

Clackmannanshire Council

Core Paths Plan

Strategic Environmental Assessment Environmental Report

March 2008

ENVIRONMENTAL REPORT

Clackmannanshire Council

**Strategic Environmental Assessment (SEA): Environmental Report for
Clackmannanshire Council
Core Paths Plan**

March 2008



13 Coates Crescent
Edinburgh
EH3 7AF
Telephone 0131 220 6121
Facsimile 0131 220 6131
Email info@naturalcapital.co.uk

ENVIRONMENTAL REPORT

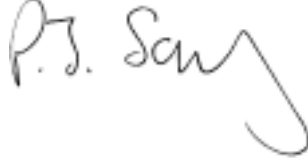
Clackmannanshire Council

Strategic Environmental Assessment (SEA): Environmental Report for Clackmannanshire Council Core Paths Plan

For and on behalf of
Natural Capital Ltd.

Approved by: Dr Phil Say

Signed:



Position: Director

Date: 28 March 2008

This report has been prepared by Natural Capital Ltd. with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

In line with our company environmental policy we purchase paper for our documents only from suppliers who supply recycled and/or sustainably sourced paper.

CLACKMANNANSHIRE CORE PATHS PLAN

SEA ENVIRONMENTAL REPORT NON-TECHNICAL SUMMARY

1 INTRODUCTION

1.1 STATUTORY CONTEXT FOR THE SEA

Clackmannanshire Council is required to draw up a plan for a network of paths (core paths) sufficient for the purpose of giving the public reasonable access throughout its area.

The Environmental Assessment (Scotland) Act 2005 requires some plans and programmes developed by public bodies to be subject to strategic environmental assessment (SEA) including the Clackmannanshire Council Core Paths Plan (CPP). The findings of the SEA of the CPP are presented in an Environmental Report. This document is a non-technical summary of that report.

1.2 PURPOSE OF THE ENVIRONMENTAL REPORT

The purpose of this Environmental Report is to set out the findings of an environmental assessment of the draft Clackmannanshire Council CPP. In accordance with Part 2 of the Environmental Assessment (Scotland) Act 2005, the Environmental Report identifies, describes and evaluates the likely significant effects on the environment of implementing the CPP and the reasonable alternatives which have been assessed.

2 THE CORE PATHS PLAN AND ITS CONTEXT

Part 1 of the Land Reform (Scotland) Act 2003 introduced a right of responsible access to most land and inland water throughout Scotland. It also provided Scottish local authorities with a new set of powers and duties to help manage access at a local level. One of the key duties is to produce a Core Paths Plan.

A Core Paths Plan is required to identify a system of routes that provides the community and visitors with reasonable non-motorised access throughout their local authority area. It should include paths suitable for all types of user including walkers, cyclists, horse-riders, those seeking access to inland water, and for people with varying abilities.

The Clackmannanshire CPP is designed to deliver the following objectives:

- provide access opportunities for all main user-types - pedestrians, cyclists, horse riders, water-borne users and people with disabilities (Note: Not every path requires to cater for all user-types);
- create an access network which enables non-motorised travel to school and work;
- provide opportunities for outdoor recreation for residents and visitors;
- increase levels of physical activity in the local population;
- support efficient land management through proactive management of outdoor access;
- provide local economic benefits by encouraging visitors to spend time in the area.

The Clackmannanshire CPP sets out the paths that were selected through a process of consultation during the CPP development process. An understanding of the relevance of other legislation, policy and plans to the SEA of the CPP is an essential step in understanding the context for the CPP, its relationship with other plans and programmes and in deriving the necessary environmental baseline and objectives for the assessment.

3 THE SEA PROCESS

3.1 INTRODUCTION

SEA is a structured approach to predicting and assessing the environmental effects which are likely to arise from the CPP.

The SEA process has been undertaken in three stages:

Stage 1: deciding on the scope of the assessment (which has included defining objectives, developing the assessment framework, establishing the baseline position and consulting with appropriate statutory agencies).

Stage 2: assessing the environmental effects of the CPP objectives and the paths within the draft CPP (which has involved assessing the effects of individual paths, considering alternatives, identifying residual and cumulative effects, identifying appropriate mitigation and suggesting proposals for monitoring).

Stage 3: preparing the Environmental Report (which has involved bringing together the findings of the scoping exercise, feedback from consultations, the assessment of environmental effects and developing conclusions and recommendations for mitigation and monitoring the effects of the CPP).

3.2 SEA OBJECTIVES

A set of SEA objectives have been defined based on:

- a review of relevant plans and programmes;
- consultations with relevant agencies;
- analysis of the environmental baseline of the area;
- review of relevant environmental problems and issues; and
- a review of relevant SEA guidance relevant to objectives.

The objectives have been developed to provide a consistent and clear basis for the appraisal of the CPP.

4 ENVIRONMENTAL ASSESSMENT OF THE CPP

4.1 ALTERNATIVES AND DEVELOPMENT OF THE PLAN

Alternative path options have been considered throughout the iterative stages of developing the CPP as an integrated part of the process. Specifically options were considered in relation to:

- any land ownership issues;
- specific accessibility issues;
- safety issues; and
- factors affecting the integrity of an historic site.

Much of the consideration of options was undertaken as part of the staged process of CPP development.

Selection of the Core Paths involved three stages:

- Stage 1: Gathering together all the comments and observations from a series of workshops and meetings;
- Stage 2: Screening the paths that began to emerge as likely candidates against the Core Paths Plan objectives and SEA objectives; and
- Stage 3: Mapping the candidate paths for a further round of informal community consultations, which led to the production of a draft Core Paths Plan.

Throughout, attention was paid to both selection of individual paths and the sufficiency of the CPP as a whole.

4.2 ENVIRONMENTAL BASELINE

Details of the current state of the environment in the study area and how this might change in the future in the absence of the CPP and the environmental characteristics of the area likely to be affected by the plan were identified and are described in the Environmental Report.

Key environmental issues highlighted by the baseline data included biodiversity (flora and fauna), climate change, health, hydrology and flooding, material assets and waste management, and landscape and cultural heritage.

Environmental baseline data were taken into account in selecting candidate core paths including existing landscape, ecological, cultural heritage, and water features and designations around the proposed core paths. This helped ensure that environmental considerations played a key role in path identification and adoption.

4.3 ENVIRONMENTAL EFFECTS

The routes designated as Core Paths in the plan are, with the exception of two that go around field margins, all existing paths around Clackmannanshire. The adoption of the CPP will not necessitate any physical interventions connected with these paths other than the provision of signage. The principal effect of the CPP will be to promote these paths as routes for use by walkers, cyclists, horse riders and canoeists for access and recreation around Clackmannanshire. As a consequence the impacts associated with the plan will arise primarily through the potential for increased footfall on existing routes.

The potential for adverse effects of the CPP on the environment has been assessed and it is concluded that there will be no significant impacts. There is a risk that increased patronage in particularly sensitive areas could result in impacts caused by improper use, however, this will be mitigated by improved signage and so is unlikely to cause any significant adverse environmental effects. Overall, the health and environmental benefits that the CPP can deliver, in terms of improving the provision of dedicated routes for non-motorised forms of transport, encouragement for recreational use of paths and the protection that the paths will be afforded as a result of their designation, will outweigh any minor effect on the environment that arises through increased patronage.

4.4 EFFECTS ON THE FIRTH OF FORTH SPECIAL PROTECTION AREA

One of the proposed Core Paths has a stretch running along the banks of the Firth of Forth, adjacent to the boundary of a European Special Protection Area (SPA) designated for its ornithological interest. As a result of this designation particular attention is required in order to determine that there will be no significant effects on the special interests of the SPA. If there is a risk of significant effects an Appropriate Assessment would be required in accordance with the Habitats Regulations and the European Birds Directive. An initial assessment of the risk of likely significant effects has been undertaken and no effects on the qualifying features and site integrity have been identified. It is concluded that a full Appropriate Assessment is not required.

4.5 POSSIBLE CUMULATIVE EFFECTS

The very small magnitude of individual impacts predicted to arise from the adoption of the CPP is not likely to cause significant cumulative impacts following implementation of the plan. The development and promotion of the CPP as a whole will increase awareness of the Clackmannanshire path network and bring improvements in access to the whole of the Clackmannanshire area, whilst bringing support to other sustainable transport initiatives that will arise in the future.

4.6 PROPOSED MITIGATION

Mitigation measures, that is, measures to reduce any possible adverse effects on the environment from the adoption of the CPP, have been suggested where appropriate during the environmental appraisal process. These have not proved to be many since the CPP is based on a network of existing paths and rights of way with no planned new infrastructure and physical works.

The impacts of the CPP on the integrity of historic and natural environmental designations are therefore considered to be consistently negligible and specific measures to mitigate the impacts are not therefore considered to be necessary, provided the need for attention to flood prevention is highlighted in relation to ongoing maintenance of the network. Information signage would be implemented in particularly environmentally sensitive areas, to discourage any activities that may affect the nature conservation interests.

4.7 MONITORING

Monitoring of the effects of implementing the CPP will be undertaken by regimes currently in place for local authority infrastructure and maintenance through the routine monitoring by the environmental authorities. Information about management, maintenance and development of core paths will be collated by the Council and form part of an overall report on access related work across the Clackmannanshire area.

5 NEXT STEPS

The following stages in the development of the CPP and its environmental assessment will be as follows:

- The Environmental Report, which reports the findings of the SEA of the CPP will be published for consultation around the same time as the draft CPP. This is programmed for Spring 2008, and the public consultation period is scheduled to last for twelve weeks.
- Following consultation on the draft CPP and the Environmental Report, the CPP will be revised and updated taking account of stakeholder and public comments.

- An SEA Statement will be prepared and made available to the Consultation Authorities (and made public) setting out how the findings of the public and stakeholder consultation exercise and the environmental assessment have been incorporated into the development of the CPP.
- It is intended that finalisation and adoption of the CPP would be in late 2008.

COMMENTS

Any queries on the SEA of the Clackmannanshire CPP should be addressed to:

Access and Countryside Projects Officer
Kilncraigs
Greenside Street
Alloa
Clackmannanshire
FK10 1EB

mdean@clacks.gov.uk

01259 450000

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	CONTEXT OF THE CORE PATHS PLAN	1
1.2	STATUTORY CONTEXT FOR THE SEA	1
1.3	PURPOSE OF THE ENVIRONMENTAL REPORT	2
1.4	SUSTAINABLE DEVELOPMENT	2
1.5	SEA ACTIVITIES TO DATE	3
1.6	LAYOUT OF THE REPORT	4
2	APPRAISAL METHODOLOGY	5
2.1	INTRODUCTION	5
2.2	OVERALL APPROACH TO SEA	5
2.3	SEA GUIDANCE	5
2.4	SEA OBJECTIVES	6
2.5	SCOPING THE APPRAISAL	7
2.5.1	Initial Scoping	7
2.5.2	Revisions to the Scoping	8
2.6	ASSESSMENT METHODS	8
2.7	RESPONSE TO STATUTORY CONSULTATION	13
2.7.1	Introduction	13
2.7.2	Scottish Environment Protection Agency (SEPA)	13
2.7.3	Scottish Natural Heritage (SNH)	13
2.7.4	Historic Scotland	14
3	PLAN CONTEXT	15
3.1	INTRODUCTION	15
3.2	OUTLINE AND OBJECTIVES OF THE CORE PATHS PLAN	15
3.3	PLAN PREPARATION	15
3.4	LINKS TO OTHER RELEVANT POLICIES, PLANS AND PROGRAMMES	17
4	ENVIRONMENTAL BASELINE	21
4.1	INTRODUCTION	21
4.2	CURRENT ENVIRONMENTAL BASELINE	21
4.2.1	Introduction	21
4.2.2	Biodiversity, Flora and Fauna	21
4.2.3	Population and Human Health	23
4.2.4	Soil	24
4.2.5	Water	24
4.2.6	Air Quality and Climatic Factors	26
4.2.7	Material Assets	27
4.2.8	Cultural Heritage including Architectural and Archaeological Heritage	27
4.2.9	Landscape	29
4.3	CURRENT ENVIRONMENTAL ISSUES	29
4.4	FUTURE OF THE ENVIRONMENT WITHOUT THE CORE PATHS PLAN	30
5	ASSESSMENT OF THE ENVIRONMENTAL EFFECTS AND PROPOSED MITIGATION	33
5.1	INTRODUCTION	33
5.2	ASSESSMENT OF ALTERNATIVES	33
5.3	ASSESSMENT OF THE DRAFT CORE PATHS PLAN	34
5.3.1	Introduction	34
5.3.2	Appropriate Assessment	38
5.4	POSSIBLE CUMULATIVE EFFECTS ASSOCIATED WITH THE CPP	39
5.5	PROPOSED MITIGATION	40

5.6	MONITORING	40
6	NEXT STEPS	43
6.1	PROPOSED STAGES	43
6.2	ANTICIPATED MILESTONES	43

ANNEXES

ANNEX A	SCOPING REPORT
ANNEX B	RELEVANT PLANS, PROGRAMMES AND STRATEGIES REVIEWED
ANNEX C	CORE PATH SCREENING TABLE
ANNEX D	DETAILED PATH APPRAISAL
ANNEX E	SUMMARY OF STATUTORY CONSULTEE RESPONSES
ANNEX F	BIBLIOGRAPHY

1 INTRODUCTION

1.1 CONTEXT OF THE CORE PATHS PLAN

Clackmannanshire Council is preparing a Core Paths Plan (CPP) for a network of paths (core paths) sufficient for the purpose of giving the public reasonable access throughout its local authority area. Natural Capital has been appointed as the consultancy team to undertake the Strategic Environmental Assessment (SEA) of the draft CPP.

The CPP has been drawn up under the terms of the Land Reform (Scotland) Act 2003 (the Act) which gives local authorities three years from February 2005 to draw up a draft plan. The Act sets out procedures in relation to consultation, adoption, maintenance and review of the paths.

The draft plan sets out the proposed Core Paths within the Clackmannanshire Council area and documents the process that has been followed to determine which paths should be included. Once adopted the plan will provide a basis for managing access and promotion of routes throughout Clackmannanshire. The paths will be designated and protected for the future and monitored and reviewed at appropriate intervals.

The CPP is intended to satisfy the basic path needs of local people and visitors for recreation, exercise and transit, and to provide key links to the wider path network. The identified core paths will have surfaces ranging from natural ground through to the hard surfaces of constructed paths, tracks and pavements, and cater for a range of users including walkers, cyclists, horse riders, people with disabilities and canoeists gaining access to water – although not every path is designed or managed for every type of user. Access authorities are not under a duty to maintain core paths. Provision and care of core paths will be achieved through a range of measures and by a variety of stakeholders. It is expected that once designated, core paths will be protected through planning control. The Council has committed the Clackmannanshire core path network to be based on the results of public consultation, to be readily accessible to all communities and to make meaningful connections between communities and recreational green spaces.

1.2 STATUTORY CONTEXT FOR THE SEA

The Environmental Assessment (Scotland) Act 2005 is the statutory mechanism by which the requirements of the European Directive 2001/42/EC – “On the assessment of the effects of certain plans and programmes on the environment” (known as the Strategic Environmental Assessment or SEA Directive) are now delivered in Scotland. The purpose of the SEA Directive is twofold. Firstly it aims to provide for a high level of protection of the environment and secondly ensure that environmental considerations are taken into account in the preparation and adoption of plans. This should promote sustainable development as part of the planning process (see Section 1.4 below).

Current guidance (specifically the Scottish Executive’s¹ September 2006 Strategic Environmental Assessment Tool Kit) confirms that SEA will be required for all plans and strategies that are likely to have a significant affect on the environment (see Section 2.2 below).

¹ Now the Scottish Government

The Council recognises that the delivery of its CPP objectives (see Section 3.2) could, if not managed sustainably, result in significant impacts on the environment. It is therefore appropriate that a plan of this nature should be subject to SEA and appraised fully so that any possible negative effects can be mitigated against and the positive effects strengthened as far as is possible.

1.3 PURPOSE OF THE ENVIRONMENTAL REPORT

The purpose of this Environmental Report is to set out the findings of an environmental assessment of Clackmannanshire Council's CPP. In accordance with Part 2 of the Environmental Assessment (Scotland) Act 2005, the Environmental Report identifies, describes and evaluates the likely significant effects on the environment of implementing the CPP and delivering the path network and the reasonable alternatives that have been assessed.

The report is intended to provide this information for the Consultation Authorities and the general public during public consultation on the CPP. Further information on consultation for the CPP and SEA is presented in Section 1.5 of this report.

1.4 SUSTAINABLE DEVELOPMENT

In March 2005 Scotland signed up to a new UK shared framework for sustainable development, *One future – different paths*² which set 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 for future generations”

This framework set out five shared principles of sustainable development:

- “Living within Environmental Limits”
- “Ensuring a Strong, Healthy and Just Society”
- “Achieving a Sustainable Economy”
- “Promoting Good Governance”
- “Using Sound Science Responsibly”

Scottish Ministers set out their aims for sustainable development in “*Choosing our Future – Scotland's Sustainable Development Strategy*”³. The main thrust of the strategy is enshrined in four key goals:

- “The well being of Scotland's people”
- “Supporting thriving communities”
- “Scotland's global contribution”
- “Protecting Scotland's natural heritage and resources”

The Scottish Government in 2007 further developed these into five strategic objectives:

- **Strategic objective 1:** Wealthier and Fairer - Enable businesses and people to increase their wealth and more people to share fairly in that wealth.

² *One future – different paths* – UK Shared Framework for Sustainable Development, DEFRA, 2005

³ “*Choosing our Future – Scotland's Sustainable Development Strategy*”, Scottish Executive, December 2005

- **Strategic Objective 2:** Healthier - Help people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care.
- **Strategic Objective 3:** Safer and Stronger - Help local communities to flourish, becoming stronger, safer place to live, offering improved opportunities and a better quality of life.
- **Strategic Objective 4:** Expand opportunities for Scots to succeed from nurture through to life long learning ensuring higher and more widely shared achievements.
- **Strategic Objective 5:** Improve Scotland's natural and built environment and the sustainable use and enjoyment of it.

There is a strong environmental strand running through the above goals and strategic objectives particularly Strategic Objective 5, so testing Clackmannanshire Council's CPP against the requirements of the SEA Directive will make sure that the Council's approach to core paths planning is effective in protecting the environment whilst at the same time contributing to sustainable development.

1.5 SEA ACTIVITIES TO DATE

The following activities have been undertaken to date by Clackmannanshire Council with respect to the SEA of the CPP:

- screening to determine whether the CPP is likely to have significant environmental effects;
- preparation of a Scoping Report⁴ (see Annex A) setting out the proposed approach to the environmental assessment of the CPP and the proposed period for public consultation;
- submission of the Scoping Report to the Consultation Authorities (statutory consultation with the SEA Consultation Authorities was undertaken in December 2007 and January 2008, via the SEA Gateway, through submission of the SEA Scoping Report. Comments received from the Authorities have been reviewed by the Natural Capital team and incorporated into the SEA process (see Annex E). Further information on the scoping stage of the SEA is presented in Section 2.4 of this report.
- review of Consultation Authorities responses on the Scoping Report (see Annex E); and
- developing a set of SEA objectives.

The Environmental Report brings the results of all of these activities together and then goes on to describe:

- an appraisal of the consistency of the CPP objectives with the SEA objectives (see Table 3.1);
- a primary screening of all the nominated core paths against environmental criteria (see Annex C);
- an assessment of a number of individual paths which as a result of the screening were felt to pose possible environmental risks (see Annex D);
- an assessment of the path network as a whole, including alternatives and cumulative effects (see Section 5); and
- the proposals for any mitigation measures, and monitoring of the implementation of the CPP (see Sections 5.5 and 5.6).

⁴ SEA Scoping Report for Clackmannanshire Core Paths Plan, Clackmannanshire Council, December 2007

The next steps for the SEA, including those for public consultation and finalisation and adoption of the CPP are set out in Section 6 of this report. Box 1 summarises the key facts relating to the CPP.

Box 1: Summary of Key Facts relating to the Core Paths Plan

Name of Responsible Authority: Clackmannanshire Council

Title of Plan/Programme: Clackmannanshire Core Paths Plan

What prompted the Plan: Section 17 of the Land Reform (Scotland) Act 2003

Plan Subject: The Core Path Plan sets out the basic network of paths required to meet community needs.

Period covered by Plan: The Core Paths Plan is likely to be adopted in 2008 and is anticipated to cover the period 2008 - 2013

Frequency of Updates: The Core Paths Plan will be reviewed and updated simultaneously with the Local Plan

Plan Area: The Clackmannanshire Council local authority area

Plan Purpose/Objectives: To draw up a plan for a system of core paths sufficient to provide reasonable public access throughout the area. The Plan will be based on the results of public consultation and will provide for walkers, cyclists and horse riders of all abilities. A small number of water routes will be included. The network will be readily accessible to all communities and make meaningful connections between communities

Contact Point: Martin Dean, Access and Countryside Projects Officer,
mdean@clacks.gov.uk or 01259 452409

1.6 LAYOUT OF THE REPORT

The remainder of the document is structured as follows:

- Section 2: sets out the appraisal methodology including SEA guidance and the response to the statutory consultation;
- Section 3: describes the CPP and its context together with the links with other relevant plans and programmes;
- Section 4: describes the environmental baseline and key environmental issues and discusses the future of the environment without the implementation of the CPP;
- Section 5: presents the results of the environmental assessment including the assessment of alternatives, the proposed mitigation and proposals for monitoring;
- Section 6: describes the next steps including the proposed stages and key milestones.

The main text is supported by the following annexes:

- Annex A: Scoping Report
- Annex B: Relevant Plans, Programmes and Strategies Reviewed
- Annex C: Core Path Screening Table
- Annex D: Detailed Path Appraisals
- Annex E: Summary of Statutory Consultee Responses
- Annex F: Bibliography

2 APPRAISAL METHODOLOGY

2.1 INTRODUCTION

This section presents a summary of the methods used to carry out the environmental assessment of the CPP. The approach to SEA is set out first followed by the guidance that has been used to shape the development of the Environmental Report. This is then followed by a summary of the SEA objectives to be used in the assessment followed by a summary of the scoping process carried out by the Council. The assessment methods are set out in Section 2.6 and the chapter is concluded with a description of the response to the statutory consultation on the scoping report.

2.2 OVERALL APPROACH TO SEA

The approach to the SEA has followed a series of defined stages:

- Review of relevant plans and programmes which both underpin the CPP and which provide direction for the SEA of the CPP (see Section 3, Table 3.1 and Annex A);
- Identification and review of relevant aspects of the current state of the environment that relate to the Core Path network across Clackmannanshire and that could be influenced by the implementation of the CPP (see Section 4.2);
- Identification of existing and potential future environmental issues which may influence or be influenced by the CPP (see Section 4.2);
- Identification of SEA objectives to guide the CPP appraisal taking account of the objectives in other plans and programmes, the identified issues and the current baseline (see Section 2.3);
- Scoping of environmental issues to be appraised in the SEA (see Section 2.5);
- Environmental assessment of the objectives and paths within the CPP (see Section 5.3 and Annexes B and C);
- Establishing any appropriate mitigation and proposals for monitoring the implementation of the CPP (see Section 5.4 and 5.5).

2.3 SEA GUIDANCE

This Environmental Report has been prepared with reference to the following SEA legislation and guidance:

- Environmental Assessment (Scotland) Act 2005;
- European Commission DG Environment (2004) Implementation of Directive 2001/42 on the Assessment of the Effects of Certain Plans and Programmes on the Environment;
- Office of the Deputy Prime Minister (2005) A Practical Guide to the Strategic Environmental Assessment Directive;
- Scottish Executive (2003) Environmental Assessment of Development Plans, Interim Planning Advice;
- Scottish Executive (2006) SEA Toolkit;
- guidance on the SEA Directive produced by the Office of the Deputy Prime Minister which identifies a series of requirements for the SEA.

The main requirements set out in the Directive are summarised in Table 2.1 along with a comment as to their status in the SEA of the CPP.

Table 2.1 SEA Directive Guidance

Requirements	Response within SEA of the CPP
a) Outline of the contents, main objectives of the plan and relationship with other relevant plans	Addressed within the SEA Scoping Report produced by Clackmannanshire Council (Annex A) and summarised in this Environmental Report
b) Relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan	
c) Environmental characteristics of areas likely to be significantly affected	
d) Existing environmental problems which are relevant to the plan	
e) Environmental protection objectives established at international, Community or national level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation	
f) Likely significant effects on the environment	Addressed within this Environmental Report
g) Measures envisaged to prevent, reduce and as fully as possible offset significant adverse effects on the environment of implementing the plan	
h) Outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties	
i) Description of measures envisaged concerning monitoring in accordance with Article 10	
j) Non-technical summary of the information provided under the above headings	

A full list of plans and programmes reviewed as part of the SEA work undertaken to date is included in Annex B and sources of reference for the environmental baseline are included in Annex F.

2.4 SEA OBJECTIVES

The Environmental Assessment (Scotland) Act 2005 does not require the generation of SEA objectives by Clackmannanshire Council to appraise the potential effects of the CPP. However, environmental protection objectives from other policies, plans and programmes should be taken into consideration where they are appropriate. The development of specific SEA objectives and indicators is a recognised way in which environmental effects can be described, analysed and compared. SEA objectives will describe the intent and desired direction of environmental change, whilst indicators will measure the performance of the CPP against these objectives (for indicators see later in Section 5.5).

To fulfil the requirements of the SEA Directive and the Environmental Assessment (Scotland) Act 2005 the SEA objectives should cover:

- ‘... biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, landscape and the interrelationships between them.’
(Schedule 3 of the Environmental Assessment (Scotland) Act 2005).

Table 2.2 summarises SEA objectives for the CPP. The objectives have been developed by the Council during the scoping stage and are designed to consolidate:

- the environmental topics of Schedule 3 of the Scottish Act ;
- the objectives within the CPP;

- objectives from other relevant plans and programmes;
- environmental issues and problems identified as part of the baseline analysis during the Scoping stage.

Table 2.2: SEA Objectives for the CPP

Objective	SEA Topic
1. Ensure the sustainable management of, and avoid damage to, designated wildlife sites and protected species 2. Maintain biodiversity, avoiding irreversible losses 3. Provide opportunities for people to come into contact with and appreciate wildlife and wild places	Biodiversity (Flora and Fauna)
4. Promote healthy living 5. Reduce and prevent crime; reduce fear of crime 6. Improve quality of life for present and future generations	Human health Population Air quality
7. Maintain and restore key ecological processes (e.g. hydrology, water quality, coastal processes)	Soil and land Water Population
8. Reduce greenhouse gas emissions 9. Reduce vulnerability to the effects of climate change	Climatic factors Air Quality
10. Minimise waste, then re-use or recover it through recycling, composting or energy recovery 11. Make best use of existing infrastructure	Material assets
12. Preserve historic buildings, archaeological sites and other culturally important features	Cultural Heritage
13. Protect and enhance the landscape 14. Improve quality of publicly accessible open space	Landscape Biodiversity

2.5 SCOPING THE APPRAISAL

2.5.1 Initial Scoping

In accordance with the Environmental Assessment (Scotland) Act 2005, the Council considered whether the environmental effects (positive and negative) of the CPP were likely to be significant. This initial scoping assessment was based on preliminary information about the scope of objectives and nature of the core paths system likely to feature in the emerging CPP, the known environmental baseline likely to be affected by the plan and the likely environmental issues.

A summary of the initial scoping appraisal is presented in Table 2.3.

Table 2.3 Scoping of Significant Effects (undertaken by Clackmannanshire Council)

SEA Issues	Scoped In	Scoped Out	Reasons
Biodiversity, flora and fauna	Yes	No	
Population	Yes	No	

SEA Issues	Scoped In	Scoped Out	Reasons
Human health	Yes	No	
Soil		Yes	No significant impacts on soil are anticipated
Water	Yes	No	
Air		Yes	No significant impacts on air quality are anticipated
Climatic factors	Yes	No	
Material assets	Yes	No	
Cultural heritage	Yes	No	
Landscape	Yes	No	

2.5.2 Revisions to the Scoping

The Council originally scoped out soil, regarding the CPP as unlikely to have a significant effect on this SEA topic. During the statutory consultation SEPA stressed that there would need to be clear justification as to why the CPP would not have an effect on the soil environment.

It was felt on reflection that there could be impacts on the soil environment (e.g. soil erosion on footpaths, path construction, modification or maintenance effects on soils, possible impacts in agricultural settings and possible contaminated land effects in areas where core paths coincide with brownfield site redevelopment). The SEA therefore went forward by including soil in the assessment of the effects of the CPP on the environment.

2.6 ASSESSMENT METHODS

The CPP currently contains 178 numbered core paths. A two-stage approach to the assessment process was adopted:

- **Stage 1:** An initial screening of all 178 paths against a set of criteria that would indicate whether the adoption of the path within the plan would trigger the risk of an environmental effect. Paths screened out during this process would not be taken forward for further assessment whereas those screened in would. A summary of this screening process is presented in Annex C.
- **Stage 2:** A more detailed assessment of the screened in paths against the SEA objectives (see Annex D).

A framework approach was used in Stage 2 to evaluate the effects of the CPP. The SEA framework (see Table 2.4) was developed following the work undertaken during the scoping stage by the Council. It was based on the SEA objectives presented in Section 2.4 and Table 2.2 above. A set of appraisal criteria was developed, drawn from the literature, the study team's own experience and feedback from the Council. These criteria have been used to focus the appraisal of the screened in paths against the SEA objectives.

Table 2.4 SEA Appraisal Framework

SEA Objective	SEA Topic	Checklist of Questions
1. Ensure the sustainable management of, and avoid damage to, designated wildlife sites and protected species 2. Maintain biodiversity, avoiding irreversible losses 3. Provide opportunities for people to come into contact with and appreciate wildlife and wild places	Biodiversity (Flora and Fauna)	<ul style="list-style-type: none"> Does it encourage the protection and/or enhancement of designated sites and natural and semi-natural habitats? Will it proactively conserve and enhance protected species? Does it have significant implications for the conservation and/or enhancement of biodiversity? Does it promote opportunities for people to come into contact with and appreciate wildlife and wild places?
4. Promote healthy living 5. Reduce and prevent crime; reduce fear of crime 6. Improve quality of life for present and future generations	Population and Human Health	<ul style="list-style-type: none"> Does it have significant implications for the population? Will it improve accessibility to resources and local services? Does it promote the proper assessment of accessibility implications for future developments? Does it improve community safety? Does it reduce the fear of crime? Does it have significant implications for human health? (i.e. protection and improvement?) Does it help to improve the quality and access to greenspaces?
7. Maintain and restore key ecological processes (e.g. hydrology, water quality, coastal processes)	Soil, Land and Water	<ul style="list-style-type: none"> Does it encourage the proper consideration of the soil and water resource for future developments (including protecting these)? Does it encourage the proper consideration of flood risks? Does it consider potential impacts on flood plains? Does it promote adaptation to the effects of climate change in the design and location of paths and the management of greenspace?
8. Minimise waste, then re-use or recover it through recycling, composting or energy recovery 9. Make best use of existing infrastructure	Material Assets	<ul style="list-style-type: none"> Does it have significant implications for improving the use of natural resources? Does it help to promote local sourcing of materials and assets? Does it encourage the protection of the existing material asset resource? Will it encourage development on previously developed land? Does it promote sustainable design and construction? Does it promote the use of sustainable materials? Will it increase waste minimisation, recovery and recycling?
10. Reduce greenhouse gas emissions 11. Reduce vulnerability to the effects of climate change	Climatic factors	<ul style="list-style-type: none"> Does it have significant implications for reducing ghg emissions? Will it help reduce the use of fossil fuels?
12. Preserve historic buildings, archaeological sites and other culturally important features	Cultural heritage, including architectural and	<ul style="list-style-type: none"> Does it avoid impacts on and safeguard the historic and cultural heritage?

SEA Objective	SEA Topic	Checklist of Questions
13. Protect and enhance the landscape 14. Improve quality of publicly accessible open space	archaeological heritage and Landscape	<ul style="list-style-type: none"> • Does it encourage the proper assessment of the impact of future developments on cultural heritage? • Does it promote the enjoyment and understanding of Clackmannanshire's historic assets? • Will it ensure that the landscape is protected? • Does it avoid adverse impacts on, respect and safeguard the character, diversity and quality of Clackmannanshire's landscape and visual amenity?

The SEA framework was used to predict the potential effects of individual paths and the path system as a whole. Best practice guidance on evaluation was followed and the effects were considered in terms of their scale, the sensitivity of the resource, whether the effects were temporary or permanent, positive or negative, direct or indirect and whether there was the potential for effects to build up. Wherever the potential for significant environmental effects was identified the potential for mitigation was considered.

A simple scoring system was used to assess the CPP objectives, the screened in individual paths and the path network against the SEA framework, as set out in Table 2.5.

Table 2.5 SEA Framework Scoring System

Clear contribution to the objective, very positive	✓✓
Broadly supportive	✓
Neutral, no discernible effect	0
Negative effect, incompatible	x
Very negative effect	xx
Uncertain effect	?
Positive and negative effects	x✓

The findings of each individual path assessment are set out in a matrix table (based on the one in Table 2.6 below, see Annex D). Each assessment is supported by text as appropriate to ensure that the summaries in the tables are auditable and the methods of assessment transparent. The text indicates where qualitative appraisal only has been possible and what information has been used to inform the findings and recommendations.

In undertaking the final appraisals of residual effects, the scale and nature of the effects was taken into account. The potential for cumulative environmental effects of the CPP has been evaluated in the light of the evolution of the environment without the plan (see Sections 4.4, 5.2 and 5.4).

Table 2.7 Example Matrix for Documenting the Assessment of a CPP Objectives and Priority Paths

SEA Objective	Likely Environmental Impact			Mitigation or Further Improvement
	Short	Medium	Long	Comments
1. Ensure the sustainable management of, and avoid damage to, designated wildlife sites and protected species				(to cover for example): - Likelihood/certainty of effect occurring - Geographical scale of effect - Whether temporary or permanent - Frequency of effects and potential for reversibility - Assumptions made in assessment - Future opportunities for mitigation - Potential for indirect effects - Potential for secondary effects - Potential for synergistic effects - Potential for cumulative effects - Identification of any partners to deliver mitigation etc - Recommendations for data collation - etc
2. Maintain biodiversity, avoiding irreversible losses				
3. Provide opportunities for people to come into contact with and appreciate wildlife and wild places				
4. Promote healthy living				
5. Reduce and prevent crime; reduce fear of crime				
6. Improve quality of life for present and future generations				
7. Maintain and restore key ecological processes (e.g. hydrology, water quality, coastal processes)				
8. etc				

2.7 RESPONSE TO STATUTORY CONSULTATION

2.7.1 Introduction

The responses of the three statutory consultees – the Scottish Environment Protection Agency, Scottish Natural Heritage and Historic Scotland to the consultation process on the scoping report are summarised in Annex E. A brief summary of the responses is given below.

2.7.2 Scottish Environment Protection Agency (SEPA)

SEPA made a number of helpful recommendations for how the Environmental Report should be put together and issues that would need to be considered including:

- the ER should describe the likely change to the environment without the implementation of the Plan;
- in relation to the objective dealing with ‘water’, the requirements of The Water Framework Directive should be mentioned to ensure no deterioration in the status of water bodies;
- it is a requirement of the Act to assess cumulative, synergistic and secondary effects;
- mitigation measures are a crucial part of SEA and should be set out to clearly identify: (1) the measures required, (2) when they would be required and (3) who will be required to implement them.

2.7.3 Scottish Natural Heritage (SNH)

SNH also made a number of helpful recommendations for how the Environmental Report should be put together and issues that would need to be considered including:

- expect the SEA to consider the potential impact of routes on designated sites and protected species in some detail;
- make reference to the Scottish Biodiversity List and to the statutory duty on all public bodies to further the conservation of biodiversity;
- include a description of the likely evolution of the environment without the plan to provide a frame of reference for the assessment of the plan;
- identify any entirely new routes within the Plan and those likely to see a significant change in use due to new promotion or an upgrade;
- add development pressure along watercourses and within floodplains, and the need for sustainable flood alleviation schemes. The spread of non-native invasive species along watercourses is also an issue for Clackmannanshire. Specific attention should be given to the Firth of Forth SPA and Ramsar site;
- refer to the Areas of Great Landscape Value (AGLV) in Clackmannanshire, access and the developing Access Strategy;
- include synergistic and secondary effects. The proposals may also have cumulative effects, e.g. proposals which consist of linear paths along sensitive watercourses can be detrimental cumulatively;
- consider alternative path options where there are potential negative environmental impacts – both at a more strategic network approach level and regarding deleting or changing particular routes.

2.7.4 Historic Scotland

Historic Scotland also made a number of helpful recommendations for how the Environmental Report should be put together and issues that would need to be considered including:

- the effects of individual paths should be included in the assessment;
- the summary of the environmental baseline should also include information for the historic environment;
- additional baseline information to be provided for the following features of the historic environment: Gardens and designed Landscapes, locally important archaeological sites, Conservation Areas;
- effects on the historic environment should be assessed separately from those on landscape;
- suggest the wording of proposed SEA objective for the historic environment to 'protect and, where appropriate, enhance the historic environment';
- set out any recommendations or expectations for lower level projects or activities that are identified as mitigation measures and identify who will be responsible for ensuring that the mitigation measures are taken forward;
- ER should contain information on proposed monitoring strategy. Indicators chosen for the historic environment should reflect both the actions to be taken within the plan and the potential impacts identified in the course of the SEA.

3 PLAN CONTEXT

3.1 INTRODUCTION

This section provides a brief summary of the CPP together with the key objectives. The links to other relevant plans, programmes and strategies (PPS) are then described setting out the main environmental objectives of these PPS and the corresponding implications for the CPP. A more extensive list with implications for the CPP is given in Annex B.

3.2 OUTLINE AND OBJECTIVES OF THE CORE PATHS PLAN

Clackmannanshire Council set out as its core aim that the Clackmannanshire CPP would identify a system of core paths sufficient for the purpose of giving the public reasonable access throughout Clackmannanshire. The network would be based on the results of public consultation, be readily accessible to all communities and make meaningful connections between communities and recreational green spaces.

The Clackmannanshire CPP is designed to deliver the following objectives:

- provide access opportunities for all main user-types - pedestrians, cyclists, horse riders, water-borne users and people with disabilities (Note: Not every path requires to cater for all user-types);
- create an access network which enables non-motorised travel to school and work;
- provide opportunities for outdoor recreation for residents and visitors;
- increase levels of physical activity in the local population;
- support efficient land management through proactive management of outdoor access;
- provide local economic benefits by encouraging visitors to spend time in the area.

These have been developed according to the appropriate legislation and guidance. The CPP objectives were tested for their compatibility with the SEA objectives and the results are presented in Table 3.1. It can be seen that all the CPP objectives are broadly compatible with the SEA objectives.

3.3 PLAN PREPARATION

The preparation of the CPP has involved several steps including:

- first round of consultations (visiting every community) – to find out where access is taken or would like to be taken;
- preliminary assessment of findings from initial consultation;
- identification of criteria (with Access Forum input) to be used to assess paths;
- second round of consultations;
- drawing up of draft CPP.

Table 3.1: Compatibility of SEA and Core Paths Plan Objectives

	Core Paths Plan Objectives*	1	2	3	4	5	6
SEA Topic	SEA Objective						
Biodiversity (Flora and Fauna)	Ensure the sustainable management of, and avoid damage to, designated wildlife sites and protected species.	0	0	0	0	√	0
	Maintain biodiversity, avoiding irreversible losses.	0	0	0	0	√	0
	Provide opportunities for people to come into contact with and appreciate wildlife and wild places.	√	√	√	√	0	√
Population and Human Health	Promote healthy living	√	√	√	√	0	√
	Reduce and prevent crime; reduce fear of crime	0	0	0	0	0	0
	Improve quality of life for present and future generations	√	√	√	√	√	√
Soil, Land and Water	Maintain and restore key ecological processes (e.g. hydrology, water quality, coastal processes)	0	0	0	0	√	0
Material Assets	Minimise waste, then re-use or recover it through recycling, composting or energy recovery.	0	0	0	0	0	0
	Make best use of existing infrastructure	0	0	0	0	√	0
Climatic factors	Reduce greenhouse gas emissions	√	√	0	0	0	0
	Reduce vulnerability to the effects of climate change	0	0	0	0	√	0
Cultural heritage, including architectural and archaeological heritage and Landscape	Preserve historic buildings, archaeological sites and other culturally important features	0	0	0	0	√	0
	Protect and enhance the landscape	√	0	0	0	√	√
	Improve quality of publicly accessible open space	√	√	√	√	√	√

Key:

√ - Objectives are compatible with each other. X – Objectives are incompatible – note that none of the objectives are incompatible. 0 - There is no specific link between the objectives.

*Core Paths Plan Objectives are:

1. Provide access opportunities for all main user-types - pedestrians, cyclists, horse riders, water-borne users and people with disabilities.⁵
2. Create an access network which enables non-motorised travel to school and work.
3. Provide opportunities for outdoor recreation for residents and visitors.
4. Increase levels of physical activity in the local population.
5. Support efficient land management through proactive management of outdoor access.
6. Provide local economic benefits by encouraging visitors to spend time in the area.

⁵ Note: Not every path is required to cater for all user-types

The Plan has been compiled through this process of community and stakeholder engagement. Additionally, the judgement and advice of a range of professional officers within the Development and Environmental Services Department (in particular Land Services, Roads and Transportation) helped inform the path selection process.

Ultimately, core paths need to be suitable for promotion as usable routes. Known factors such as path condition, location, and land management issues including adjacent designated sites and environmental considerations therefore needed to be taken into account as part of the selection process. As part of this process a set of criteria were developed (with input from the Access Forum) to facilitate path selection that included essential and desirable criteria (see Box 2).

Box 2 – Core Path Selection Criteria Developed by Clackmannanshire Council

Essential criteria for a core path:

- Easily accessible from where people live or links two communities.
- Join two public places – roads/pavements/rights of way/established paths/public open space. Note: Could be circular if starting/finishing from a public place.
- Is unlikely to adversely impact upon biodiversity.
- Where a cross-border path, there is consistency with the neighbouring authority.

Desirable criteria for a core path:

- Was identified in the first round of consultations and/or is a right of way/established path.
- Capable of supporting all abilities use i.e. surfaced, flat, free from barriers such as steps.
- Unaffected by land management issues e.g. sports pitches, golf courses, enclosed fields of crops/livestock.
- Unaffected by curtilage/privacy issues e.g. farm yards, dwelling houses
- Free from significant maintenance issues – poor surface, infrastructure e.g. bridges/steps/railings.
- Is likely to be used in travel to/from school/work.
- Gives access to places of interest – natural and built heritage e.g. country parks, nature reserves, castles, towers.
- Gives access to facilities e.g. shops.
- Provides links to other paths.
- Capable of supporting multi-use i.e. is a surfaced path.

It was decided that core paths would be required to meet all relevant essential criteria (the last essential criterion only applies to paths which link with neighbouring local authorities) and 5 or more of the desirable criteria.

3.4 LINKS TO OTHER RELEVANT POLICIES, PLANS AND PROGRAMMES

An understanding of the relevance of other legislation, policy and plans to the CPP is an essential step in understanding the context for the CPP and in deriving the necessary baseline for the assessment. A summary list of the policies, plans and programmes together with their environmental objectives relevant to the CPP are presented in Table 3.2 below. These were used to help shape the SEA objectives in Table 2.2. Other plans and programmes, together with more details on the key environmental messages used to shape the SEA objectives, are given in Annex B.

Table 3.2: Summary of Representative Plans, Programmes and Strategies (PPS) relevant to the CPP (see Annex B for more details)

Policy, Plan or Programme	Summary of Relevant Environmental Objectives and corresponding implications for the CPP
International	
Kyoto Protocol (1998)	To reduce emissions of greenhouse gases (e.g. CO ₂)

Policy, Plan or Programme	Summary of Relevant Environmental Objectives and corresponding implications for the CPP
EU Habitats Directive (92/43/EC)	To conserve natural habitats
EU Birds Directive (79/409/EEC)	To protect wild bird species
EU Water Framework Directive (2000/60/EC)	To improve water quality
Rio Convention on Biological Diversity (1992)	To conserve and enhance biodiversity
WHO Health 21	To achieve full health potential for all
UK Wide	
The UK Strategy for Sustainable Development "Securing the Future" (2005)	To ensure the effective protection of the environment, maintenance of economic growth, employment and prudent use of natural resources
UK Climate Change Programme (2006)	To reduce greenhouse gas emissions
UK Energy White Paper "Our Future Energy – Creating a Low Carbon Economy" (2003)	To reduce CO2 emissions
Transport White Paper (2004)	To protect the environment and examine how transport policy can best contribute to reducing CO2 emissions
Biodiversity: The UK Action Plan (1994)	To conserve and enhance the UK's biodiversity
National	
"Choosing Our Future": Scotland's Sustainable Development Strategy (2005)	To decrease Scotland's energy consumption and waste production to ensure the health and well being of Scotland's future generations
"Changing Our Ways" Scotland's Climate Change Programme (2006)	To make an equitable contribution to the UK commitment on climate change and enable Scotland to make the transition to a low carbon economy.
Scottish Biodiversity Strategy: Scotland's Biodiversity, Its in Your Hands (2004)	To conserve Scotland's biodiversity for future generations
Nature Conservation (Scotland) Act (2004)	To conserve and enhance Scotland's biodiversity, wildlife and natural features. The Act places a "Biodiversity Duty" on Clackmannanshire Council
NPPG 14: Natural Heritage	To conserve Scotland's plants, animals, landscapes, geology, natural beauty and amenity
Water Environment (Controlled Activities) (Scotland) Regulations 2005	A new regime for water environment protection in Scotland
Water Environment and Water Services (Scotland) Act 2003	Requires Clackmannanshire Council to have regard to the desirability of protecting the water environment
NPPG 18: Planning and the Historic Environment	To conserve Scotland's culture and historic environment
"Passed to the Future" Historic Scotland's Policy for the Sustainable Management of the Historic Environment (2002)	To look after Scotland's ancient monuments, historic buildings and landscapes whilst also ensuring that they can be enjoyed by all, including generations to come
Our National Health: A plan for action, a plan for change	To reduce inequalities and improve the health of Scotland's people
National Planning Framework for Scotland (2004)	To ensure that future planning contributes towards sustainable development
SPP 17: Planning for Transport	To reduce the need for travel and create the right conditions for greater use of sustainable transport methods
Land Reform (Scotland) Act 2003	Introduces a right of responsible access to land and inland water in Scotland. The <i>Scottish Outdoor Access Code</i> gives guidance on the responsible exercising of this right
Local	
Clackmannanshire and Stirling Structure Plan	To work towards sustainable development in Clackmannanshire through a local land use framework that facilitates positive social and economic development whilst maintaining and enhancing environmental quality
Clackmannanshire Local Plan	

Policy, Plan or Programme	Summary of Relevant Environmental Objectives and corresponding implications for the CPP
	To ensure that the natural environment is protected from any adverse effects of development. To ensure that development proposals are located where they do not cause significant harm to Clackmannanshire's natural environment
Clackmannanshire Community Plan	To achieve a balance between change and better use of existing environmental resources To safeguard and enhance the area's natural heritage To sustainably manage all public open space To ensure that the built and natural heritage is enhanced
Clackmannanshire Local Biodiversity Action Plan	The LBAP translates national targets for species and habitats in to effective local action, stimulates local working partnerships into tackling biodiversity conservation, raises awareness, identifies local resources, identifies local targets for species and habitats ensures delivery and monitors progress
Clackmannanshire Joint Health Improvement Plan	The Clackmannanshire Joint Health Improvement Plan provides a framework and series of priorities for action to direct health improvement efforts over the next 3 years.
Flood Drainage and Land Drainage Plan	To map all known occurrences of flooding of land, not being agricultural land, within the Council Area To prevent or mitigate flooding of such land To set out the measures the Council considers necessary to prevent or mitigate the flooding of land in the Council area
Clackmannanshire Local Transport Strategy	To map out how the roads and transportation system will develop in the short and long term To support future roads and transportation improvements To set out measures aimed at providing travel choices for all To ensure that job opportunities are not restricted to only those with access to a car
Community Safety Strategy	To reduce the fear of crime and antisocial behaviour both inside and outside the home To reduce crime To make the public environment safer and more attractive

4 ENVIRONMENTAL BASELINE

4.1 INTRODUCTION

Schedule 2 of the Environmental Assessment (Scotland) Act requires the Environmental Report to include a description of “the relevant aspects of the current state of the environment and the likely evolution thereof without the implementation of the Plan or programme.”

This section of the Environmental Report describes:

- the current state of the environment in the study area and how this might change in the future in the absence of the Plan, and the environmental characteristics of the area likely to be significantly affected by the Plan; and
- the existing environmental issues which are relevant to the Plan including those relating to areas of particular environmental importance.

4.2 CURRENT ENVIRONMENTAL BASELINE

4.2.1 Introduction

Clackmannanshire is the smallest mainland authority in Scotland with a population of 48,630, and is situated on the North of the River Forth bordering the Councils of Stirling, Perth & Kinross, Fife and Falkirk. It covers 15,864 hectares and has a population density of 3.06 persons per hectare. Clackmannanshire’s main settlements are Alloa & Sauchie, Alva, Clackmannan, Tillicoultry, Devonside & Coalsnaughton and Tullibody & Cambus.⁶

4.2.2 Biodiversity, Flora and Fauna

Protected Sites

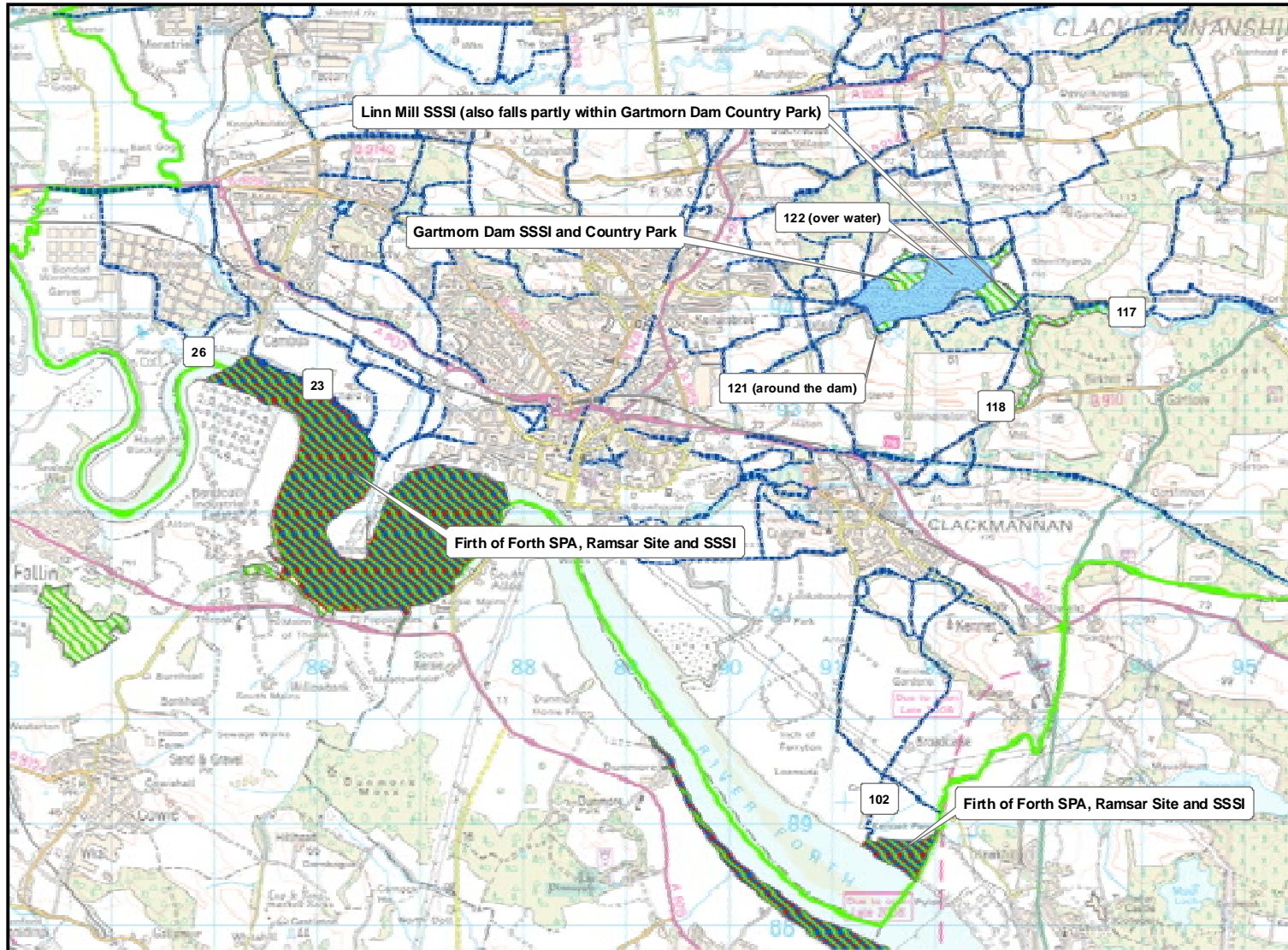
The Firth of Forth is designated under the European Union Birds Directive⁷ as a Special Area of Protection (SPA) and is also protected under the Ramsar convention on wetlands⁸. Part of The River Forth that passes through Clackmannanshire is within the designated area (see Figure 4.1).

In addition to the internationally designated sites there are 13 nationally designated Sites of Special Scientific Interest (SSSIs) in Clackmannanshire, collectively covering an area of 857 hectares. SSSIs with particular relevance to the Core Paths Plan are Gartmorn Dam and Linn Mill, as these are both located close to one or more of the proposed Core Paths. Gartmorn Dam is also the only Local Nature Reserve in Clackmannanshire (see Figure 4.1).








⁶ All information from Clackmannanshire SEA Scoping Report, Dec 2007

⁷ European Union (1979) Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds.

⁸ UNESCO (1971) Convention on Wetlands of International Importance especially as Waterfowl Habitat..



Key

-  Proposed Core Path Network
-  Site of Special Scientific Interest (SSSI)
-  Special Protection Area (SPA)
-  Ramsar Site
-  Clackmannanshire Local Authority Boundary
-  Core path accessed by water
-  Core Path Number



DRAWN BY: AK	CHECKED BY: PS	DATE: 03.08
--------------	----------------	-------------

Figure 4.1: Natural Heritage Designations

natural CAPITAL



Local Biodiversity Action Plan

Clackmannanshire Council has developed a detailed local biodiversity action plan (LBAP), including species and habitat plans. The LBAP includes habitat action plans for 23 identified habitats including; blanket bogs, broadleaved woodland, coastal lagoons, estuary and urban wildlife corridors. Nationally important species recorded in Clackmannanshire include 20 UK Priority Species and 141 species of conservation concern. Species Action Plans (SAPs) have therefore been produced to cover the most important species occurring locally. SAPs have been written for species of plant, mammal, reptile, fish, birds and invertebrates, and include amongst others, the sticky catchfly (*Lychnis viscaria*), the badger (*Meles meles*), the common lizard (*Lacerta vivipara*), the Atlantic salmon (*Salmo salar*) and the tree sparrow (*Passer montanus*).

4.2.3 Population and Human Health

Population

Clackmannanshire has a population density over four times higher than Scotland as a whole (308 persons per square kilometre for Clackmannanshire: 66 persons per square kilometre for Scotland). There are approximately 48,630 people living within Clackmannanshire, of which approximately 25,185 are female and 23,715 are male. 63% per cent of the population are of working age, with 22% below working age, and 15% above it, which is very similar to the national ratio⁹.

Employment

The main employment area in Clackmannanshire is in services such as public administration, education, health and other services, with this sector covering approximately 43% of jobs, significantly higher than the national figures (36%). Other major sources of employment are in the areas of retail, wholesale and hotels, manufacturing, finance and business, construction and transport. Clackmannanshire has significantly lower figures than the national average for jobs in finance and business, and in energy and water, but is above in the areas of manufacturing and construction.

Health

Health services in Clackmannanshire are controlled by NHS Forth Valley. Clackmannanshire has the highest death rate in Forth Valley for cancer, heart disease and stroke. The most common causes of death in the area controlled by NHS Forth Valley are Cancer (specifically, Lung Cancer and Breast Cancer), Coronary Heart Disease and Stroke. The main challenges to improved health in Clackmannanshire have been identified as being diet and exercise. A survey showed that in target communities in Clackmannanshire, only 30% of households eat the recommended five portions of fruit and vegetables in a day. Increased amounts of physical exercise and an active lifestyle are being promoted amongst the population and focus especially on children, encouraging them to participate in regular, frequent, safe and fun physical activity, sport, play and active travel¹⁰.

There is a clear link between transport and health. Transport has a major impact on health through accidents, air quality, physical activity and access to healthcare. The health amongst those considered to be at a social disadvantage is of great concern as these are the people most likely to be exposed to high levels of traffic leading to increased exposure to air pollution, noise, community severance and

⁹ General Register Office Scotland (2007) Mid- 2006 Population Estimates Scotland; Population Estimates By Sex, Age and Administrative Area.

¹⁰ NHS Forth Valley (2007) The 18th Annual Report of the Director of Public Health. Available at: http://www.nhsforthvalley.com/web/files/Public_Health_files/18th_Annual_Report.pdf

accidents. Air pollution episodes are associated with rises in hospital admissions, increasing chronic asthma and premature death. Noise levels are also a disturbance to health through reduced concentration, stress and loss of sleep. Traffic is a significant source of air and noise pollution and a burden to the health service, especially when accident costs are also factored in.

The Clackmannanshire Core Paths Plan can therefore play a clear role here in creating opportunities for active travel, access to outdoor and physical recreation and reduced levels of air pollution.

4.2.4 Soil

Soil Character

The distribution of soil associations throughout the district is influenced primarily by the underlying parent material. Within this overall pattern, the interaction of numerous other factors, in particular climate and topography, with the basic properties of the parent material, defines a wide variety of soil types within each association. On the highest ground of the upper plateau-like surface of the Ochils, the effect of poor drainage dominates the influence of the underlying lava parent material, resulting in the formation of blanket peats, while on the same parent material on adjoining hill slopes, soils of the Sourhope series occur, ranging from peaty podzols to brown forest soils on the most freely-draining areas.

Contaminated Land

The Scottish Vacant and Derelict Land Survey (SVDLS) allows local authorities to record whether any sites on their register are contaminated. The definition of contamination in the 2006 survey is the same as that which is laid out in Part IIA (Contaminated Land) of the Environmental Protection Act 1990. Any site that a local authority views as being contaminated in line with this definition (and also has the other characteristics of derelict land, i.e. it has been damaged by previous development and is currently not in use) is likely to appear in this survey. However it does not follow that 'any' site recorded in the survey as derelict would also be contaminated in line with the definition in Part IIA of the 1990 Act.

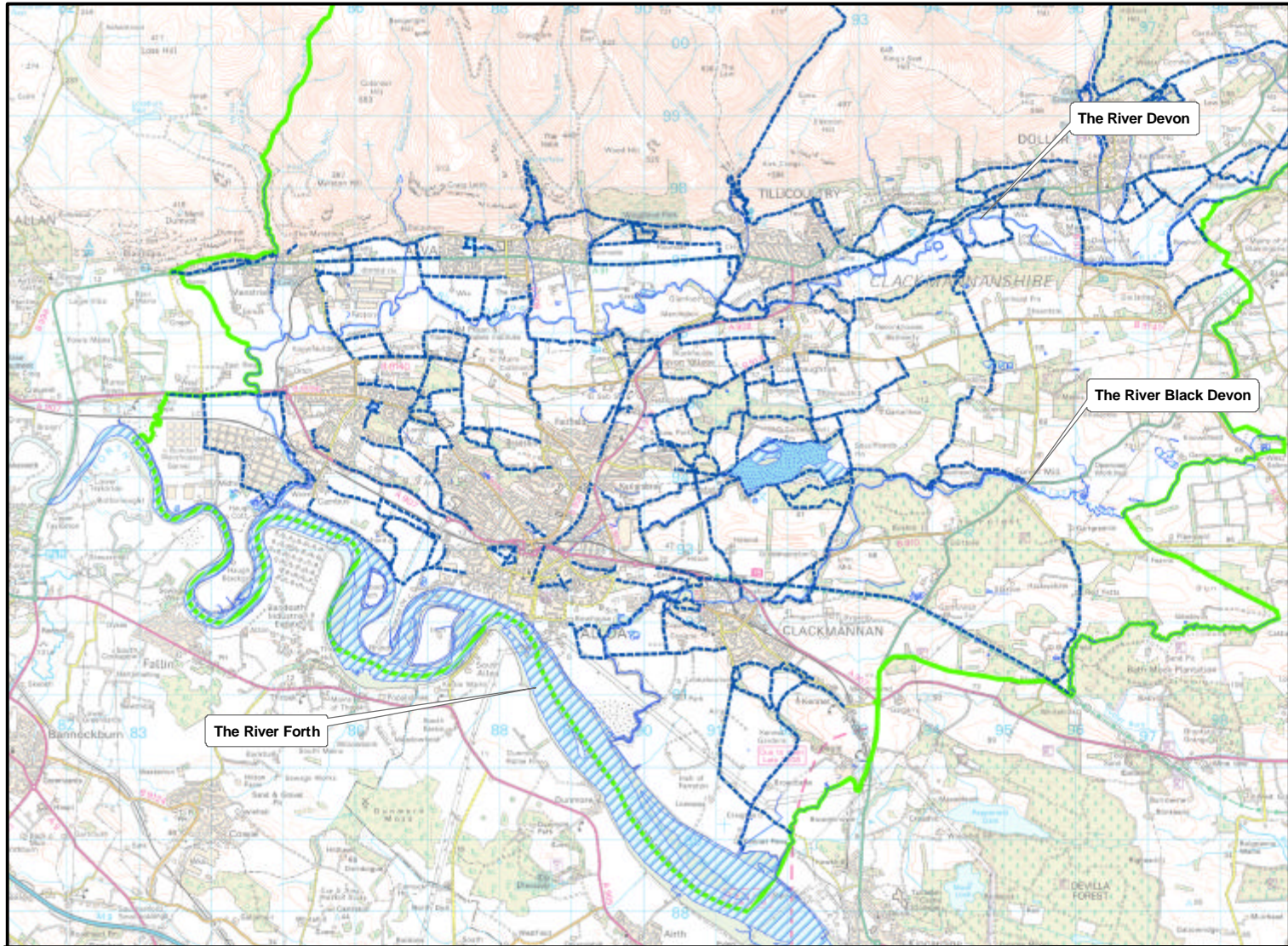
Clackmannanshire contains 46 hectares (ha) of derelict land, over 13 individual sites, and 45 ha of urban vacant land, distributed over 21 sites¹¹.

4.2.5 Water

The Water Environment

The River Forth with its wide meanders and tidal mudflats is the dominant water body in the area and is internationally designated as a Special Protection Area (SPA) and Ramsar Site for its natural heritage importance (See section 4.3.1 and Figure 4.2). In the lowest reaches, its tributary the Devon is of similar character although of smaller scale, becoming much narrower and more incised in its middle section upstream of Dollar. The Black Devon is similar to the middle Devon, winding its way through undulating forest country to the Forth of Clackmannan. The large man-made reservoir at Gartmorn Dam is a site of Special Scientific Interest (SSSI) and also an important recreational resource (it is Clackmannanshire's only Country Park), although its visual impact is localised due to the extensive peripheral woodlands.

¹¹ Scottish Vacant and Derelict Land Survey 2006, Scottish Government.



- Key**
- Proposed Core Path Network
 - █ Clackmannanshire Local Authority Boundary
 - ▨ Core path accessed by water
 - ▧ Watercourses



DRAWN BY: AK

CHECKED BY: PS

DATE: 03.08

natural CAPITAL



Figure 4.2: Watercourses

Flooding

Extensive parts of Clackmannanshire are areas of flood plain. Flooding is a natural phenomenon that plays an important role in shaping the environment. However, climate change may mean that flooding becomes more severe and more frequent in certain areas. It should be managed rather than prevented and needs to be taken into account in decisions about locating development. In accordance with SPP7 - Planning and Flooding, the Council will take a precautionary approach to flooding by avoiding new development and infrastructure on land at risk from flooding. Only where the development cannot be sited in a less sensitive location will the risk of flooding be managed through the provision of mitigation measures.

The potential for flooding is greatest alongside the rivers Forth, Devon and Black Devon. In addition, the Forth estuary is an important strategic feature for reasons of ecology, landscape, recreation and flooding. This area is covered by the 'Forth Integrated Management Strategy' which identifies key objectives and actions aimed at protecting and enhancing the estuary. The Council recognises the strategic importance of this area and will not support development, which may adversely affect its overall integrity.

Sustainable Urban Drainage (SUDS) can aid flood control in an environmentally acceptable manner. In many instances SUDS offer the opportunity for ecological enhancement through new habitat creation.

4.2.6 Air Quality and Climatic Factors

Climatic Factors

Scotland's Climate Change Programme¹² sets a key goal of reducing Scotland's own greenhouse gas emissions within the UK and Kyoto frameworks. The Scottish Programme will contribute directly to the UK domestic goal of reducing emissions of carbon dioxide to 20% below 1990 levels by 2010. It has identified the "Scottish Share" towards this reduction as being 1.7 million tonnes of carbon (MtC) in annual savings and sets out a range of strategies for delivering this reduction.

Existing climate is generally in line with Scotland as a whole but climate change predictions suggest potential increases in annual temperature and seasonal precipitation changes¹¹.

The Local Transport Strategy focuses on the promotion and facilitation of public transport and active travel over use of the private motorcar, thus striving to reduce carbon dioxide and other air pollutants emissions from this major source¹³.

Air Quality

Clackmannanshire Council has a responsibility under the Environment Act 1995 and Air Quality (Scotland) Amendments Regulations (2002) to improve air quality, not merely minimise pollution. The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2000) and the Addendum (2003) set health based objectives for nine air pollutants and two for the protection of vegetation and ecosystems. Where it is found that these objectives are unlikely to be met by the due date, then an Air Quality Management Area (AQMA) must be declared and an action plan setting out proposals for addressing the problems must be prepared. It

¹² "Changing our Ways" Scotland's Climate Change Programme, Scottish Executive, 2006

¹³ Clackmannanshire Local Transport Strategy 2006-2009: Transport and the Environment. Available at: <http://www.clacksweb.org.uk/document/1298.PDF>

is important for any air quality actions plans to be coordinated with the Local Transport Strategy and the planning system.

Many air quality hotspots in the UK are related to transport and vehicle emissions. Transport involves significant use of energy both from the fuel used by vehicles to the processing of materials for vehicle manufacturing and maintenance of the road surfaces. All of these activities can lead to decreased air quality and increased risk to human and environmental health.

It should be noted that Clackmannanshire Council only monitor air quality within urban areas. Clackmannanshire Council has concluded that it is unlikely at present that the National Air Quality Strategy (NAQS) objectives will be exceeded for any pollutant. A gradual decline in most air pollutants is expected due to new European vehicle emission limits and fuel quality standards.

4.2.7 Material Assets

Public Transport Infrastructure

Clackmannanshire has a growing network of recognised walking and cycling tracks, much of which utilise old pathways and railway lines. This network includes the National Cycle Network Route 76 – ‘Round the Forth’ that passes from east to west through Clackmannanshire. Much has been done in recent years to extend, improve and connect these networks.

The public transport system, which is currently served by buses, connects via the main centre of Alloa within Clackmannanshire to the more rural areas. Whilst the bus network is reasonable, with frequent connection between Alloa and Stirling, services could be improved, especially in those areas with limited services in the off-peak or infrequent services throughout the day. There are some areas which are not served by any public transport.

Waste and Recycling

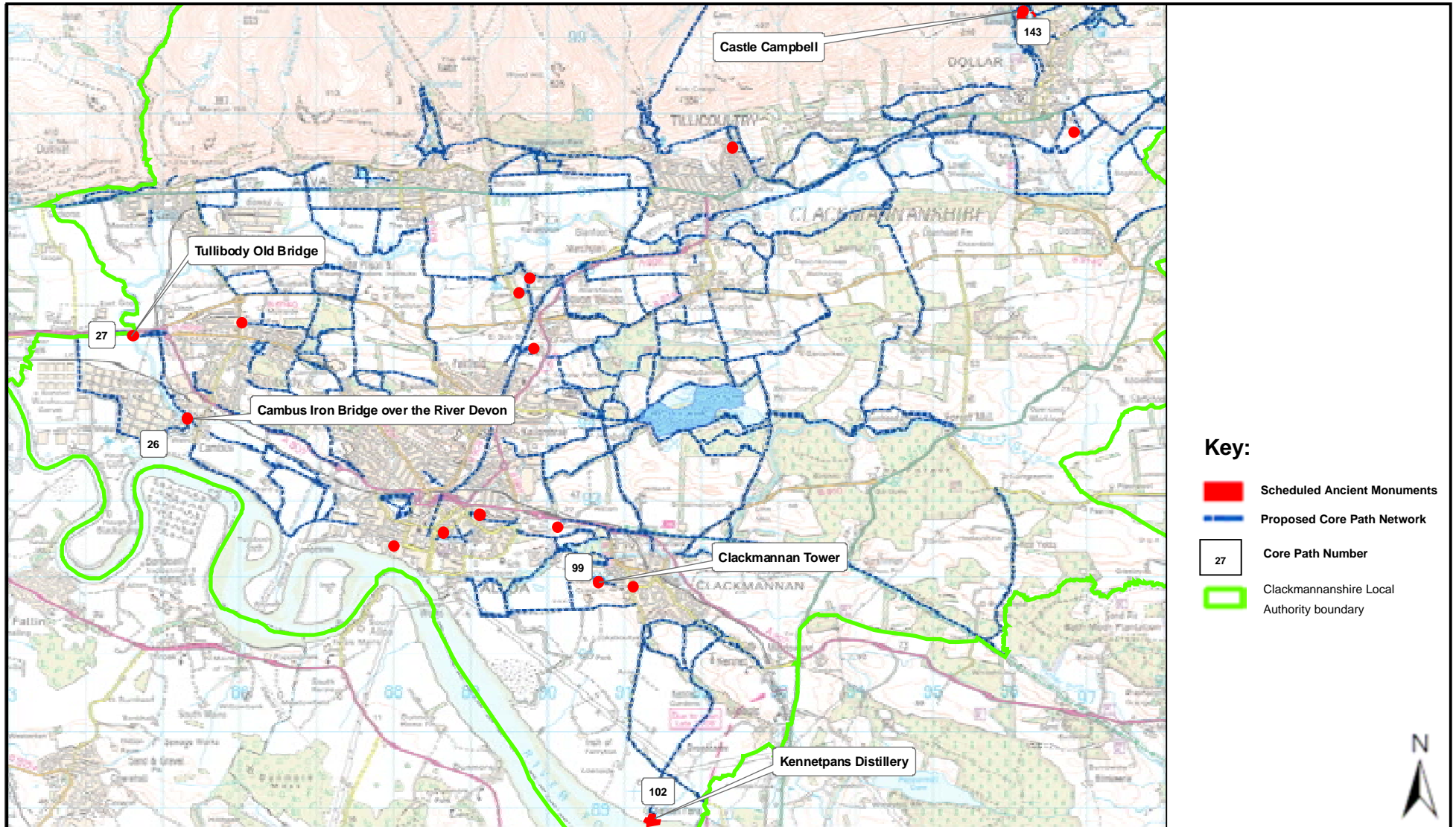
Significant progress has been made in recent years with regard to waste management in Clackmannanshire. The National Waste Strategy and the European Council Landfill Directive establish a framework for reforming the waste management system in Scotland and sets targets for improving the sustainability of waste management up until the year 2020. Clackmannanshire is currently ahead of the national targets and continuing to improve rapidly. The percentage of municipal waste recycled or composted has risen from below five per cent in 2001/2002 to 41.3% in 2006/2007.

4.2.8 Cultural Heritage including Architectural and Archaeological Heritage

Clackmannanshire has a rich cultural history in the form of historic buildings, protected under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997, and ancient monuments, protected under the Ancient Monuments and Archaeological Areas Act 1979.

Clackmannanshire contains 298 listed buildings- 17 Category A, 151 Category B, and 130 Scheduled C(S) listed buildings (as at 1st July 2007).

There are 17 Scheduled Ancient Monuments within Clackmannanshire, which include a tombstone, a cairn, Castle Campbell and Clackmannan Stone, amongst others (see Figure 4.3).



Key:

- Scheduled Ancient Monuments
- Proposed Core Path Network
- Core Path Number
- Clackmannanshire Local Authority boundary

DRAWN BY: AK	CHECKED BY: PS	DATE: 03.08
--------------	----------------	-------------

natural CAPITAL



Figure 4.3: Scheduled Ancient Monuments

4.2.9 Landscape

Clackmannanshire has two Areas of Great Landscape Value (AGLVs): Forest, which covers the predominantly wooded lowland area east of Alloa and north of Clackmannan, and also Ochil, which covers the Ochil Hills. The coverage of both of these AGLVs has been reviewed in the most recent Local Plan and the boundaries have been redrawn to ensure that the most valuable landscapes in Clackmannanshire are protected.

Whilst the Local Plan policies seek to protect designated landscapes such as AGLVs, the wider landscape heritage is also given protection from development that may affect its overall quality. Landscape Character Assessment (LCA) has been undertaken for the whole of Clackmannanshire. This identifies the different landscape types in the area, provides information about key landscape features.

According to the LCA, the landscape of Clackmannanshire can be divided into three Landscape Types: Hills, River Valleys and Valley Fringes.

The Ochils fall within the type termed Hills and form the highest ground within the Lowlands of Central Region. The dominant feature of the hills is the striking contrast between the abrupt, extremely steep southern scarp, and the broad, level plain of the lower Devon River below. The streams of the upper plateau slopes converge and carve into the south-facing perimeter of the hills, plunging through steep-sided glens to reach the valley floor.

The River Valleys consist of three separate Character Areas, ranging in nature from the broad agricultural flatlands of the Carse of Forth to the narrow gorge-like Middle Devon.

The third Landscape Type; Valley Fringes, includes the transitional landscapes of generally subdued relief, which link together the adjoining Forth and Devon valleys¹⁴.

4.3 CURRENT ENVIRONMENTAL ISSUES

Many of Clackmannanshire's environmental problems are common to Scotland as a whole. Clackmannanshire performs well in terms of air quality and waste management; it has areas of deprivation, with consequent social problems such as poor health; its natural heritage is vulnerable to development pressures and to the threat of global climate change.

Environmental problems which have been identified are:

- **Biodiversity, flora and fauna:** Decline in biodiversity in region; lack of information on European protected species; impacts of climate change on biodiversity.
- **Population and human health:** Predicted population decline, ageing population, health inequalities.
- **Water and soil:** Potentially considerable amount of contaminated land. Areas of the Forth Estuary are classed as poor. Scotland wide issues of erosion, climate change affecting organic content.
- **Material assets:** Household waste generation increases every year, however recycling levels are higher than Scottish average figures. Scotland wide issues of poor building maintenance.
- **Air:** No problems: air quality in the region is generally of a high quality in terms of national air quality objectives.

¹⁴ Scottish Natural Heritage (1998) Clackmannanshire Landscape Character Assessment

- **Climatic factors:** Flood risk in many areas. SEPA's State of Scotland's Environment 2006 identifies climate change as Scotland's most significant environmental problem.
- **Cultural heritage and landscape:** Scotland wide issues of neglect of buildings. Landscape character disruption due to wind farms, major developments and infrastructure.

4.4 FUTURE OF THE ENVIRONMENT WITHOUT THE CORE PATHS PLAN

The SEA process is designed to identify what impacts the adoption of the plan is likely to have on the environment. The SEA Directive also requires that the evolution of the environment in the absence of the plan should be examined. The path network already described in the CPP comprises existing paths, many of which are rights of way and most of which are listed in the Scottish Path Records. Therefore, no physical interventions will arise from the adoption of the plan, other than the introduction of signage as required by legislation and the conversion of existing stiles into gates in order to facilitate greater access.

However, the paths listed in the CPP will be afforded an additional level of protection that will be most significant where land available for development and path routes coincide. Consequently, in the absence of the Plan's adoption, there is risk that existing routes may be lost, and that future opportunities for new core paths would not be identified.

Table 4.1 Evolution of the Environment without the Core Paths Plan

SEA Topic	Evolution without Core Paths Plan
Biodiversity, Flora and Fauna	The Core Paths Plan does not provide for any physical interventions except signage and gates and therefore it is not expected that any adverse change is likely to occur to Clackmannanshire's biodiversity with the adoption of the Plan. The designation and protection of paths may result in their increased use in the future, but the encouragement of responsible use through interpretation and signage suggested within the Plan should help to mitigate against this. Effects on biodiversity could be prevented by adoption of the plan if the major development of land that is currently rich in species diversity is halted as a direct result of the adoption of a core path on that land. It is most likely, however, that with the adoption of the Plan, biodiversity status will be unchanged.
Population and Human Health	The promotion of the core path network, both as a recreational resource and to improve non-motorised transit should increase the number of Clackmannanshire residents and visitors using a mode of transport that involves a level of physical activity. Without the Plan, fewer people are likely to walk or cycle in town and this may have a minor negative effect on the overall health of the population.
Soil	No new physical interventions, other than installing some gates, are included in the Core Paths Plan and therefore, like biodiversity, it is not envisaged that there will be any significant impact on soils arising as a result of adopting or not adopting the Plan. Changing use patterns and minor maintenance activity may have minor impacts on levels of soil erosion.
Water Air Quality and Climatic Factors	The potential for the Core Paths Plan to encourage an increase in non-motorised forms of transport may bring less reliance on motorised transport, which could bring minor benefits to water and air quality. However, the general levels of car use and ownership are increasing throughout the UK and globally and the

SEA Topic	Evolution without Core Paths Plan
	knock-on effects will continue to be apparent in the Clackmannanshire area irrespective of the adoption of the Core Path Plan.
Material Assets	The adoption of some core paths may restrict or alter the form of development that would otherwise be permitted on the route of a path. However, the Core Paths Plan has been developed in consultation with landowners and stakeholders to ensure that the potential for conflicts of interest over land use is minimised.
Cultural Heritage including Architectural and Archaeological Heritage	<p>The Core Paths Plan would not generate adverse effects on any sites of cultural heritage value. Paths already exist that serve the towers, castles and historic sites in Clackmannanshire and in each case there is either no direct access to the site from the path or the site is fenced off from the path.</p> <p>However, the path network will improve linkages between sites and may consequently increase patronage and associated viewing opportunities. Without the Core Paths Plan, many sites will continue to be attractions for visitors and residents of Clackmannanshire.</p>
Landscape	The main influence on Clackmannanshire's landscape is likely to come from development, which is largely dictated by the provisions of development plans and development control/management. This is unlikely be affected by the adoption of the Core Paths Plan, although the protection of designated routes may alter the form and exact footprint of development in the vicinity of core paths. Without the Plan, it is likely that such modification to development would still occur due to the need to respond to existing rights of way.

5 ASSESSMENT OF THE ENVIRONMENTAL EFFECTS AND PROPOSED MITIGATION

5.1 INTRODUCTION

The procedure for assessing the likely environmental impacts of the Core Paths Plan has been described in Section 2.6. The aims and objectives of the Plan have been tested for their compatibility with the SEA objectives (see Table 3.1). An overall summary of the environmental assessment of the Candidate Paths against the SEA objectives is given in Table 5.1. Although there were no explicit alternative plans considered during development of the Core Paths Plan, consideration was given to alternative CPP objectives, to a large number of potential core paths suggested by consultees, and to different levels of core path coverage (*i.e.* more or less core paths). How these were assessed is discussed below in Section 5.2.

5.2 ASSESSMENT OF ALTERNATIVES

The SEA Directive and the *Environmental Assessment (Scotland) Act* require the Environmental Report to consider the impacts of alternatives to the proposed plan as part of the SEA. There is no alternative *per se* to producing a CPP (*i.e.* a do nothing alternative) as production of a plan is a statutory requirement of the Land Reform (Scotland) Act 2003¹⁵. However the development of the CPP has been an iterative process, during which a large number of possible routes have been considered for inclusion, through application of the criteria listed, as well as discussions with relevant parties. Alternatives to the content and proposals contained within the Plan have therefore been considered as part of the Plan development.

As a result of this iterative assessment and series of consultations the following were developed and refined during the CPP development process:

- the criteria used to define what constitutes a core path, which were informed and shaped by legislation, guidance, input from the Access Forum and consultation (see Section 3.3);
- routes including the following were tested against the developed criteria, as they were suggested during consultation:
 - existing rights of way and other paths recorded on paths record databases (Scottish Path Records (SPR));
 - other informal paths, mapped or otherwise locally known and used; and
 - sections of minor road/pavement which link sections of path in order to provide continuity of route.
- where appropriate, the need for alternatives when use of a path has to be restricted; and
- inclusion of provisional routes that could be designated as core paths at a later stage (for example, if new funding means they can be suitably maintained, or where lack of connectivity or a blockage can be resolved).

All paths were screened against the CPP criteria (Section 3.3) and this presented the opportunity to identify some potential environmental constraints at an early stage. No paths were rejected specifically on the grounds of environmental impact. Many of the paths proposed during the consultations have been taken forward but a number were rejected because they did not meet the all essential

¹⁵ <http://www.opsi.gov.uk/legislation/scotland/acts2003/20030002.htm>

and the required number of desirable criteria (Section 3.3). A small number of paths were discounted because of issues relating to land use and management although the majority of concerns in this area were successfully addressed by amendments to initially proposed routes. Certain routes were also identified for consideration during future reviews of the plan as they are not suitable for designation at the present time.

Alternatives in relation to the overall level of path provision across the Clackmannanshire area were considered at each stage bearing in mind the statutory obligation to provide “reasonable access” throughout the area.

5.3 ASSESSMENT OF THE DRAFT CORE PATHS PLAN

5.3.1 Introduction

Building on the screening assessment that was undertaken for the individual proposed core paths (see Annex C), the CPP has been considered as a whole in the context of the SEA Topics. Table 5.1 consolidates the environmental effects that are predicted to arise as a result of the adoption of the draft CPP. Adoption of the CPP is not expected to result in any major physical works to any paths. All of the proposed core paths are existing routes which provide reasonable access in their current condition. The only actions that will be undertaken will be:

- to provide low key signing of core paths;
- to promote them by dissemination of the core paths marking of core paths on next issues of ordnance survey maps; and
- to identify them in future local plans for consideration in planning decisions.

The promotion of core paths may result in their increased use with potential for impact on environmental resources at risk from disturbance by people, cycles, dogs, etc. Against this increased walking, cycling and riding has the potential to offer benefits to the health and welfare of people using them and reduce the adverse effects of motorised forms of travel. The CPP does describe some potential future paths that would require physical works which have the potential to be far more significant than the proposals to use existing routes included in the current plan. These routes will however be subject to further review and assessment before they are adopted and they are not therefore addressed in this assessment.

In reaching the conclusions included in Table 5.1, professional judgement has also been exercised in considering the likelihood of secondary, cumulative, indirect and synergistic effects arising from the adoption of the proposed CPP.

Table 5.1 SEA Appraisal Summary of the CPP

SEA Topic	SEA Objective	Likely Significant Impact	Comments
Biodiversity, Flora and Fauna	<ul style="list-style-type: none"> • Ensure the sustainable management of, and avoid damage to, designated wildlife sites and protected species • Maintain biodiversity, avoiding irreversible losses • Provide opportunities for people to come into contact with and appreciate wildlife and wild places 	Neutral/positive	<p>Most of the paths are likely to have a broadly neutral effect on these SEA objectives. The proposed core paths consist of existing paths, predominately for low impact users such as walkers, cyclists and occasionally horse riders. The core paths process may increase public awareness and use of the existing network as well as promote opportunities to enjoy and understand Clackmannanshire's Natural Heritage. Where paths pass through or adjacent to areas designated for their ecological importance, signage should ask path users to avoid sensitive areas, minimise the impacts that they have generally throughout the area (by keeping dogs under control, not entering watercourses, <i>etc</i>). Additional signage and interpretation relating to why a designation exists, explaining the important or unique characteristics of the designated area, would help to promote the opportunities for people in Clackmannanshire to enjoy the natural heritage. Since there are no new paths to be created as part of the CPP and since there are no plans for major new infrastructure (such as bridges over watercourses) nor the removal of habitat or trees to make way for new paths, then there are no anticipated effects predicted on European Protected species such as the otter or bats by the adoption of the CPP.</p> <p>Core Path 122 is the only 'on-water' Core Path that provides access to a water body - the reservoir Gartmorn Dam. Core Path 121 provides a route around the reservoir. Although the reservoir and its immediate environs are designated as an SSSI it is already well used by a variety of water based recreational user groups (canoeists, sailing dinghies and fishermen) and has signage that highlights the sensitive areas and steers human activity away from these areas. Since Path 121 is already an existing path and right of way and because there is no planned physical intervention to this path as a result of the CPP, there will be no significant effects on the SSSI as a result of the adoption of the CPP.</p> <p>Sections of two of the proposed core paths (Core Paths 23 and 26) are adjacent to the Firth of Forth SPA . Because Core Path 23 is an existing path and right of way and Core Path 26 is part of the National Cycle</p>

SEA Topic	SEA Objective	Likely Significant Impact	Comments
			Network 76 (also referred to as 'Round the Forth Cycle Route'), and because there are no planned physical interventions to these paths as a result of the proposed CPP, there will be no significant effects on the SPA arising as a result of adoption and there is no need for appropriate assessment under the Habitats Directive (see also 5.3.2).
Population, Human Health and Air Quality	<ul style="list-style-type: none"> Promote healthy living Reduce and prevent crime; reduce fear of crime. Improve quality of life for present and future generations 	Neutral/positive	The core paths process may increase public awareness and use of the existing path network and promote opportunities for healthy recreational activities and alternative modes of commuting e.g. walking and cycling. Therefore the CPP is likely to have a broadly positive effect in promoting healthy living. Improving and protecting the path network may also improve access to schools, healthcare facilities and other community services (e.g. shops and libraries) for people who do not have access to motorised transport. In these cases this will make a contribution towards improving the quality of life in the area.
Soil and land Water Population	<ul style="list-style-type: none"> Maintain and restore key ecological processes (e.g. hydrology, water quality, coastal processes) 	Neutral	No new paths are proposed across existing agricultural land (although parts of five paths, Core Paths 28, 44, 50, 176 and 181 are proposed along field margins) therefore there will be no significant impact on existing soil quality. Increased intensity of use of paths and minor maintenance activity could result in very minor effects in relation to soil erosion but these are very unlikely to affect farm production. Increased intensity of use of existing paths may result in slightly increased erosion from bare soil, and also the potential for increased litter, which in some cases could adversely affect water quality. With regard to water quality and its impact on biodiversity, signage should be used to discourage user activities and behaviour that may adversely affect water quality.
Climatic factors Air Quality	<ul style="list-style-type: none"> Reduce greenhouse gas emissions Reduce vulnerability to the effects of climate change 	Neutral	Promotion of the proposed core paths may result in some transfer from motorised to non-motorised modes of transport but the effect on overall traffic in Clackmannanshire is likely to be very small and is unlikely to have any significant impact in reducing emissions or altering existing air quality trends across the district.
Material assets	<ul style="list-style-type: none"> Minimise waste, then re-use or recover it through recycling, composting or energy recovery Make best use of existing infrastructure 	Neutral	The Core Paths Planning process will increase public awareness and use of the existing network of paths so will be making best use of existing path infrastructure. If future path construction, modification and maintenance makes use of reused and recycled materials then there will be a contribution to minimising potential waste materials and recovering and reusing them. Any mode transfer from motorised to non-motorised transport would reduce energy consumption but, as with air quality, effects are unlikely to be significant across Clackmannanshire.

SEA Topic	SEA Objective	Likely Significant Impact	Comments
Cultural Heritage	<ul style="list-style-type: none"> • Preserve historic buildings, archaeological sites and other culturally important features 	Neutral/positive	<p>The adoption of the CPP will not cause direct impacts (loss of or damage to features of the historic environment). Neither will it cause indirect effects (e.g. effects on setting, changes to surface drainage etc), since the CPP is based on a set of existing paths. The CPP does, however, promote several paths that provide access to some of the towers, castles and ancient monuments within Clackmannanshire. All of the paths are based on existing rights of way and are already in active use. There will not be any adverse impacts on these historic monuments caused by the adoption of the CPP because there is either no direct access to them from the path or where the path does go close by the site is fenced off.</p> <p>The only exception to this was Clackmannan Tower , accessed by CP 99. The path has now been diverted around the tower so that the public would need to divert off the path to visit the tower. This action should, therefore, relieve any pressure on the monument from a possible increase in walkers using the path.</p> <p>The development of the Plan, especially the consultation process and plan adoption, will increase public awareness and possible use of the existing path network, improve knowledge of access provision and broadly promote the enjoyment and understanding of Clackmannanshire's cultural heritage.</p>
Landscape Biodiversity	<ul style="list-style-type: none"> • Protect and enhance the landscape • Improve quality of publicly accessible open space 	Positive	<p>Routes through visually sensitive areas such as the Ochil hills follow existing paths and rights of way, and since there is no planned footpath or infrastructural work on these paths there will be no landscape impacts caused by the adoption of the CPP.</p> <p>Potential greater intensity in the use of the existing network may promote a wider understanding and enjoyment of Clackmannanshire's scenic character and landscape assets. Several proposed core paths, including Core Paths 61, 62 , 143, 147 and 168 provide some of the only means of access to key viewpoints across Clackmannanshire from the Ochil hills.</p>

5.3.2 Appropriate Assessment

The Core Paths Plan is seeking to encourage the use of existing paths, some of which lie adjacent to the Firth of Forth Special Protection Area (SPA) see Section 4.2.2 and Figure 4.1. It is therefore necessary to consider the effects of the proposals in accordance with the requirements of the *Habitats Regulations 1994* as amended. Guidance produced by SNH¹⁶ describes a staged process for considering the effects of proposals that affect Special Protection Areas (SPAs) as follows:

1. Define the proposals.
2. Establish whether the proposals are necessary to the management of the site for nature conservation purposes. If they are then no further assessment is required.
3. Determine whether the proposals are likely to have a significant effect on the site. This acts as a coarse sieve to remove from the process projects that are neutral, trivial, or very short term in their impacts on a site's qualifying interests (the significance test).
4. If it cannot be demonstrated that the effect is trivial or inconsequential, then the implications of the development for the site's conservation objectives should be assessed so as to answer the question "*can it be demonstrated that the proposal will not adversely affect the integrity of the site?*" This is referred to as the Appropriate Assessment.
5. If the Appropriate Assessment (undertaken by Clackmannanshire Council as the Competent Authority) indicates that no adverse effect will occur, consent may be granted. If not, further steps are required to demonstrate that specific reasons why the development should be permitted before consent may be granted. These may include consideration of alternatives, or Imperative Reasons of Over-riding Public Interest (IROPI). The proposals are defined above and it is evident that they are not necessary to management for nature conservation purposes (steps 1 and 2).

The process of determining whether a likely significant effect will occur has involved a review of the following:

- details of the nature conservation interests of the Firth of Forth SPA and the qualifying interest for which it was designated;
- the conservation objectives of the Firth of Forth SPA;
- the condition of the site; and
- the anticipated change in the level and pattern of usage of the core paths.

This included consideration of:

- how the proposed core paths could affect the qualifying interest of the SPA;
- how sensitive the areas of the SPA most likely to be affected are;
- the probability of a negative effect occurring;
- the likely consequences for the conservation objectives if the effect occurred; and

¹⁶ Scottish Natural Heritage Guidance Note Series (2000) Natura Casework Guidance: Consideration of Proposals Affecting SPAs and SACs, SNH.

- the magnitude, duration and reversibility of the effect.

Within the Core Path Plan proposed for Clackmannanshire it is considered that only Core Paths 23 and 26 are relevant to any assessment of likely significant effects on the Forth SPA arising from the CPP.

Much of the route of CP 23 follows an existing path and right of way adjacent to the River Forth near Tullibody Inch from the western edge of Alloa to Cambus. The path runs along the river bank and does not physically intrude into or impact upon the SPA habitat. CP 26 follows the route of the National Cycle Network 76 from Cambus via Cambus Pools Nature Reserve along a track adjacent to a complex of bonded warehouses (Diageo plc) before reaching the A907.

Both paths as presented within the CPP require no physical works or realignment. In this respect, there are no construction phase impacts to be considered as part of an Appropriate Assessment. What remains to be considered within the context of an assessment of likely significant effects, is the potential impact of any change in the level or pattern of use of Core Paths 23 and 26 and adjacent shoreline resulting from implementation of the CPP, on the SPA. Of particular importance are the qualifying assemblage of wildfowl and wader species that use the sand and mudflat areas for feeding, loafing or roosting. The presence of humans, and especially with dogs is known to be a potential source of disturbance to bird species along the foreshore as could be any minor maintenance work if carried out.

Since they are already existing rights of way, Core Paths 23 and 26 are well established and reasonably popular areas for walking and cycling. Any increase in usage due to the CPP is considered likely to be modest, and the additional impact on the integrity of the SPA as a result of designation of the paths is expected to be minimal. It should also be noted that the greatest increase in use of these paths is likely to occur outside the winter months which is the main period of interest for birds.

To mitigate any risk of disturbance from increased path use, good practice or codes of conduct (including the existing codes that are already available today) will be promoted and assisted through signage to highlight the value and nurture interest in the birds along the Firth of Forth, and encourage dog owners to behave responsibly. This should ensure that the majority of users make use of the path without causing unnecessary disturbance. In the light of these considerations it is considered that the likely impact on the integrity of Firth of Forth SPA arising from the implementation of the Plan will be negligible. Hence, it can be concluded that a more detailed Appropriate Assessment by Clackmannanshire Council is not required.

5.4 POSSIBLE CUMULATIVE EFFECTS ASSOCIATED WITH THE CPP

As described above, few individual environmental impacts are likely to arise as a result of implementing the Plan. However, the effect of any such impacts that do arise could possibly become increasingly significant when combined with effects arising from the development of the rest of the path network and construction activities occurring concurrently with any core path activities. It is therefore an SEA requirement to consider cumulative impacts in this assessment.

The very small magnitude of impacts predicted to arise from the development of the Core Path Plan is not likely to cause significant cumulative impacts following implementation of the Plan. The development and promotion of the Plan as a

whole will increase awareness of the Clackmannanshire path and water route network and bring improvements in access to the whole of the Clackmannanshire area, whilst bringing support to other sustainable transport initiatives across the area.

Because there are no construction elements to the proposed Plan, its adoption will not contribute to construction impacts of unrelated developments being implemented in the vicinity of the path network and therefore the potential for cumulative impacts with development proposals currently in the planning system is not considered further.

5.5 PROPOSED MITIGATION

Because there are no new paths to be created as part of the CPP and therefore no associated major construction activities there are no significant direct and indirect impacts of construction on environmental resources predicted through the adoption of the CPP (e.g. loss or disturbance of wildlife, protected species and nature conservation interests, severance of wildlife corridors, loss or damage to cultural heritage sites, landscape features, water bodies, drainage and flooding, soils and erosion).

The impacts of the Plan on the integrity of environmental and historic designations are therefore considered to be negligible. Mitigation is thus limited to making sure that signage is appropriate to ensure sensitive areas are protected from disturbance.

Where paths pass through or close to areas designated for their ecological or historic importance, signage for such paths should request that path users adopt measures to minimise the impacts that they have within those areas, such as keeping dogs under control (e.g. on a lead), preventing litter, not entering watercourses, *etc.*

Additional signage and interpretation relating to why a designation exists, explaining the important or unique characteristics of the designated area, would reinforce the mitigation and help promote opportunities for people to enjoy and understand Clackmannanshire's natural and cultural heritage.

The Council is aware of its duty under the Nature Conservation (Scotland) Act 2004 to further the conservation of biodiversity, and to help deliver the Scottish Biodiversity Strategy¹⁷ (where there is a focus on those species that feature in the Scottish Biodiversity List). Providing signage and interpretation where appropriate within the CPP will be an important contribution that can be made to furthering conservation and help the Council deliver its duty.

5.6 MONITORING

Monitoring of the effects of implementing the Plan will be undertaken by regimes currently in place for local authority infrastructure maintenance and environmental regulators.

This will draw on several local authority departments and regulators, including:

- Road and Transportation who maintain adopted cycletracks and footways;

¹⁷ Scotland's Biodiversity – *Its in Your Hands*, A strategy for the conservation and enhancement of biodiversity in Scotland, the Scottish Executive, 2004

- the Clackmannanshire Ranger Service who manage paths through countryside sites including Ochil Hills Woodland Park at Tillicoultry and Gartmorn Dam Country Park;
- Land Services who manage Clackmannanshire owned parks and green spaces; and
- numerous path management activities carried out by private land managers.

Environmental bodies will also play a role in ensuring that no additional environmental impacts arise through ongoing monitoring regimes for footpaths.

SEPA will continue to monitor water quality and would report back to Clackmannanshire Council if the path network appears to be contributing to increased pollution. SNH has a responsibility to monitor and report on the condition of SSSIs and has a similar regime in place for monitoring the status of sites designated under the Habitats Directive, including Special Protection Areas (SPAs) and Special Areas for Conservation (SACs). Locally designated sites, such as Sites of Interest for Nature Conservation (SINCs) are the responsibility of local authorities (in this case Clackmannanshire Council), sometimes in collaboration with the Scottish Wildlife Trust, and existing programmes for maintaining the condition of such sites will continue throughout the implementation and adoption of the CPP.

Monitoring will therefore rely on the continued day-to-day management and site knowledge of those managing core paths on land for which they have responsibility, and the ongoing activities of the environmental regulators. Information about management, maintenance and development of core paths will be collated by the Council and form part of the data to be used on access related work across the Clackmannanshire area.

6 NEXT STEPS

6.1 PROPOSED STAGES

The following stages in the development of the CPP and its environmental assessment are envisaged:

- The Environmental Report, which reports the findings of the SEA of the CPP will be published for consultation alongside the CPP. This is programmed for late April 2008, and the consultation period is scheduled to last for some three months.
- Following consultation on the CPP and the Environmental Report, the CPP will be revised and updated where necessary taking account of the comments received.
- Following revision of the CPP, an SEA Statement will be prepared and made available to the Consultation Authorities and public setting out how the findings of consultation and the environmental assessment have been incorporated into the development of the CPP.

It is intended to finalise the CPP and associated documents by the end of March 2008 and it is anticipated that the CPP will be adopted in late 2008.

6.2 ANTICIPATED MILESTONES

The key milestones in the development of the CPP and the SEA are as follows:

- Submission of the Environmental Report to the Consultation Authorities, May 2008;
- Consultation on the CPP and Environmental Report from May 2008 to August 2008;
- Finalisation and adoption of the CPP in late 2008.

Natural Capital Ltd
13 Coates Crescent
Edinburgh
EH3 7AF
Tel: 0131 220 6121
Fax: 0131 220 6131
Email: info@naturalcapital.co.uk