

SEA

# STRATEGIC ENVIRONMENTAL ASSESSMENT

VOLUME 1: ENVIRONMENTAL REPORT

MARCH 2017

DRAFT NATIONAL PARK PARTNERSHIP PLAN 2018-2023



<b>Project title:</b>	<b>Strategic Environmental Assessment (SEA) of the draft Loch Lomond and the Trossachs National Park Partnership Plan (NPPP) 2018-2023</b>
<b>Contracting organisation:</b>	<b>Loch Lomond and the Trossachs National Park Authority</b>
<b>Contractor:</b>	<b>Collingwood Environmental Planning Limited (CEP)</b>
<b>Contact details:</b>	<p><b>Head office:</b></p> <p>Address: 1E The Chandlery, 50 Westminster Bridge Road, London, SE1 7QY, UK</p> <p>Contact: Ric Eales</p> <p>Tel. 020 7407 8700</p> <p>Fax. 020 7928 6950</p> <p>Email: <a href="mailto:r.eales@cep.co.uk">r.eales@cep.co.uk</a></p> <p>Website: <a href="http://www.cep.co.uk">www.cep.co.uk</a></p> <p><b>Scottish office:</b></p> <p>Address: c/o Department of Civil and Environmental Engineering, University of Strathclyde, Level 5, James Weir Building, 75 Montrose Street, Glasgow, G1 1XJ</p> <p>Contact: Dr Peter Phillips</p> <p>Tel: 0141 416 8700</p> <p>Email: <a href="mailto:p.phillips@cep.co.uk">p.phillips@cep.co.uk</a></p>
<b>Report details:</b>	<p><b>Report title:</b> <b>Volume 1: Environmental Report</b></p> <p>Date issued: 21<sup>st</sup> March 2017</p> <p>Version no.: 2</p> <p>Authors: Peter Phillips and William Sheate</p>

## List of abbreviations

<b>C&amp;LU</b>	Conservation and Land Use (NPPP theme)
<b>EC</b>	European Commission
<b>EIA</b>	Environmental Impact Assessment
<b>EU</b>	European Union
<b>FRM</b>	Flood Risk Management
<b>HES</b>	Historic Environment Scotland
<b>HRA</b>	Habitat Regulations Assessment
<b>LDP</b>	Local Development Plan
<b>LLTNP</b>	Loch Lomond and the Trossachs National Park
<b>LUS</b>	Land Use Strategy
<b>NFM</b>	Natural Flood Management
<b>NPA</b>	National Park Authority
<b>NTS</b>	Non-Technical Summary
<b>NPPP</b>	National Park Partnership Plan
<b>NWCN</b>	National Walking and Cycling Network
<b>RD</b>	Rural Development (NPPP theme)
<b>RLUP</b>	Regional Land Use Partnership
<b>PVA</b>	Potentially Vulnerable Area
<b>SEA</b>	Strategic Environmental Assessment
<b>SEPA</b>	Scottish Environment Protection Agency
<b>SNH</b>	Scottish Natural Heritage
<b>SRDP</b>	Scotland Rural Development Programme
<b>SuDS</b>	Sustainable Urban Drainage Schemes
<b>VE</b>	Visitor Experience (NPPP theme)
<b>WFD</b>	Water Framework Directive

# Contents

<b>1. Introduction</b>	<b>4</b>
1.1 Purpose of the SEA	4
1.2 SEA steps undertaken prior to this Environmental Report	5
1.3 Consultation on this Environmental Report	5
1.4 Compliance with the SEA Directive and 2005 Act	6
1.5 Compliance with the EU Habitats Directive 92/43/EC	6
<b>2. The National Park Partnership Plan 2018-2023</b>	<b>8</b>
2.1 Introduction	8
2.2 The Loch Lomond and the Trossachs National Park area	8
2.3 The purpose of the NPPP	8
2.4 Introduction to the draft NPPP 2018-2023	8
<b>3. SEA methodology</b>	<b>11</b>
3.1 Overview of the SEA of the draft NPPP 2018-2023	11
3.2 Timing of the SEA	12
3.3 SEA approach and methodology	12
<b>4. Environmental objectives, baseline and context</b>	<b>15</b>
4.1 Relationship with other relevant plans, programmes, strategies and environmental objectives	15
4.2 Summary of key environmental issues	16
4.3 Likely evolution of the environment without the NPPP 2018-2023	22
<b>5. The SEA Framework</b>	<b>23</b>
5.1 SEA objectives	23
5.2 Significance criteria	24
<b>6. Testing the compatibility of NPPP outcomes with the SEA objectives</b>	<b>27</b>
6.1 Purpose of testing compatibility	27
6.2 NPPP outcomes and assessment of compatibility	27
<b>7. Assessment of alternative approaches to the NPPP</b>	<b>30</b>
7.1 Identification of alternatives	30
7.2 Assessment of alternatives	30
7.3 Conclusion	34
<b>8. Assessment of the proposed NPPP 2018-2023</b>	<b>35</b>
8.1 Summary of the assessment	35
8.2 Key areas of potential cumulative effects	44
8.3 Proposed mitigation and enhancement measures	44
<b>9. Monitoring proposals</b>	<b>50</b>
9.1 Monitoring in relation to the assessment	50
9.2 Relationship with other assessments	52
<b>10. Conclusions and next steps</b>	<b>54</b>

**Appendices:** (see separate volume)

**Appendix 1: Scoping Report consultation responses**

**Appendix 2: List of other relevant plans, programmes and strategies**

**Appendix 3: Summary of environmental baseline information**

**Appendix 4: Compatibility analysis of NPPP outcomes and SEA objectives**

**Appendix 5: Proposed NPPP 2018-2023 – detailed assessment matrices**

# 1. Introduction

This document is an Environmental Report prepared as part of the Strategic Environmental Assessment (SEA) of the draft Loch Lomond and the Trossachs National Park Partnership Plan (NPPP) 2018-2023. It should be read in conjunction with the draft plan document itself and the separate SEA Environmental Report Appendices volume. A standalone Non-Technical Summary (NTS) of the Environmental Report has also been prepared which some readers may wish to refer to.

## 1.1 Purpose of the SEA

The Loch Lomond and the Trossachs National Park Authority (the NPA) have developed a draft National Park Partnership Plan (NPPP) for the period 2018-2023. This plan will replace the current NPPP which was adopted in 2012 and will expire at the end of 2017. Further information on the draft NPPP 2018-2023 and the proposals therein are provided in Chapter 2.

As part of the process of developing the new plan, the NPA have been undertaking a Strategic Environmental Assessment (SEA) of the emerging draft NPPP 2018-2023. The NPA commissioned Collingwood Environmental Planning Limited (CEP) to undertake the environmental assessment of the draft plan and prepare this Environmental Report. All other stages of the SEA have been / will be undertaken in-house.

SEA is a requirement of the European Commission (EC) SEA Directive (2001/42/EC) – the SEA Directive – and the Environmental Assessment (Scotland) Act 2005 – the 2005 Act. The approach taken to this SEA has been informed by relevant EC and Scottish legislation as well as statutory and non-statutory SEA guidance. This report constitutes an Environmental Report in accordance with the requirements set out in the SEA Directive and the 2005 Act. This chapter describes the purpose of SEA and the Environmental Report, outlines the report's structure and content and where to locate relevant SEA statutory requirements.

The 2005 Act is Scotland's national legislative framework on SEA for implementation of the EU SEA Directive. In Scotland, SEA is a requirement for all public plans, programmes and strategies which may have a significant effect on the environment. The overall purpose of SEA is to protect the environment and promote sustainable development. Further specific objectives of SEA, in the context of the draft NPPP 2018-2023, are outlined in Box 1.1 below.

### **Box 1.1: Overall objectives of the NPPP 2018-2023 SEA**

- Provide for a high level of environmental protection and enhancement;
- Ensure that the likely significant effects on the environment of implementing the NPPP 2018-2022 are identified, described, evaluated and taken into account before the plan is adopted;
- Evaluate reasonable alternatives, taking into account the objectives and geographical scope of the NPPP 2018-2023, to identify their likely significant environmental effects and inform the nature, content and scope of the preferred plan going forward; and
- Facilitate the process of consultation and engagement for stakeholders, statutory consultees and members of the public to comment on the potential environmental implications of the proposed NPPP 2018-2023.

The purpose of this Environmental Report is to set out key findings from the SEA process undertaken to date and the proposed next steps. It presents a summary of the environmental assessment of the draft NPPP 2018-2023 outcomes and priorities and is intended to support members of the public, the statutory Consultation Authorities and other stakeholders in responding to the consultation on the draft plan and its potential environmental effects. To meet this objective, this Environmental Report includes the information set out in Box 1.2 below.

**Box 1.2: Key information included within this Environmental Report**

- A summary of the relationship between the NPPP 2018-2023 and other relevant plans, programme and strategies (PPS);
- The environmental protection objectives established at the international, national, regional and local level of relevance to the NPPP 2018-2023 and information (where relevant) on how these have been incorporated with the SEA framework;
- An overview of the current environmental baseline and an indication of how this is likely to evolve in the absence of the NPPP 2018-2023;
- The characteristics of the environment within the Loch Lomond and the Trossachs National Park (LLTNP) area most likely to be affected by implementation of the NPPP 2018-2023;
- The key environmental issues and problems in the LLTNP that the NPPP 2018-2023 should seek to address;
- The potential environmental effects of implementing the NPPP 2018-2023 and of its reasonable alternatives;
- The measures envisaged to mitigate adverse and enhance beneficial environmental effects;
- The measures proposed to monitor the significant environmental effects of implementing the NPPP 2018-2023; and
- The next steps in the SEA process.

Further information on the consultation on the draft NPPP 2018-2023 and this accompanying Environmental Report, including details of how to respond, are provided at section 1.3 below.

## **1.2 SEA steps undertaken prior to this Environmental Report**

The NPPP qualifies for SEA by virtue of section 5(3) of the 2005 Act<sup>1</sup>. It is required by a legislative provision from the National Parks (Scotland) Act 2000<sup>2</sup> and covers most (if not all) of the topics listed at section 5(3)(a)(i) of the 2005 Act; e.g. agriculture, forestry, energy, town and country planning, transport and tourism. Accordingly, Screening was not required and the SEA proceeded directly to the Scoping stage.

The NPPP 2018-2023 SEA Scoping Report was submitted to the Scottish Government SEA Gateway on 21<sup>st</sup> March 2016. The report included an outline of the draft plan, a summary of its relationship with other relevant plans, programmes and strategies (PPS), a summary of the environmental baseline, trends and key environmental issues in the Park, details of the proposed scope and level of detail for the assessment and the proposed methodology for the SEA.

Scoping responses were received from the three statutory Consultation Authorities for SEA: the Scottish Environment Protection Agency (SEPA); Scottish Natural Heritage (SNH); and Historic Environment Scotland (HES). Responses were broadly supportive of the proposed approach and level of detail though several minor modifications have been made as a result. A full list of the comments received and details of how they have been taken into account in this Environmental Report are provided in Appendix 1.

## **1.3 Consultation on this Environmental Report**

The twelve-week consultation period on this Environmental Report, its Non-Technical Summary and the separate appendices volume, which accompany the draft NPPP 2018-2023, runs from 10<sup>th</sup> April to 3<sup>rd</sup> July 2017. The main address where the draft plan and the various SEA reports are available to view as printed documents is detailed in Box 1.3 below. The documents are also available to view at libraries and mobile libraries within / serving the Park.

<sup>1</sup> <http://www.legislation.gov.uk/asp/2005/15/section/5>

<sup>2</sup> <http://www.legislation.gov.uk/asp/2000/10/section/11>

**Box 1.3: Location where the draft NPPP 2018-2023 and Environment can be viewed in hard copy**

Loch Lomond and the Trossachs National Park HQ, Carrochan, Carrochan Road, Balloch, G83 8EG

All printed documents are also available electronically at the following URL:

<http://www.lochlomond-trossachs.org/park-authority/get-involved/consultations/>

The 2005 Act requires that the general public and the three statutory SEA Consultation Authorities (SEPA, SNH and HES) are consulted on the draft NPPPs and its accompanying Environmental Report. Your views on the proposed NPPP 2018-2023 and its potential environmental effects are important. The 2005 Act requires the NPA, as the Responsible Authority, to take account of every opinion expressed in response to this consultation. Where appropriate, your comments will be used to help shape and guide the outcomes and priorities that are adopted within the finalised NPPP.

Responses to the consultation should be sent to the address in Box 1.3 FAO NPPP Public Consultation or online via the URL listed above.

## 1.4 Compliance with the SEA Directive and 2005 Act

Schedule 3 of the 2005 Act lists the information that must be included in SEA Environmental Reports<sup>3</sup>. Table 1.1 below lists these requirements and cross-references them to where they can be found in this Environmental Report and its appendices.

**Table 1.1: Summary of SEA requirements and where they are covered in the Environmental Report**

Information to be included in Environmental Reports as per Schedule 3 of the Environmental Assessment (Scotland) Act 2005	Relevant sections in the Environmental Report
Schedule 3(1): an outline of the contents and main objectives of the plan, programme or strategy and of its relationship with other qualifying plans, programmes and strategies.	Chapter 2, sections 4.1 and 4.2, Appendices 2 and 3.
Schedule 3(2): the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.	Sections 4.2 and 4.3, Chapter 7, Appendix 3.
Schedule 3(3): the environmental characteristics of areas likely to be significantly affected.	Chapter 4, Appendix 3.
Schedule 3(5): the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.	Section 4.1, Chapter 5, Appendix 2.
Schedule 3(6): the likely significant effects on the environment of the draft plan and reasonable alternatives.	Chapters 6, 7 and 8, Appendix 4.
Section 3(7): the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.	Section 8.3, Appendix 4.
Section 3(8): an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of expertise) encountered in compiling the required information.	Chapters 7, 8 and 10.
Section 3(9): a description of the measures envisaged concerning monitoring in accordance with section 19.	Chapter 9.
Section 3(10): a non-technical summary of the information provided under paragraphs 1 to 9.	Separate document and at the front of the ER.

## 1.5 Compliance with the EU Habitats Directive 92/43/EC

<sup>3</sup> <http://www.legislation.gov.uk/asp/2005/15/schedule/3>

At the Scoping stage, the draft NPPP 2018-2023 was considered against the requirements of the Conservation (Natural Habitats &c) Regulations 1994 (as amended). It was deemed that a Habitat Regulations Assessment (HRA) would be required given the plan's potential to affect Natura 2000 sites in the Park (see Figure 4.2). The HRA process is being undertaken independently of this SEA and will be reported on separately.



## 2. The National Park Partnership Plan 2018-2023

---

### 2.1 Introduction

---

The draft NPPP 2018-2023 sets out proposals for how the NPA and a wide range of other organisations and interests can work together over the next five years to look after, enhance and make the most of the special landscape of the Loch Lomond and the Trossachs National Park (LLTNP). This section of the Environmental Report should be read in conjunction with the draft NPPP document which provides full details of the vision, themes, outcomes and priorities proposed.

This chapter provides a brief overview of the National Park area, outlines the purpose of the NPPP and provides some further details of the draft NPPP's proposals (outcomes, priorities etc).

### 2.2 The Loch Lomond and the Trossachs National Park area

---

Shown on Figure 2.1 below, the LLTNP covers an area of 720 square miles. It is in close proximity to Glasgow and other major settlements in the central belt and west of Scotland.

The Park is predominantly upland in nature dominated by highland landscapes comprising hills, upland glens and steep glen sides<sup>4</sup>. It is also heavily wooded (relative to Scotland as a whole) with 30% of the Park's land area made up of forests and woodlands<sup>5</sup>.

The Park is served by several trunk roads connecting to the west (A83), north (A82 and A84) and east (A85) of Scotland. The West Highland Line (railway) runs through the west of the Park with stops in Arrochar and Tarbet, Ardlui, Crianlarich and Tyndrum. There are also regular train connections from Glasgow Queen Street to Balloch in the south of the Park.

The Park is served by several strategic routes as part of the national walking and cycling network<sup>6</sup> (a designated national development in the latest National Planning Framework) as well as numerous locally designated core paths<sup>7</sup>. The environmental characteristics of the Park of relevance to the draft NPPP are outlined in Chapter 4 and Appendix 3.

### 2.3 The purpose of the NPPP

---

The NPPP sets out the overall vision, priorities and policies for managing the National Park, providing the strategic plan to coordinate the activities of the NPA and the various partner organisations that support the delivery of the Park's objectives. The specific purpose of "National Park Plans" is defined in the National Parks (Scotland) Act 2000<sup>8</sup>. The coordination purpose of the plan helps to align resources and ensure the delivery of multiple benefits.

### 2.4 Introduction to the draft NPPP 2018-2023

---

Like the extant NPPP, the draft NPPP 2018-2023 is structured around the following three themes:

1. Conservation and land management;
2. Visitor experience; and
3. Rural development.

---

<sup>4</sup> <http://www.snh.org.uk/pdfs/publications/review/140.pdf>

<sup>5</sup> <http://scotland.forestry.gov.uk/images/corporate/pdf/fcs-nwss-loch-lomond.pdf>

<sup>6</sup> <http://www.snh.gov.uk/docs/A2078355.pdf>

<sup>7</sup> <http://www.lochlomond-trossachs.org/park-authority/publications/core-paths-plan/>

<sup>8</sup> <http://www.legislation.gov.uk/asp/2000/10/section/11>

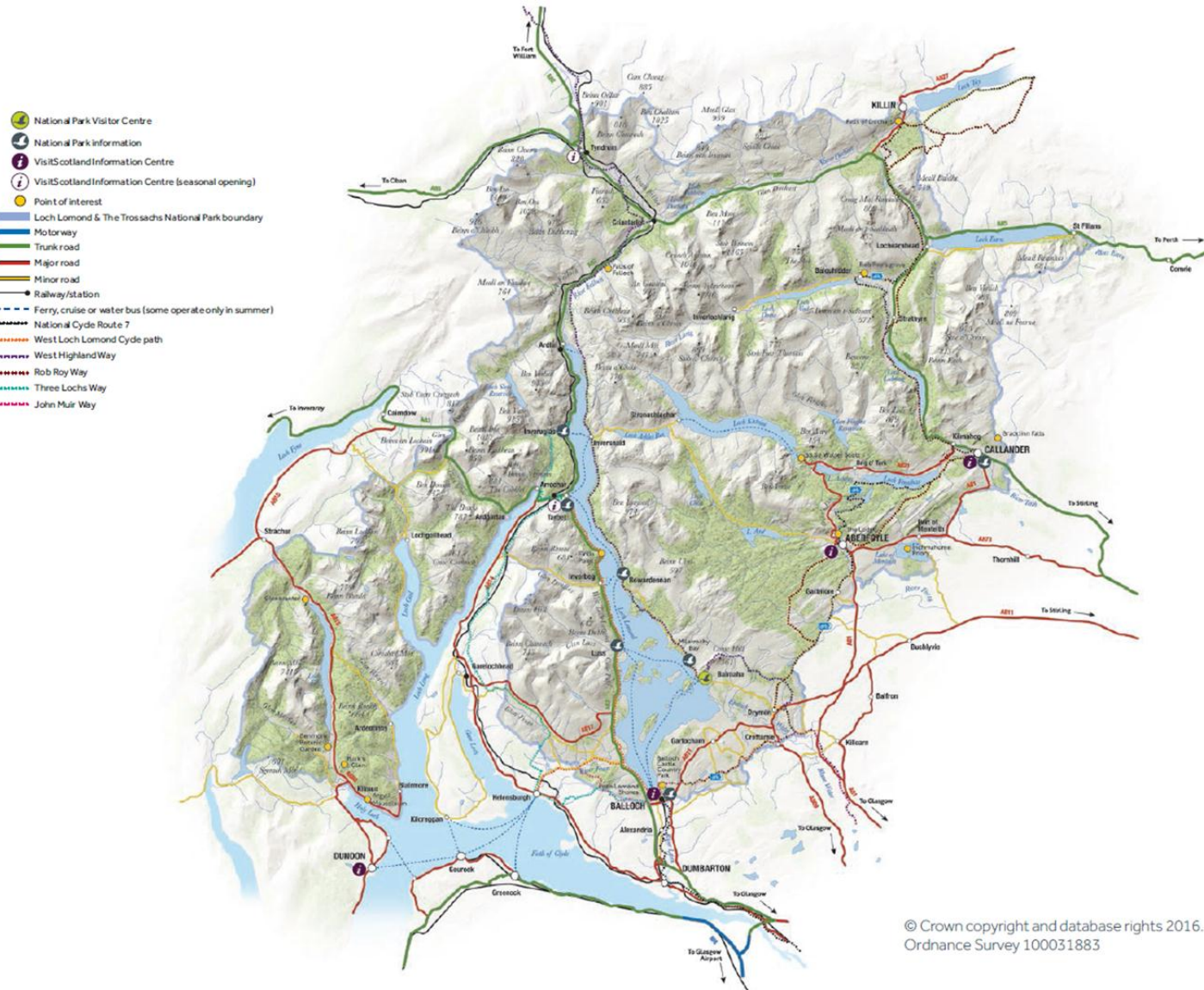


Figure 2.1: Overview of the Loch Lomond and the Trossachs National Park

Each of the draft NPPP's three themes is illustrated by a **vision** statement (see Box 2.1). The substantive parts of the NPPP are the 13 **outcomes** it aims to achieve (see Table 2.1) underpinned by a suite of more detailed **priorities**. The priorities provide a strategic focus for the activities of the NPA and the various partner organisations. They are too numerous to list here; readers should refer to the draft plan document to see the full range of proposals within the new NPPP.

**Box 2.1: NPPP 2018-2023 draft vision statements**

**Vision for conservation and land management:** *Nature, heritage, land and water are valued, managed and enhanced for multiple benefits for people and nature.*

**Vision for visitor experience:** *There is a high quality, authentic visitor experience for visitors from all backgrounds to enjoy recreation activities and appreciate the area's outstanding natural and cultural heritage.*

**Vision for rural development:** *Businesses and communities thrive and people live and work sustainably.*

The draft outcomes and priorities have been the focus for the environmental assessment in this SEA. The outcomes have been subject to a compatibility analysis with the SEA objectives (Chapter 6) and the priorities have been assessed in more detail against the SEA objectives and assessment criteria to identify the potential environmental effects of the draft NPPP 2018-2023 (Chapter 8).

**Table 2.1: NPPP 2018-2023 draft outcomes**

Theme	Outcomes
<b>Conservation and land management</b>	<ul style="list-style-type: none"> <li>• <b>C&amp;LU1 – Habitat restoration and connectivity:</b> The Park's natural resources are enhanced for future generations and important habitats are restored and better connected on a landscape scale.</li> <li>• <b>C&amp;LU2 – Landscape enhancement and experience:</b> The Park's special landscape qualities and sense of place are conserved and enhanced with more opportunities to enjoy and experience them.</li> <li>• <b>C&amp;LU3 – Land use and climate change:</b> The natural environment of the Park is better managed to help mitigate and address the impacts of climate change.</li> <li>• <b>C&amp;LU4 – Integrated land management (at catchment scale):</b> New catchment scale partnerships deliver better integrated management of the land and water environment, providing multiple benefits for people and nature.</li> </ul>
<b>Visitor experience</b>	<ul style="list-style-type: none"> <li>• <b>VE1 – Range of recreation opportunities:</b> The Park has a wide variety of well promoted and managed outdoor recreation opportunities providing for a range of abilities and interests.</li> <li>• <b>VE2 – Visitor management at key sites:</b> The most popular parts of the Park are well managed to ensure that the quality of environment, visitor experience and community life are protected and enhanced.</li> <li>• <b>VE3 – Increase in water recreation opportunities:</b> There are more opportunities to enjoy water based recreation across the Park's lochs, rivers and coasts.</li> <li>• <b>VE4 – Thriving visitor economy:</b> The Park's visitor economy is thriving with more businesses working together to create a world class destination.</li> <li>• <b>VE5 – Health and outreach:</b> More people are enjoying and valuing the Park and it is used as a place for people to connect with nature and enjoy the health and well-being benefits it brings.</li> </ul>
<b>Rural development</b>	<ul style="list-style-type: none"> <li>• <b>RD1 – Towns and villages:</b> The Parks towns and villages are enhanced through investment in their built and historic environment, public spaces and infrastructure.</li> <li>• <b>RD2 – Rural economy:</b> The rural economy has been strengthened through sustainable business growth and diversification.</li> <li>• <b>RD3 – Growing economically active population:</b> Population decline is being addressed by attracting and retaining more skilled working age and young people within the National Park.</li> <li>• <b>RD4 – Sustainable communities:</b> The long-term sustainability of communities is supported through empowering them to deliver actions that improve their quality of life and place.</li> </ul>

## 3. SEA methodology

### 3.1 Overview of the SEA of the draft NPPP 2018-2023

This section outlines the overall approach adopted in the SEA of the draft NPPP 2018-2023. More detailed information on specific tasks undertaken in the environmental assessment and Environmental Report stage of the SEA is provided elsewhere in this Chapter. Details of the approach taken to scoping and early consultation with statutory consultees is provided in the Scoping Report which is available via the Scottish Government SEA database<sup>9</sup> or on request from the NPA.

The overall objective of the SEA Directive 2001/42/EC is:

*“to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans...with a view to promoting sustainable development” (Article 1).*

Further details on the legislative framework for SEA in the EU and Scotland is provided in Chapter 1. The approach to the SEA of the NPPP 2018-2023 has been designed to comply with the SEA Directive and the 2005 Act. The development of the approach has also drawn on: relevant SEA guidance (especially the Scottish Government’s guidance<sup>10</sup>); the knowledge and experience of the SEA team at CEP (Dr Peter Phillips; Dr William Sheate); and input from members of the LLTNPA planning team.

The overall approach to the SEA has been designed to ensure that the LLTNPA team developing the NPPP are provided with useful environmental information, in a timely manner, to support the plan-development process. This has included:

- **An analysis of draft provisions within the proposed new (2018-2023) NPPP vs. provisions in the existing (2012-2017) NPPP:** this helped to highlight potential gaps and clarification points for the NPA as well as identifying SEA recommendations (mitigation and enhancement) aimed at the operational / management level (see Table 8.5);
- **Suggested alterations to the wording of key priorities within the draft NPPP 2018-2023:** based on the findings of the environmental assessment, a number of suggested revisions to the wording of key NPPP priorities were suggested to help improve the overall environmental intent and strategic direction of the new NPPP. These suggestions are outlined in section 8.3 (Table 8.4) of this Environmental Report; and
- **The findings of the environmental assessment undertaken on the draft NPPP 2018-2023:** the full range of results from the environmental assessment have been communicated to the NPPP team via this Environmental Report and also via a meeting to discuss the findings.

The SEA of the NPPP has adopted an SEA objective-led methodology. This sort of approach assesses the overall NPPP, its constituent elements (i.e. the various outcomes and priorities under each theme) and reasonable alternatives to the NPPP against a set of aspirational environmental or SEA objectives. The SEA objectives are detailed in full at section 5.1 below.

The development of the SEA objectives has been informed by the review of other relevant plans, programmes, strategies (PPS) and environmental objectives (section 4.1; Appendix 2), the key environmental issues facing the Park (section 4.2; Appendix 3) and comments received from the statutory Consultation Authorities during the scoping consultation (Appendix 1).

The assessment considers the degree to which the various provisions being assessed (e.g. the draft priorities) are likely to support the SEA objectives or work against / conflict with them. In the case of

<sup>9</sup> <http://www.gov.scot/Topics/Environment/environmental-assessment/sea/SEAG>

<sup>10</sup> <http://www.gov.scot/Resource/0043/00432344.pdf>

the former there is potential for the NPPP to contribute to significant positive environmental effects and in the latter, significant negative effects. The assessment methodology is described further at section 3.3 below.

The assessment is supported by environmental baseline information and trends (Chapter 4 and Appendix 3), an understanding of the key environmental issues / problems and opportunities of relevance to the NPPP (section 4.2, Appendix 3) and the expert knowledge of the CEP SEA team. The environmental effects predicted through the SEA objectives-led assessment are then evaluated against significance criteria, in order to determine their likely significance. NPPP specific significance criteria have been developed with reference to key provisions from the SEA legislation, notably Schedule 2 of the 2005 Act<sup>11</sup>, as described at section 5.2.

## 3.2 Timing of the SEA

---

The SEA process commenced in December 2015 with scoping and preparation of an SEA Scoping Report. This was undertaken in conjunction with the early stages of plan-development (e.g. early stakeholder engagement, agreeing the position and approach for the new NPPP, drafting NPPP discussion papers). The Scoping Report was submitted to the Scottish Government SEA Gateway in March 2016. Scoping responses from the statutory Consultation Authorities were subsequently received in April 2016.

Following scoping, there was a period of delay in the implementation of the SEA programme due to internal resource issues at the NPA. In February 2017, the NPA commissioned CEP to undertake the environmental assessment of the draft NPPP 2018-2023 and produce this Environmental Report. Environmental information and feedback produced through this assessment process then informed the final consultation version of NPPP, as outlined in section 3.1 above.

Consultation on this Environmental Report runs until **3<sup>rd</sup> July 2017**, after which the Environmental Report and any comments from the consultation will be taken into account in finalising the NPPP. The impact of the SEA informing and influencing the NPPP will then be documented in an SEA post-adoption statement to be published alongside the finalised, adopted NPPP 2018-2023 later on in 2017. Full details of next steps following consultation on the draft plan and this Environmental Report are provided at Chapter 10.

## 3.3 SEA approach and methodology

---

### Temporal and geographical scope of the assessment

The temporal and geographical scope of an SEA is defined by the plan or programme subject to assessment. Consideration of temporal / geographical scope informs the approach taken to a range of SEA tasks including the level of detail and scope for the environmental baseline and the timescales considered in the assessment of environmental effects.

The **geographical scope** for the assessment is the whole of the National Park area (see Figure 2.1). Some aspects of the draft NPPP 2018-2023 relate to specific areas / sites or landscape types. These spatially explicit aspects of the plan have been reflected in the assessment where relevant. The SEA has given some consideration to potential interactions between the NPPP and activities within adjacent local authority areas, however, the focus of the assessment has been within the Park.

The **temporal scope** for the assessment has been taken as the lifetime of the plan; i.e. from 2018 to 2023. This has important implications for several aspects of the SEA (e.g. considering the timescales over which environmental effects might be realised and how these can be monitored and considering the timescales set by environmental objectives and targets identified in the PPS review).

---

<sup>11</sup> <http://www.legislation.gov.uk/asp/2005/15/schedule/2>

## A strategic approach

The draft NPPP 2018-2023 is a highly strategic document. The NPPP's draft priorities – the provisions considered in the detailed assessment of the draft plan – set out the NPA's strategic intent for the 2018-2023 period but without the detailed policies and actions that will deliver the priorities. In effect, the detailed operational aspects of the plan setting out how it will be implemented remain to be agreed (e.g. through discussions with individual partner organisations).

Given the lack of detailed operational and implementation provisions in the draft NPPP therefore, the assessment has focussed on identifying broad areas of environmental risk (negative effects) and opportunity (positive effects) associated with the plan. Accordingly, collation of environmental baseline information and other scoping tasks have been undertaken in a manner befitting this strategic level of assessment.

The strategic nature of the plan and its assessment mean that there is a high degree of uncertainty concerning the likely significant environmental effects of the NPPP 2018-2023. Where relevant, detailed SEA mitigation and enhancement recommendations have been developed to help inform operational decisions (Table 8.4). Implementation of these recommendations should help to address the inherent uncertainty and ensure that negative effects are mitigated and positive effects enhanced.

## Updating scoping tasks

Prior to undertaking the environmental assessment of the draft NPPP 2018-2023 and the preparation of this Environmental Report, a number of the SEA scoping tasks were updated in line with scoping comments received from the statutory Consultation Authorities. SNH and HES were broadly content with the proposed approach and level of detail for the assessment. SEPA's response required more detailed consideration and action including: updates to the SEA framework; updates to the baseline and PPS review; and minor methodological revisions concerning the implementation and recording of the environmental assessment. Appendix 1 provides a categorised list of all scoping comments received and explains where and how they have been taken into account in revisions to the assessment approach and in the preparation of this Environmental Report.

## Environmental assessment of the draft NPPP proposals and alternatives

The environmental assessment of the draft NPPP 2018-2023 involved several separate tasks as outlined below:

1. **Testing the compatibility of NPPP outcomes with SEA objectives:** within each of its three themes, the draft NPPP sets out the various outcomes it aims to achieve (Table 2.1). These delineate the overall ends that the plan is aiming towards and so it is important to assess their compatibility with environmental objectives. The compatibility of each NPPP outcome with each SEA objective was assessed to determine the overall environmental coherence of the plan. The assessment was summarised in a matrix with comments explaining the rationale for individual assessments where relevant / necessary. The following scoring system was used: 1) compatible; 2) potential for conflict; 3) compatibility uncertain; and 4) no identified conflict or compatibility.
2. **Assessment of alternative approaches to the NPPP:** the nature of the NPPP is such that there are a limited number of reasonable alternatives given the objectives and geographical scope of the plan (i.e. as per the requirements for consideration of alternatives in the 2005 Act<sup>12</sup>). This is due to the "Sandford Principle" for National Park management which prioritises the conservation of natural heritage over other objectives (e.g. economic

---

<sup>12</sup> <http://www.legislation.gov.uk/asp/2005/15/section/14>

development, recreation)<sup>13</sup>. Accordingly, there are no reasonable alternatives to the draft NPPP which, the NPA highlight, strikes an appropriate (and fine) balance between conservation and sustainable use of the Park's natural and cultural heritage. Despite this, it has been possible to consider the Business as Usual (BAU) alternative which in this case is the continued implementation of the extant NPPP 2012-2017; the requirement of the National Parks (Scotland) Act 2000 to have a National Park Plan in place<sup>14</sup> means that there is no "do minimum" or "no plan" alternative. An environmental SWOT (strengths, weaknesses, opportunities and threats) analysis of the new NPPP vs the old NPPP has been undertaken against the headline SEA objectives / topics. At an appropriately high level (i.e. recognising the constrained nature of the alternatives assessment in this case), the SWOT analysis identified key areas of environmental risk and opportunity concerning the implementation of the draft NPPP 2018-2023 over the extant NPPP (as a form of alternatives assessment).

3. **Assessment of the draft NPPP 2018-2023:** a detailed assessment of the draft NPPP was undertaken on the basis of the various priorities proposed under the plan's three themes: (1) Conservation and Land Use; (2) Visitor Experience; and (3) Rural Development. In total, 47 separate priorities were assessed. Six priorities were screened out of the assessment on the basis that they were likely to result in no / minimal effects or because they overlapped other aspects of the plan to the extent that the assessment would be duplicated (see Appendix 5 for further details). Each priority was assessed against each of the 13 headline SEA objectives. Potential effects were teased out using assessment criteria (Table 5.1). The significance of the identified effects was then evaluated using the significance criteria (Table 5.2) informed by the various evidence used in the SEA (environmental baseline information and trends, key environmental issues, PPS review etc). The three themes were assessed separately with assessment results summarised in matrices. The detailed assessment matrices in Appendix 5 include a comments column explaining the rationale for individual assessments. The summary matrices in Chapter 8 include the individual assessment scores only. Once priorities in each theme had been assessed separately, interactions across the themes were considered to identify potential cumulative effects of the plan as a whole.
4. **Developing SEA recommendations:** following on from the assessment of the draft NPPP, SEA recommendations were developed to enhance positive effects and mitigate negative effects. SEA recommendations were developed at two levels: (1) suggested amendments to the wording of NPPP draft priorities – these recommendations alter the strategic intent of the plan and can help to ensure that desired environmental outcomes are realised; and (2) operational mitigation and enhancement measures – these more detailed recommendations are intended to support the implementation of the NPPP, addressing the inherent uncertainty associated with the strategic nature of the draft priorities. SEA recommendations in (1) and (2) are linked explicitly to significant environmental effects identified in the assessment and the aspect(s) of the plan likely to cause the effects.

---

<sup>13</sup> <http://www.nationalparks.gov.uk/students/whatisanationalpark/aimsandpurposesofnationalparks/sandfordprinciple>

<sup>14</sup> <http://www.legislation.gov.uk/asp/2000/10/section/11>

## 4. Environmental objectives, baseline and context

---

### 4.1 Relationship with other relevant plans, programmes, strategies and environmental objectives

---

A key requirement of SEA is undertaking a review of other relevant plans, programmes and strategies (PPS) and environmental protection objectives. The purpose of this review is partially concerned with good plan-making and partially with SEA and consideration of environmental issues. In the former, the PPS review builds up an understanding of the policy context that the draft NPPP will operate in on adoption and any constraints, opportunities or synergies this may raise. In the latter, the PPS review helps to provide a range of environmental information for the SEA and potential for interaction with other PPS:

- **Environmental objectives:** many PPS are, in part, oriented towards environmental protection. For example, the LLTNPA Local Development Plan (LDP) includes specific objectives on conservation of natural and cultural heritage alongside more development focussed objectives<sup>15</sup>. The Park's Biodiversity Action Plan – Wild Park 2020 – has an explicit focus on environmental protection and enhancement<sup>16</sup>. Extracting environmental objectives and targets from other relevant PPS therefore identifies the strategic intent of related environmental policies. Where relevant, these objectives can be incorporated within the SEA framework as SEA objectives and assessment criteria (see Chapter 5). Understanding the strategic intent of related environmental policies can also help to illustrate potential future environmental problems. By appraising environmental objectives and targets against related environmental trends (see section 4.2), it is possible to identify where objective and targets are unlikely to be met and therefore where future environmental problems are likely to arise (e.g. greenhouse gas mitigation targets). This is all useful information for the assessment by helping to evaluate significance.
- **Key environmental issues:** other relevant PPS can be a useful source of environmental baseline information as well as highlighting key environmental issues for consideration in the assessment (e.g. as part of the evidence base when evaluating environmental effects). For example, Wild Park 2020 contains five “wild challenges” capturing the key biodiversity issues in the Park that other relevant strategic actions (e.g. within the LDP) should work to address. As explained above, the dynamic assessment of environmental objectives / targets with trends data can help to identify emerging environmental issues that should ideally be addressed early on.
- **Potential cumulative effects:** a widely-recognised benefit of SEA is its ability to identify cumulative effects; the strategic nature of the assessment means that the potential impacts of multiple strategic actions can be considered simultaneously. This concept also applies to the impacts of multiple individual plans combining to cause *inter-plan* cumulative effects (e.g. LDPs from adjacent Local Authorities could combine to cause cumulative effects on key transboundary issues like landscape and biodiversity). The review of other relevant PPS provides an important opportunity to identify potential risks (and opportunities) associated with *inter-plan* cumulative effects.

Appendix 2 lists the PPS that have been considered in the SEA, divided by SEA topic where relevant. A separate category for cross-cutting PPS has also been included. Some minor updates to this list have been made following comments from the statutory Consultation Authorities at scoping (see Appendix 1). These PPS were reviewed in line with the rationale above. In particular, the review has helped to identify related environmental protection objectives and targets etc that have been

---

<sup>15</sup> <http://www.lochlomond-trossachs.org/planning/planning-guidance/local-development-plan/>

<sup>16</sup> <http://www.lochlomond-trossachs.org/rr-content/uploads/2016/07/Wild-Park-2020-Nature-Conservation-Action-Plan.pdf>



incorporated, where relevant, within the SEA framework (see Chapter 5). It has also helped to identify environmental baseline information, indicators (see section 9.1), trends and key environmental issues that have informed the assessment of the draft NPPP 2018-2023.

Figure 4.1 below illustrates the relationship of the NPPP with other key PPS / categories of PPS, NPA partner organisation activities and monitoring / data collection.

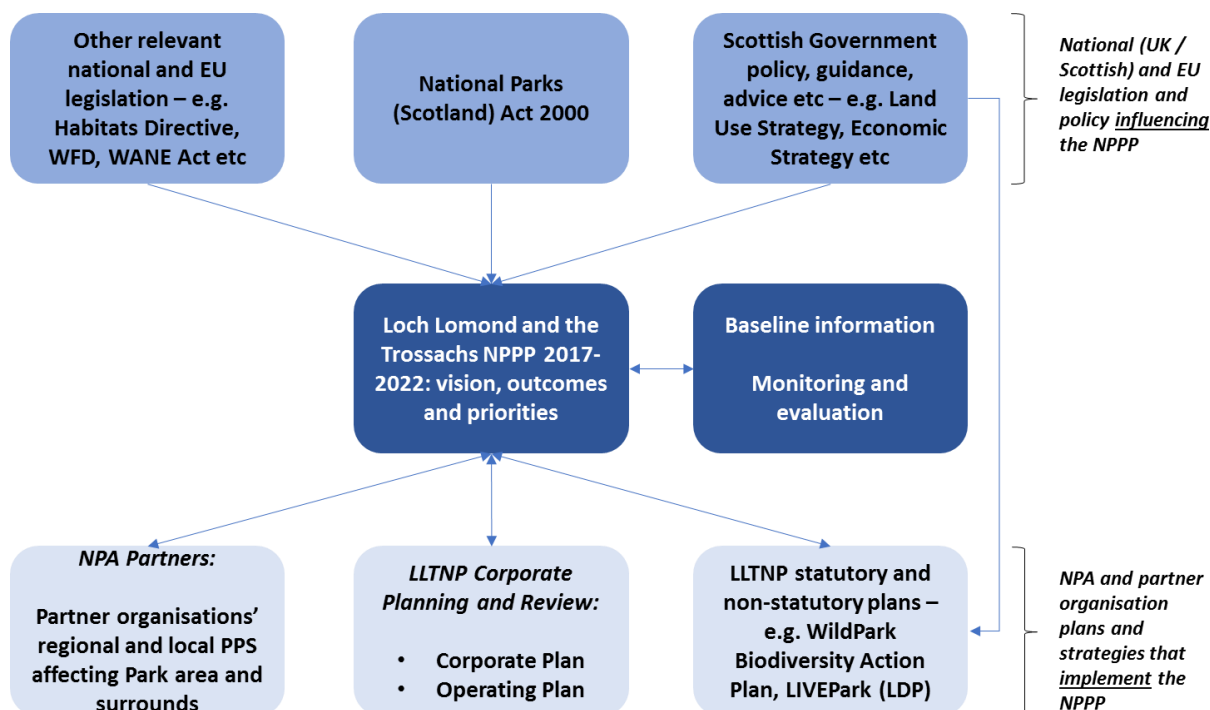


Figure 4.1: Schematic representation of the relationship between the NPPP and other relevant PPS

## 4.2 Summary of key environmental issues

A summary of the environmental baseline information of relevance to the SEA of the draft NPPP 2018-2023 is provided in Appendix 3. This has been subject to some minor updates following comments from the statutory Consultation Authorities at scoping (see Appendix 1).

Figures 4.2 and 4.3 show the location and extent across the Park of natural and cultural heritage designations respectively. Proposed indicators for monitoring the significant environmental effect of the NPPP are outlined at section 9.1.

The key environmental issues emerging from the analysis of environmental baseline data and information, trends and environmental objectives are set out in the sub-sections below. These capture the most critical environmental issues (problems and opportunities) that should be considered in the development of the NPPP 2018-2023 and in its SEA.

The baseline, trends analysis and key environmental issues have informed the scope and content of the SEA framework (Chapter 5) and the assessment of the draft NPPP and reasonable alternatives (Chapters 7 and 8).

### Biodiversity, flora and fauna

- **Over-grazing:** unsustainable levels (densities) of wild deer, feral goats and livestock in some upland and woodland areas is suppressing the development and regeneration of semi-natural habitats, leading to reduced tree cover and soil erosion. The Park has 27 designated sites assessed as being in “unfavourable” condition due to grazing pressures.

- **Invasive Non-Native Species (INNS):** despite successes in some areas / catchments (e.g. the Tay and Forth catchments), the spread of INNS (e.g. Himalayan balsam) remains an important management issue in the Park, acting to displace native wildlife. The Park has 25 designated sites assessed as being in “unfavourable” condition due to pressures from INNS.
- **Visitor pressure:** high visitor numbers and wild camping in the busiest parts of the Park (especially loch shores) continue to put habitats and wildlife under pressure (e.g. unauthorised felling of trees for firewood, pollution with human waste) during spring and summer months. The new camping development strategy YOURPark<sup>17</sup> aims to address these issues but the effectiveness of full implementation of the new byelaws remains to be seen.
- **Expansion of native woodlands:** the Scottish Government’s ambitious woodland expansion targets<sup>18,19</sup> raise an opportunity for woodland creation in the Park in line with “right tree right place” principles. The expansion and improved management of native woodlands in particular can help to enhance biodiversity (and landscape).
- **Habitat networks:** there remains an important opportunity to consolidate, restore and enhance the full range of natural and semi-natural habitats across the Park to enhance habitat networks and promote ecological connectivity.
- **Sustainable forest management:** there is an opportunity and interest in increasing the amount of woodland under continuous cover forestry (CCF) systems. This would reduce the amount of clear fell and associated soil erosion and landscape impacts.

## Geology and soils

- **Sustainable forest management:** see *biodiversity, flora and fauna*.
- **Peatland restoration:** there is an important opportunity to restore and maintain peatlands across the Park (e.g. blanket bog) to help prevent soil erosion and deliver multiple benefits (e.g. water purification, carbon storage).

## Water

- **Water quality:** issues remain in the Park caused by unsustainable abstractions, morphology pressures and land management issues linked to diffuse pollution. Three river and 12 loch waterbodies in the Park still fail to achieve “good” status in line with Water Framework Directive (WFD) objectives.
- **Flooding:** the magnitude and frequency of flood events is expected to increase with climate change. This raises issues for communities, businesses and infrastructure at various locations across the Park including the Loch Lomond and Loch Earn basins, the Forth and Teith and coastal flooding around Loch Long (all these areas are Potentially Vulnerable Areas – PVAs).
- **Natural flood management:** in line with Scottish Government guidance on sustainable flood risk management<sup>20</sup> (FRM) and the extant Flood Risk Management Strategies (FRMS) intersecting the Park, there is an important opportunity for the NPA to promote natural flood management techniques, especially through support for integrated land management at the regional and whole estate / farm level.

## Climatic factors

<sup>17</sup> <http://www.thisisyourpark.org.uk/your-park-camping-development-strategy/>

<sup>18</sup> <http://www.gov.scot/Resource/0051/00513102.pdf>

<sup>19</sup> <http://www.gov.scot/Topics/farmingrural/Rural/Forestry>

<sup>20</sup> <http://www.gov.scot/Resource/Doc/351427/0117868.pdf>

- **Peatland restoration:** see *geology and soils*.

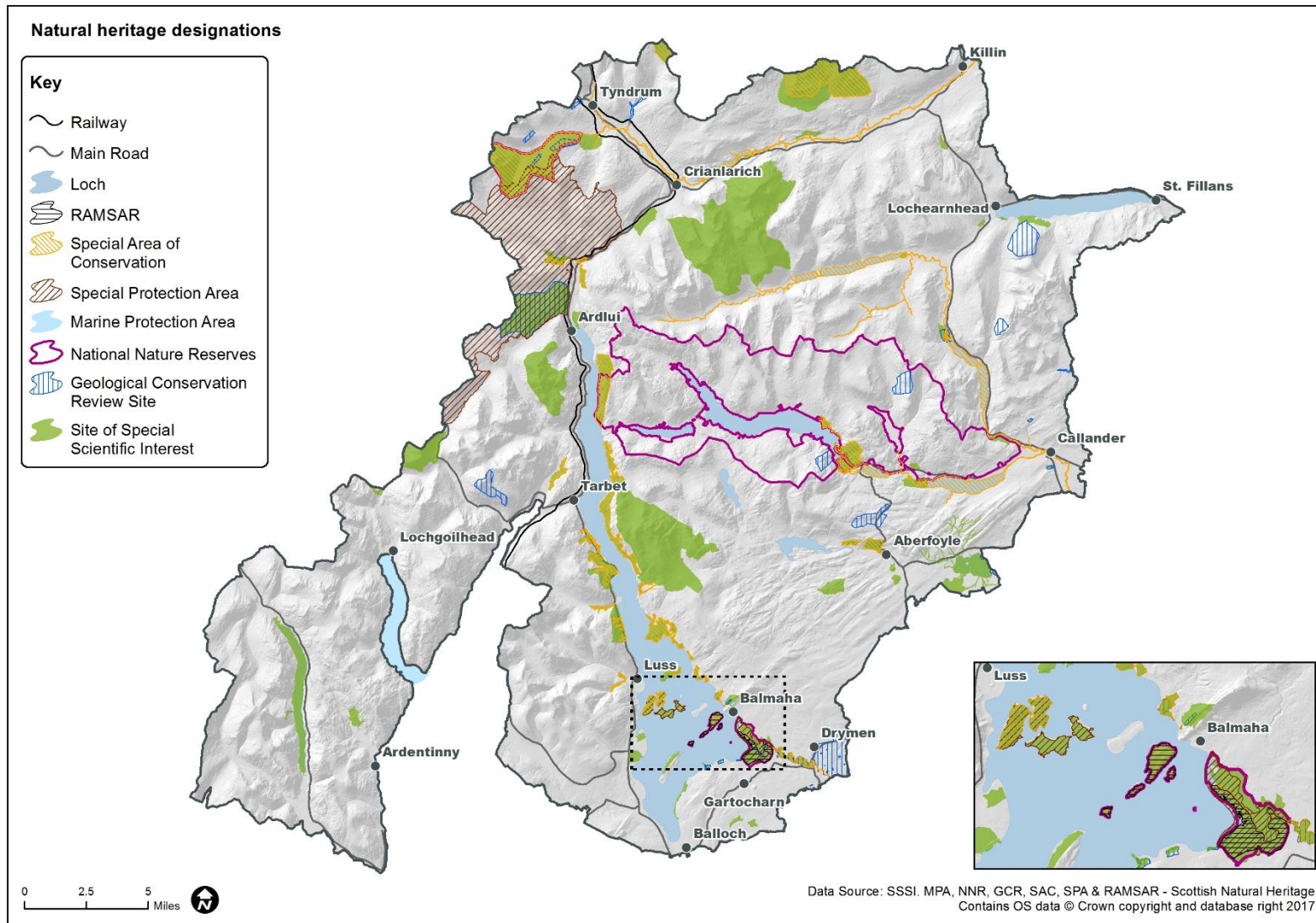


Figure 4.2: Location and extent of international, EU and national level natural heritage designations across the Park

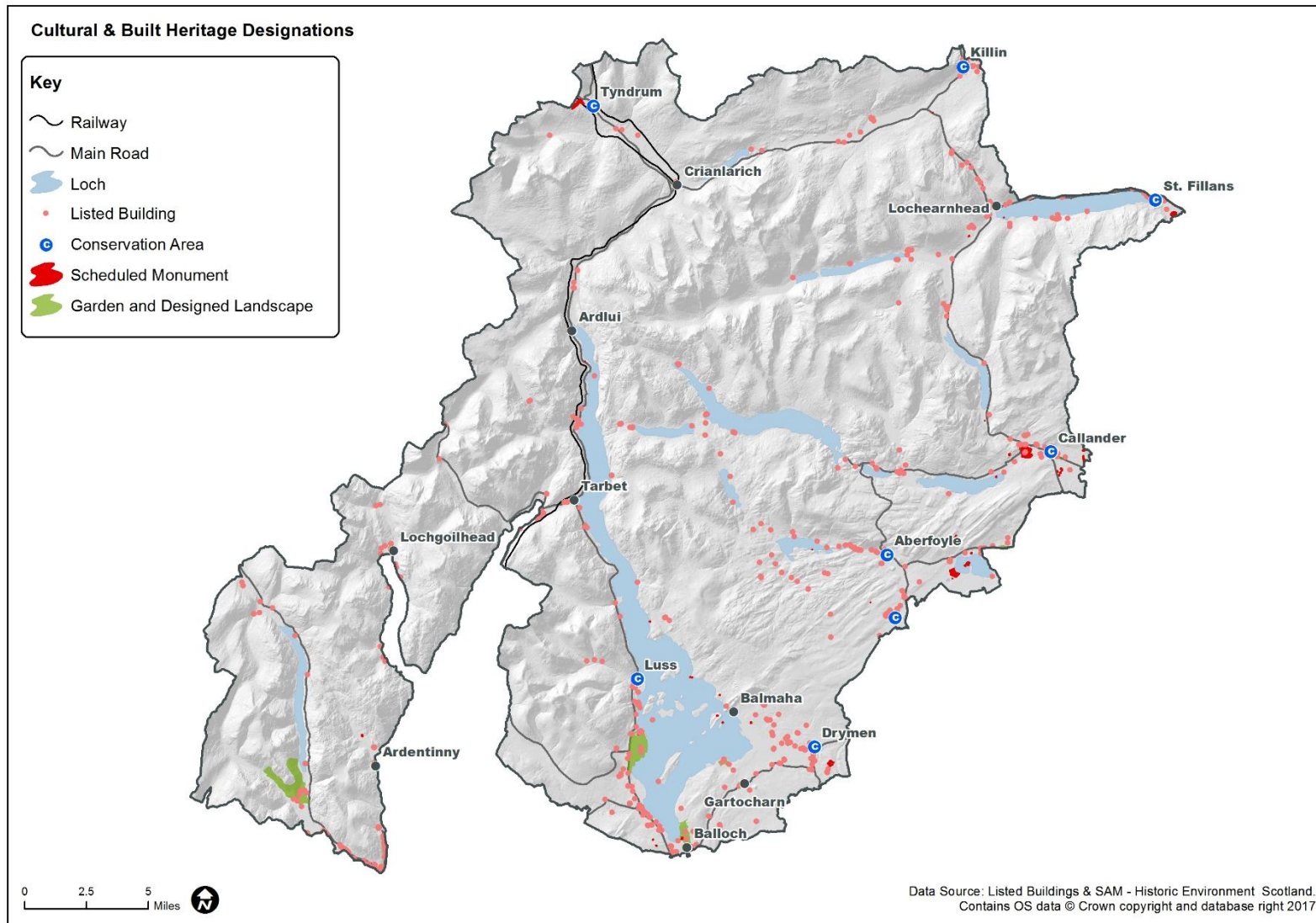


Figure 4.3: Location and extent of cultural heritage designations across the Park

## Climatic factors (continued)

- **Flooding:** see *water*.
- **Natural flood management:** see *water*.
- **Sustainable transport:** see *material assets*.
- **Other climate risks:** whilst flooding is quantifiably the most important climate risk affecting Scotland<sup>21</sup>, the Park is also exposed to other climate risks that are harder to predict and quantify. Overgrazing (see *biodiversity*) on prone slopes can increase the risk of landslides during prolonged and / or intense periods of heavy rainfall<sup>22</sup>. In the Park, landslides have affected the A82 at the Rest and be Thankful and the A85 at Glen Ogle.
- **Changing climate space and pests and diseases:** rapid changes in seasonal temperatures and rainfall patterns continue to put the Park's wild species populations under the dual pressure of needing to adapt to changing climate space (a warmer wetter climate) and the emergence and spread of new plant diseases (e.g. ash dieback).

## Landscape and cultural heritage

- **Sustainable forest management:** see *biodiversity, flora and fauna*.
- **Restructuring of forest estate:** large scale restructuring of some forests and woodlands will be required over the coming years to address new and emerging tree diseases, especially ash dieback and *Phytophthora ramorum* affecting Japanese larch. The impact on the Park's landscapes is unclear at present, dependent on the tree species that are used to replace these vulnerable species.
- **Ensuring the integrity of cultural heritage assets:** demand for various new development across the Park (see *population and human health*) means that there is a need to manage this pressure on parts of the Park with important cultural heritage assets (see Figure 4.3).

## Population and human health

- **Population stability and housing:** the Park's population has decreased and is projected to decrease further with a shift towards an older demographic. Access to affordable housing remains a critical part of the challenge for retaining and growing the younger population. However new housing needs to be delivered in a sustainable manner especially in terms of protecting the Park's natural and cultural heritage assets and ensuring provision of adequate ancillary infrastructure (see *material assets*).

## Materials assets

- **Sustainable infrastructure:** demand for new development in the form of housing and visitor accommodation and facilities requires a sustainable approach to infrastructure provision, especially in terms of flooding and water infrastructure (e.g. ensuring that development does not increase flood risk, ensuring adequate provision of drainage / sustainable urban drainage schemes (SuDS) and waste water infrastructure).
- **Visitor pressure:** high numbers of visitors to the most accessible and popular places in the Park put pressure on recreational and other facilities (e.g. footpaths, car parks, waste / litter management). There is a continuing need to address these issues through the right combination of engagement and education, investment (e.g. in new facilities) and, where necessary, management measures and regulation.

<sup>21</sup> <https://www.theccc.org.uk/wp-content/uploads/2016/07/UK-CCRA-2017-Scotland-National-Summary.pdf>

<sup>22</sup> <http://www.sciencedirect.com/science/article/pii/S1877705816305616>

- **Transport:** the vast majority of visitor journeys to the Park continue to be made by car. There remains a need to promote public transport options and encourage visitors to travel by alternative modes. There are also opportunities to make travel to and within the Park “part of the experience” (e.g. linking longer distance cycle routes to public transport, investing in the seasonal waterbus service).
- **Population stability and housing:** see *population and human health*.

### **4.3 Likely evolution of the environment without the NPPP 2018-2023**

SEA legislation requires consideration of the likely evolution of the baseline environment without the implementation of the plan or programme<sup>23</sup>. In the case of the NPPP, there isn't a “no plan” scenario as such as National Park Plans are a legal requirement of the National Parks (Scotland) Act 2000<sup>24</sup> (see Figure 4.1). Given this, the likely evolution of the baseline environment has been inferred from the assessment of the Business as Usual (BAU) scenario; i.e. a continuation of the extant NPPP 2012-2017. The BAU scenario has been considered within the assessment of reasonable alternatives to the draft NPPP 2018-2023 in section 7.2 below. Consideration of the BAU alternative identifies what might happen to the baseline environment in the absence of the new plan. Extrapolation of the baseline can also be inferred from the trends analysis undertaken as part of the environmental baseline (Appendix 3), from the SEA of the extant NPPP (Environmental Report dated April 2012) and from the significant environmental effects monitoring of the extant NPPP carried out for SEA.

---

<sup>23</sup> <http://www.legislation.gov.uk/asp/2005/15/schedule/3/enacted>

<sup>24</sup> <http://www.legislation.gov.uk/asp/2000/10/section/11>

## 5. The SEA Framework

### 5.1 SEA objectives

As explained at section 3.3, the SEA has adopted an objectives-led assessment methodology whereby the draft NPPP 2018-2023 has been assessed in terms of its potential to support or conflict with environmental objectives. Headline SEA objectives and sub-objectives / assessment criteria have been identified and developed to account for the key environmental issues of relevance to the NPPP. Where relevant, they also reflect environmental protection objectives identified in the PPS review (see section 4.1 and Appendix 2). The full suite of SEA objectives and sub-objectives / assessment criteria, as revised following scoping consultation, is provided at Table 5.1 below.

**Table 5.1: SEA headline objectives and sub-objectives / assessment criteria**

Headline SEA objectives	SEA sub-objectives / assessment criteria
<b>Biodiversity, flora and fauna</b>	
1. Furthering biodiversity by conserving and enhancing the diversity of species	<ul style="list-style-type: none"> <li>Prevent loss of priority species</li> <li>Minimise disturbance to and avoid deterioration in populations of priority species and their habitats</li> <li>Increase area of habitat managed for priority species</li> <li>Prevent impacts of non-native and invasive species</li> </ul>
2. Further biodiversity by conserving and enhancing the diversity of habitats	<ul style="list-style-type: none"> <li>Increase creation and management of priority habitats</li> <li>Prevent loss of priority habitats</li> <li>Minimise disturbance to and avoid deterioration of priority habitats</li> <li>Ensure Natura 2000 sites are in favourable condition</li> </ul>
3. Conserve and enhance the integrity of ecosystems	<ul style="list-style-type: none"> <li>Prevent fragmentation of habitats</li> <li>Ensure management and development does not create new barriers to species movement</li> <li>Promote habitat networks</li> </ul>
<b>Geology and soils</b>	
4. Conserve and enhance land form, soils and related natural processes and systems	<ul style="list-style-type: none"> <li>Respect landform, geology and geomorphology</li> <li>Minimise risk of coastal erosion</li> <li>Avoid interference with natural fluvial processes</li> <li>Conserve geodiversity</li> <li>Conserve soil resources</li> <li>Conserve and restore the ability of peatland and all other soil types to act as carbon sinks / support carbon sequestration</li> <li>Conserve the Park's best and most versatile agricultural land</li> </ul>
<b>Water</b>	
5. Conserve and enhance the water environment including coastal, river and loch systems	<ul style="list-style-type: none"> <li>Maintain and improve water quality</li> <li>Reduce risk of point and diffuse source water pollution</li> <li>Manage flood risks</li> <li>Manage water abstraction</li> <li>Promote use of Sustainable Urban Drainage Systems</li> <li>Ensure good ecological status of water bodies</li> </ul>
<b>Air and noise</b>	
6. Maintain and improve air quality	<ul style="list-style-type: none"> <li>Minimise need for travel by private car and reduce journey lengths</li> <li>Minimise emissions of atmospheric pollutants from all relevant sectors (e.g. transport, agriculture, tourism)</li> <li>Avoid potentially polluting developments</li> </ul>
7. Reduce noise and light pollution	<ul style="list-style-type: none"> <li>Minimise noise and light intrusion</li> </ul>
<b>Climatic factors</b>	
8. Reduce the causes of	<ul style="list-style-type: none"> <li>Reduce energy consumption</li> </ul>



Headline SEA objectives	SEA sub-objectives / assessment criteria
climate change (mitigation)	<ul style="list-style-type: none"> <li>• Reduce emissions contributing to climate change</li> <li>• Encourage more efficient energy use</li> <li>• Promote use of renewable energy</li> <li>• Maximise energy efficiency of existing infrastructure and new development</li> <li>• Encourage walking, cycling and the use of public transport</li> </ul>
9. Reduce the effects of climate change (adaptation)	<ul style="list-style-type: none"> <li>• Respond to predicted climatic changes through adaptation measures</li> <li>• Reduce exposure to climate risks and promote resilience</li> </ul>
<b>Landscape and cultural heritage</b>	
10. Conserve and enhance the landscape character, local distinctiveness, and scenic value of the Park	<ul style="list-style-type: none"> <li>• Maintain and enhance landscapes and their special qualities including the Park's wild land areas</li> <li>• Prevent negative impacts on landscape character</li> <li>• Ensure development is sited and designed to contribute positively to landscape character</li> <li>• Regenerate degraded developments</li> </ul>
11. Protect and (where appropriate) enhance the Park's cultural, historic and built environments	<ul style="list-style-type: none"> <li>• Protect scheduled ancient monuments, historic buildings, designed gardens and landscapes, archaeological sites, townscapes, historic landscapes, Conservation Areas and maritime archaeology</li> <li>• Ensure high quality new building design</li> <li>• Maintain the character of settlements</li> <li>• Prevent loss of locally distinctive architecture</li> <li>• Promote historical and cultural associations between people and places</li> <li>• Promote Gaelic and Scots language</li> <li>• Preserve traditional skills</li> </ul>
<b>Population and human health</b>	
12. Protect and improve the health and wellbeing of residents and visitors to the Park	<ul style="list-style-type: none"> <li>• Provide for local housing needs</li> <li>• Ensure community access to services</li> <li>• Encourage healthy lifestyles</li> <li>• Provide local employment opportunities</li> <li>• Prevent the loss and fragmentation of access networks and open space</li> <li>• Create new access opportunities</li> <li>• Promote appropriate use of green infrastructure for health benefits</li> </ul>
<b>Material assets</b>	
13. Promote sustainable use of resources	<ul style="list-style-type: none"> <li>• Reduce consumption of fossil fuels</li> <li>• Encourage use of local products</li> <li>• Conserve mineral resources</li> <li>• Optimise recycling and reusing</li> <li>• Promote sustainable use of water</li> <li>• Promote efficient use of land</li> <li>• Promote sustainable reuse of vacant buildings</li> <li>• Increase reuse and recycling of materials</li> <li>• Reduce the amount of residual waste disposed to landfill in each sector</li> </ul>

## 5.2 Significance criteria

The environmental assessment of the draft NPPP 2018-2023 consists of evaluating the draft priorities and reasonable alternatives against the SEA objectives / assessment criteria and summarising the assessment in matrices. Indicators, baseline data, trends analysis and summary of key environmental issues provides supporting evidence for the assessment when evaluating the potential significance of the environmental effects identified. To aid this evaluation process, generic

significance criteria from Schedule 2 of the 2005 Act<sup>25</sup> have been translated into evaluation of significance guidelines specific to the NPPP; e.g. to help distinguish a major positive effect from a minor effect. Table 5.2 summarises these criteria, taking into account the 2005 Act's requirements in Schedule 3 to include secondary, synergistic, short / medium / long-term, permanent and temporary, positive and negative effects, and whether they are likely to be reversible or irreversible, probable or improbable, frequent or rare<sup>26</sup>. The completed assessment matrices are presented in Chapters 7 and 8 and Appendix 4.

**Table 5.2: SEA significance criteria**

Effect score / significance	Description
<b>Major Positive (++)</b>	An NPPP priority or alternative that is very likely to lead to a significant opportunity / improvement, or a series of long-term improvements, leading to large-scale and permanent benefits to the SEA objective being assessed. A major positive effect is also likely to have cumulative and indirect beneficial impacts and / or improve conditions outside the specific Park area (i.e. positive transboundary effects).
<b>Minor Positive (+)</b>	An NPPP priority or alternative likely to lead to moderate improvement in both short and long-term, leading to large scale temporary, or medium scale permanent benefits to the SEA objective being assessed. Even where beneficial effects are felt to be temporary, they should not be easily reversible (to detriment of the SEA objective) in the long-term.
<b>Neutral (0)</b>	An NPPP priority or alternative which is unlikely to have any beneficial or negative impact / effect on the objective being assessed in either the short, or long-term. Neutral scoring should only be used where it is very likely that the effect will be neither positive, nor negative. A neutral score is not the same as 'uncertain', where an appraiser is not sure if an effect is likely to be positive or negative, or 'mixed', where the appraiser feels that the effects are likely to be both positive and negative (see below for more detail).
<b>Minor Negative (-)</b>	An NPPP priority or alternative which is likely to lead to moderate damage / loss in both short and long-term, leading to large-scale temporary, or medium scale permanent negative impact on the SEA objective being assessed. This also relates to NPPP priorities / alternatives which may have limited cumulative and indirect detrimental impact and / or limited degradation of conditions outside the specific policy or project area. It is also likely that it will be possible to mitigate or reverse a minor negative effect through policy or project intervention.
<b>Major Negative (--)</b>	An NPPP priority or alternative which is likely to lead to a significant or severe damage / loss, or series of long-term negative effects, leading to large-scale and permanent negative impacts on the SEA objective being assessed. This also relates to NPPP priorities / alternatives which may have significant cumulative and indirect detrimental impacts and / or degrade conditions outside the Park area (i.e. negative transboundary effects) and / or that are likely to threaten environmental thresholds / capacities in areas already under threat. The detrimental effects of the priority / alternative will be hard to reverse and are unlikely to be easily mitigated through policy or project intervention. Any damage or detrimental effect in or to environmentally sensitive areas, issues or landscapes which are recognised and / or protected locally, regionally, nationally or internationally should be scored as a major negative.
<b>Mixed (e.g. +/-, +/- etc)</b>	The effect is likely to be a combination of beneficial and detrimental effects, particularly where effects are considered on sub-issues, areas or criterion. For example, an NPPP priority / alternative may enhance the viability of certain protected species or habitats (such as native woodlands), but through this damage existing (non-native) habitats which may themselves be important. Such mixed effects will be hard to predict, but could be significant in the long-term, or in combination with other effects (cumulative).

<sup>25</sup> <http://www.legislation.gov.uk/asp/2005/15/schedule/2>

<sup>26</sup> <http://www.legislation.gov.uk/asp/2005/15/schedule/3>

Effect score / significance	Description
<b>Uncertain (?)</b>	The effect of an NPPP priority / alternative is not known, or is too unpredictable to assign a conclusive score. The appraiser is not sure of the effect. This may be the case where a priority / alternative covers a range of issues, or where the manner in which it is implemented will have a material impact on the effects it will have.

## 6. Testing the compatibility of NPPP outcomes with the SEA objectives

---

### 6.1 Purpose of testing compatibility

---

The purpose of testing the outcomes from the draft NPPP 2018-2023 against the SEA objectives (Table 5.1) is to identify potential synergies and areas of inconsistency / potential conflict between what the plan is trying to achieve and the aspirations for the environment, as per the SEA objectives. This information can help to refine the overall strategic direction of the plan as well as highlighting key issues to look out for in the detailed assessment of the preferred alternative (Chapter 8).

### 6.2 NPPP outcomes and assessment of compatibility

---

Table 6.1 below presents a summary of the overall findings of the compatibility assessment of the draft NPPP 2018-2023 outcomes vs. the SEA objectives. The NPPP outcomes have been listed in short form only. Please refer to Table 2.1 to see the outcomes listed in full. A detailed matrix of the compatibility assessment is provided in Appendix 4. This includes detailed comments explaining the rationale for the assessments. Key headline messages from the assessment are outlined below:

- **Mixed compatibility with biodiversity SEA objectives:** all C&LU outcomes exhibit strong support for biodiversity objectives; however outcomes promoting increased activity across the Park (e.g. VE1, VE3 and RD2) are more uncertain due to the potential for disturbance / damage to habitats and wild species populations. Whilst VE2 is designed explicitly to address this tension, careful implementation and monitoring of any increases in tourism and wider economic development activities is required to ensure that conflicts are minimised.
- **Development activities causing emissions:** many of the Visitor Experience and Rural Development outcomes will promote increased activity in the Park, attract more visitors and hopefully increase the Park's resident population. All these outcomes are likely to increase transport demand to / from / within the Park. This has the potential to increase noise, congestion, emissions of air pollutants (NO<sub>x</sub>, PM<sub>10</sub> etc) and emissions of greenhouse gases. This issue will need to be managed carefully to minimise emissions and ensure that the Park's existing good air quality is maintained (see Appendix 3).
- **Mixed compatibility with landscape and cultural heritage SEA objectives:** many of the NPPP outcomes will work towards the protection and enhancement of landscape quality etc; e.g. integrated land management (C&LU4) should help to ensure that the aggregated effect of holding level land management contributes to landscape outcomes at the catchment level. For the various outcomes that promote new development in the Park (e.g. VE1, VE2, RD2 etc), whilst it is anticipated that projects will be small and sensitive to landscape constraints, there remains the need to manage the cumulative effect of multiple small scale developments in a sensitive and proactive manner.
- **Strong support for health and wellbeing SEA objectives:** 10 of the 13 outcomes exhibit strong support for the SEA objective on health and wellbeing. However, support from three of four C&LU outcomes is uncertain. Whilst there is a growing body of scientific evidence demonstrating linkages between "nature connectedness" and health and wellbeing outcomes<sup>27</sup>, careful targeting of related activities (e.g. awareness raising, engagement projects) are likely to be required to ensure that this is realised. As such, compatibility between certain C&LU outcomes has been scored as "uncertain" at present.

<sup>27</sup> <http://www.sciencedirect.com/science/article/pii/S0169204616302237>

**Table 6.1: Compatibility assessment of draft NPPP 2018-2023 outcomes with headline SEA objectives**

**Key to scoring of compatibility assessment**

- ✓ NPPP outcome compatible with SEA objective
- ✗ Potential for conflict between NPPP outcome and SEA objective
- ? Compatibility uncertain
- 0 No identified conflict or compatibility

SEA Objectives	Draft NPPP 2018-2023 outcomes												
	C&LU1: Habitat restoration & connectivity	C&LU2: Landscape enhancement & experience	C&LU3: Land use & climate change	C&LU4: Integrated land management	VE1: Range of recreation opportunities	VE2: Visitor management at key sites	VE3: Increase in water recreation opportunities	VE4: Thriving visitor economy	VE5: Health and outreach	RD1: Towns and villages	RD2: Rural economy	RD3: Growing economically active population	RD4: Sustainable communities
1. Furthering biodiversity by conserving and enhancing the diversity of species	✓	✓	✓	✓	?	✓	?	?	✓	0	?	?	?
2. Further biodiversity by conserving and enhancing the diversity of habitats	✓	✓	✓	✓	?	✓	?	?	✓	0	?	?	?
3. Conserve and enhance the integrity of ecosystems	✓	✓	✓	✓	?	✓	?	?	✓	0	?	?	?
4. Conserve and enhance land form, soils and related natural processes and systems	✓	✓	✓	✓	?	✓	0	?	?	?	?	0	?
5. Conserve and enhance the water environment including coastal, river and loch systems	✓	✓	✓	✓	?	✓	✗	?	?	0	?	?	✓
6. Maintain and improve air quality	0	0	✓	✓	?	✓	?	?	✓	?	?	?	?
7. Reduce noise and light pollution	0	0	0	?	✗	✓	✗	?	?	?	?	?	?

**Key to scoring of compatibility assessment**

- ✓ NPPP outcome compatible with SEA objective
- ✗ Potential for conflict between NPPP outcome and SEA objective
- ? Compatibility uncertain
- 0 No identified conflict or compatibility

Draft NPPP 2018-2023 outcomes													
SEA Objectives	C&LU1: Habitat restoration & connectivity	C&LU2: Landscape enhancement & experience	C&LU3: Land use & climate change	C&LU4: Integrated land management	VE1: Range of recreation opportunities	VE2: Visitor management at key sites	VE3: Increase in water recreation opportunities	VE4: Thriving visitor economy	VE5: Health and outreach	RD1: Towns and villages	RD2: Rural economy	RD3: Growing economically active population	RD4: Sustainable communities
8. Reduce the causes of climate change (mitigation)	✓	✓	✓	✓	?	?	?	?	?	✓	?	?	✓
9. Reduce the effects of climate change (adaptation)	✓	✓	✓	✓	0	0	0	?	?	?	?	?	✓
10. Conserve and enhance the landscape character, local distinctiveness and scenic value of the Park	?	✓	?	✓	?	✓	?	?	?	✓	?	?	0
11. Protect and (where appropriate) enhance the Park’s cultural, historic and built environments	?	✓	?	✓	?	✓	?	?	?	✓	?	?	✓
12. Protect and improve the health and wellbeing of residents and visitors to the Park	?	✓	?	?	✓	✓	✓	✓	✓	✓	✓	✓	✓
13. Promote sustainable use of resources	0	0	✓	✓	?	✓	?	?	0	✓	?	?	✓

## 7. Assessment of alternative approaches to the NPPP

### 7.1 Identification of alternatives

As noted in Section 4.3, there is no ‘do nothing’ alternative scenario in this case, given the legal obligation of the NPA to have an extant National Park Plan. There is therefore only a ‘do minimum’ alternative, which is a continuation of the existing plan or ‘business as usual’ (BAU). An analysis was undertaken to compare the components of the draft plan with the extant plan, in order to identify similarities and differences between them, and therefore the implications for implementing the draft plan compared to the BAU.

In identifying ‘reasonable alternatives’ as required by the SEA Directive and the SEA Act 2005 (see Chapter 1) it is necessary to take into account the objectives and the geographical scope of the plan. An undue emphasis on economic development activity, for example, is likely to be incompatible with the purposes of the National Park and the NPPP. The NPPP sets priorities for delivery by other partners and plans / programmes / projects and therefore needs to be deliverable within the remit and funding opportunities available. The compatibility assessment undertaken in Chapter 6 was helpful therefore in identifying the extent to which certain types of activity have the potential to be in conflict with certain SEA objectives.

### 7.2 Assessment of alternatives

In this section the BAU alternative (continuation of the extant NPPP 2012-2017) is assessed relative to the preferred alternative (the draft NPPP 2018-2023 – see Chapter 2), drawing on the analysis undertaken and described in section 7.1 above. In addition, a further discussion of alternatives is provided in relation to the potential environmental effects of having an enhanced emphasis on certain priorities from the more development / recreation focussed themes (Visitor Experience and Rural Development).

#### SWOT analysis of the draft NPPP 2018-2023 over the extant NPPP 2012-2017

The assessment of the BAU and preferred alternatives has been undertaken using an environmental SWOT (strengths, weaknesses, opportunities and threats) analysis approach (see section 3.3 for full details). Using the headline SEA objectives and topics as a framework, a SWOT analysis of the new plan (preferred alternative) with the extant plan (BAU alternative) has been undertaken. The SWOT is presented in Table 7.1 below. Key findings from the SWOT analysis include:

- **The new NPPP 2018-2023 exhibits more strengths than weaknesses when compared to the extant plan:** several innovations and new provisions within the draft NPPP 2018-2023 constitute important strengths over the extant plan. In particular, support for a catchment based approach to the delivery of many measures (e.g. INNS, waterbody restoration) is preferable as planning and delivering intervention at the ecosystem scale can be more effective<sup>28</sup>. The proposed **Regional Land Use Partnerships** (RLUPs) are an important innovation in this regard as they can provide a mechanism for collaborative land use planning at the regional (e.g. catchment) level;
- **The main weakness of the new plan over the extant plan is its lack of specificity combined with its very strategic nature:** given limited resources and the framing of the priorities in the draft plan, it is unclear how intervention will be prioritised. For example, in the extant NPPP, waterbody restoration and natural flood management measures are focussed in the **Forth and Tay catchments**. The new plan does not appear to include any such prioritisation and it is unclear if there will be sufficient resources to deliver the ambitious waterbody restoration

<sup>28</sup> <https://catchmentbasedapproach.org/about>

measures across all catchments during the plan period. This key weakness is likely to be addressed by using the new NPPP as a discussion document to formalise arrangements and agreements with partner organisations on an individual basis (e.g. using individual partnership agreements as per the extant NPPP). However, it would be preferable if resource availability (and constraint) is articulated clearly in the plan document to help manage expectations;

- **The new NPPP 2018-2023 raises several important environmental opportunities:** as with strengths (see above), several innovations and new provisions within the draft NPPP raise significant opportunities for environmental enhancement over the extant plan. The new **RLUP** mechanism is important (as explained above) especially when linked to existing NPPP support for whole farm / estate planning (**support for land managers to deliver benefits**). Crucially, the land use management priorities articulated at the regional level via **RLUPs** have the potential to be picked-up and delivered “on the ground” by individual farmers and land managers using existing NPA support mechanisms at this level. Also, it is important to note that coherent planning of certain land management actions at the landscape scale can deliver additional benefits over discrete actions at the field / farm level<sup>29</sup> (e.g. enhancement of ecological networks). New health focussed measures within the draft NPPP 2018-2023 also raise important opportunities for **population and human health**;
- **Notwithstanding the above, the new NPPP 2018-2023 also raises several environmental threats when compared to the extant plan:** a new (somewhat utilitarian) focus on delivering multiple benefits from nature, whilst an important policy objective from the Scottish Government Land Use Strategy<sup>30</sup> (LUS), runs the risk of eroding critical stocks of natural capital (e.g. focus on productive, functional habitats / land covers only) unless an overarching objective on protecting and enhancing ecosystem health is incorporated alongside this. This protection is implicitly provided by the Sandford Principle<sup>31</sup> but it may be useful to set this out explicitly in the new NPPP itself (Table 8.4). Other key threats raised by the new NPPP relate to: potential conflicts between **landscape** and **biodiversity** objectives; promotion of water recreation development on larger lochs may negatively affect **biodiversity** and **landscape**; and the new more stringent visitor management measures may erode certain personal freedoms (**population and human health**), negatively impacting the image of the National Park.

### Alternative emphasis within Visitor Experience and Rural Development themes

Given the remit of the NPA there is a need to balance the three priorities of conservation, visitors and development. Where there is a risk of conflict, the Sandford Principle is clear that NPA’s should:

*“attach greater weight to the purpose of conserving and enhancing the natural beauty, wildlife and cultural heritage of the area”<sup>32</sup>.*

Consequently, an alternative that had an increased emphasis on Rural Development and / or the economic aspects of Visitor Experience would be unlikely to be a ‘reasonable alternative’, given the nature and scope of the plan and its objectives.

Furthermore, given the current uncertainty over funding (e.g. access to EU funds such as the SRDP) it would also be ‘unreasonable’ to have a stronger set of activities / measures under the Conservation and Land Use and Visitor Experience themes.

Also, a stronger emphasis on visitors, for example, would potentially conflict with conservation objectives and / or require significant mitigation measures, which also have a cost implication that

<sup>29</sup> <http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=2&ProjectID=18555>

<sup>30</sup> <http://www.gov.scot/Resource/0050/00505253.pdf>

<sup>31</sup> <http://www.nationalparks.gov.uk/students/whatisanationalpark/aimsandpurposesofnationalparks/sandfordprinciple>

<sup>32</sup> <http://www.nationalparks.gov.uk/students/whatisanationalpark/aimsandpurposesofnationalparks/sandfordprinciple>



may not be sustainable given the resource constrained environment faced by the NPA and other public bodies.

**Table 7.1: SWOT analysis of the draft NPPP 2018-2023 over the extant NPPP 2012-2017**

**Note:** the SWOT points in the table below relate to the proposed new NPPP (the preferred alternative) relative to the extant NPPP (the BAU alternative). For example, points in the *strengths* cell refer to the environmental strengths of the new NPPP over the extant NPPP.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• <b>Water, soil, population and human health, climatic factors, material assets:</b> focus on the delivery of multiple benefits from nature (e.g. natural flood management, recreation, timber and food production).</li> <li>• <b>Biodiversity, water, climatic factors:</b> use of a strategic, catchment based approach to the delivery of many measures (e.g. INNS, waterbody and peatland restoration).</li> <li>• <b>Biodiversity, water, landscape:</b> more robust visitor management measures (YOURPark) will help to protect sensitive loch shore habitats in the Park.</li> <li>• <b>Biodiversity, landscape, water, soil:</b> new support for Deer Management Groups (e.g. via management plans and impact assessments) has the potential to deliver a range of benefits across the Park.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Potentially all SEA topics:</b> limited prioritisation of activity across themes, outcomes and priorities may hinder delivery of the Plan (e.g. given limited resources, continued austerity, risk of spreading resources too thinly rather than focussing on key priority issues).</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• <b>Potentially all SEA topics:</b> inclusion of collaborative land use planning at the regional scale (<b>Regional Land Use Partnerships</b>) presents an opportunity to identify land use management priorities at more strategic levels (i.e. catchment / landscape scale) and link these to practical on the ground delivery via existing farm / estate level mechanisms (<b>support for land managers to deliver benefits</b>).</li> <li>• <b>Population and human health, soil, landscape:</b> support for new and existing Heritage Lottery Fund (HLF) projects (e.g. The Mountains and The People, Callander Landscape Partnership) has the potential to leverage in additional funding and deliver various benefits around the Park.</li> <li>• <b>Population and human health:</b> measures to promote the Park as a resource for health improvement (e.g. <b>establish a National Park Health Partnership</b>) raise an important opportunity to help tackle health issues in the Glasgow and Clyde Valley city region and the wider central belt of Scotland.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Potentially all SEA topics:</b> limited articulation of deliverable / on the ground actions and policies may hinder delivery of the Plan.</li> <li>• <b>Biodiversity, landscape:</b> somewhat utilitarian focus on ecosystem services and enhancing benefits from nature (e.g. specific objectives on timber and food production) may mean that some habitats / land covers are prioritised over others, with potential risks to overall ecosystem health.</li> <li>• <b>Biodiversity, landscape:</b> new focus on <b>protecting wild land qualities of upland areas</b> may act to preclude sustainable expansion of some upland habitats (e.g. upland birchwoods) due to incompatibility with prevailing landscape aesthetic.</li> <li>• <b>Population and human health:</b> more robust visitor management measures (YOURPark) may inadvertently reduce access for some groups (irresponsible and responsible wild campers) eroding certain personal freedoms.</li> <li>• <b>Biodiversity, water, landscape:</b> development of new recreational infrastructure and increased use of sea lochs and larger freshwater lochs may result in disruption of habitats and wild species populations.</li> </ul>

In hypothetical terms, however, it is possible to consider the potential implications of an NPPP with a stronger focus on the developmental aspects of the plan. Within the Visitor Experience theme, for example, introducing a stronger focus on **water recreation** would increase the magnitude, range, certainty and potential overall significance of the minor negative effects identified under these priorities (Table 8.2, Appendix 5).

A stronger focus here could equate to more relaxed policy (e.g. within the LDP) on loch side development including more access / egress points, moorings, ancillary facilities etc, a relaxed approach to different types of uses (e.g. motor boating) and stronger promotion of large scale water based events. In all cases, this would likely result in increased disruption of sensitive aquatic / riparian habitats and wild species populations (**biodiversity**), degradation of loch shore fringe, loch island, sea loch foreshore and glen side landscapes<sup>33</sup> (**landscape**), increased emissions of air pollutants / greenhouse gases and increased noise (**air and noise, climatic factors**).

Further, key effects that have been evaluated as 'neutral' in the current assessment (Table 8.2, Appendix 5) may be 'upgraded' to minor negative. For example, the magnitude of disruption to individual habitats and wild species populations (see above) may increase to the extent that cumulatively, the overall integrity of loch / river ecosystems is disrupted (**biodiversity – conserve and enhance the integrity of ecosystems**).

Clearly, the above scenario is very unlikely to happen under the draft NPPP 2018-2023 for the reasons outlined above (i.e. what constitutes a 'reasonable alternative' given the National Parks legislation and the Sandford Principle). However, it helps to illustrate what could happen under a counterfactual situation, e.g. in the case that the area was not a designated National Park and / or if the Sandford Principle was not an explicit requirement of the implementing legislation for National Parks.

## 7.3 Conclusion

---

The SEA has used a SWOT analysis approach to assess the draft plan along with the BAU alternative (the 'do-minimum' option). Under current circumstances and given the remit of the NPA and the objectives and scope of the NPPP, the NPA concluded that there were no other alternatives that could be considered 'reasonable' for further assessment. This has been illustrated above with reference to a hypothetical 'alternative emphasis' scenario that would see greater weight attached to priorities within the Rural Development and Visitor Experience themes.

The findings of the SWOT analysis of the new plan (preferred alternative) over the old plan (BAU alternative) show that the proposed NPPP 2018-2023 has significant advantages over the extant plan (e.g. integration of collaborative land use management planning across scales, general usage of catchment based approaches, support for deer management).

The key weakness of the new plan concerns its highly strategic nature and lack of prioritisation / focus across theme and priorities; i.e. it is unclear if / how activity will be prioritised **spatially** across the Park or **thematically** across themes, outcomes and priorities. Without this focus, there is a risk that limited resources may be spread too thinly to deliver desired environmental outcomes.

---

<sup>33</sup> <http://www.snh.org.uk/pdfs/publications/review/140.pdf>

## 8. Assessment of the proposed NPPP 2018-2023

This chapter presents a summary of the assessment of the draft NPPP 2018-2023 (section 8.1) including key areas of potential cumulative effects (section 8.2) and proposed mitigation and enhancement measures (section 8.3). Detailed assessment matrices, per NPPP theme, are provided in Appendix 5. Readers should note that six proposed priorities from the draft NPPP have not been assessed as part of this SEA (see section 3.3 and Appendix 5 for further details).

### 8.1 Summary of the assessment

#### Assessment of Conservation and Land Use (C&LU) draft priorities

A summary of the assessment of the Conservation and Land Use (C&LU) draft priorities is presented in Table 8.1 below. The full assessment (including detailed notes explaining the rationale for assessment against the significance criteria etc) is provided in Appendix 4 Table A4.1.

Overall, the assessment has identified the potential for C&LU priorities to give rise to a range of mainly positive environmental effects though with key areas of uncertainty dependent on how the priorities are implemented. This is to be expected given the strategic nature of the priorities and SEA recommendations have been made to the NPA at section 8.3 to help ensure that as many of these positive effects are realised upon implementation of the NPPP 2018-2023.

An outline of specific points relating to the C&LU priorities assessment is provided below:

- **Draft C&LU priorities likely to cause the most significant positive effects:** several priorities were assessed as having the potential to cause *several major positive effects*, especially **woodland enhancement and expansion, waterbody and peatland restoration and support for Deer Management Groups (DMGs)**:
  - **Woodland:** the spatial focus on upland and riparian areas means that key UK BAP Priority habitats in the Park are likely to benefit (e.g. upland birch / oak woods), supporting *biodiversity SEA objectives*. This will also help to address soil erosion issues (e.g. planting heavily grazed slopes, cleuchs etc in upland areas) and riparian planting (including floodplain woodland) can help to promote natural fluvial processes / flooding regimes<sup>34</sup>, supporting *soil* and *water SEA objectives*. Woodland measures are also expected to provide major benefits to *climatic factors (adaptation) SEA objectives* (see Table 8.1).
  - **Waterbody and peatland restoration:** the importance of blanket bog as an integral part of the Park's upland landscapes<sup>35</sup> and core wild land areas<sup>36</sup> means that action taken to restore degraded peatland habitats will also support *landscape SEA objectives*. The proposed catchment based approach to waterbody restoration, in conjunction with other C&LU measures including **Regional Land Use Partnerships (RLUPs)** and **support for land management planning**, raises an important opportunity to address the Park's remaining WFD issues, especially rural diffuse pollution and morphological pressures, supporting *water SEA objectives*. Waterbody and peatland measures are also expected to provide major benefits to *biodiversity, soil* and *climatic factors SEA objectives* (see Table 8.1).
  - **Support for DMGs:** supporting DMGs and the associated positive impacts in terms of managing grazing / browsing pressure is expected to provide various environmental

<sup>34</sup> [https://www.forestry.gov.uk/pdf/FRMG004\\_Woodland4Water.pdf/\\$FILE/FRMG004\\_Woodland4Water.pdf](https://www.forestry.gov.uk/pdf/FRMG004_Woodland4Water.pdf/$FILE/FRMG004_Woodland4Water.pdf)

<sup>35</sup> <http://www.snh.org.uk/pdfs/publications/review/140.pdf>

<sup>36</sup> <http://www.snh.gov.uk/docs/A1329851.pdf>

benefits, especially in terms of *biodiversity*, *climatic factors* and *landscape SEA objectives* (see Table 8.1).

- **Draft C&LU priorities where effects are important but uncertain:** several priorities were assessed as having the potential to cause *several major positive effects*, however the approach to implementation of these measures remains uncertain, meaning that the realisation of these benefits is uncertain also. This applies to the following priorities: **delivering multiple benefits from nature; RLUPs; and support for land management planning**. All these measures are excellent in principle but will rely heavily on support and consensus from individual land owners and managers (i.e. to effect desired land use management interventions on private land). The rationale behind these measures is based on developing a shared understanding of the benefits (ecosystem services) and management issues / priorities of relevance to natural assets at the landscape (catchment) scale (**RLUPs**) and linking this to delivery at the farm / holding / estate scale (**support for land management planning**). This type of approach is endorsed in the Scottish Government's updated (2016) Land Use Strategy<sup>37</sup> (LUS) and has the potential to deliver benefits for nature (e.g. enhancing ecological connectivity, consolidating high value habitats) and people (enhancing the delivery of key ecosystem services – e.g. flood storage, recreation / access provision). In principle, therefore, the combined effect of these three measures has potential to result in major positive effects across almost all SEA objectives (see Table 8.1) though this is heavily dependent on the effectiveness of implementation.
- **Draft C&LU priorities where effects are mixed:** several priorities have the potential to cause mixed (minor) positive and negative environmental effects though with a degree of uncertainty. This relates especially to: **delivering multiple benefits from nature; conserving & enhancing wildness, dark skies etc; wild land qualities of upland areas; and support for Flood Risk Management (FRM)**. For example:
  - **Delivering multiple benefits from nature:** potential to deliver substantial positive effects as per the above. However, a very utilitarian (ecosystem services) approach to nature may mean that certain land use functions are prioritised over others (e.g. productive land uses / provisioning services, regulating services etc).
  - **Wild land / upland landscapes:** there is much debate at present in Scotland and the UK concerning how our land should be used and managed in the future, especially given the potential consequences of Brexit<sup>38</sup>. This is particularly acute in relation to upland areas where debates about landscape aesthetics and the emerging concept of “rewilding” are exposing different views about how our upland areas should be developed and managed in the future<sup>39,40</sup>. The **wild land** and **upland landscape** measures in the draft NPPP raise both opportunities and threats in this context; maintaining these areas with their current configuration of land covers and habitats will deliver benefits for some aspects of *biodiversity* and *landscape* (e.g. blanket bog) but potentially at the expense of others (e.g. expanding appropriate forms of native upland woodlands). These trade-offs will need to be reconciled carefully on a case-by-case (catchment / landscape / site) basis to ensure sustainable outcomes.
- **Draft C&LU priorities with potential negative effects:** although the vast majority of the C&LU measures are likely to cause major and minor positive effects, there is potential for some negative issues to arise also via measures causing mixed effects (see above) and one measure that may cause specific minor negative effects. **Enhancing opportunities to enjoy**

<sup>37</sup> <http://www.gov.scot/Resource/0050/00505253.pdf>

<sup>38</sup> <http://www.parliament.uk/business/committees/committees-a-z/commons-select/environmental-audit-committee/inquiries/parliament-2015/future-of-the-natural-environment-after-the-eu-referendum-16-17/>

<sup>39</sup> <http://www.rewildingbritain.org.uk/>

<sup>40</sup> <http://www.snh.gov.uk/docs/A2131195.pdf>

**landscapes** may cause minor negative effects in relation to various aspects of **biodiversity**. In particular, removing vegetation along roads and railways (for example) to open-up views could result in loss of linear habitats which are important for ecological connectivity and the aspects of ecosystem function that this underpins.

### Assessment of Visitor Experience (VE) draft priorities

A summary of the assessment of the Visitor Experience (VE) draft priorities is presented in Table 8.2 below. The full assessment (including detailed notes explaining the rationale for assessment against the significance criteria etc) is provided in Appendix 4 Table A4.2.

Overall, the assessment has identified the potential for VE priorities to give rise to mixed effects including many areas of neutral effects (i.e. measures that are unlikely to have any **significant** beneficial or adverse effect on the SEA objective being assessed – see Table 5.2). As with measures in the C&LU theme (Table 8.1), the assessment of VE priorities is also characterised by key areas of uncertainty, dependent on how the priorities are implemented.

An outline of specific points relating to the VE priorities assessment is provided below:

- **Aspects of the environment likely to be most beneficially affected:** the assessment has highlighted several aspects of the environment (as per the SEA objectives) that are likely to be most positively affected by the proposed VE priorities, especially **air, noise, climate change mitigation, population and human health** and **material assets**. Further details below:
  - **Air / noise / climatic factors (mitigation):** all measures that promote / facilitate active travel and / or integrated travel options (e.g. **core paths review, strategic links to NWCN, active and integrated travel**) will help to reduce emissions of transport related air pollutants and greenhouse gases (GHG), contributing positively to relevant SEA objectives. Effects are only likely to be minor positive due to the Park's existing good air quality (though this may alter as anticipated increases in visitor numbers increase transport demand) and the relatively small contribution made by the Park to national level GHG emissions. SEA objectives relating to **noise and light pollution** are likely to benefit through potential reduced demand for transport and better management of tranquil loch shores via YOURPark etc.
  - **Population and human health:** the vast majority of the VE measures are expected to contribute positively to SEA objectives on **population and human health**. Principally, this relates to measures that will increase provision of access and recreation infrastructure as well as promoting and facilitating its use (see above). Of particular importance are the new measures relating to the **Park as a resource for health improvements** and the idea of a **National Park Health Partnership**. These measures have the potential to promote and utilise the Park's many recreational assets as a means of delivering health benefits to a much wider audience (i.e. the affected population is potentially very large – e.g. the Glasgow and Clyde Valley area). Increased use in this regard will however require careful management to avoid undue pressure on key natural assets (see below).
- **Draft VE priorities likely to cause the most significant positive effects:** several priorities were assessed as having the potential to cause **several major and / or minor positive effects**, especially **YOURPark, management of quiet areas on east Loch Lomond and islands** and **best practice for water craft use**. All measures that have the potential to manage various forms of visitor pressure on different aspects of the environment; e.g. promoting / ensuring appropriate use and activities of sensitive loch shores (**YOURPark, management of quiet areas**) will help to protect sensitive habitats and wild species populations, supporting

***biodiversity SEA objectives.*** Similar mechanisms will deliver positive effects for ***water*** and ***soil SEA objectives.***

**Table 8.1: Assessment of NPPP 2018-2023 draft Conservation and Land Use (C&LU) priorities – summary matrix**

Key to potential environmental effects		NPPP 2018-2023 draft Conservation and Land Use (C&LU) priorities														
		Woodland enhancement & expansion	Waterbody & peatland restoration	Delivering multiple benefits from nature	At risk species (conservation status in decline)	Tackling & reducing INNS	Flagship species	Conserving & enhancing wildness, dark skies etc	Wild land qualities of upland areas	Enhancing opportunities to enjoy landscapes	Landscape works for habitat improvement	Collaboration on joint land/water management	Supporting FRM plans delivery	Regional Land Use Partnerships (RLUP)	Support for Deer Management Groups (DMG)	Support for land managers to deliver benefits
++	Major positive															
+	Minor positive															
0	Neutral															
-	Minor negative															
--	Major negative															
-/+	Mixed															
?	Uncertain															
<b>SEA Objectives</b>																
Furthering biodiversity by conserving and enhancing the diversity of species		++	++	+ - ?	++	++	0	+ - ?	+ - ?	-	+	+	+ - ?	++ ?	++	++ ?
Further biodiversity by conserving and enhancing the diversity of habitats		++	++	+ - ?	+	++	0	+ - ?	+ - ?	-	+	++	+ - ?	++ ?	++	++ ?
Conserve and enhance the integrity of ecosystems		++	++	++ ?	+ ?	++	0	+ - ?	+ - ?	-	+	++	++ - ?	++ ?	++ ?	++ ?
Conserve and enhance land form, soils and related natural processes and systems		++	++	+ ?	+ ?	0	0	+	+	0	+	++ ?	+ - ?	+ ?	+	+ ?
Conserve and enhance the water environment including coastal, river and loch systems		++	++	++ ?	+ ?	++ ?	0	+	+	0	+	++ ?	++ - ?	++ ?	+	++ ?
Maintain and improve air quality		0	0	0	0	0	0	- ?	0	- ?	0	0	- ?	0	0	0
Reduce noise and light pollution		+ ?	0	+ ?	0	0	0	+	+	?	+ ?	?	- ?	?	0	?
Reduce the causes of climate change (mitigation)		++ ?	++	++ ?	+ ?	0	0	+	+	- ?	+	++ ?	+ - ?	++ ?	++	++ ?
Reduce the effects of climate change (adaptation)		++	++	++ ?	+ ?	++ ?	0	+	+	0	+	++ ?	++	++ ?	++	++ ?
Conserve and enhance the landscape character, local distinctiveness, and scenic value of the Park		++ ?	++	++ - ?	+	+	0	++ ?	++ ?	+ - ?	++	+	+	++	++	++
Protect and (where appropriate) enhance the Park's cultural, historic and built environments		+ - ?	+	+ - ?	?	+	0	++	+	+ - ?	0	0	?	+ ?	?	+ ?
Protect and improve the health and wellbeing of residents and visitors to the Park		+	+ ?	+ ?	0	?	+	+	+	+	?	?	+	+ ?	0	+ ?
Promote sustainable use of resources		+	+	+	+	0	0	?	?	0	+	++	+	++ ?	+	++ ?



Table 8.2: Assessment of NPPP 2018-2023 draft Visitor Experience (VE) priorities – summary matrix

Key to potential environmental effects		NPPP 2018-2023 draft Visitor Experience (VE) priorities																
		Core path network review	Raise awareness of access & recreation opps.	Strategic links to NWCN	Maximise opps. From path network	Active & integrated travel options	Implementing YOURPark management zones	Loch Lomond islands joint management approach	Litter management	Parking management	Promoting water recreation on sea lochs	Supporting more water recreation on large lochs	Quiet areas on east Loch Lomond & islands	Best practice for water craft use	Encourage business to capitalise on trends	Investment in new visitor facilities & services	The Park as a resource for health improvement	Establish a National Park Health Partnership
++	Major positive																	
+	Minor positive																	
0	Neutral																	
-	Minor negative																	
--	Major negative																	
-/+	Mixed																	
?	Uncertain																	
SEA Objectives																		
Furthering biodiversity by conserving and enhancing the diversity of species		0	-	-	-	0	++	+?	0	0	-	-	+	+	-	+	-?	-?
Further biodiversity by conserving and enhancing the diversity of habitats		0	-	-	-	0	++	+?	0	0	-	-	+	+	-	+	-?	-?
Conserve and enhance the integrity of ecosystems		0	-	-+	-	0	++?	0	0	0	0	0	+	0	-	0	0	0
Conserve and enhance land form, soils and related natural processes and systems		0	-	+ - ?	-	0	+	?	0	0	0	0	+	0	?	0	?	?
Conserve and enhance the water environment including coastal, river and loch systems		0	?	0	?	0	++	+?	+?	0	-?	-?	+	+	-?	+	0	0
Maintain and improve air quality		+	+	+	+	+	?	0	0	?	?	0	0	?	0	?	?	?
Reduce noise and light pollution		+	+	+	+	+	+	+?	0	?	-	-	+	+	-?	0	?	?
Reduce the causes of climate change (mitigation)		+	+	+	+	+	0	0	0	?	-	-	0	?	-?	0	?	?
Reduce the effects of climate change (adaptation)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	?	0	0
Conserve and enhance the landscape character, local distinctiveness, and scenic value of the Park		?	0	?	0	?	?+	?+	0	0	-?	-?	0	0	0	?	0	0
Protect and (where appropriate) enhance the Park's cultural, historic and built environments		?	0	?	0	?	0	0	0	0	?	?	0	0	0	?	0	0
Protect and improve the health and wellbeing of residents and visitors to the Park		+	+	+	+	+	+ - ?	+	?	?	+	+	+	?	+	+?	++	++
Promote sustainable use of resources		+	+	+	+	+	0	0	+?	?	?	?	0	?	+ - ?	+?	0	0

- **Aspects of the environment that might be negatively affected by VE priorities:** although the VE priorities are expected to deliver a range of benefits for the Park's environment, one outcome from this aspect of the Plan could well be increased visits to the Park e.g. as a result of the *support a thriving visitor economy and help deliver health and wellbeing* outcomes in the VE theme (see Chapter 6 and Table 6.1). An increase in visitor numbers will create risks for certain aspects of the environment and in certain locations (e.g. tourism and activity hotspots such as popular loch shores). Whilst this visitor pressure will be managed sustainably (e.g. via **YOURPark**), potential for minor negative effects remain, particularly given ongoing austerity and uncertainty regarding partner resources etc. Key risks relate to: **biodiversity, soils, noise** and **climatic factors (mitigation)**. Some further examples are as follows:
  - **Biodiversity:** all measures that promote increased use of the Park present the risk of increasing disturbance to priority species and their habitats (e.g. the Loch Lomond Woods SAC / SSSI – see Figure 4.2).
  - **Soils:** increased access to and use of the Park will require careful management and related activities (e.g. path maintenance and upgrade works) to ensure that increased use does not contribute to soil erosion, especially in sensitive upland areas.
- **Neutral effects:** over a third of the VE assessments suggest that the priorities will result in neutral effects on the SEA objective assessed (i.e. no significant adverse or beneficial effects in the context of the criteria used – see Tables 5.1 and 5.2). As shown on Table 8.1, there are no particular trends or themes to this result in terms of the VE priorities assessed or the SEA objectives. However, neutral effects should be subject to appropriate monitoring to capture any unexpected adverse effects and / or to identify unexpected positive effects that could potentially be enhanced. Monitoring proposals are introduced in Chapter 9.

### Assessment of Rural Development (RD) draft priorities

A summary of the assessment of the Rural Development (RD) draft priorities is presented in Table 8.3 below. The full assessment (including detailed notes explaining the rationale for assessment against the significance criteria etc) is provided in Appendix 4 Table A4.3.

Overall, the assessment has identified the potential for RD priorities to give rise to mixed effects including many areas of neutral effects (i.e. measures that are unlikely to have any **significant** beneficial or adverse effect on the SEA objective being assessed – see Table 5.2). As with measures in the C&LU and VE themes (Tables 8.1 and 8.2), the assessment of RD priorities is also characterised by key areas of uncertainty, dependent on how the priorities are implemented.

An outline of specific points relating to the VE priorities assessment is provided below:

- **Aspects of the environment likely to be most beneficially affected:** the assessment has highlighted several aspects of the environment (as per the SEA objectives) that are likely to be most positively affected by the proposed RD priorities, especially **water** and **population and human health**:
  - **Water:** several key RD measures have potential to enhance water related objectives (**climate change adaptation, transition to low carbon economy and Rural Development Frameworks**); sustainable design (e.g. use of SuDS) and sustainable FRM measures (e.g. use of NFM techniques) have the potential to help manage flood risks, reduce diffuse pollution (from roads, building footprints etc) and reduce water usage. The magnitude of this effect however is likely to be relatively small (minor significance overall) due to anticipated small levels of development (e.g.

housing land supply to 2027 of 916 homes<sup>41</sup>) and / or limited opportunities for retrofitting some measures due to heritage related design constraints.

- **Population and human health:** most of the RD measures have potential to contribute to health and wellbeing outcomes, in various ways. For example, the **enhancement of built and historic environments** presents an opportunity to enhance access and open space networks in the Park's towns and villages, helping to promote active travel for short, local journeys. Measures on **climate change adaptation** should build resilience within communities and businesses helping to ensure access to vital services (e.g. food / shops, health) when extreme weather events / climate impacts (e.g. flooding, landslides) cut-off wider access.
- **Aspects of the environment that might be negatively affected:** although the VE priorities are expected to deliver a range of benefits for the Park's environment, the overarching objective of this aspect of the Plan is to increase visits to the Park to e.g. support the rural economy and grow the economically active rural population (see Chapter 6 and Table 6.1). Increased population and economic activity in this regard will undoubtedly create risks for certain aspects of the environment. Principally, this relates to **noise** and **climatic factors (mitigation)** linked to increased development activity. **Noise** related effects are likely to be minor and temporary linked to specific development projects. Likewise, **climatic factors** effects are linked to GHG emissions associated with new built development (embodied emissions) and from increased transport demand. However, consolidating development in existing settlements (Arrochar, Balloch etc) should help to manage these emissions by making the most of existing public transport provision.
- **Uncertain effects:** there are many areas of uncertainty inherent to the RD priorities. A particular example is **diversification of land based rural businesses** which could contribute to a range of positive and negative effects, depending on the interests of those involved.

---

<sup>41</sup> <http://www.ourlivepark.com/our-plan/>

**Table 8.3: Assessment of NPPP 2018-2023 draft Rural Development (RD) priorities – summary matrix**

Key to potential environmental effects		NPPP 2018-2023 draft Rural Development (RD) priorities														
		Spatial focus for development at Arrochar etc	Built and historic environment enhancements	Active travel options between communities	Climate change adaptation & resilience	Transition to low carbon economy	Energy efficiency & renewable energy	Diversification of land based rural business	Rural Development Frameworks	Workspace etc for start-ups	More focussed rural business support	Local service delivery & rural facilities	Improving public transport links	Land reform and community empowerment	Communities leading on projects etc	Communities owning & managing assets
++	Major positive															
+	Minor positive															
0	Neutral															
-	Minor negative															
--	Major negative															
-/+	Mixed															
?	Uncertain															
SEA Objectives																
Furthering biodiversity by conserving and enhancing the diversity of species		0	0	?	0	?	-?	+ - ?	+	-?	?	0	?	?	?	0
Further biodiversity by conserving and enhancing the diversity of habitats		0	0	?	0	0	+ - ?	+ - ?	+	0	?	0	0	?	?	?
Conserve and enhance the integrity of ecosystems		0	0	+?	0	0	+ - ?	+ - ?	+	0	?	0	0	?	?	?
Conserve and enhance land form, soils and related natural processes and systems		-?	+ - ?	0	+?	0	?	+ - ?	?	0	0	0	0	?	?	?
Conserve and enhance the water environment including coastal, river and loch systems		?	?	0	+	+	?	+	+	?	?	?	0	0	0	0
Maintain and improve air quality		0	?	+	0	?	?	?	?	-?	?	+	+	0	0	0
Reduce noise and light pollution		-	-	0	-	?	?	?	0	?	0	0	?	0	0	0
Reduce the causes of climate change (mitigation)		-	0	+	0	+?	+	+ - ?	-	-?	?	+	+	?	?	?
Reduce the effects of climate change (adaptation)		?	?	0	+	0	0	+?	?	0	0	+	?	?	?	?
Conserve and enhance the landscape character, local distinctiveness, and scenic value of the Park		0	+	-?	+ - ?	?	-	+ - ?	+	?	0	0	0	?	?	?
Protect and (where appropriate) enhance the Park's cultural, historic and built environments		0	++	?	?	?	?	?	+	?	0	0	0	+?	+?	+?
Protect and improve the health and wellbeing of residents and visitors to the Park		+	+	+	+?	?	0	?	+	0	0	+	+	+	+	+
Promote sustainable use of resources		+	+?	0	0	+?	+?	+?	+?	+?	0	0	0	+?	+?	+?

## 8.2 Key areas of potential cumulative effects

There are three main areas in relation to the draft NPPP 2018-2023 where cumulative effects can occur:

1. Across multiple SEA objectives within a single theme.
2. Across multiple SEA objectives across more than one theme; and
3. As a result of multiple priorities against a single SEA objective.

Cumulative effects occur where sensitive receptors (e.g. people, species, habitats, water courses, landscapes) receive impacts from multiple sources / activities. These impacts can be positive or negative, additive, subtractive, synergistic (greater than the sum of the parts) and short, medium or long-term, permanent or temporary. Given the strategic nature of the NPPP there is a limit to which specific details of potential cumulative effects can be elaborated, since it will depend on delivery through subsequent plans / programme / projects and by partners. It is, however, important to identify at this strategic level the potential areas where cumulative effects could occur so these can be monitored and addressed by lower level plans, programme and projects.

Examples of potential cumulative effects identified from the assessment matrices (see Tables 8.1 – 8.3 above) include:

1. Under the C&LU theme three SEA objectives: ***biodiversity (species)***; ***biodiversity (habitats)***; and ***ecosystems*** are each potentially affected by activities under the priorities **enhancing opportunities to enjoy landscapes** (minor negative scores), along with uncertain or mixed effects from **supporting FRM plans delivery**, and measures supporting **wild land qualities**. This points to the need for careful implementation in the way in which such activities are undertaken, along with mitigation measures where necessary.
2. The C&LU and VE themes, and to a lesser extent the RD theme, interact with the same SEA objectives identified in (1) as well as the soils objectives through activities promoting **access and recreation**.
3. Again, cumulative effects are possible in relation to individual ***biodiversity SEA objectives*** and across multiple types of activities for **promoting access and recreation** (under VE theme), and in relation to ***noise and light pollution*** under the RD theme across multiple activities as part of the **spatial focus for development** (especially promoting development in Arrochar), **enhancing built and historic environments, climate change adaptation and resilience**, for example.

Considering the above, there is the potential for multiple cumulative effects on ***biodiversity*** (species, habitats and ecosystems) if **recreation activities** and **rural development** were not properly planned, implemented and managed. These effects could be additive / synergistic and permanent / long-term. However, it is expected that sensitive design and management are part of the NPPP implementation and within the remit of lower level plans, programmes and projects (including the LDP<sup>42</sup> and **Local Development Frameworks** such as that for Buchanan South<sup>43</sup>).

## 8.3 Proposed mitigation and enhancement measures

It is worth noting that no **major** negative adverse effects from the draft NPPP have been identified. Given the remit of the NPA and the nature of the NPPP, major negative effects would not be expected and would otherwise suggest significant incompatibility of the NPPP objectives with the SEA objectives, which has not been identified (see Chapter 6 and Table 6.1 in particular).

<sup>42</sup> <http://www.lochlomond-trossachs.org/planning/planning-guidance/local-development-plan/>

<sup>43</sup> <http://www.lochlomond-trossachs.org/rr-content/uploads/2016/08/LDP-Draft-Buchanan-South-SG-1.pdf>

Where the potential for minor significant negative effects has been identified, these are typically in relation to the sensitive nature of the receiving environment and the potential for human recreation activity or built development to impact upon the natural environment, but where with sensitive design and management such activity or development could take place sustainably and the effects mitigated. The delivery of suitable avoidance and mitigation measures will need to be undertaken by lower level plans and programmes and in relation to individual projects as they come forward, but may also need to be identified and incorporated into specific partnership agreements and / or in relation to specific activities. Operational and management measures have been identified below to help address these environmental risks and guide lower level implementation activities (Table 8.5).

In addition to the more detailed operational / management measures, suggested amendments to the wording of several of the NPPP's draft priorities have been proposed (Table 8.4). This is the preferred mitigation strategy for SEA whereby changes are made to the aspect of the plan that is likely to cause the negative effect(s). By adjusting the wording of the priorities, the strategic intent of the NPPP is altered thereby helping to ensure that desired environmental outcomes are realised.

### Proposed amendments to the wording of NPPP draft priorities

Amendments to the wording of draft NPPP priorities have been proposed where the priority has been assessed as: (1) having the potential to cause **minor negative effects**; or (2) having the potential to cause **minor negative effects** but where the effects remain **uncertain**. Table 8.4 details the proposed amendments for each relevant priority in **bold italicised** text.

**Table 8.4: Proposed amendments to the wording of NPPP draft priorities**

Priority	Summary of potential negative effects	Propose amendments to priority wording
<b>Conservation and Land Use theme priorities</b>		
Delivering multiple benefits from nature including natural flood management, carbon sequestration and storage, timber and food production.	<b>Biodiversity, landscape:</b> utilitarian approach to nature (i.e. focus on ecosystem services and multiple benefits) may mean that some habitats and services are prioritised over others where they deliver key priority benefits for people (e.g. flood management, food production, recreation).	Delivering multiple benefits from nature (including natural flood management, carbon sequestration and storage, timber and food production) <b>whilst working to sustain and enhance overall ecosystem health.</b>
Conserving and enhancing wildness qualities, cultural heritage, tranquillity and dark skies.	<b>Biodiversity:</b> preservation of a certain landscape aesthetic (linked to e.g. perceptions of wildness) may conflict with actions to improve ecosystem health, especially in upland areas (e.g. sensitive restoration and expansion of a more diverse mosaic of upland habitats).	Conserving and enhancing wildness qualities, cultural heritage, tranquillity and dark skies, <b>whilst considering opportunities to diversify upland habitats where appropriate.</b>
Protecting wild land qualities of upland areas.	See above.	Protecting wild land qualities of upland areas <b>whilst considering opportunities to diversify upland habitats where appropriate.</b>
Enhancing opportunities to enjoy and experience landscapes, particularly along major transport routes and around settlements.	<b>Biodiversity:</b> the critical issue here is the potential for removal of vegetation alongside roads / railways and subsequent loss of linear habitats which are important for ecological	Enhancing opportunities to enjoy and experience landscapes, particularly along major transport routes and around settlements, <b>in a sustainable manner.</b>

Priority	Summary of potential negative effects	Propose amendments to priority wording
	connectivity and landscape. This is only a minor risk but something to consider, especially in terms of cumulative effects.	
Supporting the implementation of Flood Risk Management Plans that cover the Park.	<b>Biodiversity, soils, water:</b> priority could support implementation of traditional engineered FRM approaches (e.g. embankments, flood walls) which can alter watercourse morphology, disrupting natural fluvial processes and riparian habitats.	Supporting the implementation of Flood Risk Management Plans that cover the Park <b>and promoting sustainable approaches where possible.</b>
<b>Visitor Experience theme priorities</b>		
Awareness raising of recreational and access opportunities.	<b>Biodiversity, soils:</b> measures that promote increased recreational usage of the Park (directly and / or indirectly) have the potential to cause increased disruption of habitats and wild species populations and contribute to footpath / soil erosion (especially in sensitive upland areas).	Awareness raising of <b>sustainable</b> <sup>44</sup> recreational and access opportunities <b>and promoting responsible use.</b>
Strategic links (new and improving existing) to Scotland's National Walking and Cycling Network.	See above.	<b>Providing</b> strategic links (new and improving existing) to Scotland's National Walking and Cycling Network <b>in a sustainable</b> <sup>45</sup> <b>manner.</b>
Maximising opportunities from significant network of long distance and local paths, focusing on West Highland Way.	See above.	Maximising <b>sustainable</b> <sup>46</sup> opportunities from significant network of long distance and local paths, focusing on West Highland Way.
Promote water-based recreational activities on sea lochs.	<b>Biodiversity:</b> similar issues to those described above but in relation to marine habitats and species populations.	Promote <b>sustainable</b> <sup>47</sup> water-based recreational activities on sea lochs.
Support more water based recreational facilities for public use on larger freshwater lochs.	<b>Biodiversity:</b> similar issues to those described above but in relation to freshwater loch habitats and species.	Support more <b>sustainable</b> <sup>48</sup> water based recreational facilities for public use on larger freshwater lochs.
Encourage business to capitalise on growing visitor and recreation trends.	<b>Biodiversity:</b> measures that promote increased recreational, tourism, events etc usage of the Park (directly and / or indirectly) have the potential to cause	Encourage business to capitalise on growing visitor and recreation trends <b>where appropriate to the Park's natural and cultural heritage.</b>

<sup>44</sup> Use of the word "sustainable" in this context relates to the need to direct any anticipated or planned increase in usage to paths, other recreational infrastructure etc that can accommodate additional or higher levels of usage and / or ensuring that the necessary upgrades (e.g. path works) are programmed or in place already.

<sup>45</sup> Ibid.

<sup>46</sup> Ibid.

<sup>47</sup> Use of the word "sustainable" in this context relates to the need to direct any anticipated or planned increase in usage and development of loch waterbodies (marine and freshwater) to sites and locations that can accommodate such usage.

<sup>48</sup> Ibid.

Priority	Summary of potential negative effects	Propose amendments to priority wording
	increased disruption of habitats and wild species populations.	
<b>Rural Development theme priorities</b>		
Supporting land based rural businesses to diversify / expand.	<b>Biodiversity, soils, climatic factors (mitigation), landscape and cultural heritage:</b> poorly planned and / or inappropriate diversification measures have the potential to negatively affect many aspects of the environment (e.g. disruption of habitats and wild species populations, soil erosion, loss / abandonment / change in use of better quality agricultural land, loss / lack of management of traditional landscape features).	Supporting land based rural businesses to diversify / expand <b><i>in a sustainable<sup>49</sup> manner.</i></b>

### Proposed measures to guide lower level implementation

Table 8.5 below outlines a range of more detailed operational and management measures, by priority, to guide lower level implementation of the priorities (e.g. via lower level plans, individual partner agreements). The intention of these more detailed measures is to address the inherent uncertainty in the assessment of the draft NPPP's strategic priorities; e.g. measures to help ensure that uncertain negative effects are mitigated on implementation.

To focus effort, detailed operational / management measures have been developed for priorities that are likely to cause **major positive effects** or **minor negative effects**. In due course and / or if resources allow, the NPA may wish to use the assessment of the draft NPPP and detailed notes on assessment rationale (Appendix 5) to develop operational / management measures for priorities with less critical environmental effects (e.g. minor positive effects, uncertain negative effects).

<sup>49</sup> Use of the word "sustainable" in this context refers to the need for diversification strategies to be delivered in such a way that they respect, protect and enhance existing natural and cultural heritage assets.



**Table 8.5: Proposed mitigation and enhancement measures to guide lower level implementation of the NPPP 2018-2023**

**Note:** NPPP priorities in column 1 have been listed in short form only. The potential environmental effects in column 2 have been colour coded to distinguish between positive effects (green cells) and negative effects (red cells).

Priority	Summary of potential environmental effects	Proposed mitigation and enhancement measures
<b>Conservation and Land Use theme priorities</b>		
<b>Woodland enhancement &amp; expansion</b>	<b>Biodiversity:</b> measures will address priority woodland habitats and increase diversity of woodland mosaic across the Park.	Articulate woodland measures at the regional and farm / estate levels through the proposed Regional Land Use Partnerships (RLUPs) and whole farm / estate plans (e.g. identify existing woodland assets and enhancement opportunities, identify woodland habitat network enhancement opportunities at the regional and farm scale).
	<b>Soils:</b> planting in upland and riparian areas can help to manage soil erosion (e.g. planting on steep slopes, in cleuchs etc).	Careful development of farm forestry is required to ensure that the Park's (limited) areas of better quality soils are retained for food production (e.g. arable land, better quality grazing).
	<b>Climatic factors:</b> carbon sequestration associated with increased above ground biomass. Contribution to ecological networks. Contribution to runoff reduction (reduced likelihood of flooding).	Where appropriate, target tree species and management regime to maximise carbon sequestration effect of new planting and existing woodlands. Ensure that new planting is directed away from areas of carbon rich soils in line with yield class thresholds set out in updated guidance on forests and peatland habitats <sup>50</sup> . Align woodland expansion with Flood Risk Management Strategies and Plans.
<b>Waterbody &amp; peatland restoration</b>	<b>Biodiversity, soils, water, climatic factors, landscape:</b> numerous positive effects associated with protection, enhancement and improved management of waterbodies and peatland habitats in the Park.	Ensure that the extent, location and condition of peatland habitats (e.g. blanket bog, lowland raised bog) across the Park is clearly defined and understood to facilitate targeted action. Clarify and articulate the support that will be provided to land managers (e.g. advice, resources) as part of their role restoring the more natural functioning of catchments in the Park. Define clear criteria for prioritising intervention (e.g. by catchment) where resources are constrained.
<b>Enhancing opportunities to enjoy landscapes</b>	<b>Biodiversity:</b> potential for removal of vegetation alongside roads / railways and subsequent loss of linear habitats which are important for ecological connectivity and landscape.	Define clear criteria for sustainability of these types of initiative (e.g. number, scale, location, nature of intervention). Describe clear design guidelines to ensure that ecological value of sites is maintained (e.g. in terms of vegetation removal, maintaining habitat and wider landscape integrity).
<b>Collaboration on joint land / water management</b>	<b>Biodiversity, material assets:</b> initiatives have the potential to result in key benefits for several priority habitats in the Park (e.g. blanket bog, wet woodland, upland woodlands).	See <i>waterbody &amp; peatland restoration</i> .
<b>Support for Deer Management Groups (DMGs)</b>	<b>Biodiversity, climatic factors, landscape:</b> improved management of grazing / browsing pressure from deer will deliver benefits at various scales.	Define landscapes and habitats (spatially and thematically) that are particularly sensitive to deer impacts. Spatial targeting of effort / support towards areas with adverse grazing impacts (e.g. areas with high deer densities, areas with sensitive

<sup>50</sup> <http://scotland.forestry.gov.uk/images/corporate/pdf/peatland-habitats-supplementary-guidance.pdf>

Priority	Summary of potential environmental effects	Proposed mitigation and enhancement measures
		habitats). Clarify scope of funding / support to implement deer management activities on the ground (e.g. culling, fencing) beyond planning / survey input.
<b>Visitor Experience theme priorities</b>		
<b>Raise awareness of access &amp; recreation opportunities</b>	<b>Biodiversity, soils:</b> measures that promote increased recreational usage of the Park (directly / indirectly) have the potential to cause increased disruption of habitats and wild species populations and contribute to footpath / soil erosion (especially in sensitive upland areas).	Direct any anticipated or planned increase in usage to paths, other recreational infrastructure etc that can accommodate additional and / or higher levels of usage. Ensure that the necessary upgrades to infrastructure and other facilities (e.g. path works) are programmed or in place already to accommodate increased use.
<b>Strategic links to NWCN</b>	See <i>raise awareness of access &amp; recreation opportunities</i> .	See <i>raise awareness of access &amp; recreation opportunities</i> . Ensure continued focus on developing and enhancing the core path network and other active travel linkages between communities.
<b>Maximise opportunities from path network</b>	See <i>raise awareness of access &amp; recreation opportunities</i> .	See <i>raise awareness of access &amp; recreation opportunities</i> and <i>strategic links to NWCN</i> .
<b>Promoting water recreation on sea lochs</b>	<b>Biodiversity:</b> potential to cause increased disruption of marine habitats and wild species populations.	Define clear criteria for sustainability of these types of initiative (i.e. publicly accessible boating and recreational facilities such as piers, pontoons and moorings). Criteria should set out the desired and sustainable scope / scale of this ambition (e.g. location, number of sites, capacity of new infrastructure) with reference to environmental constraints and carrying capacity.
<b>Supporting more water recreation on large lochs</b>	<b>Biodiversity:</b> potential to cause increased disruption of freshwater (loch) habitats and wild species populations.	Define clear criteria for sustainability of these types of initiative (i.e. publicly accessible boating and recreational facilities, provision of facilities, services, locations etc to encourage established / emerging water based recreation, developing water bus networks). Criteria should set out the desired and sustainable scope / scale of this ambition (e.g. location, number of sites, capacity of new infrastructure, anticipated number of additional waterbus routes / services) with reference to environmental constraints and carrying capacity.
<b>Encourage businesses to capitalise on trends</b>	<b>Biodiversity:</b> measures that promote increased recreational, tourism, events etc usage of the Park (directly and / or indirectly) have the potential to cause increased disruption of habitats and wild species populations.	Define clear criteria for sustainability of these types of event to be applied on a case-by-case basis (with appropriate flexibility). Criteria should set out the desired and sustainable / scope of this ambition for different trends and growth markets (e.g. walking, cycling and canoeing, food and drink, business tourism). Criteria should be flexible enough to accommodate new trends (e.g. large scale sporting events).

## 9. Monitoring proposals

### 9.1 Monitoring in relation to the assessment

Monitoring the significant environmental effects of implementing the NPPP is an important and ongoing element of the SEA process. Given the inherent uncertainty concerning the NPPP's likely significant effect on the environment (Chapter 8, Appendix 5), monitoring the implementation of the NPPP from an environmental perspective will ensure that actual progress against the environmental objectives, which formed the core of this assessment, can be measured. Where unexpected negative effects are identified, appropriate remedial actions can be identified and implemented.

This environmental monitoring process is likely to take as its starting point the objectives, and supporting indicators, developed for the SEA assessment and the key negative environmental effects predicted. However, the monitoring will also draw heavily on existing monitoring programmes and reporting requirements at the local and national level, undertaken by the Scottish Government and other organisations on its behalf (such as SNH and SEPA), rather than requiring additional and specific monitoring. However, the remit of the NPA and the sensitive nature of the Park is such that additional monitoring and data are likely to be available (e.g. in relation to visitor numbers, path condition).

The majority of the indicators used, however, will be from readily available data sources. It is envisaged that the monitoring is most likely to be on an annual basis, although updates of some indicators will not be available that frequently (e.g. SSSI site condition assessments). The difficulty with such monitoring and deciding on any remedial actions is in determining the relative contribution of the NPPP to changes in environmental outcomes recorded by the indicators (causality). In many cases, non-NPPP factors will have substantial environmental impacts in the same areas (e.g. specific actions delivered under lower level plans and programmes) although the NPPP establishes the overall policy context for activity in the Park.

Table 9.1 below identifies the recommended measures needed to monitor the potentially significant and cumulative negative environmental effects of the NPPP. It will be important that the SEA monitoring of significant effects is integrated, as far as possible, into the monitoring of the implementation of the NPPP and the environmental monitoring is incorporated into the reporting mechanisms required for the NPPP. At this stage, monitoring arrangements have not been fully developed and it will therefore be important to define the monitoring process and timeframe in more detail and also to establish clear responsibilities for monitoring. This will be included in the SEA post adoption statement (see Chapter 10).

**Table 9.1: Proposed monitoring of key significant effects identified in the assessment**

SEA topic	Potential significant effects	Proposed indicator categories
<b>Biodiversity, flora &amp; fauna</b>	<ul style="list-style-type: none"> <li>Increased extent and enhanced condition of priority woodland habitats (e.g. wet woodland, upland birchwoods).</li> <li>Enhanced condition of peatland habitats (upland and lowland).</li> <li>Reduction in deer impacts leading to regeneration of woodland habitats.</li> <li>Reduced disruption to sensitive loch shore habitats and wild species populations.</li> </ul>	<ul style="list-style-type: none"> <li>Extent and condition of UK BAP habitats and species (including key upland bog / peatland and woodland habitats).</li> <li>Extent and condition of designated sites (Figure 4.2).</li> <li>Location and extent of natural / semi-natural habitats.</li> <li>Biodiversity index: species indicators – e.g. farmland / woodland bird species.</li> <li>Visitor numbers to the Park or suitable proxies (e.g. number of overnight stays).</li> <li>Area of park under agri-environment-</li> </ul>
	<ul style="list-style-type: none"> <li>Removal of vegetation / loss of linear habitats alongside roads and railways.</li> </ul>	

SEA topic	Potential significant effects	Proposed indicator categories
	<ul style="list-style-type: none"> <li>Disruption of habitats and wild species populations due to increased visitor numbers (especially in loch side and upland locations).</li> <li>Utilitarian approach to nature may result in degradation of overall ecosystem health.</li> </ul>	<ul style="list-style-type: none"> <li>climate (AEC) schemes.</li> <li>YOURPark byelaw implementation reporting (e.g. fines, visual inspections).</li> </ul>
<b>Geology &amp; soils</b>	<ul style="list-style-type: none"> <li>Peatland restoration / preservation of carbon rich soils.</li> <li>Stabilisation of upland soils / soils on steep slopes due to woodland expansion.</li> <li>Increased visits to the Park resulting in path and soil erosion.</li> </ul>	<ul style="list-style-type: none"> <li>Proxies for soil carbon content: extent of soils rich in organic matter; extent of peatlands; soil record books.</li> <li>Water quality / sediment content (as a proxy for soil erosion).</li> <li>Areas of highly erodible soils.</li> <li>Fertiliser application rates to arable and grazing land in the Park.</li> <li>Visitor numbers to the Park or suitable proxies (e.g. number of overnight stays).</li> <li>Area of park under agri-environment-climate (AEC) schemes.</li> <li>Implementation of path upgrade and maintenance programmes.</li> <li>TMTTP path volunteer reporting.</li> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>Catchment scale restoration of river, loch and burn waterbodies.</li> <li>Reduced sediment loading of waterbodies.</li> <li>Reduced littering and pollution (including from human waste) of lochs.</li> <li>Support for sustainable FRM, sustainable drainage (SuDS) measures.</li> </ul>	<ul style="list-style-type: none"> <li>Overall quality (WFD status) of river and loch waterbodies in the Park.</li> <li>Likely % compliance of waterbodies across the Park with WFD objectives.</li> <li>Distribution of nitrate and sediment concentrations in waterbodies across the Park.</li> <li>Area of park under agri-environment-climate (AEC) schemes.</li> <li>YOURPark byelaw implementation reporting (e.g. fines, visual inspections).</li> <li>Flooding related indicators as per <i>climatic factors</i>.</li> </ul>
<b>Air &amp; noise</b>	<ul style="list-style-type: none"> <li>Promotion of active / integrated travel options reducing transport related emissions of air pollutants.</li> <li>Increased traffic congestion, noise and emissions of air pollutants associated with increased visitor numbers to the Park (by private car).</li> </ul>	<ul style="list-style-type: none"> <li>Modal choice / split for visits to the Park.</li> <li>Percentage of Park residents with access to public transport.</li> <li>Levels of car and van ownership amongst Park residents.</li> <li>Local authority air quality reporting.</li> <li>Visitor numbers to the Park or suitable proxies (e.g. number of overnight stays).</li> </ul>
<b>Climatic factors</b>	<ul style="list-style-type: none"> <li>Woodland expansion (including in upland and riparian areas) helping to reduce runoff and flood peaks.</li> <li>Promotion of active / integrated travel</li> </ul>	<ul style="list-style-type: none"> <li>Transport related indicators as per <i>air &amp; noise</i>.</li> <li>Flood hazard extent / depth (especially fluvial flooding).</li> </ul>

SEA topic	Potential significant effects	Proposed indicator categories
	<ul style="list-style-type: none"> <li>options reducing transport related emissions of greenhouse gases.</li> <li>Enhanced resilience of communities to climate change and other external stressors.</li> </ul>	<ul style="list-style-type: none"> <li>Flooding impacts.</li> <li>Area of park under agri-environment-climate (AEC) schemes.</li> <li>Carbon equivalent (CO<sub>2</sub>e) emissions by sector.</li> </ul>
	<ul style="list-style-type: none"> <li>Increased greenhouse gas emissions associated with increased visitor numbers to the Park (by private car).</li> <li>Embodied carbon emissions associated with new development (e.g. housing).</li> </ul>	<ul style="list-style-type: none"> <li>Total greenhouse gas emissions (CO<sub>2</sub>e) from the Park.</li> <li>Socio-economic impacts of climate risks (e.g. levels of service disruption).</li> <li>New development (e.g. number of houses delivered).</li> <li>New development adopting sustainable design (e.g. timber construction, micro-renewables)</li> </ul>
<b>Landscape &amp; cultural heritage</b>	<ul style="list-style-type: none"> <li>Preservation and enhancement of upland landscapes, including designated wild land areas.</li> </ul>	<ul style="list-style-type: none"> <li>Landscape Character Areas.</li> <li>Extent and condition / integrity of core areas of wild land in the Park.</li> </ul>
	<ul style="list-style-type: none"> <li>Prevailing landscape aesthetic constrains opportunities for sensitive expansion of appropriate / native upland habitats (e.g. upland birchwoods).</li> </ul>	<ul style="list-style-type: none"> <li>Extent and condition of historic and designed landscapes in the Park.</li> <li>Area of park under agri-environment-climate (AEC) schemes.</li> </ul>
<b>Population &amp; human health</b>	<ul style="list-style-type: none"> <li>Increased access to / uptake of outdoor recreation activities.</li> <li>Enhanced outdoor exercise / activity related health outcomes.</li> </ul>	<ul style="list-style-type: none"> <li>Delivery of new / upgraded access and outdoor recreation infrastructure (e.g. length of upgraded path).</li> <li>Visitor numbers to the Park or suitable proxies (e.g. number of overnight stays).</li> <li>Participation rates in outdoor sporting events held in the Park (e.g. Great Scottish Swim).</li> <li>Participation rates in different outdoor recreation activities in the Park or suitable proxies (e.g. usage of core path network).</li> <li>Health outcomes in affected communities.</li> </ul>

## 9.2 Relationship with other assessments

The very strategic nature of the draft NPPP 2018-2023 means that it has not been possible to predict many of the plan's likely environmental effects with a high degree of certainty (Chapters 7 and 8). However, the strategic nature of the NPPP is also a strength in this regard as it establishes the overall policy framework for several lower level NPA plans, programmes and projects (e.g. LIVEPark LDP, YOURPark visitor management). Accordingly, there is an opportunity to pick-up the environmental issues identified in this SEA in more detail via SEAs (and EIAs) of lower level plans and programmes (and projects). Also, lower level plans and their assessments provide an appropriate decision-making juncture for identifying, assessing and evaluating a greater range of reasonable alternatives (e.g. alternatives to the overall spatial strategy and site allocations as part of the LIVEPark LDP) and for developing more specific mitigation measures. This 'tiered' approach to

environmental assessment ensures that issues are assessed at the appropriate level of detail in relation to the appropriate level of decision-making.

## 10. Conclusions and next steps

---

The environmental assessment of the draft NPPP 2018-2023 set out in this Environmental Report has identified a range of primarily positive and neutral environmental effects that may be caused by the plan's priorities. A compatibility assessment of the NPPP's proposed outcomes against the SEA objectives identified strong areas of compatibility along with some areas of neutral and uncertain compatibility. The findings of the assessment, therefore, reflect the strong environmental focus of the NPPP (and the wider role of the NPA) as enshrined in the National Parks (Scotland) Act 2000.

There are, however, some minor areas of potential environmental risk associated with the draft NPPP. Principally, this relates to priorities within the plan's Visitor Experience (VE) and Rural Development (RD) themes. This reflects the inherent tension between the NPA's principal role protecting and enhancing the Park's natural and cultural heritage vs. the need to promote recreation, tourism, rural development etc, to ensure that the Park also functions effectively for the people who live and work there (e.g. in terms of promoting a diverse and resilient rural economy, ensuring adequate housing provision to meet various needs). However, these environmental risks are considered to be minor in terms of significance and can largely be mitigated upon implementation or with recourse to the Sandford Principle<sup>51</sup>, where necessary.

To address the minor areas of environmental risk identified in the assessment (as well as enhancing the many positive environmental effects), a number of SEA recommendations have been made. These include suggested amendments to the wording of draft NPPP priorities (the preferred mitigation strategy for SEA) as well as more detailed operational and management recommendations to support the sustainable implementation of the NPPP.

Consultation on the draft NPPP 2018-2023 along with this Environmental Report and its accompanying Appendices volume and NTS marks the immediate next step in the SEA and plan-development process. The following next steps will then take place after the consultation closes on 3<sup>rd</sup> July 2017:

- **Analysis of consultation responses:** all responses to consultation on the draft NPPP and its accompanying Environmental Report will be analysed to identify key issues and potential implications / changes for the NPPP;
- **Finalising the NPPP:** the consultation responses may necessitate some changes to the NPPP. Any substantive changes (e.g. addition / removal of priorities) may mean that certain parts of the plan need to be re-assessed as part of the SEA. The NPA Board will then review and approve the finalised plan;
- **Submission of the finalised NPPP to the Scottish Ministers:** the Scottish Ministers will review the finalised NPPP and either approve it (with or without modifications) or reject it<sup>52</sup>; and
- **Adoption of the finalised NPPP:** once the NPPP has been approved by the Scottish Ministers it will be formally adopted by the NPA. As part of this adoption process, an SEA post-adoption statement will be prepared. The key purpose of this statement is to set out and explain how the SEA and environmental issues have been taken into account in the adopted plan. It will also set out the finalised approach and framework for monitoring the significant environmental effects of the adopted NPPP.

---

<sup>51</sup> <http://www.nationalparks.gov.uk/students/whatisanationalpark/aimsandpurposesofnationalparks/sandfordprinciple>

<sup>52</sup> <http://www.legislation.gov.uk/asp/2000/10/section/12>

SEA

# STRATEGIC ENVIRONMENTAL ASSESSMENT

VOLUME 2: APPENDICES

MARCH 2017

DRAFT NATIONAL PARK PARTNERSHIP PLAN 2018-2023





<b>Project title:</b>	<b>Strategic Environmental Assessment (SEA) of the draft Loch Lomond and the Trossachs National Park Partnership Plan (NPPP) 2018-2023</b>
<b>Contracting organisation:</b>	<b>Loch Lomond and the Trossachs National Park Authority</b>
<b>Contractor:</b>	<b>Collingwood Environmental Planning Limited (CEP)</b>
<b>Contact details:</b>	<p><b>Head office:</b></p> <p>Address: 1E The Chandlery, 50 Westminster Bridge Road, London, SE1 7QY, UK</p> <p>Contact: Ric Eales</p> <p>Tel. 020 7407 8700</p> <p>Fax. 020 7928 6950</p> <p>Email: <a href="mailto:r.eales@cep.co.uk">r.eales@cep.co.uk</a></p> <p>Website: <a href="http://www.cep.co.uk">www.cep.co.uk</a></p> <p><b>Scottish office:</b></p> <p>Address: c/o Department of Civil and Environmental Engineering, University of Strathclyde, Level 5, James Weir Building, 75 Montrose Street, Glasgow, G1 1XJ</p> <p>Contact: Dr Peter Phillips</p> <p>Tel: 0141 416 8700</p> <p>Email: <a href="mailto:p.phillips@cep.co.uk">p.phillips@cep.co.uk</a></p>
<b>Report details:</b>	<p><b>Report title:</b> <b>Volume 2: Appendices</b></p> <p>Date issued: 21<sup>st</sup> March 2017</p> <p>Version no.: 2</p> <p>Authors: Peter Phillips and William Sheate</p>

## List of abbreviations

<b>C&amp;LU</b>	Conservation and Land Use (NPPP theme)
<b>EC</b>	European Commission
<b>EIA</b>	Environmental Impact Assessment
<b>EU</b>	European Union
<b>FRM</b>	Flood Risk Management
<b>HES</b>	Historic Environment Scotland
<b>HRA</b>	Habitat Regulations Assessment
<b>LDP</b>	Local Development Plan
<b>LLTNP</b>	Loch Lomond and the Trossachs National Park
<b>LUS</b>	Land Use Strategy
<b>NFM</b>	Natural Flood Management
<b>NPA</b>	National Park Authority
<b>NPPP</b>	National Park Partnership Plan
<b>NWCN</b>	National Walking and Cycling Network
<b>RD</b>	Rural Development (NPPP theme)
<b>RLUP</b>	Regional Land Use Partnership
<b>PVA</b>	Potentially Vulnerable Area
<b>SEA</b>	Strategic Environmental Assessment
<b>SEPA</b>	Scottish Environment Protection Agency
<b>SNH</b>	Scottish Natural Heritage
<b>SRDP</b>	Scotland Rural Development Programme
<b>SuDS</b>	Sustainable Urban Drainage Schemes
<b>VE</b>	Visitor Experience (NPPP theme)
<b>WFD</b>	Water Framework Directive

# Contents

<b>Appendix 1: Scoping Report consultation responses .....</b>	<b>4</b>
<b>Appendix 2: List of other relevant plans, programmes and strategies .....</b>	<b>8</b>
<b>Appendix 3: Summary of environmental baseline information .....</b>	<b>49</b>
<b>Appendix 4: Compatibility analysis of NPPP outcomes and SEA objectives ..</b>	<b>55</b>
<b>Appendix 5: Proposed NPPP 2018-2023 – detailed assessment matrices.....</b>	<b>60</b>

## Appendix 1: Scoping Report consultation responses

**Note:** no substantive comments (i.e. comments requiring changes to the proposed scope and level of detail for the assessment) were received from Historic Environment Scotland (HES).

Scoping response comment	Suggested response / action
<b>Comments from Scottish natural Heritage (SNH)</b>	
We agree with the SEA objectives and related assessment criteria in Appendix B and suggest adding the following: a comment on climate change adaptation to Objective 10, protection of wild land to Objective 11, green infrastructure to Objective 16 or 17.	<ul style="list-style-type: none"> <li>• New SEA criteria on climate change adaptation have been added as follows: 1) respond to predicted climatic changes through adaptation measures; and 2) reduce exposure to climate risks and promote resilience.</li> <li>• SEA criteria relating to SEA Objective 11 on landscape has been amended thus: maintain and enhance landscapes and <b>their</b> special qualities <b>including the Park's wild land areas</b></li> <li>• New SEA criteria on green infrastructure have been added to SEA Objective 16 on health as follows: promote appropriate use of green infrastructure for health benefits.</li> </ul>
<b>Comments from Scottish Environment Protection Agency (SEPA)</b>	
<i>Relationship with other Plans, Programmes and Strategies (PPS)</i>	
We consider that the PPS listed in Appendix A provides a good start at providing a background framework to the development of the plan. You may wish to consider referencing the relevant Flood Risk Management Strategies, details on our website, which cover the plan area under Water Environment within the Local Plans and Strategies section of the table. We also note reference to local authority structure plans; these are being phased out, as the new system of Strategic Development Plans and Local Development Plans are adopted, following the introduction of the Planning etc. (Scotland) Act 2006.	<ul style="list-style-type: none"> <li>• Flood Risk Management Strategies (FRMS) for the Clyde and Loch Lomond, Forth and Tay Local Plan Districts have been incorporated with the PPS review.</li> <li>• The PPS review reference to Structure Plans has been replaced with a reference to the Glasgow and Clyde Valley Strategic Development Plan (SDP)</li> </ul>
Some of the PPS included have themselves been subject to SEA in the scoping report. Where this is the case you may find it useful to prepare a summary of the key SEA findings that may be relevant to the Loch Lomond and The Trossachs National Park Partnership Plan 2018- 2023 (NPPP). This may assist you with data sources and environmental baseline information and also ensure the current SEA picks up environmental issues or mitigation actions which may have been identified elsewhere.	Noted, key SEAs have been reviewed for this very purpose, especially: 1) Live Park LDP 2017-2020; 2) NPPP 2012-2017; and 3) Your Park Camping Development Strategy. However, a summary of the findings hasn't been made as such. Rather, evidence from related SEAs has been incorporated with the Environmental Report (as appropriate) and referenced accordingly.
For your information, we are currently in the process of updating our SEA Guidance in relation to our interests. Guidance for air, soil and water are now complete and available through our website.	Noted. The updated topic guidance has been referred to accordingly (e.g. identifying indicators as part of the monitoring framework).
<b>Baseline information and environmental problems</b>	
SEPA holds significant amounts of environmental data which may be of interest to you in preparing the environmental baseline, identifying environmental problems, and summarising the likely changes to the environment in the absence of the PPS, all of which are required for the	Noted. Much of this data has been used within the baseline already.

Scoping response comment	Suggested response / action
assessment. Much of this data is readily available on our website.	
Table 2 includes a good summary of baseline information sources on the aspects of the environmental issues which fall within our remit. We also consider that the environmental problems described generally highlight the main issues of relevance for the SEA topics within our remit.	Noted.
However, we note that 'Material Assets' is missing from Table 2 and that there is no reference to managing waste elsewhere within this summary. We recommend that issues relating to waste management such as the reuse of materials, the provision of suitable management facilities and waste disposal are dealt with under material assets for SEA purposes. Our Standing Advice for Responsible Authorities on Strategic Environmental Assessment (SEA) Scoping Consultations provides further guidance on this matter and also includes references to other sources of data you may find relevant to the other topic areas.	Noted. Material assets and waste management related issues are covered within the SEA framework. Suggested indicators and data from Scotland's Environment Web have been used in the assessment where appropriate. These data and indicators have also been incorporated within the monitoring framework.
<i>Alternatives</i>	
We note that alternatives are still being considered. We welcome the commitment to assess any reasonable alternatives identified during the preparation of the plan as part of the SEA process. The findings of the assessment should inform the choice of the preferred option. We note that any further assessment and evaluation will be documented in the Environmental Report.	Noted.
<i>Scoping of environmental topics</i>	
We agree that in this instance all environmental topics should be scoped into the assessment.	Noted.
<i>Methodology for assessing environmental effects</i>	
We support the use of SEA objectives, as proposed, as assessment tools as they allow a systematic, rigorous and consistent framework with which to assess environmental effects.	Noted.
We welcome the proposed assessment matrix approach with scoring provided in Tables 4 and 5. However, it should be noted including a commentary section within the matrices in order to state, where necessary, the reasons for the effects cited and the score given would help to fully explain the rationale behind the assessment results. This allows the Responsible Authority to be transparent and also allows the reader to understand the rationale behind the scores given.	Noted. Commentary sections have been incorporated within the assessment matrices.
Where it is expected that other plans, programmes or strategies are better placed to undertake more detailed assessment of environmental effects this should be clearly set out in the Environmental Report.	Noted. The Environmental Report has included a section on "relationship with other assessments" setting where and how it is more appropriate for certain provisions or effects to be assessed in more detail as part of SEAs of other related PPS.
We would expect all aspects of the PPS which could have significant effects to be assessed.	Noted.
When it comes to setting out the results of the assessment in the Environmental Report please provide enough information to clearly justify the reasons for each of the assessments presented. It would also be helpful to set out assumptions that are made during the assessment and	Noted. The assessment matrices include commentary sections explaining the justification / rationale for individual assessments. A commentary on the detailed assessment matrices has also been provided in

Scoping response comment	Suggested response / action
difficulties and limitations encountered.	the main body of the Environmental Report.
<i>Design of the assessment matrices</i>	
We are content with the proposed detailed assessment matrix but would welcome the inclusion of commentary to fully explain the rationale behind the assessment results. We welcome the consideration of mitigation / enhancement measures in the assessment framework but recommend that the matrix makes direct links between the assessment results and the mitigation measures.	Noted. See comments above. The assessment matrices will make explicit links between the predicted environmental effects and proposed mitigation and enhancement measures.
<i>Comments on wording of proposed SEA objectives</i>	
We are generally content with the proposed SEA objectives to be used in the assessment as set out within Appendix B. We note that it is intended to rationalise the objectives adopted for the previous Park Plan and recent Local Development Plan for the purposes of this assessment. With reference to our interests, the 'minimise waste' objective is to be removed and instead considered under material assets. As long as a similar set of SEA criteria are adopted for the assessment of this consideration we are satisfied that this rationalisation is appropriate.	Noted. Please see finalised SEA framework.
<i>Mitigation and enhancement</i>	
We would encourage you to use the assessment as a way to improve the environmental performance of individual aspects of the final option; hence we support proposals for enhancement of positive effects as well as mitigation of negative effects.	Noted. Enhancement measures have been considered as well as mitigation to help improve the environmental performance of the NPPP.
It is useful to show the link between potential effects and proposed mitigation / enhancement measures in the assessment framework.	Noted. The Environmental Report has made explicit links between SEA topics / objectives, potential effects identified, proposed mitigation and enhancement measures and proposed monitoring measures.
We would encourage you to be very clear in the Environmental Report about mitigation measures which are proposed as a result of the assessment. These should follow the mitigation hierarchy (avoid, reduce, remedy or compensate).	Noted. The mitigation hierarchy has been followed in the development of mitigation measures.
One of the most important ways to mitigate significant environmental effects identified through the assessment is to make changes to the plan itself so that significant effects are avoided. The Environmental Report should therefore identify any changes made to the plan as a result of the SEA.	Noted. This approach has been prioritised wherever possible and corresponding changes to the draft NPPP noted in the Environmental Report.
Where the mitigation proposed does not relate to modification to the plan itself then it would be extremely helpful to set out the proposed mitigation measures in a way that clearly identifies: (1) the measures required, (2) when they would be required and (3) who will be required to implement them. The inclusion of a summary table in the Environmental Report such as that presented below will help to track progress on mitigation through the monitoring process.	Noted. This approach has been followed wherever possible (e.g. where there is a clear understanding of partner roles and responsibilities in the delivery of proposed mitigation measures).
<i>Monitoring</i>	
It is noted that the plan will include indicators for measuring each target and outcome. It is also highlighted that environmental indicators will "need to be developed to measure environmental outcomes which could be	Noted. The Environmental Report will include details of the proposed monitoring framework.

Scoping response comment	Suggested response / action
<p><i>incorporated with monitoring the National Park Partnership Plan</i>". Early consideration to the monitoring approach is welcomed, particularly in the choice of indicators. It would be helpful if the Environmental Report included a description of the measures envisaged to monitor the significant environmental effects of the plan.</p>	
<p><i>Consultation period</i></p>	
<p>We are satisfied with the proposal for a 12-week consultation period for the Environmental Report.</p>	<p>Noted.</p>
<p><i>Outcomes of the scoping exercise</i></p>	
<p>We would find it helpful if the Environmental Report included a summary of the scoping outcomes and how comments from the Consultation Authorities were taken into account.</p>	<p>Noted. This is the purpose of this appendix to the Environmental Report.</p>

## Appendix 2: List of other relevant plans, programmes and strategies

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
<b><i>EU and other international PPS</i></b>			
<b><i>EU and other international PPS – biodiversity, flora and fauna focus</i></b>			
United Nations Convention on Biological Diversity. (2010)	Biodiversity, water, soil, landscape	Strategic Plan for Biodiversity 2011-2020.	NPPP should look for opportunities to conserve, and where possible restore, biodiversity.
Ramsar Convention on Wetlands of International Importance 1971	Biodiversity, water, landscape	Conservation and sustainable use of wetlands.	NPPP can require the protection and enhancement of wetlands through policies and targets.
Directive 2009/147/EC on the conservation of wild birds – the Birds Directive] (amended version of Council Directive 79/409/EEC)	Biodiversity	Protects all wild birds, their nests, eggs and habitats within the European Union (EU). It gives EU member states the power and responsibility to classify Special Protection Areas (SPAs) to protect birds which are rare or vulnerable in Europe, as well	Framework for the conservation and management of, and human interactions with, wild birds in Europe.



Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		as all migratory birds which are regular visitors.	
Directive 92/43EEC: The Conservation of Natural Habitats of Wild Fauna and Flora 1992 – the Habitats Directive	Biodiversity, water, landscape	Requires EU member states to sustain populations of naturally occurring flora and fauna by sustaining areas of habitats to maintain ecologically and scientifically sound levels.	The NPPP can require protection and enhancement of SAC designated habitats through policies and targets.
European Union Biodiversity Strategy to 2020 (2011)	Biodiversity, water, soil, landscape	Halting the loss of biodiversity and ecosystem services in the EU by 2020.	NPPP should support conservation and enhancement of biodiversity.
7th Environmental Action Programme -The new general Union Environment Action Programme to 2020. Living well, within the limits of our planet	All topics	Through this Environment Action Programme (EAP), the EU has agreed to step up its efforts to protect our	The NPPP should promote sustainable development.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		natural capital, stimulate resource-efficient, low-carbon growth and innovation, and safeguard people's health and wellbeing – while respecting the Earth's natural limits.	
<b><i>EU and other international PPS – geology and soils focus</i></b>			
EU Common Agricultural Policy (CAP)	Soil, landscape, biodiversity, population and human health	Sets policy for agricultural support with increased emphasis on rural development support.	NPPP can recognise and provide opportunities for uptake of appropriate diversification of rural economic activities, agri-environment measures etc.
Thematic Strategy for Soil Protection (EU 2006)	Soil, material assets, biodiversity	The Soil Thematic Strategy is seeking to establish common principles for the protection and sustainable use of soils.	NPPP should contribute towards the protection and improvement of soils in the Park.
Directive 91/676/EEC: Nitrates Directive	Soil, water,	Requires	NPPP should support

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
	landscape	member states to reduce water pollution caused or induced by nitrates from agricultural sources and to prevent further such pollution.	measures from the Directive.
<b><i>EU and other international PPS – water focus</i></b>			
EU Flood Risk Directive 2007/60/EC	Water, climatic factors, population and human health	Aims to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity.	NPPP can provide guidance for development to take place outside of high flood risk areas, and for encouraging natural flood management approaches.
Directive 2006/118/EC: Groundwater Daughter Directive	Water, soil, population and human health	Developed under the auspices of the Water Framework Directive, this Daughter Directive aims to prevent and limit inputs of pollutants to	NPPP should where possible contribute to the protection of groundwater resources.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
Directive 2006/7/EC: Bathing Water Directive	Water, population and human health	groundwater. Aims to protect the public and the environment from faecal pollution at waters used for bathing by large numbers of visitors.	NPPP should consider the contribution that actions could make towards the attainment of bathing water quality standards.
Directive 2000/60 EC: The Water Framework Directive	Water, soil, biodiversity, population and human health, landscape	Requires member states to achieve good ecological status of inland water bodies, and develop integrated catchment management and river basin management plans.	NPPP should include policies and targets for managing and protecting the water environment.
<b><i>EU and other international PPS – air and noise focus</i></b>			
The Clean Air Policy Package (EC, 2013)	Air, population and human health, soil, water	The package consists of a Clean Air Programme for Europe with air quality objectives for the period up	NPPP proposals should not adversely affect air quality.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		to 2030, a revised National Emission Ceilings Directive (currently under review) with stricter national emission ceilings for the six main pollutants, and a proposal for a new Directive to reduce pollution from medium-sized combustion installations.	
Directive 2001/81/EC (NECD): National Emissions Ceiling Directive	Air, population and human health	Sets ceilings for each member state for emissions of ammonia, oxides of nitrogen, sulphur dioxide and volatile organic compounds.	The NPPP should reflect the purpose of the Directive and should not adversely affect air quality.
Directive 2008/50/EC: Ambient Air Quality and Cleaner Air for Europe [Air Quality Directive]	Air,	Establishes	The NPPP should support

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
	population and human health	standards for air quality and sets limits for various pollutants.	measures that would improve air quality.
Directive 2002/49/EC: Environmental Noise Directive	Noise, population and human health	Aims to define a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to the exposure to environmental noise.	NPPP should seek to ensure policies and developments do not result in negative health and wellbeing effects resulting from noise.
<b><i>EU and other international PPS – climatic factors focus</i></b>			
UN Framework Convention on Climate Change (the Rio Earth Summit) 1992	Climatic factors, population and human health	Treaty aimed at reducing global emissions of greenhouse gases to combat global warming.	NPPP should assist in the reduction of greenhouse gas emissions.
Kyoto Protocol (UNFCCC, 1997) <sup>1</sup>	Climatic	Protocol to the	NPPP can provide policy

<sup>1</sup> On 4th March 2016, the EU agreed to formally sign-up to the global climate deal reached in Paris, December 2015 (comes into force 2020).

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
	factors, population and human health	international Framework Convention on Climate Change Framework with the objective of reducing Greenhouse gases which cause climate change.	direction for encouraging more energy efficient buildings and directing settlements to areas where public transport is provided for, thereby helping to reduce related emissions.
European Union Climate Change Agreement 2007	Climatic factors, population and human health	EU member states agreed to cut greenhouse gas emissions by 20 per cent by 2020.	The NPPP should seek to promote the development and use of appropriate renewable energy sources and contribute to climate change mitigation.
European Union Policy Framework for Climate and Energy (2020 to 2030)	Climatic factors, population and human health	A framework for EU climate and energy policies in the period from 2020 to 2030. At the heart of the 2030 framework is a target to reduce greenhouse gas emissions by 40% by 2030.	The NPPP should seek to promote the development and use of appropriate renewable energy sources and contribute to climate change mitigation.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
Second European Climate Change Programme	Climatic factors, population and human health	Work identified in the first programme is being undertaken according to plan. Further measures will be required in order to meet the EU's commitments under the Kyoto agreement.	NPPP can provide policy direction for encouraging more energy efficient buildings and directing settlements to areas where public transport is provided for, thereby helping to reduce related emissions.
<b><i>EU and other international PPS – landscape and cultural heritage focus</i></b>			
European Landscape Convention (2000)	Landscape and cultural heritage, biodiversity, water, soil	Promotes the protection, management and planning of European landscapes and organises European co-operation on landscape issues.	NPPP can provide direction for managing the Park's unique landscapes.
<b><i>EU and other international PPS – population and human health focus</i></b>			
European Framework for Sustainable Development (2001)	All SEA topics	Promotes quality of life, coherent and cost effective policy making,	The Plan should support sustainable social progress and respect for the local environment.



Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		technological innovation, stronger involvement of civil society and business in policy formulation. Strategies for sustainable economic growth should support social progress and respect the local environment.	
European Charter for Regional or Minority Languages (European Council, 1992)	Population and human health, landscape and cultural heritage	European Charter adopted under the auspices of the Council of Europe to protect and promote historical regional and minority languages in Europe. The charter identifies Gaelic as being	NPPP can support the Gaelic language by encouraging good design and placemaking.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		an endangered language.	
<b><i>EU and other international PPS – material assets focus</i></b>			
Directive 2009/28/EC: Promotion of the use of energy from renewable resources	Material assets, climatic factors	Establishes a common framework for the production of energy from renewable sources and the promotion of its use.	The NPPP should seek to promote the development and use of appropriate renewable energy sources.
Directive 2008/98/EC: Waste Framework Directive	Material assets, population and human health	The revised EU Waste Framework Directive establishes the legislative framework for the handling of waste by member states.	NPPP should, if needed, provide a strategic context for waste management within the National Park.
Directive 1999/31/EC: Landfill of Waste Directive	Material assets, population and human health, soil, air, water	The objective of the Directive is to prevent or reduce as far as possible negative effects on the environment, in particular on surface water, groundwater,	NPPP should promote the waste hierarchy and work towards reducing landfill waste.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		soil, air, and on human health from the landfilling of waste by introducing stringent technical requirements for waste and landfills.	
<b>National (UK and Scottish) PPS</b>			
<b>National (UK and Scottish) PPS – biodiversity, flora and fauna focus</b>			
The Inshore Fishing (Prohibition of Fishing and Fishing Methods) (Scotland) Order 2015	Biodiversity, water, material assets	Aims to protect or improve shellfish waters in order to support shellfish life and growth. It is designed to protect the aquatic habitat of bivalve and gastropod molluscs, which include oysters, mussels, cockles, scallops and clams.	NPPP should seek to avoid negative effects on shellfish waters, which in the National Park context include Upper Loch Fyne and Loch Goil MPA which is designated to protect an assembly of seabed habitats, these long narrow sea lochs are home to the spectacular fireworks anemone, brightly coloured flame shells and the ocean quahog - one of the longest-lived animals on the planet.
Wildlife and Natural Environment (Scotland) Act 2011	Biodiversity,	Amends	NPPP should provide

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
	soil, water, landscape, climatic factors	Wildlife Consultation Act 1981, and seeks to modernise game law; abolish the designation 'areas of special protection'; improve snaring practice; regulate invasive non-native species; change the licensing system for protected species; amend current arrangements for deer management and deer stalking; strengthen protection of badgers; change how muirburn can	specific policies to ensure the Act is adhered to.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		be practised; and make operational changes to the management of Sites of Scientific Interest; game law, use of shores, and invasive species legislation.	
Nature Conservation (Scotland) Act 2004	Biodiversity, soil, water, landscape	Places duties on public bodies for conserving biodiversity, increases protection for Sites of Special Scientific Interest (SSSI), amends legislation on Nature Conservation Orders, provides for Land Management Orders for SSSIs and	NPPP can include policies for protecting and enhancing biodiversity in all areas of the National Park, inside and outside of natural heritage designated areas.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		associated land, strengthens wildlife enforcement legislation, and requires the preparation of a Scottish Fossil Code.	
Environmental Impact Assessment (Forestry) (Scotland) Regulations 1999	Potentially all SEA topics	Requires environmental impact assessments for certain forestry projects.	The NPPP can be a material consideration for planning applications requiring Environmental Impact Assessments.
Conservation (Natural Habitats &c.) Regulations 1994 (as amended in Scotland) [The Habitats Regulations 1994]	Biodiversity, soil, water, landscape	These regulations relate to the designation of Natura 2000 sites, and provision of protection to various plant and animal species.	The NPPP should ensure that Natura 2000 sites (SPAs and SACs) are protected from loss or damage.
The Scottish Forestry Strategy: Progress Report (2014-15) and Future Implementation (2015-18)	Potentially all SEA topics	Lays out directions for 2015-2018 by theme from the 2006 SFS.	Provides direction for NPPP policies concerning development of forestry and woodlands.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
Scottish Forestry Strategy (2006)	Potentially all SEA topics	Outlines strategic priorities for forestry including management, planting and environmental stewardship (currently being reviewed and publication is due in March 2017).	Provides direction for NPPP policies concerning development of forestry and woodlands.
UK Post-2010 Biodiv	Potentially all SEA topics	The Framework sets out the common purpose and shared priorities of the UK and Scotland for the management of biodiversity and the wider environment / ecosystem services.	The NPPP should reflect the purpose of the Framework.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
			
		Collingwood Environmental Planning	



Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
Scottish Biodiversity Strategy	Biodiversity, water, soil, landscape	Comprises two documents: 1) Scotland's Biodiversity – It's in Your Hands. A strategy for the conservation and enhancement of biodiversity in Scotland (2004) & 2) 2020 Challenge for Scotland's Biodiversity - A Strategy for the conservation and enhancement of biodiversity in Scotland (2013). Identifies Scottish biodiversity priorities and lead partners for taking action.	The NPPP should reflect the purpose of the Strategy through support for LLTNPA Wild Park 2020.
The Invasive Non-Native Species Framework Strategy for Great Britain (2008 and updated in 2015)	Biodiversity, water, landscape	Provides a strategic framework	NPPP should support this strategy. Wild Park 2020 includes Invasive species

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		within which the actions of government departments, their related bodies and key stakeholders can be better co-ordinated	control.
The Scottish Plant Health Strategy (2016-2021)	Biodiversity, landscape, material assets	Demonstrates the importance of safeguarding Scottish plant health to protect and enhance Scotland's economy and natural environment.	The NPPP should support the delivery of this strategy.
Scotland Policy on Control of Woodland Removal	Potentially all SEA topics	Sets out the Scottish Ministers' policy on woodland removal.	The NPPP should support the delivery of this policy.
<b><i>National (UK and Scottish) PPS – geology and soils focus</i></b>			
The Land Reform (Scotland) Act 2016	Soil, biodiversity, water, population and human health,	Legislation to transform how land is used and governed.	NPPP can provide policy direction for local level action.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
	landscape and cultural heritage		
Land Reform (Scotland) Act 2003	Soil, biodiversity, water, population and human health, landscape and cultural heritage	Establishes right of responsible access to land and water (amongst other provisions relating to land).	NPPP can provide policy direction for right of responsible access projects.
Scotland Rural Development Programme (SRDP) 2014-2020	Soil, biodiversity, population and human health, water, climatic factors, material assets	Sets goals and provides funding for sustainable rural development including rural diversification and agri-environment measures.	NPPP can include specific policies for rural development and diversification that can be funded and supported by SRDP investment.
Scottish Soil Framework 2009	Soil, biodiversity, water, climatic factors, material assets	Describes key pressures on soils, particularly climate change, relevant policies to combat those threats, and identifies the	The NPPP should promote soil conservation and restoration / enhancement.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		future focus for soil protection, key soil outcomes, and actions across a range of sectors.	
Scottish Government – Getting The Best From Our Land: A Land Use Strategy for Scotland (2016)	Potentially all SEA topics	Strategy for achieving sustainable land use across Scotland. The LUS sets out a long-term Vision towards 2050 with three clear Objectives relating to economic prosperity, environmental quality and communities.	The NPPP can include specific direction for different types of land use across the Park.
<b>National (UK and Scottish) PPS – water focus</b>			
Water Environment (Controlled Activities) Regulations 2011	Water, biodiversity, landscape, population and human health	Gives effect to requirements of the Water Environment and Water Services (Scotland) Act 2003 for	NPPP can provide guidance for activities which may require CAR licences.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		controls over activities relating to the water environment.	
Flood Risk Management Act (Scotland) Act 2009	Water, climatic factors, population and human health, biodiversity	Establishes roles, responsibilities and requirements for sustainable flood management.	National Park Authority has responsibility for ensuring planning decision-making incorporates flood risk. NPPP policies can influence planning decision-making and can require natural flood management approaches to be considered.
Water Environment and Water Services (Scotland) Act 2003	Water, biodiversity, climatic factors, material assets, population and human health	Transposes the Water Framework Directive into Scots law.	NPPP can provide policy direction for encouraging development away from environmentally sensitive areas along waterways and for requiring sustainable drainable systems such as SUDs and more efficient use of water.
Water Industry (Scotland) Act 2002	Water, population and human health, material assets	Along with the Sewage (Scotland) Act 1968, gives responsibilities to Scottish Water to	The NPPP should have regard to Scottish Water's duties under this Act.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		manage the discharge of surface water that enters its drainage systems (by providing sewers and public Sustainable Urban Drainage Systems (SUDs)) and to maintain water supplies and drainage infrastructure.	
Sewage (Scotland) Act 1968	Water, population and human health, material assets	Along with the Water Industry (Scotland) Act 2002 this gives responsibilities to Scottish Water to manage the discharge of surface water that enters its drainage systems (by providing sewers and public	The NPPP should have regard to Scottish Water's duties under this Act.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		Sustainable Urban Drainage Systems (SUDs)) and to maintain water supplies and drainage infrastructure.	
The river basin management plan for the Scotland river basin district: 2015–2027 (2015)	Water, biodiversity, soil, landscape, population and human health, material assets	Provides an assessment of the condition of our water environment, and identify where our efforts for protection and improvement must be targeted.	Includes management objectives for water bodies in the National Park which the NPPP must take account of and help deliver.
Groundwater Protection Policy for Scotland (SEPA, 2009)	Water, soil, population and human health, material assets	This policy aims to provide a sustainable future for Scotland’s groundwater resources by protecting legitimate uses of groundwater and providing a common SEPA framework.	The NPPP should help manage significant risks to groundwater from relevant sources of pollution.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
Scottish Water Business Plan 2015 - 2021	Water, population and human health, material assets	The business plan sets out how Scottish Water will deliver improvements to drinking water quality, the environment and customer service required by Scottish Ministers.	The NPPP should be developed with regard to the objectives and actions proposed in the Business Plan.
Delivering Sustainable Flood Risk Management Guidance (2011)	Water, climatic factors, population and human health, biodiversity	Guidance on how to act in the way best calculated to manage flood risk in a sustainable way and consider the social, environmental and economic impact of exercising flood risk management functions.	Relevant policies and provisions within the NPPP should promote the principles and approaches set out in this guidance.
Flood Risk Management Strategies for the Clyde and Loch Lomond and Tay Local Plan Districts (2015_	Water,	Describe flood	The NPPP should support



Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
	climatic factors, population and human health, biodiversity	risks in the Local Plan Districts in terms of “Potentially Vulnerable Areas” and set out the strategy and programme of measures to address identified flood risks between 2016 and 2021.	the delivery of the FRMS (e.g. through development management and by providing guidance on / coordinating relevant land use management activities).
<b><i>National (UK and Scottish) PPS – air and noise focus</i></b>			
Air Quality Standards (Scotland) Regulations 2010	Air, population and human health	These have been adopted in order to transpose the European 2008 Ambient Air Quality Directive (2008/50/EC) which sets legally binding limits for concentrations in outdoor air for certain air pollutants. The purpose is	The NPPP should support measures that would improve air quality.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		Local Air Quality Management.	
Air Quality (Scotland) Regulations 2000 and Amendment 2002	Air, population and human health	Establishes standards for air quality and sets limits for various pollutants in Scotland.	The NPPP should support measures that would improve air quality.
Scottish Government - Local Air Quality Management Policy Guidance 2009 PG(S)(09)	Air, population and human health	Part IV of the Environment Act 1995.	The NPPP should support the implementation of this guidance.
Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007)	Air, population and human health	Sets out objectives and targets for eight key air pollutants.	The NPPP should support the implementation of the strategy (e.g. by requiring sustainable design of buildings, including energy efficiency).
<b>National (UK and Scottish) PPS – climatic factors focus</b>			
Climate Change (Scotland) Act 2009 (and relevant secondary legislation)	Potentially all SEA topics	Outlines emission reduction targets, adaptation measures, and establishes duties on public bodies.	The NPPP can provide specific policies and actions for addressing climate change issues across the Park.
Climate Ready Scotland Scottish Climate Change Adaptation Programme (2014)	Climatic factors,	Considers the most important	The NPPP should support the delivery of relevant

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
	water, soil, population and human health, biodiversity, material assets	impacts of the changing climate on the natural environment and sets out the SG's related objectives associated with the identified climate risks.	aspects of this programme.
Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013-2027: The Second Report on Proposals and Policies (RPP2)	Climatic factors, water, soil, population and human health, biodiversity, material assets	RPP2 is structured around the key sectors of energy supply, homes and communities, business and the public sector, transport, waste and rural land use. For each of these sectors, policies to reduce greenhouse gas emissions are identified, as are a number	The NPPP should encourage reductions in emissions (in relevant sectors) through a range of measures.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		of proposals for further consideration and development.	
<b><i>National (UK and Scottish) PPS – landscape and cultural heritage focus</i></b>			
Historic Environment Scotland Act 2014	Cultural heritage, landscape, material assets	Has the general function of investigating, caring for and promoting Scotland's historic environment.	NPPP should support the protection and preservation of the historic environment.
Ancient Monuments and Archaeological Areas Act 1979 (as amended by Historic Environment (Amendment) (Scotland) Act 2011)	Cultural heritage, landscape, material assets	Prescribes the approach to be taken to planning for scheduled ancient monuments and archaeological areas.	The NPPP should ensure that scheduled ancient monuments and archaeological areas are not adversely affected by new development.
Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997	Cultural heritage, landscape, material assets	Prescribes the approach to be taken in planning for listed buildings, conservation areas and designed landscapes and	The NPPP should ensure that listed buildings, conservation areas and designed landscapes and gardens are not adversely affected by new development.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		gardens.	
Our Place in Time – The Historic Environment Strategy for Scotland (2014)	Cultural heritage, landscape, material assets	High level framework which sets out a 10-year vision for the historic environment.	Provides guidance for NPPP policy development on the management of the historic environment.
Managing Change in the Historic Environment Guidance Notes	Cultural heritage, landscape, material assets	Series of guidance notes which are designed to support the Scottish Historic Environment Policy (SHEP) and Scottish Planning Policy.	Provides guidance for NPPP policy development on the management of the historic environment.
Scotland’s Landscape Charter	Landscape, biodiversity, water, soil	A national initiative which focuses on actions to ensure protection of Scotland’s landscapes.	Provides guidance for NPPP policy development on the management and protection of the Park’s landscapes.
<b>National (UK and Scottish) PPS – population and human health focus</b>			
The Town Centre First Principle	Population and human health, cultural heritage, material	Encourages the public sector to continue to invest in town centres and help	NPPP policies and actions should be designed to support this principle.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
	assets	communities thrive.	
Scotland's National Transport Strategy (2016)	Population and human health, climatic factors, air, noise, material assets	The National Transport Strategy for Scotland.	The NPPP should support the delivery of relevant aspects of the NTS.
National Planning Framework 3 (2014)	All SEA topics	Spatial expression of the Government Economic Strategy, sets out a long-term vision for development and investment across Scotland over the next 20 to 30 years.	Provides strategic guidance for development of the Local Development Plan (LDP), as one of the key implementation plans for the NPPP.
Scottish Planning Policy Guidance (2014)	All SEA topics	Sets out national planning policies which reflect Scottish Ministers' priorities for operation of the planning system and for	It directly relates to: the preparation of development plans; the design of development, from initial concept through to delivery; and the determination of planning applications and appeals.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		the development and use of land.	
Planning Advice Notes (including PAN 42)	All SEA topics	Scottish Government good-practice advice and guidance on planning matters.	Provide guidance for developing policies to address specific issues in the LDP, as one of the key implementation plans for the NPPP.
The Government Economic Strategy (2011)	Population and human health, material assets	The Government Economic Strategy identifies the six strategic priorities which will accelerate recovery, drive sustainable economic growth and develop a more resilient and adaptable economy.	The NPPP should support the delivery of this strategy.
Creating Places – A policy statement on architecture and place for Scotland	Population and human health, material assets, cultural	Provides the policy context for important areas of planning policy and design	The NPPP can provide guidance and direction on design.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
	heritage, landscape	guidance.	
Scotland's circular economy strategy, Making Things Last	Population and human health, material assets, cultural heritage	Supports the aims of Scotland's Economic Strategy, particularly with regard to innovation and more efficient resource use, by offering new ways to create value, decoupled from the consumption of natural resource.	The NPPP should support the delivery of this strategy.
<b>Local PPS</b>			
<b>Local PPS – cross-cutting</b>			
Loch Lomond and The Trossachs National Park Authority - National Park Partnership Plan 2012 - 2017	All SEA topics	The National Park Partnership Plan is the document that steers all the public organisations in the Park for 2012–2017. It is the	The extant NPPP directly informs the new NPPP.



Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		responsibility of all those organisations to deliver it as well as communities, businesses and the voluntary sector.	
National Park Partnership Plan – Annual Review (2014)	All SEA topics	The review sets out progress made towards delivering actions and achieving outcomes in the second year of the National Park Partnership Plan.	The extant NPPP and its review directly informs the new NPPP.
LIVEPark – Local Development Plan (LDP) for the National Park (2017)	All SEA topics	LIVEPark sets out how planning – through the Park’s new Local Development Plan (LDP) – can help improve the National Park, from housing	Directly informs the development of the new NPPP and <i>vice versa</i> .

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		to jobs and everything in between.	
Glasgow and Clyde Valley Strategic Development Plan (2012)	All SEA topics	Establishes statutory planning policy for the SDP region covering the eight local authorities in the GCV region including East and West Dunbartonshire which intersect the National Park.	Directly informs the NPPP and other key PPS prepared and delivered by the National Park Authority including LIVEPark (see above).
Local Authority Single Outcome Agreements	All SEA topics	Strategic documents outlining priorities across communities in the National Park.	NPPP can help to deliver community priorities and outcomes across the Park.
Clyde Marine Planning Partnership / Marine Plan	All SEA topics	Development and delivery of regional marine planning in the Clyde.	The NPPP can provide a policy framework to guide interactions between National Park activities on land and marine planning objectives in the Clyde Marine Plan area.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
<b>Local PPS – biodiversity, flora and fauna focus</b>			
LLTNPA WILDPark 2020	Biodiversity, water, soil, landscape	Second edition of the National Park Biodiversity Plan setting out the strategy for achieving the long-term vision for the National Park's biodiversity.	The NPPP establishes the overall policy context for the protection and enhancement of biodiversity in the Park, as delivered by WILDPark.
Central Scotland Green Network	All SEA topics	Partnership project and NPF National Development to restore and transform the Central Scotland landscape.	Boundary of project area is close to the National Park and could be connected to and integrated with the Park.
Integrated Habitat Networks (IHN) including Glasgow and Clyde Valley Green Network Partnership and NP IHN (March 2011)	Biodiversity, landscape, soil, water, climatic factors	Creation of an ecological network covering more than one habitat.	Boundary of project area is close to the National Park and could be connected to and integrated with the Park.
Native Woodland Survey of Scotland- Loch Lomond and The Trossachs National Park (2014)	Biodiversity, landscape, soil, water, climatic factors, material	Survey of native woodland in the Park.	Provides evidence and direction for NPPP policies and actions on development of forestry and woodlands.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
Loch Lomond Bylaws 2013	assets Biodiversity, water, landscape, population and human health	The Loch Lomond Byelaws aim to protect the loch from environmental damage, whilst supporting the many types of recreational activity to be undertaken safely and responsibly.	NPPP provides the overall policy context for visitor management in the Park.
East Loch Lomond Camping Bylaws	Biodiversity, water, landscape, population and human health	The East Loch Lomond Camping Byelaws have been introduced to help tackle problems of mis-use and overuse and were approved by Scottish Ministers on 10 March 2011. The byelaws apply from 1 March to 31 October every	NPPP provides the overall policy context for visitor management in the Park.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
Local Authority Biodiversity Action Plans	Biodiversity, water, soil, landscape	year. Priorities and actions for biodiversity within local authority boundaries.	The NPPP can help to implement the priorities outlined in these Plans.
<b>Local PPS – air and noise focus</b>			
Regional and Local Transport Strategies	Air and noise, climatic factors, population and human health	Set out how to maintain and improve transport infrastructure and services.	NPPP can help direct development to existing settlements and promote / facilitate active and sustainable travel modes.
<b>Local PPS – landscape focus</b>			
National Park Wild Land Study (March 2011)	Landscape, biodiversity, soil, population and human health	Study of areas of wild land within the Park.	The NPPP can include policies for managing recreation and development in and around areas of wild land in the Park.
<b>Local PPS – population and human health focus</b>			
LLTNPA Tourism Strategy 2012-2017	Population and human health, material assets, landscape	This strategy provides the tourism context of the National Park Partnership Plan, setting out a clear and long term ambition for	The NPPP establishes the overall policy context for tourism and wider visitor experience in the Park, as delivered through the Tourism Strategy.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
Core Paths Plan	Population and human health, material assets, landscape, soil, biodiversity	Sets out the statutory network of core paths throughout the Park.	NPPP provides the overarching policy for outdoor recreation in the Park.
Community Plans	Potentially all SEA topics	Plans set out how public services will be planned and delivered, through consultation and co-operation.	NPPP can help to implement some community goals as set out in community plans.
LLTNPA Outdoor Recreation Plan (June 2013)	Population and human health, biodiversity, landscape	The plan outlines commitment to actions and aspirations which enhance outdoor recreation opportunities across the Park from 2013 to 2017.	The NPPP establishes the overall policy context for outdoor recreation and wider visitor experience in the Park, as delivered through the Tourism Strategy.
Local Housing Strategies	Potentially all SEA topics	Required by the Housing (Scotland) Act	The NPPP can assist in providing for housing needs by providing

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		2001. Involves a comprehensive assessment of housing needs and conditions.	strategic guidance for development in the Park.
Economic Development Strategies	Potentially all SEA topics	Priority areas for economic development.	The NPPP can encourage and promote appropriate forms of economic development (e.g. tourism, rural diversification, and sustainable communities).
Gaelic Language Plan	Population and human health, cultural heritage	The LLTNPA's first Gaelic Language plan.	NPPP provides the overarching policy for cultural heritage issues in the Park.
<b>Local PPS – material assets focus</b>			
Area Waste Plans	Material assets, population and human health, soil, water	Strategies for waste management, minimisation and recycling for each local authority area.	NPPP can help to implement goals and targets for waste management in the Park.
Evaluation of the Special Qualities of LLTNP: Technical Appendix to the National Park Plan, 2006	Potentially all SEA topics	Document outlining methodology and analysis for identifying National Park	The NPPP can include policies for protecting and enhancing the special qualities of the Park as important assets.

Title of PPS	Relevant SEA topics	Objectives / purpose of the PPS	Relationship with draft NPPP 2018-2023
		special qualities.	



## Appendix 3: Summary of environmental baseline information

A summary of the environmental baseline information of relevance to the SEA of the draft NPPP 2018-2023 is provided in Table A3.1 below. This has been subject to some minor updates following comments from the statutory Consultation Authorities at scoping (see Appendix 1).

Figures 4.2 and 4.3 in the main body of the Environmental Report show the location and extent of natural heritage and cultural heritage designations respectively.

The baseline summary includes information on the current state of the environment as well as identifying key trends where possible. Trends are also indicated using the symbology shown below:


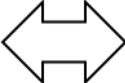















	Broadly positive, improving from current baseline.		Stable, neither improving or worsening.
	Broadly negative, worsening from current baseline.		Mixed, some aspects of indicator improving, others worsening.

Table A3.1: Summary of environmental baseline information

Current state of the environment	Key trends	Trend symbol
<b>Biodiversity, flora and fauna</b>		
<ul style="list-style-type: none"> <li>• <b>Designated sites:</b> the Park is host to a range of international, EU and national sites including: two Ramsar sites; eight Special Areas of Conservation (SACs); two Special Protection Areas (SPAs); three National Nature Reserves (NNRs); and 57 Sites of Special Scientific Interest (SSSI) with 139 notified features. Most sites are shown on Figure 4.2 below.</li> </ul>	<p><b>Conservation management:</b> increased use of landscape scale ecosystem approach to conservation and restoration.</p>	
<ul style="list-style-type: none"> <li>• <b>Conservation management:</b> large areas of land in the Park are managed explicitly for conservation objectives – e.g. areas owned and managed by the Royal Society for the Protection of Birds (RSPB), the National Trust for Scotland, the Woodland Trust and parts of the Argyll and Queen Elizabeth National Forest Parks.</li> </ul>	<p><b>Grazing impacts:</b> On-going suppression of semi-natural habitats in large parts of the uplands by domestic sheep, wild red deer and/or feral goats.</p>	
<ul style="list-style-type: none"> <li>• <b>UK BAP species:</b> the Park is home to approximately 184 UK Biodiversity Action Plan (BAP) Species of Conservation Concern, including 37 Priority Species.</li> <li>• <b>High profile native species:</b> the Park is home to a range of high profile native species including: golden eagle; pine marten; salmon, powan, Scots pine, red squirrel, black grouse, water vole, bryophytes and various artic-alpine plants.</li> </ul>	<p><b>Plant health:</b> increase in issues, particularly tree diseases.</p>	
<ul style="list-style-type: none"> <li>• <b>Marine habitats:</b> the Upper Loch Fyne and Loch Goil Marine Protected Area<sup>2</sup> (MPA) is located partially within the Park.</li> <li>• <b>Invasive Non-Native Species (INNS):</b> INNS remain a key pressure on the Park's native natural heritage. Key INNS include: <i>Rhododendron ponticum</i>; Japanese knotweed; giant hogweed; Himalayan balsam; North American skunk cabbage; North American mink; Canada goose; grey squirrel; and ruffe. The NPA is adopting a catchment based approach to managing INNS that has seen success in some areas (Tay and Forth) but less success in others (Loch Lomond and Cowal).</li> </ul>	<p><b>INNS:</b> key successes have been achieved eradicating riparian INNS in the Tay and Forth catchments. However, riparian INNS remain a key concern in the Loch Lomond and Cowal catchment / area.</p>	
<ul style="list-style-type: none"> <li>• <b>Plant health issues:</b> such as tree diseases affecting ash (caused by <i>Hymenoscyphus fraxineus</i>) and Japanese larch (caused by <i>Phytophthora ramorum</i>).</li> </ul>	<p><b>Wild species populations:</b> decrease in some species populations (e.g. powan) and increase in others (e.g. pine marten).</p>	
<b>Forests and woodland aspects of biodiversity</b>		

<sup>2</sup> <http://www.snh.gov.uk/docs/A978499.pdf>

Current state of the environment	Key trends	Trend symbol
<ul style="list-style-type: none"> <li>• <b>Woodland cover:</b> 30% of the Park's land area (52,532ha) is forests and woodlands.</li> <li>• <b>Native woodland:</b> native woodland makes up 4,226ha of the Park's woodland land cover. Nearly native woodland covers 113ha and other (ancient) woodland (&lt;40% native species) covers 3,060ha.</li> <li>• <b>UK BAP Priority woodland habitats:</b> main priority habitats in the Park are: upland birchwoods<sup>3</sup>; wet woodland<sup>4</sup> and upland oakwoods<sup>5</sup>. These habitats make up 32%, 27% and 18% of native woodland cover in the Park respectively (see above).</li> <li>• <b>Coniferous trees:</b> two thirds of the woodland cover in the Park is made up of coniferous species.</li> <li>• <b>Wood pasture</b><sup>6</sup>: a valuable UK BAP priority habitat in the Park (e.g. in Glen Finglas).</li> <li>• <b>Tree health issues:</b> ash trees and Japanese larch are increasingly affected by tree pathogens (see above).</li> </ul>	<p><b>Felling and restructuring of conifer plantations over next 20 years:</b> including conversion to native species is leading to increased biodiversity, recreation and landscape value.</p>	
	<p><b>Natural regeneration:</b> increasing in some areas due to decline in grazing pressures.</p>	
	<p><b>Veteran, heritage and landmark trees:</b> growing recognition of the contribution made by these trees to the biodiversity and cultural diversity of the Park.</p>	
	<p><b>Trees and woodlands in and around development:</b> growing recognition of the importance of trees and woodland features in and new developments and built up areas and the contribution they make to the quality of finished developments.</p>	
<b>Geology and soils</b>		
<ul style="list-style-type: none"> <li>• <b>Landform:</b> glaciation has had a significant effect in shaping the landform of the Park area.</li> <li>• <b>Quarrying and mining:</b> there is a history of slate, limestone and sandstone quarrying and lead, zinc and gold mine exploration in the Park.</li> <li>• <b>Soil suitability for production:</b> the Park is host to a range of fertile and poor soil types for agriculture and forestry (though soils are predominantly upland in nature and suited for rough grazing or improved grassland only)<sup>7</sup>.</li> <li>• <b>SSSIs:</b> ten SSSIs in the Park have notified earth science features (see Figure 4.2). There are also other significant earth science sites across the Park (e.g. the Highland Boundary Fault).</li> </ul>	<p><b>Agricultural land use change:</b> change from agricultural production in some areas to rural diversification.</p>	
	<p><b>Geodiversity:</b> identification of increased number of regionally important geological sites through audit and planning applications.</p>	
	<p><b>Land stability:</b> decreasing in some areas.</p>	
<b>Water</b>		
<ul style="list-style-type: none"> <li>• <b>Loch waterbodies:</b> there are 22 large lochs in the Park (Loch Lomond being the largest body of freshwater in the UK) and numerous smaller lochs.</li> <li>• <b>River waterbodies:</b> there are approximately</li> </ul>	<p><b>Water quality:</b> whilst water quality is "good" in most waterbodies, some are still falling short of WFD target status of "good" due to various pressures (e.g. Loch Lomond).</p>	



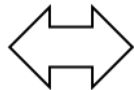




<sup>3</sup> [http://jncc.defra.gov.uk/pdf/UKBAP\\_BAPHabitats-57-UplandBirchwoods.pdf](http://jncc.defra.gov.uk/pdf/UKBAP_BAPHabitats-57-UplandBirchwoods.pdf)

<sup>4</sup> [http://jncc.defra.gov.uk/pdf/UKBAP\\_BAPHabitats-64-WetWoodland.pdf](http://jncc.defra.gov.uk/pdf/UKBAP_BAPHabitats-64-WetWoodland.pdf)

<sup>5</sup> [http://jncc.defra.gov.uk/pdf/UKBAP\\_BAPHabitats-63-UplandOakwood.pdf](http://jncc.defra.gov.uk/pdf/UKBAP_BAPHabitats-63-UplandOakwood.pdf)

<sup>6</sup> [http://jncc.defra.gov.uk/pdf/UKBAP\\_BAPHabitats-65-WoodPastureParkland2011.pdf](http://jncc.defra.gov.uk/pdf/UKBAP_BAPHabitats-65-WoodPastureParkland2011.pdf)

<sup>7</sup> [http://www.hutton.ac.uk/sites/default/files/files/soils/lca\\_map\\_hutton.pdf](http://www.hutton.ac.uk/sites/default/files/files/soils/lca_map_hutton.pdf)

Current state of the environment	Key trends	Trend symbol
<p>50 rivers and large burns in the Park as well as many small burns.</p> <ul style="list-style-type: none"> <li>• <b>River basins:</b> waterbodies across the Park drain to three main river basins – the Tay, Clyde and Forth.</li> <li>• <b>Water quality:</b> the main pressures on water quality in the Park are from abstraction, morphology pressures and diffuse pollution.</li> <li>• <b>Flooding:</b> there are five “Potentially Vulnerable Areas<sup>8</sup>” (PVA) in the Park as identified in Scotland’s National Flood Risk Assessment<sup>9</sup>. PVAs show areas where there is a likelihood of flooding (1 in 200 year event) combined with valuable and / or vulnerable receptors (e.g. peoples’ homes, transport infrastructure).</li> </ul>	<p><b>Development pressure:</b> increased demand for development in towns and villages across the Park creates pressure on water resources, quality and infrastructure and can increase the risk of flooding.</p>	
	<p><b>Hydro-electricity:</b> there is a growing demand for this form of electricity generation / increasing applications.</p>	
<b>Air and noise</b>		
<ul style="list-style-type: none"> <li>• <b>Good air quality:</b> NO<sub>2</sub> and SO<sub>2</sub> levels monitored by Local Authorities within the Park are well within national air quality standards.</li> </ul>	<b>Stable air quality.</b>	
<b>Climatic factors</b>		
<ul style="list-style-type: none"> <li>• <b>Rainfall:</b> average rainfall across the Park from north to south, particularly during winter months when levels vary from 180mm to 377mm.</li> <li>• <b>Temperatures:</b> average rainfall is consistent across the Park but varies greatly with altitude.</li> <li>• <b>Flooding:</b> see water above.</li> </ul>	<p><b>Rainfall:</b> anticipated climate change in Scotland is expected to result in increased winter rainfall and potentially increased incidence of intense summer rainfall events, particularly in the west of the country<sup>10</sup>.</p>	
	<p><b>Flooding:</b> increased rainfall due to climate change is expected to result in increased frequency and magnitude of flooding from rivers and surface water. Sea level rise combined with increased storminess is also expected to increase coastal flooding.</p>	
<b>Landscape and cultural heritage</b>		
<ul style="list-style-type: none"> <li>• <b>Designated landscapes:</b> the Park contains three National Scenic Areas (NSAs): Loch Lomond; the Trossachs; and the River Earn (Comrie to St Fillans stretch). There are also three designated Garden and Designed Landscape sites (see Figure 4.3).</li> <li>• <b>Agriculture:</b> registered agricultural land accounts for 55% of the Park’s land.</li> <li>• <b>Wild land:</b> the park is home to two designated wild land areas<sup>11</sup>: Ben Lui<sup>12</sup>; and</li> </ul>	<p><b>Landscape impacts:</b> increased cumulative impacts on landscape from different forms of development (e.g. housing, minerals, energy) within and outwith the Park.</p>	
	<p><b>Infrastructure pressures:</b> growing demand for infrastructure upgrade due to increased tourism and visitor numbers.</p>	









<sup>8</sup> <http://map.sepa.org.uk/floodmap/map.htm>

<sup>9</sup> <http://www.gov.scot/Topics/Environment/Water/Flooding/FRMAAct/NFRA>

<sup>10</sup> <https://www.theccc.org.uk/wp-content/uploads/2016/07/UK-CCRA-2017-Chapter-1-Introduction.pdf>


<sup>11</sup> <http://www.snh.gov.uk/protecting-scotlands-nature/looking-after-landscapes/landscape-policy-and-guidance/wild-land/>

<sup>12</sup> <http://www.snh.gov.uk/docs/A2177500.pdf>

Current state of the environment	Key trends	Trend symbol
<p>Ben More – Ben Ledi<sup>13</sup>.</p> <ul style="list-style-type: none"> <li>• <b>Designated cultural heritage:</b> the Park is home to various designated cultural heritage features: 728 listed buildings (as of 2015); 62 Scheduled Ancient Monuments (SAMs); and eight conservation areas. These sites are shown on Figure 4.3 below.</li> <li>• <b>Undesignated unknown heritage assets:</b> there are undoubtedly a range of sites across the Park including buried archaeology, non-designated gardens and designed landscapes, locally important / non-designated historic buildings / structures and non-designated battlefields.</li> </ul>	<p><b>Wild land and dark skies:</b> growing recognition of the value of wild land and dark skies as part of the Park's special qualities.</p>	
	<p><b>Traditional land management:</b> decline in traditional practices resulting in effects on landscape character and traditional rural features, woodland and other management objectives.</p>	
	<p><b>Importance of cultural heritage:</b> there is a growing awareness of the importance of these assets around the Park manifesting itself in various ways including: conversion and reuse of historic buildings; sensitive repair and maintenance of historic properties; and use of traditional building skills and materials.</p>	
<b>Population and human health</b>		
<ul style="list-style-type: none"> <li>• <b>Population:</b> the Park has a population of 15,168 (2011 data) with a population density of 0.08 people/ha. Balloch and Callander and the Park's main population centres (highest population densities). There are 6,594 households in the Park (2011 data).</li> <li>• <b>Health:</b> 84.3% of the Park's population describe their health as good / very good. This is slightly higher than Scotland's population as a whole.</li> </ul>	<p><b>Population decline and ageing population:</b> the Park's population is expected to decrease 5% by 2031. The Park has an ageing population and younger people continue to move away.</p>	
	<p><b>Employment:</b> there is a trend of outward commuting to higher paid jobs and inward commuting to lower paid jobs in the Park. There is a change from traditional agricultural activities towards more diverse rural enterprise including tourism, recreation and renewable energy.</p>	
<b>Material assets</b>		
<ul style="list-style-type: none"> <li>• <b>Transport:</b> cars are the dominant mode of private transport in the Park – there are 1.46 cars per household (2011 data). 85% of visitors to the Park travel by car. There are limited public transport options available for travel within and to the Park.</li> <li>• <b>Tourism accommodation:</b> there are 19,000 beds available in the Park (2013 data).</li> <li>• <b>Waste<sup>14</sup>:</b> waste generation data (2015) for the four local authorities intersecting the Park boundary are as follows: Stirling – 41,924t in total and 452kg/person; Perth and Kinross – 76,187t in total and 508.15kg/person; Argyll and Bute – 51,847t in total and 597kg/person; and West Dunbartonshire – 45,088t in total</li> </ul>	<p><b>Housing:</b> there are high levels of need for affordable housing provision within the Park (e.g. for people who work in the Park on lower incomes). There is strong external demand for second, retirement and commuter homes in the Park.</p>	
	<p><b>Transport:</b> continued reliance on the private car for journeys within the Park. Increased number of tourists in the Park, most of whom (85%) travel by car.</p>	
	<p><b>Tourism accommodation:</b> increased demand for tourism accommodation and facilities.</p>	

<sup>13</sup> <http://www.snh.gov.uk/docs/A2177509.pdf>

<sup>14</sup> <http://www.environment.scotland.gov.uk/get-interactive/data/household-waste>

Current state of the environment	Key trends	Trend symbol
and 503kg/person. Stirling and Perth and Kinross have good recycling rates (2015 data) at 53.87% and 54.25% respectively. Argyll and Bute has one of the lower rates in Scotland at 33.78% (2015).	<b>Waste:</b> at the Scotland level, the volume of waste generated and landfilled is falling. Recycling rates are increasing.	

## Appendix 4: Compatibility analysis of NPPP outcomes and SEA objectives

### Key to scoring of compatibility assessment

- ✓ NPPP outcome compatible with SEA objective
- ✗ Potential for conflict between NPPP outcome and SEA objective
- ? Compatibility uncertain
- 0 No identified conflict or compatibility

Draft NPPP 2018-2023 outcomes														
SEA Objectives	C&LU1: Habitat restoration & connectivity	C&LU2: Landscape enhancement & experience	C&LU3: Land use & climate change	C&LU4: Integrated land management	VE1: Range of recreation opportunities	VE2: Visitor management at key sites	VE3: Increase in water recreation opportunities	VE4: Thriving visitor economy	VE5: Health and outreach	RD1: Towns and villages	RD2: Rural economy	RD3: Growing economically active population	RD4: Sustainable communities	Summary comments
1. Furthering biodiversity by conserving and enhancing the diversity of species	✓	✓	✓	✓	?	✓	?	?	✓	0	?	?	?	Supportive / uncertain compatibility. C&LU outcomes all supportive. Potential uncertain compatibility where increased activity could conflict with biodiversity objectives (e.g. VE1, VE3, RD2) though suitable measures can be put in place to manage this (e.g. VE2).
2. Further biodiversity by conserving and enhancing the diversity of habitats	✓	✓	✓	✓	?	✓	?	?	✓	0	?	?	?	As above.
3. Conserve and enhance the integrity of ecosystems	✓	✓	✓	✓	?	✓	?	?	✓	0	?	?	?	As above.
4. Conserve and enhance land form, soils and	✓	✓	✓	✓	?	✓	0	?	?	?	?	0	?	Mixed compatibility. C&LU outcomes all supportive. Potential areas of uncertainty similar to biodiversity SEA objectives. Development in towns and villages (RD1)

**Key to scoring of compatibility assessment**

- ✓ NPPP outcome compatible with SEA objective
- ✗ Potential for conflict between NPPP outcome and SEA objective
- ? Compatibility uncertain
- 0 No identified conflict or compatibility

Draft NPPP 2018-2023 outcomes														
SEA Objectives	C&LU1: Habitat restoration & connectivity	C&LU2: Landscape enhancement & experience	C&LU3: Land use & climate change	C&LU4: Integrated land management	VE1: Range of recreation opportunities	VE2: Visitor management at key sites	VE3: Increase in water recreation opportunities	VE4: Thriving visitor economy	VE5: Health and outreach	RD1: Towns and villages	RD2: Rural economy	RD3: Growing economically active population	RD4: Sustainable communities	Summary comments
related natural processes and systems														could help to address brownfield sites / soil contamination (if / where this is an issue).
5. Conserve and enhance the water environment including coastal, river and loch systems	✓	✓	✓	✓	?	✓	✗	?	?	0	?	?	✓	Mixed compatibility. Strong support from C&LU outcomes, especially catchment management (C&LU4). Potential conflict with water recreation outcome (VE3) though this can be managed (e.g. via VE2). Aspects of the growing population outcome (RD3) will require careful management (e.g. development of suitable water infrastructure) to manage water environment impacts.
6. Maintain and improve air quality	0	0	✓	✓	?	✓	?	?	✓	?	?	?	?	Several key areas of uncertainty will require careful management to ensure that existing good air quality (Appendix 3) is maintained. Enhancing visitor experience and promoting rural development will increase visitor numbers, diversify uses of the Park and increase the resident population. All aspects are likely to increase transport demand which could degrade air quality (e.g. at tourist hotspots) if current trends of private car usage continue.
7. Reduce noise and light	0	0	0	?	✗	✓	✗	?	?	?	?	?	?	Key areas of uncertainty and potential conflict will require careful management. Increasing recreation



**Key to scoring of compatibility assessment**

- ✓ NPPP outcome compatible with SEA objective
- ✗ Potential for conflict between NPPP outcome and SEA objective
- ? Compatibility uncertain
- 0 No identified conflict or compatibility

Draft NPPP 2018-2023 outcomes														
SEA Objectives	C&LU1: Habitat restoration & connectivity	C&LU2: Landscape enhancement & experience	C&LU3: Land use & climate change	C&LU4: Integrated land management	VE1: Range of recreation opportunities	VE2: Visitor management at key sites	VE3: Increase in water recreation opportunities	VE4: Thriving visitor economy	VE5: Health and outreach	RD1: Towns and villages	RD2: Rural economy	RD3: Growing economically active population	RD4: Sustainable communities	Summary comments
pollution														opportunities (VE1) and water based recreation (VE3) could contribute to noise pollution, depending on the scope and nature of the activity (e.g. increased motor boating, watersports on lochs). Management of noise sensitive areas (e.g. via VE2) should be a priority. All rural development outcomes and VE4/5 could potentially conflict; e.g. temporary noise impacts from development (RD1, RD3), increased transport demand (all outcomes).
8. Reduce the causes of climate change (mitigation)	✓	✓	✓	✓	?	?	?	?	?	✓	?	?	✓	Mixed compatibility. C&LU outcomes all supportive. Enhancing built environment and infrastructure (RD1) and support for sustainable communities (RD4) also have potential to support mitigation (e.g. enhancing building efficiency). All development activities promoting increased numbers of tourists, visitors and residents have the potential to increase emissions, principally via transport but also accommodation / built environment.
9. Reduce the effects of climate change (adaptation)	✓	✓	✓	✓	0	0	0	?	?	?	?	?	✓	Mixed compatibility. C&LU outcomes all supportive though enhancing habitat networks (C&LU1) can increase connectivity for INNS as well as native species. Potential to increase resilience of the rural economy through diversification and enhancement of internet / mobile phone coverage (e.g. VE4, RD2). RD4 has potential to

**Key to scoring of compatibility assessment**

- ✓ NPPP outcome compatible with SEA objective
- ✗ Potential for conflict between NPPP outcome and SEA objective
- ? Compatibility uncertain
- 0 No identified conflict or compatibility

Draft NPPP 2018-2023 outcomes														
SEA Objectives	C&LU1: Habitat restoration & connectivity	C&LU2: Landscape enhancement & experience	C&LU3: Land use & climate change	C&LU4: Integrated land management	VE1: Range of recreation opportunities	VE2: Visitor management at key sites	VE3: Increase in water recreation opportunities	VE4: Thriving visitor economy	VE5: Health and outreach	RD1: Towns and villages	RD2: Rural economy	RD3: Growing economically active population	RD4: Sustainable communities	Summary comments
														enhance community resilience (e.g. flood awareness). Care needs to be taken around increased housing development (RD3) to ensure that capacity of water and flooding infrastructure is adequate.
10. Conserve and enhance the landscape character, local distinctiveness and scenic value of the Park	?	✓	?	✓	?	✓	?	?	?	✓	?	?	<b>0</b>	Mixed compatibility. Habitat creation projects (C&LU1, C&LU3) have potential to conflict with landscape objectives (e.g. inappropriately sited commercial forestry) though this can be managed by effective planning. For the various outcomes that promote development (e.g. VE1, VE2, RD2 etc), it is anticipated that developments will be small scale and sensitive to landscape objectives. However, the cumulative effect of multiple small scale developments (e.g. in relation to landscape capacity) will need to be adequately considered (e.g. via development management).
11. Protect and (where appropriate) enhance the Park's cultural, historic and built	?	✓	?	✓	?	✓	?	?	?	✓	?	?	✓	Similar issues to above. Enhancement of towns and villages (RD1) and sustainable communities (RD4) raises an important opportunity.

**Key to scoring of compatibility assessment**

- ✓ NPPP outcome compatible with SEA objective
- ✗ Potential for conflict between NPPP outcome and SEA objective
- ? Compatibility uncertain
- 0 No identified conflict or compatibility

Draft NPPP 2018-2023 outcomes														
SEA Objectives	C&LU1: Habitat restoration & connectivity	C&LU2: Landscape enhancement & experience	C&LU3: Land use & climate change	C&LU4: Integrated land management	VE1: Range of recreation opportunities	VE2: Visitor management at key sites	VE3: Increase in water recreation opportunities	VE4: Thriving visitor economy	VE5: Health and outreach	RD1: Towns and villages	RD2: Rural economy	RD3: Growing economically active population	RD4: Sustainable communities	Summary comments
environments														
12. Protect and improve the health and wellbeing of residents and visitors to the Park	?	✓	?	?	✓	✓	✓	✓	✓	✓	✓	✓	✓	Outcomes supportive on the whole. There is a growing body of evidence demonstrating links between access / connections to nature and health and wellbeing <sup>15</sup> ; effective delivery of C&LU outcomes therefore has potential to support this SEA objective, though careful targeting and related activities (e.g. awareness raising, engagement projects) may be required also.
13. Promote sustainable use of resources	0	0	✓	✓	?	✓	?	?	0	✓	?	?	✓	Mixed compatibility. C&LU4 has the potential to promote the efficient use of land for the delivery of multiple benefits. Key development related outcomes (e.g. VE1, VE3, RD2) could result in conflict depending on approach to e.g. meeting transport demand and waste management.

<sup>15</sup> <http://www.sciencedirect.com/science/article/pii/S0169204616302237>

## Appendix 5: Proposed NPPP 2018-2023 – detailed assessment matrices

**Table A5.1: Assessment of Conservation and Land Use (C&LU) draft priorities**

**Note:** The C&LU priority *safeguarding and restoring tranquil loch-shores through the YOURPark and Respect Your Park initiatives* has not been assessed as part of this SEA because it overlaps with several priorities from the Visitor Experience (VE) theme (i.e. assessment effort would be duplicated to reach the same / very similar conclusions).

Key to potential environmental effects		NPPP 2018-2023 proposed draft Conservation and Land Use (C&LU) priorities													Assessment rationale / mitigation notes		
		Woodland enhancement & expansion	Waterbody & peatland restoration	Delivering multiple benefits from nature	At risk species (conservation status in decline)	Tackling & reducing INNS	Flagship species	Conserving & enhancing wildness, dark skies etc	Wild land qualities of upland areas	Enhancing opportunities to enjoy landscapes	Landscape works for habitat improvement	Collaboration on joint land/water management	Supporting FRM plans delivery	Regional Land Use Partnerships (RLUP)		Support for Deer Management Groups (DMG)	Support for land managers to deliver benefits
++	Major positive																
+	Minor positive																
0	Neutral																
-	Minor negative																
--	Major negative																
+/-	Mixed																
?	Uncertain																
SEA Objectives																	
Furthering biodiversity by conserving and enhancing the diversity of species		++	++	+ ?	++	++	0	+ ?	+ ?	-	+	+	+ ?	++ ?	++	++ ?	<p><b>General:</b> delivery of Park scale major positive effects highly dependent on resource availability and degree to which action is subject to further prioritisation (e.g. which catchments, species etc are focussed on).</p> <p><b>Woodland:</b> spatial focus of woodland measures means that key UK BAP priority woodland habitats in the Park are likely to benefit (e.g. upland birch / oak woods).</p> <p><b>Multiple benefits:</b> suggestion for ecosystem services (ES) type approach may mean that some habitats are prioritised over others where there are key utilitarian benefits (e.g. improved grassland).</p> <p><b>Wild land / upland landscapes:</b> biodiversity and wild land objectives are not necessarily compatible (e.g. if the perceived wildness of heath is prioritised over opportunities to create / restore other upland habitats). Creating opportunities to enjoy landscapes may cause negative effects (e.g. disruption if vegetation is removed along roads / railways).</p> <p><b>RLUPs and whole farm plans (WFPs):</b> provide an important mechanism for delivering species benefits</p>

NPPP 2018-2023 proposed draft Conservation and Land Use (C&LU) priorities

Key to potential environmental effects		Woodland enhancement & expansion	Waterbody & peatland restoration	Delivering multiple benefits from nature	At risk species (conservation status in decline)	Tackling & reducing INNS	Flagship species	Conserving & enhancing wildness, dark skies etc	Wild land qualities of upland areas	Enhancing opportunities to enjoy landscapes	Landscape works for habitat improvement	Collaboration on joint land/water management	Supporting FRM plans delivery	Regional Land Use Partnerships (RLUP)	Support for Deer Management Groups (DMG)	Support for land managers to deliver benefits	Assessment rationale / mitigation notes	
++	Major positive																	
+	Minor positive																	
0	Neutral																	
-	Minor negative																	
--	Major negative																	
+/-	Mixed																	
?	Uncertain																	
SEA Objectives																		
																	but are likely to be dependent on achieving consensus and good-will.	
Further biodiversity by conserving and enhancing the diversity of habitats		++	++	- ?	+	++	0	- ?	+	-	+	++	- ?	++	?	++	?	<p><b>General:</b> see comments above.</p> <p><b>Woodland:</b> measures will address key priority habitats and increase diversity of woodland mosaic across the Park (e.g. farm + upland).</p> <p><b>At risk species:</b> addressing species issues via landscape scale approaches can deliver benefits for habitats also (e.g. in terms of extent, condition and connectivity).</p> <p><b>Landscape enjoyment:</b> operations to improve views on roads etc could result in loss of linear habitats.</p> <p><b>Joint land/water management:</b> initiatives could result in key benefits for several priority habitats in the Park (e.g. blanket bog, wet woodland, upland woodlands).</p> <p><b>Support for FRM:</b> effects from FRM will be dependent on approach (e.g. NFM will likely deliver enhancements whereas traditional engineered approaches will disrupt natural processes).</p>
Conserve and enhance the integrity of ecosystems		++	++	++ ?	+	++	0	- ?	+	-	+	++	- ?	++	?	++	?	<p><b>General:</b> see comments above. Any activity planned and delivered at the landscape / catchment scale is likely to result in significant benefits – this applies to several measures in this theme. A focus on flood storage / NFM across various NPPP measures could result in restoration of hydrological processes (e.g. reconnecting rivers and burns with floodplains).</p> <p><b>At risk species:</b> conservation measures could enhance ecosystem integrity depending on species and conservation approach (e.g. small scale site based intervention for specific flora will most likely not deliver ecosystem scale benefits).</p>

**NPPP 2018-2023 proposed draft Conservation and Land Use (C&LU) priorities**

Key to potential environmental effects		Woodland enhancement & expansion	Waterbody & peatland restoration	Delivering multiple benefits from nature	At risk species (conservation status in decline)	Tackling & reducing INNS	Flagship species	Conserving & enhancing wildness, dark skies etc	Wild land qualities of upland areas	Enhancing opportunities to enjoy landscapes	Landscape works for habitat improvement	Collaboration on joint land/water management	Supporting FRM plans delivery	Regional Land Use Partnerships (RLUP)	Support for Deer Management Groups (DMG)	Support for land managers to deliver benefits	Assessment rationale / mitigation notes
++	Major positive																
+	Minor positive																
0	Neutral																
-	Minor negative																
--	Major negative																
+/-	Mixed																
?	Uncertain																
SEA Objectives																	
																	<p><b>INNS:</b> strategic approach including for key aquatic / riparian species has substantial potential to deliver ecosystem scale benefits.</p> <p><b>Landscape enjoyment:</b> removal of linear habitats (e.g. along roads) to free-up views could disrupt ecological connectivity.</p> <p><b>DMG support:</b> this will need to be targeted spatially for delivery of maximum benefit.</p>
Conserve and enhance land form, soils and related natural processes and systems		++	++	+	+	0	0	+	+	0	+	++	+	+	+	+	<p><b>Woodland and peatland / waterbodies:</b> woodland (especially upland and riparian) and peatland / waterbody measures will help to address soil erosion and may promote natural fluvial processes (e.g. flood regimes). Care is required for farm forestry development to ensure that better-quality soils are retained for food production.</p> <p><b>Multiple benefits / RLUPs / land management planning / at risk species:</b> measures could result in positive effects depending on approach taken (e.g. which species / habitats are addressed, degree to which carbon storage is incorporated as a priority ES).</p> <p><b>Wild land / upland landscapes:</b> measures likely to have minor positive effects (soil resources and erosion) given the importance of blanket bog in the Park's upland landscapes and wild land areas<sup>16,17</sup>.</p> <p><b>Joint land/water management:</b> collaboration may result in major positive effects (e.g. soil resources / erosion) though this will depend on scale of</p>

<sup>16</sup> <http://www.snh.gov.uk/docs/A2177500.pdf>

<sup>17</sup> <http://www.snh.gov.uk/docs/A2177509.pdf>

NPPP 2018-2023 proposed draft Conservation and Land Use (C&LU) priorities																	
Key to potential environmental effects		Woodland enhancement & expansion	Waterbody & peatland restoration	Delivering multiple benefits from nature	At risk species (conservation status in decline)	Tackling & reducing INNS	Flagship species	Conserving & enhancing wildness, dark skies etc	Wild land qualities of upland areas	Enhancing opportunities to enjoy landscapes	Landscape works for habitat improvement	Collaboration on joint land/water management	Supporting FRM plans delivery	Regional Land Use Partnerships (RLUP)	Support for Deer Management Groups (DMG)	Support for land managers to deliver benefits	Assessment rationale / mitigation notes
++	Major positive																
+	Minor positive																
0	Neutral																
-	Minor negative																
--	Major negative																
+/-	Mixed																
?	Uncertain																
SEA Objectives																	
																	implementation and integration with other measures (e.g. woodland, peatland). <b>Support for FRM:</b> mixed effects depending on approach (e.g. NFM such as wetland restoration vs trad. measures that could disrupt natural fluvial processes).
Conserve and enhance the water environment including coastal, river and loch systems		++	++	++ ?	+ ?	++ ?	0	+	+	0	+	++ ?	++ -	++ ?	+	++ ?	<b>Woodland:</b> upland and riparian planting (in particular) will enhance water related ES (e.g. water purification, flood storage). <b>Multiple benefits / RLUPs / land management planning:</b> key focus on regulating ES has potential to deliver various water environmental objectives but will depend heavily on implementation (e.g. support for uptake, links with related measures – RLUP, land management planning etc). <b>At risk species / INNS:</b> could deliver minor positive effects depending on which species are targeted and how (e.g. landscape scale approach to addressing aquatic species could be highly beneficial for the water environment as a whole). <b>Wild land / upland landscapes:</b> action to restore and enhance blanket bog (as part of upland landscapes) could contribute to various water related ES. <b>Landscape enjoyment:</b> small risk that opening up / creating loch side views etc could result in low level degradation of water environment (e.g. littering). Could be cumulative over multiple sites. Most likely manageable through YOURPark etc. <b>Support for FRM:</b> potential for mixed effects depending on approach.

NPPP 2018-2023 proposed draft Conservation and Land Use (C&LU) priorities																	
Key to potential environmental effects		Woodland enhancement & expansion	Waterbody & peatland restoration	Delivering multiple benefits from nature	At risk species (conservation status in decline)	Tackling & reducing INNS	Flagship species	Conserving & enhancing wildness, dark skies etc	Wild land qualities of upland areas	Enhancing opportunities to enjoy landscapes	Landscape works for habitat improvement	Collaboration on joint land/water management	Supporting FRM plans delivery	Regional Land Use Partnerships (RLUP)	Support for Deer Management Groups (DMG)	Support for land managers to deliver benefits	Assessment rationale / mitigation notes
++	Major positive																
+	Minor positive																
0	Neutral																
-	Minor negative																
--	Major negative																
+/-	Mixed																
?	Uncertain																
SEA Objectives																	
																	<b>DMG support:</b> action to reduced browsing pressure in riparian areas could help to restore riparian woodland / other vegetation and contribute to water environment ES.
Maintain and improve air quality		0	0	0	0	0	0	-	0	-	0	0	-	0	0	0	<b>Wild land / landscape enjoyment:</b> measures to promote enjoyment of landscapes have the potential to increase visitors to the Park. Visits by private car (in line with current trends) could result in some low level (and uncertain) risks for air quality. <b>Support for FRM:</b> implementation of FRM schemes adjacent to roads / in settlements could require traffic management and increase congestion, potentially contributing to short-term, low level air quality risks.
Reduce noise and light pollution		+ ?	0	+ ?	0	0	0	+	+	?	+	?	- ?	?	0	?	<b>General:</b> mixed and uncertain effects – mitigation of noise is an important ES though normally associated with urban areas. Many measures have the potential to enhance noise regulation ES though this will depend on the location (e.g. are there existing noise issues present) and scope / design (e.g. does the new habitat or vegetation have the necessary physical characteristics) of measures delivered. <b>Wild land / upland landscapes:</b> measures to protect dark skies should help to address light pollution. <b>Support for FRM:</b> see above.
Reduce the causes of climate change (mitigation)		++ ?	++	++ ?	+	0	0	+	+	- ?	+	++ ?	+	++ ?	++	++ ?	<b>Woodland:</b> expansion has potential to contribute to major positive effects but will depend on implementation (e.g. tree species, management regime, existing stocks of soil carbon). <b>Multiple benefits / RLUPs / land management planning / collaboration:</b> substantial potential to



**NPPP 2018-2023 proposed draft Conservation and Land Use (C&LU) priorities**

Key to potential environmental effects		Woodland enhancement & expansion	Waterbody & peatland restoration	Delivering multiple benefits from nature	At risk species (conservation status in decline)	Tackling & reducing INNS	Flagship species	Conserving & enhancing wildness, dark skies etc	Wild land qualities of upland areas	Enhancing opportunities to enjoy landscapes	Landscape works for habitat improvement	Collaboration on joint land/water management	Supporting FRM plans delivery	Regional Land Use Partnerships (RLUP)	Support for Deer Management Groups (DMG)	Support for land managers to deliver benefits	Assessment rationale / mitigation notes
++	Major positive																
+	Minor positive																
0	Neutral																
-	Minor negative																
--	Major negative																
+/-	Mixed																
?	Uncertain																
SEA Objectives																	
																	contribute to positive effects but will depend on voluntary uptake and interest of land owners / farmers and availability of funding for measures (e.g. forestry, agri-environment etc post-Brexit). <b>Wild land / upland landscapes:</b> management and enhancement projects are likely to involve some work with blanket bogs and enhanced carbon storage.
Reduce the effects of climate change (adaptation)		++	++	++ ?	+ ?	++ ?	0	+	+	0	+	++ ?	++	++ ?	++	++ ?	<b>General:</b> many issues are similar to mitigation (see above), especially <b>multiple benefits, RLUPs, land management planning and collaboration.</b> <b>At risk species / INNS:</b> substantial potential to improve the resilience of wild species populations and habitats though dependent on approach (e.g. purely site based approach to species conservation may not allow species to track changing climate space, by habitat networks for example).
Conserve and enhance the landscape character, local distinctiveness, and scenic value of the Park		++ ?	++	++ - ?	+	+	0	++ ?	++ ?	+	- ?	++	+	++	++	++	<b>Woodland / multiple benefits:</b> potential to deliver major benefits but will require a sensitive approach (e.g. in line with right tree right place principles). Restructuring of forest estates to address pests and diseases (e.g. <i>Phytophthora</i> ) will need to consider how landscape character can be maintained or enhanced where possible. A highly utilitarian approach to multiple benefits (e.g. heavily prioritising carbon storage) could be at the expense of other opportunities that enhance landscape character. <b>Landscape works for habitat improvement:</b> used effectively, this provides an important mechanism to ensure that the maintenance of landscape character can be undertaken in line with habitat enhancements.

**NPPP 2018-2023 proposed draft Conservation and Land Use (C&LU) priorities**

Key to potential environmental effects		Woodland enhancement & expansion	Waterbody & peatland restoration	Delivering multiple benefits from nature	At risk species (conservation status in decline)	Tackling & reducing INNS	Flagship species	Conserving & enhancing wildness, dark skies etc	Wild land qualities of upland areas	Enhancing opportunities to enjoy landscapes	Landscape works for habitat improvement	Collaboration on joint land/water management	Supporting FRM plans delivery	Regional Land Use Partnerships (RLUP)	Support for Deer Management Groups (DMG)	Support for land managers to deliver benefits	Assessment rationale / mitigation notes	
++	Major positive																	
+	Minor positive																	
0	Neutral																	
-	Minor negative																	
--	Major negative																	
+/-	Mixed																	
?	Uncertain																	
SEA Objectives																		
																	For example, supporting the sensitive expansion of appropriate native woodland habitat (e.g. upland oak or birch woods) in upland areas). <b>Wild land / upland landscapes:</b> substantial potential to deliver major benefits but will require a flexible approach in line with SNH wild land descriptions <sup>18</sup> (e.g. supporting appropriate expansion of native woodland in upland areas). <b>Landscape enjoyment:</b> opening up views along roads etc could negatively affect wider landscape character (e.g. reducing the shielding effect of vegetation to roads / railways from other vantage points). <b>RLUPs / land management planning:</b> integrating strategic (e.g. catchment scale) and farm / holding level land use management planning can help to identify appropriately scaled positive land use management change (e.g. conversion to woodland) whilst preserving valued aspects of landscape.	
Protect and (where appropriate) enhance the Park's cultural, historic and built environments		+ - ?	+ - ?	+ - ?	?	+ - ?	0	++	+	+ - ?	0	0	?	+	?	+	?	<b>Woodland / multiple benefits:</b> appropriate tree planting in towns and villages and the wider countryside can enhance the character of settlements and built development. However new planting needs to be managed carefully (e.g. to protect undesignated / unknown heritage assets such as buried archaeology). <b>Landscape enjoyment:</b> see comments above. <b>RLUPs / land management planning:</b> potential to deliver positive effects though will depend on

<sup>18</sup> <http://www.snh.gov.uk/docs/A1329851.pdf>

**NPPP 2018-2023 proposed draft Conservation and Land Use (C&LU) priorities**

Key to potential environmental effects		Woodland enhancement & expansion	Waterbody & peatland restoration	Delivering multiple benefits from nature	At risk species (conservation status in decline)	Tackling & reducing INNS	Flagship species	Conserving & enhancing wildness, dark skies etc	Wild land qualities of upland areas	Enhancing opportunities to enjoy landscapes	Landscape works for habitat improvement	Collaboration on joint land/water management	Supporting FRM plans delivery	Regional Land Use Partnerships (RLUP)	Support for Deer Management Groups (DMG)	Support for land managers to deliver benefits	Assessment rationale / mitigation notes
++	Major positive																
+	Minor positive																
0	Neutral																
-	Minor negative																
--	Major negative																
+/-	Mixed																
?	Uncertain																
SEA Objectives																	
																	approach (e.g. identifying built heritage as a regional priority and supporting land owners, community groups etc to identify, manage and enhance assets in their ownership).
Protect and improve the health and wellbeing of residents and visitors to the Park		+	+	+	0	?	+	+	+	+	?	?	+	+	0	+	<p><b>Woodland / peatland and waterbodies / multiple benefits:</b> expansion of woodlands (especially in proximity to the Park's towns and villages) and restoration of waterbodies creates opportunities for health via access improvements (e.g. woodland walks, linear routes next to rivers) and joining-up fragmented access networks and open space. Benefits from this measure will depend on implementation approach though (i.e. utilising design that ensures these wider multiple benefits).</p> <p><b>Flagship species / landscape enjoyment:</b> increasing awareness of and engagement with the natural environment can encourage people to take up outdoor recreation with associated health benefits.</p> <p><b>Wild land / upland landscapes:</b> measures to protect and improve these landscapes has the potential to attract more outdoor recreationalists within certain user groups (e.g. hill walkers / runners).</p> <p><b>RLUPs / land management planning:</b> similar issues to built heritage above (i.e. depends on approach / whether outdoor recreation, access is prioritised by participating land owners, community groups etc).</p>
Promote sustainable use of resources		+	+	+	+	0	0	?	?	0	+	++	+	++	+	++	<p><b>General:</b> various C&amp;LU measures have good potential to promote the sustainable use of land and water.</p> <p><b>Multiple benefits, RLUPs and land management planning</b> in particular have potential to support the</p>

NPPP 2018-2023 proposed draft Conservation and Land Use (C&LU) priorities																		
<b>Key to potential environmental effects</b>		Woodland enhancement & expansion	Waterbody & peatland restoration	Delivering multiple benefits from nature	At risk species (conservation status in decline)	Tackling & reducing INNS	Flagship species	Conserving & enhancing wildness, dark skies etc	Wild land qualities of upland areas	Enhancing opportunities to enjoy landscapes	Landscape works for habitat improvement	Collaboration on joint land/water management	Supporting FRM plans delivery	Regional Land Use Partnerships (RLUP)	Support for Deer Management Groups (DMG)	Support for land managers to deliver benefits	<b>Assessment rationale / mitigation notes</b>	
++	Major positive																	
+	Minor positive																	
0	Neutral																	
-	Minor negative																	
--	Major negative																	
+/-	Mixed																	
?	Uncertain																	
<b>SEA Objectives</b>																		
																		rational and sustainable use and management of land for the delivery of multiple benefits.

**Table A5.2: Assessment of Visitor Experience (VE) draft priorities**

**Note:** The following VE priorities have not been assessed as part of this SEA because they are likely to result in no / minimal environmental effects: *improving visitor information and business collaboration; and increase opportunities for engagement, education and volunteering in the Park, especially for young people and people experiencing disadvantage.*

Key to potential environmental effects		NPPP 2018-2023 proposed draft Visitor Experience (VE) priorities																Assessment rationale / mitigation notes	
		Core path network review	Raise awareness of access & recreation opps.	Strategic links to NWCN	Maximise opps. from path network	Active & integrated travel options	Implementing YOURPark management zones	Loch Lomond islands joint management approach	Litter management	Parking management	Promoting water recreation on sea lochs	Supporting more water recreation on large lochs	Quiet areas on east Loch Lomond & islands	Best practice for water craft use	Encourage business to capitalise on trends	Investment in new visitor facilities & services	The Park as a resource for health improvement		Establish a National Park Health Partnership
++	Major positive																		
+	Minor positive																		
0	Neutral																		
-	Minor negative																		
--	Major negative																		
+/-	Mixed																		
?	Uncertain																		
SEA Objectives																			
Furthering biodiversity by conserving and enhancing the diversity of species		0	-	-	-	0	++	+	0	0	-	-	+	+	-	+	-	-	<p><b>General:</b> mixed effects. All priorities that promote increased use of the Park present the risk of increasing disturbance to priority species and their habitats (e.g. the Loch Lomond Woods SAC / SSSI). However, this risk can be managed; e.g. by the YOURPark camping strategy and byelaws.</p> <p><b>Water craft best-practice / visitor facilities:</b> positive effects will depend on the scope / nature of uptake.</p>
Further biodiversity by conserving and enhancing the diversity of habitats		0	-	-	-	0	++	+	0	0	-	-	+	+	-	+	-	-	<p><b>General:</b> see comments above.</p> <p><b>Loch Lomond islands joint management:</b> uncertain if, how or when the joint management approach will be delivered.</p> <p><b>Parking management:</b> may result in some localised benefits (e.g. less damage to hedgerows, verge habitats) but this is unlikely to be significant at the Park scale.</p> <p><b>Capitalising on key trends:</b> increased business response to key trends (e.g. outdoor recreation, large scale sporting events / challenges) could result in small scale long-term / large scale temporary impacts (e.g. erosion, disruption, trampling etc) depending on the nature of</p>

		NPPP 2018-2023 proposed draft Visitor Experience (VE) priorities																Assessment rationale / mitigation notes	
Key to potential environmental effects		Core path network review	Raise awareness of access & recreation opps.	Strategic links to NWCN	Maximise opps. from path network	Active & integrated travel options	Implementing YOURPark management zones	Loch Lomond islands joint management approach	Litter management	Parking management	Promoting water recreation on sea lochs	Supporting more water recreation on large lochs	Quiet areas on east Loch Lomond & islands	Best practice for water craft use	Encourage business to capitalise on trends	Investment in new visitor facilities & services	The Park as a resource for health improvement		Establish a National Park Health Partnership
++	Major positive																		
+	Minor positive																		
0	Neutral																		
-	Minor negative																		
--	Major negative																		
+/-	Mixed																		
?	Uncertain																		
SEA Objectives																			
																			activities pursued.
Conserve and enhance the integrity of ecosystems		0	-	- +	-	0	++ ?	0	0	0	0	0	+	0	-	0	0	0	General: see comments above. <b>YOURPark:</b> benefits are unclear for this objective (e.g. it is unclear which types of habitat will be promoted for network enhancement though YOURPark would be of less benefit to upland habitats). <b>NWCN / active travel:</b> development of active travel routes and new links to / from the NWCN may raise opportunities to develop / enhance linear habitats.
Conserve and enhance land form, soils and related natural processes and systems		0	-	+ - ?	-	0	+	?	0	0	0	0	+	0	?	0	?	?	<b>General:</b> promoting increased access will require careful management and related activities (e.g. path maintenance and upgrade) to ensure that increased use does not contribute to soil erosion, especially in upland areas. <b>YOURPark:</b> this and other Lochside management may result in minor positive effects in instances where soil erosion issues are present.
Conserve and enhance the water environment including coastal, river and loch systems		0	?	0	?	0	++	+	+	0	- ?	- ?	+	+	- ?	+	0	0	<b>Loch Lomond islands joint management / litter management:</b> substantial potential to help improve the environment (especially in relation to human waste and littering) though effects will be dependent on implementation (e.g. scope of management activity, degree of integration with YOURPark etc). <b>Water recreation / capitalising on key trends:</b> potential for negative effects though will be highly dependent on the scope and nature of activities delivered (e.g. resultant increase in water

NPPP 2018-2023 proposed draft Visitor Experience (VE) priorities																				
Key to potential environmental effects		Core path network review	Raise awareness of access & recreation opps.	Strategic links to NWCN	Maximise opps. from path network	Active & integrated travel options	Implementing YOURPark management zones	Loch Lomond islands joint management approach	Litter management	Parking management	Promoting water recreation on sea lochs	Supporting more water recreation on large lochs	Quiet areas on east Loch Lomond & islands	Best practice for water craft use	Encourage business to capitalise on trends	Investment in new visitor facilities & services	The Park as a resource for health improvement	Establish a National Park Health Partnership	Assessment rationale / mitigation notes	
++	Major positive																			
+	Minor positive																			
0	Neutral																			
-	Minor negative																			
--	Major negative																			
+/-	Mixed																			
?	Uncertain																			
SEA Objectives																				
																				recreation, number and scale of additional major events in the Park) and the efficacy of related management measures (e.g. promotion / uptake of best-practice for water craft).
Maintain and improve air quality		+	+	+	+	+	?	0	0	?	?	?	0	0	?	0	?	?		<p><b>General comments:</b> some key areas of uncertainty identified that could result in insignificant negative effects that are perhaps of minor significance when considered cumulatively. All measures that promote increased use of the Park (<b>water recreation, capitalising on key trends, health improvement resource</b> etc) could contribute to increased emissions of air pollutants due to increased transport demand (given current trends for private car usage). However, the Park currently has good air quality so impacts remain uncertain. All measures promoting / facilitating active travel and / or integrated travel options (e.g. <b>core paths review, NWCN</b> etc) have the potential to reduce transport related emissions of air pollutants, perhaps improving the Park's already good air quality in key travel / tourism hotspots.</p>
Reduce noise and light pollution		+	+	+	+	+	+	?	0	?	-	-	+	+	-	?	0	?	?	<p><b>Positive effects:</b> roughly half of the VE measures have potential to cause minor positive effects by promoting active travel / reducing reliance on private cars (<b>core paths review, NWCN, active and integrated travel</b> etc) or specific management measures to reduce noisy and disruptive activities (<b>YOURPark, water craft best-practice</b>).</p> <p><b>Negative effects:</b> three VE measures have potential to cause minor negative effects by</p>

NPPP 2018-2023 proposed draft Visitor Experience (VE) priorities																			
Key to potential environmental effects		Core path network review	Raise awareness of access & recreation opps.	Strategic links to NWCN	Maximise opps. from path network	Active & integrated travel options	Implementing YOURPark management zones	Loch Lomond islands joint management approach	Litter management	Parking management	Promoting water recreation on sea lochs	Supporting more water recreation on large lochs	Quiet areas on east Loch Lomond & islands	Best practice for water craft use	Encourage business to capitalise on trends	Investment in new visitor facilities & services	The Park as a resource for health improvement	Establish a National Park Health Partnership	Assessment rationale / mitigation notes
++	Major positive																		
+	Minor positive																		
0	Neutral																		
-	Minor negative																		
--	Major negative																		
+/-	Mixed																		
?	Uncertain																		
SEA Objectives																			
																			promoting activities that could result in increased noise ( <b>water recreation</b> and <b>capitalising on key trends</b> ). Whilst these impacts could be permanent (e.g. of promotion of <b>water recreation</b> results in sustained increase of this use), they are likely to be sporadic (e.g. seasonal) so disruption may be minimal.
Reduce the causes of climate change (mitigation)		+	+	+	+	+	0	0	0	?	-	-	0	?	-	0	?	?	<b>Positive effects:</b> similar issues to air and noise above (i.e. potential for increased active travel to reduce emissions associated with private car usage). <b>Negative effects:</b> promotion of increased <b>water recreation</b> and potentially <b>capitalising on key trends</b> is likely to increase visitor numbers to the Park which will increase transport demand. In line with current trends, this is likely to be predominantly via private car. This trend may be pronounced by participation in <b>water recreation</b> activities which could involve transportation of specialist equipment (e.g. boats, canoes etc).
Reduce the effects of climate change (adaptation)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	?	0	0	<b>New facilities:</b> potential for new facilities and services to be designed with climate resilience in mind (e.g. avoiding areas exposed to climate risks such as flooding and landslides).
Conserve and enhance the landscape character, local distinctiveness, and scenic value of the		?	0	?	0	?	?	?	0	0	?	?	0	0	0	?	0	0	<b>Core paths review / NWCN / active and integrated travel:</b> minor risk that inappropriate signage, use of materials etc could detract from landscape quality and character. Manage through use of appropriate and consistent design. <b>YOURPark / Loch Lomond islands joint</b>



NPPP 2018-2023 proposed draft Visitor Experience (VE) priorities																			
Key to potential environmental effects		Core path network review	Raise awareness of access & recreation opps.	Strategic links to NWCN	Maximise opps. from path network	Active & integrated travel options	Implementing YOURPark management zones	Loch Lomond islands joint management approach	Litter management	Parking management	Promoting water recreation on sea lochs	Supporting more water recreation on large lochs	Quiet areas on east Loch Lomond & islands	Best practice for water craft use	Encourage business to capitalise on trends	Investment in new visitor facilities & services	The Park as a resource for health improvement	Establish a National Park Health Partnership	Assessment rationale / mitigation notes
++	Major positive																		
+	Minor positive																		
0	Neutral																		
-	Minor negative																		
--	Major negative																		
+/-	Mixed																		
?	Uncertain																		
SEA Objectives																			
Park																			<p><b>management:</b> potential for minor positive effects though unclear if management activities will have a significant effect at the Park / landscape scale (e.g. positive impacts are likely to be more localised / site based).</p> <p><b>Water recreation:</b> potential for new boating and other recreational facilities to cause minor negative effects, especially given trends for increased cumulative impacts via different forms of development. This effect is likely to be manageable through careful planning and design of new infrastructure.</p>
Protect and (where appropriate) enhance the Park's cultural, historic and built environments		?	0	?	0	?	0	0	0	0	?	?	0	0	0	?	0	0	<p><b>Core paths review / NWCN / active and integrated travel:</b> see comments above. This may be a particular issue where paths, active travel infrastructure etc intersects settlements with designated conservation areas and clusters of listed buildings (e.g. Luss, Drymen, Aberfoyle).</p> <p><b>Water recreation:</b> minor risk that new development could detract from the character of locally distinctive architecture etc (e.g. the Park's many loch side listed buildings – see Figure 4.3). This potential risk will be manageable through careful siting and design.</p>
Protect and improve the health and wellbeing of residents and visitors to the Park		+	+	+	+	+	-	+	?	?	+	+	+	?	+	+	++	++	<p><b>Core paths review / NWCN / active and integrated travel:</b> development and promotion of access infrastructure will increase provision and help to encourage use for active travel and recreation, potentially contributing to healthy lifestyles. Realisation of benefits will be</p>

Key to potential environmental effects		NPPP 2018-2023 proposed draft Visitor Experience (VE) priorities																Assessment rationale / mitigation notes	
		Core path network review	Raise awareness of access & recreation opps.	Strategic links to NWCN	Maximise opps. from path network	Active & integrated travel options	Implementing YOURPark management zones	Loch Lomond islands joint management approach	Litter management	Parking management	Promoting water recreation on sea lochs	Supporting more water recreation on large lochs	Quiet areas on east Loch Lomond & islands	Best practice for water craft use	Encourage business to capitalise on trends	Investment in new visitor facilities & services	The Park as a resource for health improvement		Establish a National Park Health Partnership
++	Major positive																		dependent on uptake by all relevant sectors of the population, including harder to reach groups. <b>YOURPark:</b> will help to maintain the provision of responsible access to favoured camping and other recreational locations across the Park. However, indirect effects of the new byelaws may inadvertently reduce access for some groups (e.g. people who had previously used the loch side locations for camping in an irresponsible manner). Will require careful implementation to minimise adverse impacts. <b>National Park Health Partnership / health improvement resource:</b> these measures have substantial potential to deliver major health benefits by encouraging and promoting healthy lifestyles to a much wider audience (i.e. the affected population is potentially very large). Important synergies with other VE measures (e.g. <b>active and integrated travel, NWCN</b> etc).
+	Minor positive																		
0	Neutral																		
-	Minor negative																		
--	Major negative																		
+/-	Mixed																		
?	Uncertain																		
SEA Objectives																			
Promote sustainable use of resources		+	+	+	+	+	0	0	+ ?	?	?	?	0	?	+ - ?	+	?	?	<b>Core paths review / NWCN / active and integrated travel:</b> potential for increased uptake in active travel will reduce transport related consumption of fossil fuels. <b>Litter management:</b> potential to deliver benefits if management incorporates measures for reuse and recycling (e.g. segregated bins). <b>Capitalising on key trends:</b> mixed effects. In terms of large scale events for example (e.g. food and drink festivals, sporting events), well managed events have the potential to be exemplars of



**Table A5.3: Assessment of Rural Development (RD) draft priorities**

**Note:** The following RD priorities have not been assessed as part of this SEA because they are likely to result in no / minimal environmental effects: *improved broadband and mobile coverage / speed via current and emerging investment programmes; training and skills development; and maintaining good organisational capacity within communities.*

Key to potential environmental effects		NPPP 2018-2023 proposed draft Rural Development (RD) priorities														Assessment rationale / mitigation notes
		Spatial focus for development at Arrochar etc	Built and historic environment enhancements	Active travel options between communities	Climate change adaptation & resilience	Transition to low carbon economy	Energy efficiency & renewable energy	Diversification of land based rural business	Rural Development Frameworks	Workspace etc for start-ups	More focussed rural business support	Local service delivery & rural facilities	Improving public transport links	Land reform and community empowerment	Communities leading on projects etc	
++	Major positive															
+	Minor positive															
0	Neutral															
-	Minor negative															
--	Major negative															
+/-	Mixed															
?	Uncertain															
SEA Objectives																
Furthering biodiversity by conserving and enhancing the diversity of species		0	0	?	0	?	-	+	-	?	0	?	?	?	0	<p><b>Spatial focus for development:</b> the spatial focus, on balance, is likely to result in neutral effects as e.g. there are few designated sites in / around the three priority settlements and consolidating development will minimise “new” impacts in the wider countryside.</p> <p><b>Active travel:</b> options may cause disruption e.g. depending on the routes promoted.</p> <p><b>Transition to low carbon / improving public transport:</b> effects are uncertain but could be positive if there is a substantial reduction in private car journeys (i.e. through less disruption).</p>
Further biodiversity by conserving and enhancing the diversity of habitats		0	0	?	0	0	+	+	-	?	0	0	?	?	?	<p><b>Spatial focus for development:</b> spatial strategy consolidates development in existing settlements and steers it away from the wider countryside, including the Park’s N2000 sites (i.e. a neutral effect on balance).</p> <p><b>Energy efficiency &amp; renewables / diversification:</b> small scale renewables development and farm diversification raises risks (e.g. development in the wider countryside) and opportunities (e.g. biomass / woodland creation, uptake of agri-environment options).</p> <p><b>Community development measures:</b> effects are uncertain but could be positive, depending on approach (e.g. using land reform powers to purchase</p>

NPPP 2018-2023 proposed draft Rural Development (RD) priorities																	
Key to potential environmental effects		Spatial focus for development at Arrochar etc	Built and historic environment enhancements	Active travel options between communities	Climate change adaptation & resilience	Transition to low carbon economy	Energy efficiency & renewable energy	Diversification of land based rural business	Rural Development Frameworks	Workspace etc for start-ups	More focussed rural business support	Local service delivery & rural facilities	Improving public transport links	Land reform and community empowerment	Communities leading on projects etc	Communities owning & managing assets	Assessment rationale / mitigation notes
++	Major positive																
+	Minor positive																
0	Neutral																
-	Minor negative																
--	Major negative																
+/-	Mixed																
?	Uncertain																
SEA Objectives																	
Conserve and enhance the integrity of ecosystems		0	0	+	0	0	-	+	+	0	?	0	0	?	?	?	land for community woodland projects).  <b>General:</b> see comments above. <b>Spatial focus for development:</b> the spatial strategy is unlikely to affect ecological integrity for the reasons outlined above though there may be potential to use planning gain to help fund / deliver habitat creation projects to help enhance local ecological networks in and around the three focus settlements. <b>Rural Development Frameworks:</b> could be used to provide a local level articulation of ecological connectivity priorities.
Conserve and enhance land form, soils and related natural processes and systems		-	-	0	+	0	?	-	?	0	0	0	0	?	?	?	<b>Spatial focus for development:</b> should ensure that better quality agricultural land / improved grassland at settlement boundaries is protected. Soil sealing associated with new development should be minimised. <b>Enhancement of built &amp; historic environment:</b> should seek to protect and maintain (and ideally enhance) existing openspace in settlements (i.e. avoiding additional soil sealing). <b>Climate change adaptation:</b> FRM strategies / measures in proximity to town and villages may involve NFM techniques (including restoration of natural flooding regimes) though options are likely to be constrained by availability of adequate land / space. <b>Energy efficiency &amp; renewables / diversification / Rural Development Frameworks:</b> uptake of small scale biomass and other forms of diversification could result in loss of better quality agricultural land. Agri-environment based diversification (e.g. habitat

NPPP 2018-2023 proposed draft Rural Development (RD) priorities																	
Key to potential environmental effects		Spatial focus for development at Arrochar etc	Built and historic environment enhancements	Active travel options between communities	Climate change adaptation & resilience	Transition to low carbon economy	Energy efficiency & renewable energy	Diversification of land based rural business	Rural Development Frameworks	Workspace etc for start-ups	More focussed rural business support	Local service delivery & rural facilities	Improving public transport links	Land reform and community empowerment	Communities leading on projects etc	Communities owning & managing assets	Assessment rationale / mitigation notes
++	Major positive																
+	Minor positive																
0	Neutral																
-	Minor negative																
--	Major negative																
+/-	Mixed																
?	Uncertain																
SEA Objectives																	
																	creation / management) could result in better management of soils (including peat soils). RDFs could help to identify local level opportunities and constraints (e.g. better quality agricultural land, peatland restoration opportunities). <b>Community development measures:</b> effects are uncertain but could be positive, depending on approach (e.g. using land reform powers to purchase land for community woodland projects).
Conserve and enhance the water environment including coastal, river and loch systems		?	?	0	+	+	?	+	+	?	?	?	0	0	0	0	<b>Spatial focus for development / enhancement of built &amp; historic environment:</b> uncertain effects. Potential to increase flood risk though this can be managed through careful planning and design. Public realm and other built environment works should seek to avoid increasing impervious cover. <b>Climate change adaptation / low carbon / Rural Development Frameworks:</b> sustainable design (e.g. use of SuDS) and sustainable FRM measures (e.g. use of NFM techniques) have the potential to help manage flood risks, reduce diffuse pollution (from roads, building footprints etc) and reduce water usage. The magnitude of this effect however is likely to be relatively small (minor significance overall) due to anticipated small levels of development (e.g. housing land supply to 2027 of 916 homes <sup>19</sup> ) and / or retrofit. <b>Diversification:</b> a move away from agriculture (arable, livestock) is likely to result in less rural diffuse pollution. Greater uptake of agri-environment

<sup>19</sup> <http://www.ourlivepark.com/our-plan/>

NPPP 2018-2023 proposed draft Rural Development (RD) priorities																	
Key to potential environmental effects		Spatial focus for development at Arrochar etc	Built and historic environment enhancements	Active travel options between communities	Climate change adaptation & resilience	Transition to low carbon economy	Energy efficiency & renewable energy	Diversification of land based rural business	Rural Development Frameworks	Workspace etc for start-ups	More focussed rural business support	Local service delivery & rural facilities	Improving public transport links	Land reform and community empowerment	Communities leading on projects etc	Communities owning & managing assets	Assessment rationale / mitigation notes
++	Major positive																
+	Minor positive																
0	Neutral																
-	Minor negative																
--	Major negative																
+/-	Mixed																
?	Uncertain																
SEA Objectives																	
Maintain and improve air quality	0	?	+	0	?	?	?	?	-	?	+	+	0	0	0	measures (e.g. habitat creation and management) may result in further positive effects.	
Reduce noise and light pollution	-	-	0	-	?	?	?	0	?	0	0	?	0	0	0	<b>Spatial focus for development / enhancement of built &amp; historic environment / climate change adaptation:</b> all forms of built development are likely to cause temporary noise impacts.	
Reduce the causes of climate change (mitigation)	-	0	+	0	+	+	+	-	-	?	+	+	?	?	?	<b>Spatial focus for development / Rural Development Frameworks / start-up workspace:</b> new development will result in increased emissions though these can be reduced by using sustainable building techniques (e.g. use of wood, recycled materials) and operational impacts through energy efficiency measures. Consolidating development in existing settlements will help to reduce the need to travel and associated	

NPPP 2018-2023 proposed draft Rural Development (RD) priorities																	
Key to potential environmental effects		Spatial focus for development at Arrochar etc	Built and historic environment enhancements	Active travel options between communities	Climate change adaptation & resilience	Transition to low carbon economy	Energy efficiency & renewable energy	Diversification of land based rural business	Rural Development Frameworks	Workspace etc for start-ups	More focussed rural business support	Local service delivery & rural facilities	Improving public transport links	Land reform and community empowerment	Communities leading on projects etc	Communities owning & managing assets	Assessment rationale / mitigation notes
++	Major positive																
+	Minor positive																
0	Neutral																
-	Minor negative																
--	Major negative																
+/-	Mixed																
?	Uncertain																
SEA Objectives																	
																	emissions. <b>Diversification:</b> mixed effects. A move away from agriculture could reduce emissions through less cultivation of soils (arable) and livestock. Agri-environment measures could work to enhance carbon stocks (e.g. in soils and woodland). Conversely, a move towards tourism could increase travel demand and associated emissions. Magnitude of impact depends on uptake but the overall significance is likely to be minor. <b>Community development measures:</b> effects are uncertain but could be positive, depending on approach (e.g. using land reform powers to purchase land for community woodland projects).
Reduce the effects of climate change (adaptation)		?	?	0	+	0	0	+ ?	?	0	0	+	?	?	?	?	<b>Spatial focus for development / enhancement of built &amp; historic environment:</b> uncertain effects. Potential to increase flood risk though this can be managed through careful planning and design. Public realm and other built environment works should seek to avoid increasing impervious cover. <b>Diversification:</b> could contribute to land based adaptation measures (e.g. agri-environment measures that support NFM). Diversifying rural land based enterprise can also improve resilience to climate change (e.g. less reliance on single activities that could be affected by climate impacts, such as flooding of arable crops). <b>Local services / facilities:</b> maintenance and enhancement of these assets can reduce reliance on centralised services etc and reduce the risk of being “cut off” when climate impacts occur (e.g. flooding).



NPPP 2018-2023 proposed draft Rural Development (RD) priorities																	
Key to potential environmental effects		Spatial focus for development at Arrochar etc	Built and historic environment enhancements	Active travel options between communities	Climate change adaptation & resilience	Transition to low carbon economy	Energy efficiency & renewable energy	Diversification of land based rural business	Rural Development Frameworks	Workspace etc for start-ups	More focussed rural business support	Local service delivery & rural facilities	Improving public transport links	Land reform and community empowerment	Communities leading on projects etc	Communities owning & managing assets	Assessment rationale / mitigation notes
++	Major positive																
+	Minor positive																
0	Neutral																
-	Minor negative																
--	Major negative																
+/-	Mixed																
?	Uncertain																
SEA Objectives																	
Conserve and enhance the landscape character, local distinctiveness, and scenic value of the Park		0	+	-	+	?	-	-	+	?	0	0	0	?	?	?	<p><b>Spatial focus for development:</b> see comments above.</p> <p><b>Active travel:</b> new linear features in the landscape such as active travel infrastructure have the potential to negatively impact landscape character. This can usually be mitigated with careful planning and design.</p> <p><b>Energy efficiency &amp; renewables:</b> small scale renewables (including micro hydro) can result in relatively large scale temporary impacts on landscape character. This can be challenging to mitigate.</p> <p><b>Diversification:</b> mixed effects. Diversification and land abandonment can alter agricultural landscapes, affecting landscape and aesthetic values differently depending on personal preference.</p> <p><b>Rural Development Frameworks:</b> can help to promote landscape sensitive development for discrete areas of the Park.</p>
Protect and (where appropriate) enhance the Park's cultural, historic and built environments		0	++	?	?	?	?	?	+	?	0	0	0	+	+	+	<p><b>Spatial focus for development:</b> neutral effects on balance. The spatial focus on Arrochar, Balloch and Callander is relatively unconstrained (the latter is the only settlement with a Conservation Area – see Figure 4.3). Use of high quality design that is sensitive to character of settlements and locally distinctive architecture (e.g. listed buildings) should ensure that existing quality is maintained and / or enhanced.</p> <p><b>Enhancement of built &amp; historic environments:</b> scope of this measure covering “all” towns and villages raises potential for large-scale permanent benefits.</p> <p><b>Uncertain effects:</b> the effects of many RD measures on this SEA objective are uncertain depending on implementation (e.g. scale, location and materials used)</p>

NPPP 2018-2023 proposed draft Rural Development (RD) priorities																	
Key to potential environmental effects		Spatial focus for development at Arrochar etc	Built and historic environment enhancements	Active travel options between communities	Climate change adaptation & resilience	Transition to low carbon economy	Energy efficiency & renewable energy	Diversification of land based rural business	Rural Development Frameworks	Workspace etc for start-ups	More focussed rural business support	Local service delivery & rural facilities	Improving public transport links	Land reform and community empowerment	Communities leading on projects etc	Communities owning & managing assets	Assessment rationale / mitigation notes
++	Major positive																
+	Minor positive																
0	Neutral																
-	Minor negative																
--	Major negative																
+/-	Mixed																
?	Uncertain																
SEA Objectives																	
																	in the <b>active travel</b> measure, approach to and uptake of <b>diversification</b> measures). <b>Rural Development Frameworks:</b> see above. <b>Community development measures:</b> effects are uncertain but could be positive, depending on approach (e.g. using land reform powers to purchase and restore vacant buildings / plots).
Protect and improve the health and wellbeing of residents and visitors to the Park		+	+	+	+ ?	?	0	?	+	0	0	+	+	+	+	+	<b>Enhancement of built &amp; historic environments:</b> enhancement of access networks and open spaces in “all” towns and villages could help to promote healthy lifestyles (e.g. walking for short journeys). <b>Climate change adaptation:</b> building resilience within communities and businesses could help to ensure access to vital services during extreme weather events and other climate impacts (e.g. flooding, landslides). Maintaining access is also relevant to <b>local services / facilities</b> and <b>improving public transport</b> . <b>Community development measures:</b> supporting communities to use land reform and community empowerment powers may create important opportunities for e.g. encouraging healthy lifestyles, local employment opportunities (community owned / managed businesses and services etc).
Promote sustainable use of resources		+	+ ?	0	0	+ ?	+ ?	+ ?	+ ?	+ ?	0	0	0	+ ?	+ ?	+ ?	<b>Spatial focus for development:</b> consolidating development in existing settlements promotes efficient use of land. <b>Enhancement of built &amp; historic environments:</b> key opportunity to use local materials and products. <b>Uncertain positive effects:</b> various measures have the potential to promote the sustainable use of water ( <b>low</b>

NPPP 2018-2023 proposed draft Rural Development (RD) priorities																		
<b>Key to potential environmental effects</b>		<b>Spatial focus for development at Arrochar etc</b>	<b>Built and historic environment enhancements</b>	<b>Active travel options between communities</b>	<b>Climate change adaptation &amp; resilience</b>	<b>Transition to low carbon economy</b>	<b>Energy efficiency &amp; renewable energy</b>	<b>Diversification of land based rural business</b>	<b>Rural Development Frameworks</b>	<b>Workspace etc for start-ups</b>	<b>More focussed rural business support</b>	<b>Local service delivery &amp; rural facilities</b>	<b>Improving public transport links</b>	<b>Land reform and community empowerment</b>	<b>Communities leading on projects etc</b>	<b>Communities owning &amp; managing assets</b>	<b>Assessment rationale / mitigation notes</b>	
++	Major positive																	
+	Minor positive																	
0	Neutral																	
-	Minor negative																	
--	Major negative																	
+/-	Mixed																	
?	Uncertain																	
<b>SEA Objectives</b>																		
																		carbon, energy efficiency & renewables) and promote efficient use of land (Rural Development Frameworks, community development measures).

SEA

# STRATEGIC ENVIRONMENTAL ASSESSMENT

NON TECHNICAL SUMMARY

MARCH 2017

DRAFT NATIONAL PARK PARTNERSHIP PLAN 2018-2023



## Introduction

The Loch Lomond and the Trossachs National Park Authority (the NPA) have developed a draft National Park Partnership Plan (NPPP) for the period 2018-2023. This plan will replace the current NPPP which was adopted in 2012 and will expire at the end of 2017.

As part of the process of developing the new plan, the NPA have been undertaking a Strategic Environmental Assessment (SEA) of the emerging draft. The NPA commissioned Collingwood Environmental Planning Limited (CEP) to undertake the environmental assessment of the draft plan. All other stages of the SEA are being undertaken “in-house” by the NPA.



SEA is a legal requirement for certain plans and programmes in line with the European Commission (EC) SEA Directive (2001/42/EC) and the Environmental Assessment (Scotland) Act 2005 (the 2005 Act). **The purpose of SEA is to ensure that the likely significant effects on the environment of implementing the new NPPP (and of reasonable alternatives) are identified, described, evaluated and taken into account before the plan is adopted.**

This document is the **Non-Technical Summary** (NTS) of the Environmental Report required under the 2005 Act. Both documents and the draft NPPP 2018-2023 can be downloaded from the internet at:

<http://www.lochlomond-trossachs.org/park-authority/get-involved/consultations/>

## The National Park Partnership Plan (NPPP) 2018-2023

The draft NPPP 2018-2023 sets out proposals for how the NPA and a wide range of other organisations and interests can work together over the next five years to look after, enhance and make the most of the special landscape of the Loch Lomond and the Trossachs National Park (LLTNP). The coordination purpose of the plan helps to align the resources and activities of partners, ensuring value for money and the achievement of desired outcomes for the Park. Full details of the proposals can be found in the draft plan document itself, available via the link above.

### **Box A: Draft NPPP 2018-2023 – themes and vision statements**

1. **Conservation and Land Use:** nature, heritage, land and water are valued, managed and enhanced for multiple benefits for people and nature;
2. **Visitor Experience:** there is a high quality, authentic visitor experience for visitors from all backgrounds to enjoy recreation activities and appreciate the area’s outstanding natural and cultural heritage; and
3. **Rural Development:** businesses and communities thrive and people live and work sustainably.

The NPPP is made up of three different themed chapters. Each theme has a vision which describes the overall outcome that the NPA aims to achieve for that aspect of the Park and its management (see **Box A**). Underpinning the visions, there are several draft priorities that set out (in a broad sense) the NPA’s work plan for the period 2018-2023. These priorities have been assessed in this SEA to identify the likely significant effect on the environment of implementing the NPPP.

For those requiring further information, a more detailed overview of the draft NPPP 2018-2023 can be

found in **Chapter 2** of the NPPP SEA Environmental Report.

## Environmental information and objectives for the SEA

Following a review of other relevant plans, programmes and strategies and associated environmental objectives, and taking into account the nature and scope of the proposed NPPP (see **Box A**), broad aspirational environmental (SEA) objectives were identified (see **Table A**). These “SEA objectives” provide the basis for assessing the potentially significant environmental effects of the NPPP. Instances where the NPPP shows support for SEA objectives may result in **positive** environmental effects. Areas of conflict between NPPP provisions and SEA objectives may result in **negative** effects.

**Table A: SEA objectives used in the assessment of the draft NPPP 2018-2023**

SEA topic	SEA objective(s)
<b>Biodiversity, flora &amp; fauna</b>	1. Furthering biodiversity by conserving and enhancing the diversity of species
	2. Further biodiversity by conserving and enhancing the diversity of habitats
	3. Conserve and enhance the integrity of ecosystems
<b>Geology &amp; soils</b>	4. Conserve and enhance land form, soils and related natural processes and systems
<b>Water</b>	5. Conserve and enhance the water environment including coastal, river and loch systems
<b>Air &amp; noise</b>	6. Maintain and improve air quality
	7. Reduce noise and light pollution
<b>Climatic factors</b>	8. Reduce the causes of climate change (mitigation)
	9. Reduce the effects of climate change (adaptation)
<b>Landscape &amp; cultural heritage</b>	10. Conserve and enhance the landscape character, local distinctiveness, and scenic value of the Park
	11. Protect and (where appropriate) enhance the Park’s cultural, historic and built environments
<b>Population &amp; human health</b>	12. Protect and improve the health & wellbeing of residents and visitors to the Park
<b>Material assets</b>	13. Promote sustainable use of resources

A review of the existing state (baseline) and trends of the environment was undertaken alongside the process of developing the SEA objectives. This review identified indicators and data that can be used to measure progress towards the SEA objectives. The analysis of environmental trends helps to identify potential future environmental problems and issues; e.g. where there is a decline in the condition of an aspect of the environment at odds with policy objectives or targets.

Overall, the status and trends of the Park’s natural environment indicates a mixed picture. In terms of **biodiversity** for example, grazing impacts from deer, sheep and feral goats continue to suppress many habitats (e.g. native woodland) though some important wild species populations are increasing (e.g. pine marten). For the Park’s **landscapes and cultural heritage**, there is increasing recognition of the value of the Park’s wilder areas and of the importance of cultural heritage across the Park (e.g. traditional buildings and building methods / materials) contrasted with a decline in traditional land management in some areas. In terms of **population and human health**, the Park has a declining and ageing population, a trend that mirrors many other parts of rural Scotland.

The trends identified in the review of environmental information show how the environment might change if the new NPPP was not put in place. The SEA and environmental monitoring undertaken for the current NPPP (2012-2017) also helps to illustrate this. Part of the purpose of reviewing the NPPP on a five-yearly basis is to take stock of progress, review environmental trends and, where appropriate, identify a new course action for the NPPP to address emerging environmental issues.

For those requiring further information, a detailed review of the environmental baseline, trends and key

environmental issues can be found in **Chapter 4** of the NPPP SEA Environmental Report and **Appendix 3** in the standalone appendices volume.

## Assessment of NPPP outcomes and alternatives

As part of the assessment of the NPPP, the compatibility of the NPPP's proposed outcomes with SEA objectives (see **Table A**) was tested. The assessment showed how NPPP outcomes are to a large extent compatible with environmental objectives. In particular, 10 of the 13 NPPP outcomes show strong support for **population and human health** SEA objectives, due to the Park's focus on outdoor recreation and exercise and new NPPP outcomes concerning **health and outreach**.

However, a small number of outcomes may conflict with SEA objectives, depending on how the plan is implemented. For example, the assessment identified mixed compatibility with **biodiversity** SEA objectives; whilst all **Conservation and Land Use** theme outcomes show strong support, key outcomes from the **Visitor Experience** and **Rural Development** themes may result in increased visits to and use of the Park which could disrupt habitats and wild species (e.g. in sensitive loch side locations).

For those requiring further information, a detailed write-up of the NPPP outcomes vs. SEA objectives compatibility analysis can be found in **Chapter 6** of the NPPP SEA Environmental Report and **Appendix 4** in the standalone appendices volume.

An important function of SEA is to help identify other 'reasonable alternatives' to the preferred plan that might be better in environmental terms (i.e. likely to result in less negative and more positive environmental effects). Alternatives must be 'reasonable' in relation to the objectives and geographical scope of the plan being assessed.

In the case of the NPPP, other reasonable alternatives to the preferred plan are not readily available given the overall objectives for the plan and functions of the NPA, as established by the National Parks (Scotland) Act 2000. In particular, the UK National Parks **Sandford Principle** means that:

*"If there is a conflict between protecting the environment [of the Park] and people enjoying the environment, that can't be resolved by management, then protecting the environment is more important"<sup>1</sup>*

In effect, the Sandford Principle means that the options for the NPPP are tightly bounded by the need to protect the Park's natural and cultural heritage above all other objectives. So, for example,



having a more economically focussed alternative would not be considered 'reasonable'.

As such, the NPA did not identify any alternatives other than the preferred NPPP 2018-2023. To provide a comparison, however, the SEA considered the environmental implications of the new plan

<sup>1</sup> <http://www.nationalparks.gov.uk/students/whatisanationalpark/aimsandpurposeofnationalparks/sandfordprinciple>

vs. the old plan; what could be considered a “Business as Usual” scenario. This was carried out using an environmental SWOT (strengths, weaknesses, opportunities and threats) analysis approach.

Overall, the environmental SWOT analysis highlighted how the new plan (NPPP 2018-2023) has several important strengths and opportunities over the old plan (NPPP 2012-2017). On balance, the new plan appears to be preferable in environmental terms. Particular strengths relate to the new plan’s support for a catchment based approach to delivering many measures. This is preferable as planning and delivery of land use management at the ecosystem scale can be more effective, especially for **water**, **climatic factors** and **biodiversity** related issues. Important opportunities within the new plan include support for a new regional level collaborative land use planning mechanism which, when linked to existing NPPP support for farm / estate / holding level planning, raises the possibility of improved environmental outcomes across most **SEA objectives**.

Notwithstanding the above, a key weakness of the new plan over the old plan is its lack of specific implementation detail. Given limited public sector resources and the way in which the draft priorities are framed in the plan, it is unclear how intervention under the NPPP will be prioritised, and therefore whether resources may end up being spread too thinly. It is anticipated that this uncertainty will be resolved through lower level planning and policy (e.g. individual partner agreements). An example of an environmental threat raised by the new plan includes the increased focus on water based recreation on large lochs in the Park (e.g. Loch Lomond, Loch Long). This will require careful management to ensure that **biodiversity** and **landscape** issues are not negatively affected.

For those requiring further information, a detailed write-up of the alternatives assessment can be found in **Chapter 7** of the NPPP SEA Environmental Report.

## Key environmental effects of the NPPP

Draft priorities from each of the NPPP’s three themed chapters were assessed against the SEA objectives (see **Table A**). Overall, the proposed NPPP is likely to result in a range of primarily positive and neutral environmental effects (see **Table B**). This reflects the strong environmental focus of the NPPP (and the wider role of the NPA) as enshrined in the National Parks (Scotland) Act 2000 and via mechanisms like the Sandford Principle. Priorities within the **Conservation and Land Use** theme (see **Box A**) are likely to be particularly beneficial, especially in relation to **biodiversity**, **soil**, **water**, **climatic factors** and **landscape** related issues.

There are, however, some minor areas of potential environmental risk associated with the draft NPPP. Principally, this relates to priorities within the plan’s **Visitor Experience** and **Rural Development** themes (see **Box A**). Aspects of the environment that could be subject to minor negative effects include **biodiversity**, **soil**, **noise** and **climatic factors**. This reflects the inherent tension between the NPA’s principal role protecting and enhancing the Park’s natural and cultural heritage vs. the need to promote recreation, tourism, rural development etc, to ensure that the Park also functions effectively for the people who live and work there (e.g. in terms of promoting a diverse and resilient rural economy, ensuring adequate housing provision to meet various needs). However, these environmental risks are considered to be minor only in terms of significance and can largely be mitigated upon implementation or with recourse to the Sandford Principle, where necessary.

For those requiring further information, a detailed write-up of the assessment of the proposed NPPP 2018-2023 can be found in **Chapter 8** of the NPPP SEA Environmental Report and **Appendix 5** in the standalone appendices volume.



## Proposed mitigation and enhancement measures

The assessment of the draft NPPP 2018-2023 suggests that no **major** negative environmental effects are likely to arise. Where the potential for minor negative effects has been identified, these are typically in relation to the sensitive nature of the environment, but where with careful design and management, such activity or development could take place sustainably and the effects mitigated.

**Table B: Assessment of NPPP 2018-2023 draft priorities – overall summary matrix**

**Note:** the assessment summary below aggregates the results of individual assessments for all priorities within a given theme (this means that all assessments are ‘mixed’). Colour coding is used to show the **dominant effect**.

Key to potential environmental effects		NPPP themes		
		Conservation & Land Use	Visitor Experience	Rural Development
++	Major positive			
+	Minor positive			
0	Neutral			
-	Minor negative			
--	Major negative			
-/+	Mixed			
?	Uncertain			
SEA Objectives				
Furthering biodiversity by conserving and enhancing the diversity of species		++ - ?	- + 0 ?	0 + - ?
Further biodiversity by conserving and enhancing the diversity of habitats		++ - ?	- + 0 ?	0 + - ?
Conserve and enhance the integrity of ecosystems		++ - ?	0 - +	0 + - ?
Conserve and enhance land form, soils and related natural processes and systems		++ 0 ?	0 - +	0 + - ?
Conserve and enhance the water environment including coastal, river and loch systems		++ 0 ?	0 - + ?	0 + ?
Maintain and improve air quality		0 - ?	+ 0 ?	0 + ?
Reduce noise and light pollution		+ 0 ?	+ - 0 ?	0 - ?
Reduce the causes of climate change (mitigation)		++ ?	+ 0 - ?	+ - 0 ?
Reduce the effects of climate change (adaptation)		++	0	0 + ?
Conserve and enhance the landscape character, local distinctiveness, and scenic value of the Park		++ - ?	0 + - ?	0 + - ?
Protect and (where appropriate) enhance the Park’s cultural, historic and built environments		+ - 0 ?	0 ?	0 + ?
Protect and improve the health and wellbeing of residents and visitors to the Park		+ ?	+	+ 0
Promote sustainable use of resources		+ 0 ?	+ 0 ?	0 + ?

In many cases, the delivery of measures to mitigate negative effects will need to be undertaken by the lower level plans and programmes that implement the NPPP and in relation to individual projects. Individual partnership agreements for NPPP partners, where they are to be used, could also provide a useful mechanism to articulate mitigation for specific partners and their activities. To address these lower level implementation issues, a range of more detailed operational and management measures have been developed as outlined in the Environmental Report.

For those requiring further information, the full list of proposed operational and management measures can be found in **Chapter 8 Table 8.5** of the NPPP SEA Environmental Report.

Mitigation has also been proposed in terms of amendments to the wording of draft NPPP priorities. This is the preferred mitigation strategy for SEA whereby changes are made to the aspect of the plan likely to cause the negative effect(s). In doing so, the strategic intent of the NPPP is altered thereby helping to ensure that desired environmental outcomes are achieved. Amendments have been proposed where priorities have the potential to cause minor negative effects (see **Table C**).

**Table C: Proposed amendments to the wording of NPPP draft priorities**

**Note:** amendments to the priority wording are shown in the right-hand column in **bold italicised** text.

Priority	Summary of potential negative effects	Propose amendments to priority wording
<b>Conservation and Land Use theme priorities</b>		
Delivering multiple benefits from nature including natural flood management, carbon sequestration and storage, timber and food production.	<b>Biodiversity, landscape:</b> utilitarian approach to nature (i.e. focus on ecosystem services and multiple benefits) may mean that some habitats and services are prioritised over others where they deliver key priority benefits for people (e.g. flood management, food production, recreation).	Delivering multiple benefits from nature (including natural flood management, carbon sequestration and storage, timber and food production) <b>whilst working to sustain and enhance overall ecosystem health.</b>
Conserving and enhancing wildness qualities, cultural heritage, tranquillity and dark skies.	<b>Biodiversity:</b> preservation of a certain landscape aesthetic (linked to e.g. perceptions of wildness) may conflict with actions to improve ecosystem health, especially in upland areas (e.g. sensitive restoration and expansion of a more diverse mosaic of upland habitats).	Conserving and enhancing wildness qualities, cultural heritage, tranquillity and dark skies, <b>whilst considering opportunities to diversify upland habitats where appropriate.</b>
Protecting wild land qualities of upland areas.	See above.	Protecting wild land qualities of upland areas <b>whilst considering opportunities to diversify upland habitats where appropriate.</b>
Enhancing opportunities to enjoy and experience landscapes, particularly along major transport routes and around settlements.	<b>Biodiversity:</b> the critical issue here is the potential for removal of vegetation alongside roads / railways and subsequent loss of linear habitats which are important for ecological connectivity and landscape. This is only a minor risk but something to consider, especially in terms of cumulative effects.	Enhancing opportunities to enjoy and experience landscapes, particularly along major transport routes and around settlements, <b>in a sustainable manner.</b>
Supporting the implementation of Flood Risk Management Plans that cover the Park.	<b>Biodiversity, soils, water:</b> priority could support implementation of traditional engineered FRM approaches (e.g. embankments, flood walls) which can alter watercourse morphology, disrupting natural fluvial processes and riparian habitats.	Supporting the implementation of Flood Risk Management Plans that cover the Park <b>and promoting sustainable approaches where possible.</b>
<b>Visitor Experience theme priorities</b>		
Awareness raising of recreational and access opportunities.	<b>Biodiversity, soils:</b> measures that promote increased recreational usage of the Park (directly and / or indirectly) have the potential to cause increased disruption of habitats and wild species populations and contribute to footpath / soil erosion (especially in sensitive upland areas).	Awareness raising of <b>sustainable</b> recreational and access opportunities <b>and promoting responsible use.</b>

Priority	Summary of potential negative effects	Propose amendments to priority wording
Strategic links (new and improving existing) to Scotland's National Walking and Cycling Network.	See above.	<b>Providing</b> strategic links (new and improving existing) to Scotland's National Walking and Cycling Network <b>in a sustainable manner</b> .
Maximising opportunities from significant network of long distance and local paths, focusing on West Highland Way.	See above.	Maximising <b>sustainable</b> opportunities from significant network of long distance and local paths, focusing on West Highland Way.
Promote water-based recreational activities on sea lochs.	<b>Biodiversity:</b> similar issues to those described above but in relation to marine habitats and species populations.	Promote <b>sustainable</b> water-based recreational activities on sea lochs.
Support more water based recreational facilities for public use on larger freshwater lochs.	<b>Biodiversity:</b> similar issues to those described above but in relation to freshwater loch habitats and species.	Support more <b>sustainable</b> water based recreational facilities for public use on larger freshwater lochs.
Encourage business to capitalise on growing visitor and recreation trends.	<b>Biodiversity:</b> measures that promote increased recreational, tourism, events etc usage of the Park (directly and / or indirectly) have the potential to cause increased disruption of habitats and wild species populations.	Encourage business to capitalise on growing visitor and recreation trends <b>where appropriate to the Park's natural and cultural heritage</b> .
<b>Rural Development theme priorities</b>		
Supporting land based rural businesses to diversify / expand.	<b>Biodiversity, soils, climatic factors (mitigation), landscape and cultural heritage:</b> poorly planned and / or inappropriate diversification measures have the potential to negatively affect many aspects of the environment (e.g. disruption of habitats and wild species populations, soil erosion, loss / abandonment / change in use of better quality agricultural land, loss / lack of management of traditional landscape features).	Supporting land based rural businesses to diversify / expand <b>in a sustainable manner</b> .

## Monitoring proposals

Monitoring the significant environmental effects of implementing the NPPP is an important and ongoing element of the SEA process. Given the inherent uncertainty concerning the NPPP's likely significant effect on the environment (due to the high-level nature of the plan), monitoring the implementation of the NPPP from an environmental perspective will ensure that actual progress against the environmental objectives, which formed the core of this assessment, can be measured. Where unexpected negative effects are identified, appropriate remedial actions can be identified and implemented.

The recommended measures needed to monitor the potentially significant and cumulative negative environmental effects of the NPPP are outlined in **Table D** below. At this stage, monitoring arrangements have not been fully developed and it will therefore be important to define the monitoring process and timeframe in more detail and also to establish clear responsibilities for monitoring. This will be included as part of the post adoption stages of SEA.

**Table D: Proposed monitoring of key significant effects identified in the assessment**

SEA topic	Proposed indicator categories
<b>Biodiversity, flora &amp; fauna</b>	<ul style="list-style-type: none"> <li>Extent and condition of UK BAP habitats and species (including key upland bog / peatland and woodland habitats).</li> <li>Extent and condition of designated sites (Figure 4.2).</li> <li>Location and extent of natural / semi-natural habitats.</li> <li>Biodiversity index: species indicators – e.g. farmland / woodland bird species.</li> <li>Visitor numbers to the Park or suitable proxies (e.g. number of overnight stays).</li> <li>Area of park under agri-environment-climate (AEC) schemes.</li> <li>YOURPark byelaw implementation reporting (e.g. fines, visual inspections).</li> </ul>
<b>Geology &amp; soils</b>	<ul style="list-style-type: none"> <li>Proxies for soil carbon content: extent of soils rich in organic matter; extent of peatlands; soil record books.</li> <li>Water quality / sediment content (as a proxy for soil erosion).</li> <li>Areas of highly erodible soils.</li> <li>Fertiliser application rates to arable and grazing land in the Park.</li> <li>Visitor numbers to the Park or suitable proxies (e.g. number of overnight stays).</li> <li>Area of park under agri-environment-climate (AEC) schemes.</li> <li>Implementation of path upgrade and maintenance programmes.</li> <li>TMTP path volunteer reporting.</li> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>Overall quality (WFD status) of river and loch waterbodies in the Park.</li> <li>Likely % compliance of waterbodies across the Park with WFD objectives.</li> <li>Distribution of nitrate and sediment concentrations in waterbodies across the Park.</li> <li>Area of park under agri-environment-climate (AEC) schemes.</li> <li>YOURPark byelaw implementation reporting (e.g. fines, visual inspections).</li> <li>Flooding related indicators as per <i>climatic factors</i>.</li> </ul>
<b>Air &amp; noise</b>	<ul style="list-style-type: none"> <li>Modal choice / split for visits to the Park.</li> <li>Percentage of Park residents with access to public transport.</li> <li>Levels of car and van ownership amongst Park residents.</li> <li>Local authority air quality reporting.</li> <li>Visitor numbers to the Park or suitable proxies (e.g. number of overnight stays).</li> </ul>
<b>Climatic factors</b>	<ul style="list-style-type: none"> <li>Transport related indicators as per <i>air &amp; noise</i>.</li> <li>Flood hazard extent / depth (especially fluvial flooding).</li> <li>Flooding impacts.</li> <li>Area of park under agri-environment-climate (AEC) schemes.</li> <li>Carbon equivalent (CO<sub>2</sub>e) emissions by sector.</li> <li>Total greenhouse gas emissions (CO<sub>2</sub>e) from the Park.</li> <li>Socio-economic impacts of climate risks (e.g. levels of service disruption).</li> <li>New development (e.g. number of houses delivered).</li> <li>New development adopting sustainable design (e.g. timber construction, micro-renewables)</li> </ul>
<b>Landscape &amp; cultural heritage</b>	<ul style="list-style-type: none"> <li>Landscape Character Areas.</li> <li>Extent and condition / integrity of core areas of wild land in the Park.</li> <li>Extent and condition of historic and designed landscapes in the Park.</li> <li>Area of park under agri-environment-climate (AEC) schemes.</li> </ul>
<b>Population &amp; human health</b>	<ul style="list-style-type: none"> <li>Delivery of new / upgraded access and outdoor recreation infrastructure (e.g. length of upgraded path).</li> <li>Visitor numbers to the Park or suitable proxies (e.g. number of overnight stays).</li> </ul>

SEA topic	Proposed indicator categories
	<ul style="list-style-type: none"> <li>• Participation rates in outdoor sporting events held in the Park (e.g. Great Scottish Swim).</li> <li>• Participation rates in different outdoor recreation activities in the Park or suitable proxies (e.g. usage of core path network).</li> <li>• Health outcomes in affected communities.</li> </ul>

## Conclusions and next steps

The environmental assessment of the draft NPPP 2018-2023 summarised in this NTS has identified a range of primarily positive and neutral effects with some limited potential for minor negative effects to arise. On balance, therefore, the NPPP is likely to result in a positive effect on the environment overall. This is to be expected given the predominantly environmental remit of the NPA, the NPPP and the National Park itself.



Following consultation on the draft NPPP 2018-2023 and its accompanying Environmental Report, comments will be fed back into the revisions of the NPPP. If significant changes are made, these will be assessed using the same approach as described in this NTS, and an addendum made to the Environmental Report before the finalised NPPP is submitted to the Scottish Ministers.

Once the NPPP has been approved by the Scottish Ministers and adopted by the NPA, an SEA post-adoption statement will be produced to indicate how the SEA has influenced the final NPPP.

This Non-Technical Summary and the full Environmental Report (and separate appendices volume) are made available for consultation alongside the draft NPPP 2018-2023 from **10<sup>th</sup> April – 3<sup>rd</sup> July 2017**. All relevant documents are available from the internet<sup>2</sup>. Hard copies are available for inspection at the following address:

**Loch Lomond and the Trossachs National Park HQ**

**Carrochan**

**Carrochan Road**

**Balloch**

**G83 8EG**

<sup>2</sup> <http://www.lochlomond-trossachs.org/park-authority/get-involved/consultations/>