Front cover: The pits, known as lilia, to the north of the fort at Rough Castle
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1. Non-Technical Summary

1.1 Introduction

As part of the preparation of the Frontiers of the Roman Empire (Antonine Wall) World Heritage Site Supplementary Planning Guidance, North Lanarkshire Council is carrying out a Strategic Environmental Assessment (SEA). The SEA considers the likely environmental effects of implementing the guidance. The guidance supports the delivery of development plan policies agreed by the five Councils along the Antonine Wall: Falkirk, North Lanarkshire, East Dunbartonshire, Glasgow City Council and West Dunbartonshire. Background information can be found in section 2.

The information set out in this report is based on the assessment of the likely environmental effects of implementing the guidance. Our findings have informed the preparation of the guidance and will be taken into account prior to being finalised and formally adopted.

1.2 What is Strategic Environmental Assessment?

SEA is a systematic method for considering the likely environmental effects of certain plans, programmes and strategies (PPS). SEA aims to:

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

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

**Screening:** determining whether the PPS is likely to have significant environmental effects and whether an SEA is required.

**Scoping:** deciding on the scope and level of detail of the Environmental Report and the consultation period for the report – this is done in consultation with Scottish Natural Heritage, Historic Scotland and the Scottish Environment Protection Agency.

**Environmental Report:** publishing an Environmental Report on the PPS and its environmental effects, and consulting on that report.

**Adoption:** providing information on: the adopted PPS; how consultation comments have been taken into account; and methods for
monitoring the significant environmental effects arising from its implementation.

**Monitoring:** monitoring significant environmental effects in such a manner so as to also enable the Responsible Authority to identify any unforeseen adverse effects at an early stage and undertake appropriate remedial action.

The assessment process is structured around SEA topic areas. These topic areas are the range of environmental issues which should be explored through the assessment. They include biodiversity, flora and fauna, population and human health, water, soil, air, climate, material assets, cultural heritage and landscape.

### 1.3 Context

One of the early stages of the SEA process is to consider the relationship of the guidance to other relevant policies, plans, strategies and environmental objectives. This allows key environmental issues to be identified for consideration during the process of preparing the guidance. It is also important to identify the plans and strategies that will influence the guidance and those that will be influenced by the guidance. Table 2 sets out the review of the legislation, policies, plans and strategies that are considered to be of most direct relevance to the draft guidance.

To help consider the environmental effects of the draft guidance information about relevant aspects of the environmental baseline was gathered. Because the guidance provides advice relating to sections of the Antonine Wall across the width of Scotland, a baseline incorporating aspects of the five relevant Local Authorities was established. This included information on landscape, historic environment, soil, human health and population as the topics considered likely to be affected by the guidance. Section 4 of the report summarises the environmental baseline.

### 1.4 Assessment of the environmental effects of the guidance

A framework has been used to help predict the environmental effects of the guidance. This is shown in Table 4 and allows questions to be asked whilst stepping through the requirements of SEA. This approach helped to make the assessment systematic and consistent.

It was found that the guidance has the potential to result in **significantly positive effects** for the historic environment and landscape. There may also be minor positive effects for population and human health and soil. No negative effects (individually or cumulatively) were identified through the assessment. The detailed results of the assessment are described in Section 6 of the report.
1.5 Mitigation Measures

No significant negative effects were predicted during the course of the assessment which would require specific mitigation measures. However it was possible to make a number of recommendations to further improve the clarity and coverage of the guidance to enhance the positive effects. These recommendations are explained in section 6 of the report.

1.6 Monitoring

Although no significant negative effects are predicted it will be important to ensure that it is understood how the guidance is affecting the environment once it is being implemented. As such ways to monitor the effects of the guidance have been suggested in section 7 of the report.

1.7 Consultation

This Environmental Report accompanies the draft guidance for six weeks of public consultation from 20 June 2011 to 5 August 2011. Any comments that you would like to make on either documents are welcomed. With regards to the Environmental Report the main questions to consider is:

Do you agree with the results of the environmental assessment and have the key issues associated with implementing the guidance been identified?
2. Introduction

2.1 Background

As part of the preparation of the Frontiers of the Roman Empire (Antonine Wall) World Heritage Site Supplementary Planning Guidance, North Lanarkshire Council is carrying out a Strategic Environmental Assessment (SEA). SEA is a systematic method for considering the likely environmental effects of certain plans, programmes and strategies (PPS). SEA aims to:

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

The information set out in this report is based on the assessment of the draft guidance. The findings of this assessment have influenced the preparation of the guidance and will go on to inform the final document. SEA is required by the Environmental Assessment (Scotland) Act 2005. The key stages are:

- **Screening**: determining whether the PPS is likely to have significant environmental effects and whether an SEA is required
- **Scoping**: deciding on the scope and level of detail of the Environmental Report, and the consultation period for the report – this is done in consultation with Scottish Natural Heritage, Historic Scotland and the Scottish Environment Protection Agency
- **Environmental Report**: publishing an Environmental Report on the PPS and its Environmental effects, and consulting on that report
- **Adoption**: providing information on: the adopted PPS; how consultation comments have been taken into account; and methods for monitoring the significant environmental effects of the implementation of the PPS
- **Monitoring**: monitoring significant environmental effects in such a manner so as to also enable the Responsible Authority to identify any unforeseen adverse effects at an early stage and undertake appropriate remedial action
The purpose of this Environmental Report is to:

- provide information on the content of the guidance;
- identify, describe and evaluate the likely significant effects of the guidance and its reasonable alternatives; and
- provide an early and effective opportunity for the public, and Consultation Authorities to offer views on any aspect of the relevant documents.

The key facts relating to the guidance are set out in Table 1 below.

<table>
<thead>
<tr>
<th>Responsible Authority:</th>
<th>North Lanarkshire Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of guidance:</td>
<td>Frontiers of the Roman Empire (Antonine Wall) World Heritage Site Supplementary Planning Guidance</td>
</tr>
<tr>
<td>What prompted the guidance:</td>
<td>Commitment set out in the Antonine Wall World Heritage Site Management Plan 2007-12</td>
</tr>
<tr>
<td>Subject:</td>
<td>Planning, historic environment</td>
</tr>
<tr>
<td>Period covered by guidance:</td>
<td>Undefined</td>
</tr>
<tr>
<td>Frequency of updates:</td>
<td>As required</td>
</tr>
<tr>
<td>Area covered by guidance:</td>
<td>Antonine Wall World Heritage Site and Buffer Zone which includes Falkirk, North Lanarkshire, East Dunbartonshire, Glasgow City Council, and West Dunbartonshire</td>
</tr>
</tbody>
</table>
| Purpose and/or objectives of guidance: | To help ensure that development along the wall retains, protects and preserves the Outstanding Universal Value of the monument and its setting. In particular, it seeks to:  
  - explain the significance of the Antonine Wall and its status as a World Heritage Site  
  - encourage early and effective consultation with Councils and Historic Scotland  
  - outline the approach and procedure for assessing development affecting the World Heritage Site  
  - set out the criteria which will be applied in determining planning applications for development along the line and within the setting of the World Heritage Site  
  - guide decisions on planning appeals and enforcement |
| Contact Name:           | Lyndsay Noble |
| Job Title:              | Senior Planning Officer |
| Contact Address:        | Fleming House  
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  Cumbernauld  
  G67 1JW |
| Contact Tel:            | 01236 616 242 |
| Contact Email:          | NobleLy@northlan.gov.uk |
Figure 1: Antonine Wall World Heritage Site and Buffer Zone Location map
2.2 Content of the draft guidance

The purpose of the guidance is to:
- explain the significance of the Antonine Wall and its status as a World Heritage Site
- encourage early and effective consultation with Councils and Historic Scotland
- outline the approach and procedure for assessing development affecting the World Heritage Site
- set out the criteria which will be applied in determining planning applications for development along the line and within the setting of the World Heritage Site
- guide decisions on planning appeals and enforcement

2.3 The SEA process

The requirement for SEA comes from the Environment Assessment (Scotland) Act 2005. The purpose of SEA is to ensure that information on the environmental effects of a plan, programme or strategy is gathered and made available to plan-makers and decision takers as the plan is prepared and implemented. The overarching aim of SEA is to promote sustainable development. Under section 5(3) of the Act, plans, programmes and strategies with the potential to have significant environmental effects are to be subject to environmental assessment prior to adoption. As is the case here, certain types of guidance can also qualify for and require SEA.

The guidance will be adopted by five local authorities and Historic Scotland. In this situation however, one Responsible Authority needs to be identified and in this case it is North Lanarkshire Council. As North Lanarkshire Council, with agreement of all parties, considered that the guidance has the potential to result in significant environmental effects they submitted a Scoping Report to the Scottish Government’s SEA Gateway on 3 July 2009 to seek the views of the relevant Consultation Authorities (SNH and SEPA). SNH and SEPA agreed that the guidance is likely to have significant environmental effects for all SEA topics and helpful comments were received from both organisations who were generally supportive of our proposed approach.

During the assessment some changes were made to the scope of the assessment to better reflect the purpose of the guidance. Further details on the scoping process can be found in Section 3.2. Following on from the scoping stage, an environmental assessment of the draft guidance was carried out as it was being developed. This report presents the results of that environmental assessment, sets out the measures proposed to mitigate/enhance certain elements of the guidance and suggests indicators to monitor its effects. This report accompanies the draft guidance for a six week period of public consultation from 20 June 2011 to 5 August 2011.

Once the consultation period is complete, the need for changes to the guidance will be reviewed. Where significant changes are made which could result in significant environmental effects, an assessment will be undertaken of their effect, and reported in the SEA Post Adoption Statement. This will be published along with the final guidance.
3. Environmental Objectives and Scope of Assessment

3.1 Other plans, programmes and environmental objective

One of the early stages of the SEA process is to consider the relationship of the guidance to other relevant policies, plans and strategies. This allows key environmental protection objectives to be identified for consideration during the preparation process. It is also important to identify both the plans, programmes, strategies and environmental objectives that will influence and those that will be influenced by the guidance itself. An understanding of the context and the hierarchy that the guidance sits within is useful for giving early thought to any required mitigation measures and where they may be best implemented.

We have not published our full review of relevant plans, programmes and strategies; instead, Table 2 sets out our review of those that are considered to be most directly relevant to the guidance. It has been assumed that the key environmental objectives for each of the environmental topics identified in Schedule 3 of the Act are translated into national policy and strategy. The environmental protection framework provided by European legislation has not been reviewed in detail. Instead, the focus has been to review the key areas of legislation and policy relevant to the guidance and its assessment.
<table>
<thead>
<tr>
<th>SEA Topic</th>
<th>Summary of Environmental Objectives</th>
<th>Plan, Programme or Strategy</th>
</tr>
</thead>
</table>
| Biodiversity, Flora and Fauna | Biodiversity policies from international to local levels aim in particular to conserve habitats, species and ecosystems. Halting the decline of key species is important, and where possible remedial action and enhancement should be implemented in degraded areas. Policies also note the importance of an ecosystem approach – an holistic, landscape approach to biodiversity conservation that goes beyond the traditional emphasis on protecting individual sites. | Council Directive 79/409/EEC on the conservation of wild birds  
Council 92/43/EEC the conservation of natural habitats and of wild fauna and flora  
Wildlife and Countryside Act 1981  
Conservation (Natural habitats &c.) Amendment (Scotland) Regulations 2007  
Nature Conservation (Scotland) Act 2007  
UK Biodiversity Action Plan  
Scotland’s Biodiversity – It’s In Your Hands. |
| Population and Human Health | Policy outlines the need to seek to improve health and quality of life.                                                                                                                                                                   | Improving Health in Scotland – the Challenge                                                              |
| Soil                      | Policies on soil seek to protect resources from a range of impacts, including soil sealing by development, increased susceptibility to erosion and soil pollution.                                                                          | Scottish Soil Framework (2009)                                                                            |
| Water                     | Water related policies aim to protect water resources, and achieve an improvement in their ecological condition where appropriate. River Basin Management Plans, which were prepared under the Water Framework Directive and WEWS Act set specific objectives for the protection and improvement of water resources within each river basin. | Water Framework Directive 2000/60/EC  
Water Environment and Water Services (Scotland) Act 2003 (WEWS) Act  
Scotland River Basin Management Plan (2009) |
| Air                       | Air quality targets have been set at the European and UK levels. The Air Quality Strategy for England, Scotland, Wales and Northern Ireland sets objectives for Particulate Matter (PM), oxides of nitrogen (NOx), sulphur dioxide ($SO_2$) and ozone ($O_3$) amongst others. Good progress is being made towards meeting them. | 2008/50/EC Directive on ambient air quality and cleaner air for Europe  
<table>
<thead>
<tr>
<th>SEA Topic</th>
<th>Summary of Environmental Objectives</th>
<th>Plan, Programme or Strategy</th>
</tr>
</thead>
</table>
| Climatic factors | Policies focus on the need to cut greenhouse gas emissions. National targets are for an 80% reduction by 2050 making a contribution to climate change abatement targets set at the UK, EU and international levels. Energy policy highlights the importance of energy efficiency, and the need to achieve a shift from fossil fuels to renewable sources of energy. In addition the importance of adequate, planned adaptation to future climates is noted in order to increase the resilience of communities, and natural and economic systems. | UK Climate Change Act 2008  
Climate Change (Scotland) Act 2009  
Climate Change Delivery Plan (2009)  
Climate Change Adaptation Framework (2009)  
UK Low Carbon Transition Plan (2009)  
| Cultural heritage| Historic environment policies aim to identify and protect historic buildings and sites from inappropriate development and damage. Policies extend beyond specific designated sites to reflect the value of wider townscapes, the setting of monuments and historic buildings, and wider cultural landscapes. | Scottish Historic Environment Policy (SHEP) 2009  
Scottish Planning Policy (SPP)  
Managing Change in the Historic Environment Guidance Notes  
FRE (Antonine Wall) WHS Management Plan  
Convention Concerning the Protection of the World Cultural and Natural Heritage (1972) |
| Landscape        | Landscape policies aim to not only safeguard protected areas, but to recognise and conserve wider landscapes. These may not be formally designated but make an important contribution to the quality of environment. | Council of Europe, European Landscape Convention (2000)  
SNH Landscape Policy Framework  
SNH Wildness in Scotland’s countryside  
SNH Natural Heritage Futures  
SNH National Scenic Areas Programme |
| Material assets  | Agricultural and forestry policies promote sustainable land use, environmental protection and stewardship, and emphasise the importance of delivering public goods out with market mechanisms. Policy sets a target of increasing forest cover to 25% of land cover. The planning system highlights the need to allow the development of high quality, well designed, energy efficient housing. Efficient design will contribute to climate change abatement targets, as will transport emission reductions. | Scottish Forestry Strategy  
Strategic Transport Review Project  
National Transport Plan  
Local Housing Strategy  
Scottish Planning Policy  
A Vision for Scottish Agriculture  
The Zero Waste Plan for Scotland |
In addition to those plans outlined in table 2, the most relevant planning document is the Local development Plan (adopted or in preparation) for each Council, all of which contain relevant policies for land use and its responsible management.

The key environmental objectives identified from the review of legislation, policies, plans and strategies are:

- To protect and where appropriate enhance the historic environment - specifically, protecting the archaeological remains, the line and the setting of the Antonine Wall (an ancient monument of international importance)
- To halt the loss of biodiversity and continue to reverse previous losses through targeted action for species and habitats
- To protect and enhance species and habitats
- To increase awareness, understanding and enjoyment of the natural and historic environment
- To protect and enhance the water environment (with a requirement to ensure that the status of all waters are protected from deterioration)
- To promote and encourage opportunities for people of all abilities to enjoy access to wildlife and the countryside
- To manage access appropriately to avoid damage to archaeological sites or habitats, and disturbance to wildlife, especially breeding birds, by heavy public use of sensitive areas
- To protect, enhance and, where appropriate, restore landscape character, local distinctiveness and scenic value
- To protect soil resources and promote soil function
- To reduce the exposure of sensitive receptors to poor air quality
- To promote sustainable development
- To reduce our contribution to climate change and be positioned to respond to the predicted effects of climate change

3.2 Scoping the environmental topics to be included in the assessment

A key part of the SEA process is identifying the environmental parameters (from Schedule 3 of the Act) that are likely to be affected by the guidance. This can lead to some environmental topics being “scoped out” of the assessment and helps to focus the SEA on the key environmental issues. A Scoping Report was prepared in July 2009 which set out the proposed scope and level of detail of the assessment and comments were sought from The Consultation Authorities.

At the outset, and at the time of scoping, it was anticipated that the guidance would have a role in delivering other environmental objectives and this was reflected in the scoping in of all topics identified in Schedule 3 of the SEA Act. However, as work on the guidance and its environmental assessment has progressed over the past year it has become clear that for the guidance to be an effective planning tool, focusing on the protection of the World Heritage Site’s Outstanding Universal Value, the opportunity for the incorporation of other environmental objectives is limited. Likewise, the potential for the guidance to negatively
impact upon other interests is also limited. The focus of the guidance is about helping key stakeholders understand the policies by providing criteria that will assist with decision making. The key role of this criteria is to focus upon heritage matters and is not intended to outweigh or supersede other material considerations or policies, particularly those outlined in each Council’s local development plan.

Therefore, while we initially scoped all SEA topics into the assessment, in light of the current focus of the guidance, we subsequently reviewed the scope to better reflect the alternatives that could be reasonably considered and delivered.

While we have considered environmental effects in relation to all environmental topics we consider that the areas where significant effects are now most likely relate to cultural heritage, landscape, soil and population and human health (access). Table 3 provides our rationale for those environmental topics that we have scoped out of the assessment.
### Table 3: Scoping in/out

<table>
<thead>
<tr>
<th>Environmental parameter</th>
<th>Scoped in/out</th>
<th>Potential issues arising from the guidance and justification for scoping in/out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodiversity, Flora and Fauna</td>
<td>Out</td>
<td>Although there may be some indirect effects for biodiversity, flora and fauna as a result of protecting the OUV the guidance will focus on the type and quality of new development on and around the Antonine Wall. It will not contain guidance on other environmental parameters which is outlined elsewhere in national policy and guidance. As such we have scoped this topic out of the assessment.</td>
</tr>
<tr>
<td>Population and Human Health</td>
<td>In</td>
<td>The guidance could have effects on population and human health through the provision of protection for a site of cultural and educational interest.</td>
</tr>
<tr>
<td>Soil</td>
<td>In</td>
<td>There may be effects for soil as a result of guidance on forestry or agriculture activities. This will depend on the advice included in the guidance but we have taken the precautionary approach of scoping the topic in to the assessment.</td>
</tr>
<tr>
<td>Water</td>
<td>Out</td>
<td>The advice in the guidance will not address water quality, flow, flooding or pollution. As such we have scoped this topic out of the assessment.</td>
</tr>
<tr>
<td>Air</td>
<td>Out</td>
<td>It is considered that the guidance will not have significant effects on air. The advice in the guidance is unlikely to significantly improve air quality or lead to higher levels of pollution. As such we have scoped this topic out of the assessment.</td>
</tr>
<tr>
<td>Climatic Factors</td>
<td>Out</td>
<td>It is considered unlikely that the implementation of the guidance will contribute to the causes of climate change or to its mitigation. As such we have scoped this topic out of the assessment.</td>
</tr>
<tr>
<td>Material Assets</td>
<td>Out</td>
<td>Although the guidance may affect forestry and agricultural activities the relevant environmental effects are considered to be those to soil as they will cover future activity rather than current assets. These effects have been considered under the soil topic and material assets scoped out.</td>
</tr>
<tr>
<td>Cultural Heritage</td>
<td>In</td>
<td>The main purpose of the guidance is to provide for the protection of the Outstanding Universal Value. For this reason it is expected that the guidance will have significantly positive effects for the historic environment.</td>
</tr>
<tr>
<td>Landscape</td>
<td>In</td>
<td>Some of the Antonine Wall is designated for its natural landscape value and some areas are currently rural and open. The guidance will be addressing the appropriate scale and land use of developments within these sites and it is therefore considered that it could also significantly effect landscapes.</td>
</tr>
</tbody>
</table>
4. Environmental Baseline, Problems and Evolution

4.1 Environmental Baseline

In order to establish the environmental effects of the draft guidance it is necessary to understand the environmental baseline of the area that is likely to be affected. As noted above, Schedule 3 of the Act lists the environmental parameters that should be considered in SEA. To focus the SEA, baseline information has been gathered on the environmental issues that are likely to be affected by the guidance. For that reason information has not been gathered on those environmental parameters scoped out of the assessment (table 3 sets out the environmental topics that are scoped in/out of the assessment).

Given that the guidance will be implemented all along the line of the Antonine Wall, baseline information has been gathered for each of the five local authorities containing a section. We have not published all the detailed baseline information gathered during our assessment, however, a summary of the key baseline information for each environmental topic scoped into the assessment is set out below.

Population and human health

The environment provides a variety of services that are beneficial to human health including opportunities for education and recreation. Access to historic environment sites, forests, woodlands and nature conservation sites as well as the wider environment can help to promote healthier lifestyles having positive effects on both physical and mental health. The Antonine Wall is therefore an important resource for education, recreation and tourism, allowing visitors to experience and understand the site first hand.

The quality of the environment in which we live can also impact on our quality of life. High quality urban environments, including natural landscapes can create a sense of place, influencing well being. For these values to be retained the Antonine Wall needs to be managed in a sustainable way to ensure that the positive and distinctive contribution it can make to our landscape, sense of history and identity, sense of place and well being can be realised. While the key delivery tool for promotion of the Antonine Wall is the (FRE) World Heritage Site Management Plan, the guidance should help to deliver, and not hinder, opportunities for education and recreation.
The FRE (AW) WHS and buffer zone\(^1\) is typically close to fairly densely populated areas. Recently, the area close to the Antonine Wall in North Lanarkshire has experienced change through recent releases of housing land. This has resulted in some significant population increases at Croy, Gartcosh and Dullatur. Unemployment is below the Scottish average in Falkirk and East Dunbartonshire, but with higher than average levels in North Lanarkshire, Glasgow and West Dunbartonshire. This trend is reflected for the local authorities in lower average life expectancy, and higher levels of poor health and multiple deprivation.

**Historic Environment**

Scotland has five\(^2\) World Heritage Sites, over 47,000 listed buildings and more than 600 conservation areas. 386 sites are currently identified in the Inventory of Gardens and Designed Landscapes. The actual extent of archaeological remains in Scotland is unknown with 8,151 Scheduled Monuments representing only a small proportion of the archaeological sites for which the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) holds records and the many more unrecorded sites and unknown resources throughout the country.

Designation helps to protect important aspects of our cultural and historic environment by ensuring that they are considered in the management of change introduced by development. It is important that consideration goes beyond the designated buildings and sites to reflect the value of wider townscapes, the setting of historic resources and wider cultural landscapes, including the Antonine Wall.

In July 2008, the international cultural and archaeological importance of the Antonine Wall was recognised when the World Heritage Committee of UNESCO\(^3\) inscribed the site as Scotland’s fifth World Heritage Site (WHS). The Antonine Wall then became an extension of the trans-national Frontiers of the Roman Empire World Heritage Site (FREWHS) which already includes Hadrian’s Wall in England and the Upper Raetian German Limes. The intention is that the WHS will eventually include all surviving sections of the frontiers of the Romans in Europe, Africa and the Middle East.

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1. The buffer zone along the Antonine Wall has been defined in relation to local circumstances, including the landscape and modern features such as towns and villages, roads and railways. The aim, as with all buffer zones, is to protect the setting of the monument and, in this case, continue to allow understanding of why the Antonine Wall was erected in a particular location.
3. United Nations Educational, Scientific and Cultural Organisation
The Antonine Wall is of great significance for a number of reasons. It represents one of many sections of a massive military system which stretched over 5000 km from northern Britain, through Europe to the Black Sea, and from there to the Red Sea and across North Africa to the Atlantic coast. This frontier helped to protect – and define – the Roman Empire, one of the greatest states ever to have existed. The Antonine Wall was the most northerly frontier of the Empire, the last of a series of planned frontiers built in the 2nd Century AD and, at the time, the most complex ever constructed by the Romans.

The Antonine Wall runs through the northern part of North Lanarkshire, from Castlecary in the east to Croy Hill in the west. This is one of the most visible sections of the Wall, as it passes along the south side of the Kelvin valley and over the hills. As a result, the Wall has a particularly strong presence in the surrounding area. Other features of interest include the Forth and Clyde Canal, colliery pits and a foundry. There are numerous listed buildings, including a number within the buffer zones of the Antonine Wall.

The parts of the Antonine Wall in Falkirk include the best surviving stretches of the rampart, ditch, outer mound and Military Way, the best surviving fort and annexe earthworks, some visible remains of the stone-walled fort at Castle Cary (the only visible fortlet). The area also includes nine Conservation Areas and numerous listed buildings, many of which are within the WHS buffer zones.

Within East Dunbartonshire the Antonine Wall and the Roman Bathhouse in Bearsden are two of the most important Roman relics. The best evidence of the wall can be seen at New Kilpatrick Cemetery, Bearsden, where the stone base is clearly visible. The ditch to the north of the rampart can be seen to best effect at Bar Hill, Twechar. The Antonine Wall buffer zone includes listed buildings, conservation areas and townscape protection areas.
The Antonine Wall can be found in two locations in **Glasgow** to the northern edge of the City boundary at Summerston and Drumchapel. Other sites of importance include the Forth and Clyde Canal. **West Dunbartonshire** contains the western terminus of the Antonine Wall. The area of the wall within West Dunbartonshire runs from Cleddans Burn in the east, to Duntocher and ends in Old Kilpatrick at the Gavinburn Roman fort. Other sites of importance include the Forth and Clyde Canal.

With World Heritage Site status comes a commitment to protect the exceptional cultural significance of the Antonine Wall and Outstanding Universal Values (OUV) for which the site was inscribed. It is imperative that development does not compromise the values for which the Antonine Wall was inscribed as a World Heritage Site, nor its authenticity or integrity. New development is a key threat to the cultural heritage resource.

The Military Way would have run the entire length of the wall. It was normally about 5.5m wide and placed about 50m south of the wall. It rarely survives as a visible feature, but can be seen here at Bar Hill, Twechar.
**Soil**

Soils are an important natural asset on which life depends. They perform a wide range of essential environmental, social and economic functions, such as growing food, controlling the quality and quantity of water flow, and storing carbon. Scottish soils are distinguished by their high organic content, water content and leached character. Soil also protect archaeological remains and provides a record within it of previous cultivation and improvement and, therefore, of the historical development of landscapes and societies.

Within Falkirk the soil resource varies from higher quality agricultural land in the valley lowlands to the poorer soils of the more elevated areas. For example, the large rural area of the Slamannan plateau and smaller outliers around Denny, to the north at Airth and east of Polmont, support a largely open agricultural landscape. To the west, the soils are typically of lower quality for agriculture. There is a high percentage of agricultural land considered to be of high quality with land capability for agriculture classes 2 to 4 (wide to narrow ranges of crops) occurring throughout the lower lying areas of the Forth estuary and Carron Valley.

All of the local authority areas have a long history of industrial activity. Each have a legacy of vacant, derelict and contaminated land to varying degrees. Trends in the quantities of vacant and derelict land are uncertain, as there have been recent phases of re-development. Development pressure (including agricultural land management, forestry and industrial operations) is identified as the key threat to soils.

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5 Scottish Soil Framework: [www.scotland.gov.uk/Publications/2009/05/20145602/13](http://www.scotland.gov.uk/Publications/2009/05/20145602/13)
Landscape

Scotland has a rich variety of landscapes, not limited to places where there has been no development. More than one million hectares are designated as National Scenic Areas, reflecting areas of the highest landscape value and National and Regional Parks afford protection to scenic areas of national and regional importance, respectively. Landscapes are dynamic, shaped by the interaction of natural processes and human activities. They can be strongly influenced by built development and land management. The pace and scale of landscape change has increased with technological progress.

Landscapes are a key part of our cultural heritage having huge economic potential and are a vital part of our sense of place and general well-being. Scottish Planning Policy requires consideration of development impacts on landscapes and emphasises the importance of a sympathetic approach. Consideration should be given to landscapes outwith designated areas and should be managed to safeguard and enhance their distinct identity. Designated areas should be managed in such ways that are consistent with safeguarding their scenic value.

The Antonine Wall stretches from the coastal landscape at Bo'ness through the broad valleys and agricultural farmland, to Glasgow and West Dunbartonshire. Three Areas of Great Landscape Value (AGLV) cover the surrounding upland and valley landscapes of the Antonine Wall within Falkirk council area.

Pressures on the landscape include insensitive development, development pressure in the urban fringe (particularly Falkirk and North Lanarkshire) and wide scale visual effects such as windfarms.
**Gaps and or unreliability of the Environmental Baseline data**

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

- The Antonine Wall and buffer zone is a specific linear feature which occupies a small area of land within each local authority area. The environmental baseline information available across the SEA topic areas is typically produced at a local authority level, and therefore wider trends have had to be extrapolated as relevant to Antonine Wall and buffer zone.

- There is a lack of information on landscape trends and the implications of climate change on the landscape and townscape, or historic environment. SNH is currently undertaking research to explore the landscape implications of climate change.

- There is limited information on local amenity, which can be extrapolated to some extent from the results of open space audits, which reflect the quality of open spaces. However although open space audits are underway or completed in the local authorities in question the results of the analysis are not widely available.

**4.2 Environmental Issues**

The purpose of this section is to explain how existing environmental problems will affect or be affected by the guidance and whether it is likely to aggravate, reduce or otherwise affect existing environmental problems.

Environmental problems that affect the guidance were identified through an initial analysis of the baseline environmental data for the Antonine Wall and buffer zone. The key issues for the area are:

- High levels of deprivation and poor health in some areas
- Areas of vacant, derelict and contaminated land
- Some decline in quality of historic environment
- Pressures on landscape and townscape from new development, including renewable energy

These environmental problems and their implications for the guidance are summarised in table 4.
### Table 4. Environmental problems relevant to the guidance

<table>
<thead>
<tr>
<th>Topic</th>
<th>Problem</th>
<th>Supporting data (where available)</th>
<th>Implications for Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population and human health</strong></td>
<td>High levels of deprivation and poor health in some areas.</td>
<td>Census &amp; SIMD data</td>
<td>The guidance should ensure that access and interpretation to the Antonine Wall is not inhibited, particularly in more deprived areas.</td>
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<td></td>
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<td>GROS Statistics</td>
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<td>Falkirk Community Health Profile</td>
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<td>East Dunbartonshire Local Plan State of the Environment report 2008</td>
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<td></td>
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<td>North Glasgow Community Health Profile.</td>
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<td></td>
<td></td>
<td>A Community Health and Wellbeing Profile for West Dunbartonshire.</td>
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<tr>
<td></td>
<td></td>
<td>Glasgow Centre for Population Health, 2008.</td>
<td></td>
</tr>
<tr>
<td><strong>Soil</strong></td>
<td>Areas of vacant, derelict and contaminated land.</td>
<td>Vacant and Derelict Land Register</td>
<td>The guidance should allow for (and not inhibit) remediation of vacant, derelict and contaminated land where this meets the objectives of protecting the Outstanding Universal Value.</td>
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<tr>
<td></td>
<td></td>
<td>SEPA's State of the Environment Report</td>
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<td></td>
<td>East Dunbartonshire Local Plan State of the Environment report 2008</td>
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<td>Glasgow City Plan SEA</td>
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<td></td>
<td></td>
<td>The State of Scotland’s Soils (SEPA Report, 2011)</td>
<td></td>
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<tr>
<td><strong>Cultural heritage</strong></td>
<td>Some decline in quality of historic environment resources.</td>
<td>Falkirk Council Sustainable Falkirk indicators 2004</td>
<td>The guidance should support the protection and enhancement of the historic environment resources by identifying the areas for protection and identifying a series of key principles.</td>
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<td></td>
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<td>Falkirk Local Plan SEA, Structure Plan Report of Survey</td>
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<td></td>
<td></td>
<td>North Lanarkshire State of the Environment report</td>
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<td></td>
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<td>Glasgow City Plan SEA</td>
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<td></td>
<td></td>
<td>West Dunbartonshire Local Plan Environmental Report 2008</td>
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<tr>
<td><strong>Landscape, townscape and amenity</strong></td>
<td>Pressures on landscape and townscape from new development, including renewable energy.</td>
<td>North Lanarkshire State of the Environment Report</td>
<td>The guidance should ensure that the impacts of new development on landscape, townscape and amenity are minimised by identifying important features in relation to the Antonine Wall, and criteria for assessing impacts on these features.</td>
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<tr>
<td></td>
<td></td>
<td>Local plans</td>
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</tbody>
</table>
4.3 Evolution of the environment without the guidance

Without the Supplementary Planning Guidance, planning applications for development in and around the World Heritage Site would continue to be determined according to the policies of the existing Development Plan. While such an approach is expected to mitigate any significant negative effects upon the Antonine Wall, there is potential for inconsistency in both the interpretation and application of the policies. This is one of the key reasons why there is a consistent protection policy that will apply (once adopted) to all Council areas. The absence of this guidance may also result in a reduced awareness that the Antonine Wall forms part of a wider international designation.

The pits, known as lilia, to the north of the fort at Rough Castle
5. Assessment Approach and Methods

5.1 Scoping the level of detail for the assessment

It is important for any environmental assessment to be undertaken at an appropriate level of detail. In reaching a view on the level of detail it is necessary to understand the place of the guidance in the overall hierarchy of management and protection for the historic environment. We hope that its content will influence the decisions taken on individual planning applications for developments along the Antonine Wall and its Buffer Zone. The guidance may also influence other public land use policies such as those for forestry. As the format of the guidance was still being developed and has been influenced by the SEA we did not include detailed information on its likely content in this scoping report. We now know that the guidance will contain a list of factors (key principles) to consider in relation to a development proposal and examples/criteria of what could be considered to result in adverse effects and how to mitigate (avoid) harm (and where possible enhance positives). Given the SEA is about understanding and testing the likely significant effects of implementing the guidance the following elements were identified as being the key areas to consider:

- Section 3: Assessing the impact of development
- Section 4: Design and mitigating impacts

Other aspects of the guidance, such as the background information to the inscription of the site and procedural matters (e.g. the need for scheduled monument consent in some circumstances) have not been assessed as these will have no or minimal environmental effects.

5.2 How was the draft guidance assessed?

We adopted a two stage approach to the assessment. Firstly, we considered the way in which the guidance could be prepared. This looked at the overall approach of implementing the commitment set out in the overarching policy. The findings of this are set out in section 6.1.

Secondly, we assessed alternative ways of implementing the guidance in terms of how we explain the overarching policy for the protection of the (FRE) Antonine Wall WHS and its Buffer Zone. As noted above, we consider this to be the sections relating to assessing the impact of development (3) and design and mitigating impacts (4). We therefore tested the key principles contained in each of these sections. At scoping stage an assessment framework was developed to provide a consistent way of assessing the draft guidance. Given the revised scope of the assessment and based on an initial analysis of the environmental issues relevant to the guidance we reviewed our approach.
We took the view that the assessment should focus on four key questions. They are:

- **Historic Environment**: Will the principles provide for protection of the Outstanding Universal Value of the site?
- **Landscape**: Will the principles help to protect and enhance landscape character and scenic value?
- **Population and Human Health**: Will the principles promote access to the cultural and natural environment for recreation or education?
- **Soil**: Will the principles provide for the protection of soil resources (and function)?

These questions formed the foundations for our approach to the assessment which looked thematically at the guidance reflecting the SEA environmental topic areas. **Table 4** below sets out the framework we used in our assessment. This structure allows these questions to be asked whilst stepping through the requirements of SEA.

**Table 4: Assessment Structure**

<table>
<thead>
<tr>
<th>Part of the Guidance subject to assessment (Alternatives, Key principles)</th>
<th>SEA Topic: e.g. Landscape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which landscape issues could the guidance address (baseline)?</td>
<td></td>
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<tr>
<td>Is this issue addressed by the guidance?</td>
<td></td>
</tr>
<tr>
<td>Are there any alternatives that could further improve / optimise the benefits of the guidance with respect to landscape?</td>
<td></td>
</tr>
<tr>
<td>Could any of the measures within the guidance (or alternatives to them) have direct or indirect impacts on landscapes?</td>
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<tr>
<td>How significant would these effects be?</td>
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<tr>
<td>Is mitigation recommended?</td>
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<tr>
<td>Are there opportunities to enhance the guidance to provide more positive effects for the wider environment as a whole?</td>
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</tbody>
</table>
6. Assessment Findings

6.1 Assessment of broad alternatives

The commitment to preparing guidance was made in the (FRE) World Heritage Site Management Plan and subsequently within the respective local development plans for each Council:

‘The Council in association with partner Councils and Historic Scotland will prepare Supplementary Planning Guidance on the criteria which will be applied in determining planning applications for development along the line or within the setting of the Antonine Wall as defined on the Proposals Map’

In carrying out our assessment we needed to think about alternatives to the guidance, and different ways of how it could be prepared and implemented. Given the above commitment, evaluation of the environmental effects of not preparing guidance, known as the ‘business as usual’ scenario is not considered to be reasonable. In terms of alternatives the SEA has assessed the environmental effects of alternatives that have been considered during the guidance preparation process. These have been assessed against the same framework and a recommendation made on the best environmental option. We have taken a two stage approach to the consideration of alternatives.

At the outset, various alternatives were considered as a way of implementing this commitment, including:

**Alternative 1:** A high level document which provides strategic guidance. This would examine the implications of a policy which sets out headline objectives for the protection of the Antonine Wall WHS and buffer zone, and allows interpretation of these objectives within each local authority context. This could result in flexible interpretation of the guidance, with different approaches taken within local authorities and between the 5 local authorities resulting in varied impacts on the SEA topics.

**Alternative 2:** A more detailed and prescriptive approach tailored to each buffer zone and focusing on heritage protection. This would examine the potential environmental implications of detailed and prescriptive guidance which could result in a high level of heritage protection, potentially at the expense of wider environmental issues. It could also result in a prescriptive and rigid framework which does not allow opportunities for enhancement of associated environmental effects.
Alternative 3: The individual local authorities preparing guidance, instead of the co-ordinated approach across the local authorities. This would examine the environmental implications of a range of approaches to managing development along the length of the Antonine Wall and may result in a lack of consistent management of the wall as a feature as a whole. This may result in differing levels of protection and management of the buffer zone in different local authority areas.

Alternative 4: Guidance which, in addition to providing protection for the Antonine Wall and its setting, aimed to derive planning gains from development in the form of improvements in access, interpretation, landscape enhancement and restoration of derelict land. This option could also have a role in assisting with the implementation of green networks. While positive for the natural environment, this may result in an ambiguous message regarding the mitigation of impacts on the historic environment.

Summary and preferred alternative
While we considered each of the above options to be reasonable approaches, three key factors influenced our selection. The first is the need for consistent decision making along the length of the Antonine Wall. It was recognised that should each authority provide an individual interpretation of the single policy then there may be scope for ambiguity and inconsistency. This may then in turn lead to significant negative effects, particularly for the historic environment. It is also recognised that a prescriptive approach framework tailored to each Buffer Zone/Area would not be flexible enough to deal with the range of environmental issues that proposed development could bring. Finally, while the guidance could have a role in encouraging greater access to the Antonine Wall (and improvements in certain circumstances), the most appropriate mechanism for this would be the FRE (AW) WHS management plan and associated access strategy.

Recommendation: Prepare a single guidance document adopted by each authority which contains a high level of protection for the Outstanding Universal Value of the property.

6.2 Assessment of alternatives within the guidance

Once the overall approach had been established we explored the alternative ways of drafting the guidance in terms of the key principles contained within the text: As noted above, we assessed the following sections:

- Assessing the impact of development
- Design and mitigating impacts

The following summary boxes are taken from sections 3 and 4 of the draft guidance.
Key points:

- **Adverse impacts could include a development which:**
  - Destroys or would lead to the damage of archaeological remains
  - Interrupts key views to or from the WHS
  - Changes the character of the landscape in and around the WHS
  - Reduces people’s appreciation or understanding of the WHS in its landscape setting
  - Could negatively affect any of the qualities or significance for which the WHS was inscribed

- **Any physical impact on the surviving fabric of the WHS** – whether upstanding or below ground, known or previously unrecognised – will not be permitted.

- **Proposals on previously developed sites that do not extend below the vertical buffer zone** may be acceptable in certain circumstances.

- **Detailed archaeological investigations will be required to accompany any proposals for development** within the boundaries of the WHS.

- **There will be a presumption against development** within the Buffer Zone which would have an adverse impact on the WHS and its setting.

- **The criteria set out in paragraph 3.9 will be applied in the assessment of what is an adverse impact** on the setting of the Frontiers of the Roman Empire (Antonine Wall) World Heritage Site. (The authenticity and integrity of the setting, the significance of the setting, the character of the landscape in which the WHS sits and the quality of the wider landscape).

- **The Council may advise developers to demonstrate they have given due consideration to the cumulative impact of their development on the Antonine Wall and its setting.** Such consideration would include:
  - What developments or types of development, in the vicinity of the proposed site have adversely affected the integrity of the WHS in the past?
  - What ongoing activities, developments or natural processes are affecting its physical condition and survival, and the integrity of its
Summary of key principles for ‘Design and Mitigating Impacts’

Key points:
- In the first instance proposed development should **avoid** any adverse impact on the WHS and its setting. Where this is not practicable, proposals which **minimise** impact upon the site and its setting maybe acceptable, taking account of the following principles:

  **Careful site selection:**
  Site selection should seek to avoid the most sensitive parts of the WHS and Buffer Zone, preserving remains in situ.
  Prioritise previously developed sites, taking account of the ‘vertical buffer zone’ and allowing, where possible, development to fit within existing settlement patterns.

  **Well considered development layout:**
  Proposed development should seek to maximise the benefit of existing site features, especially topography and vegetation, to eliminate adverse visual impacts.

  **Appropriate building design:**
  The characteristics of the site, landscape and local building styles should inform the form, massing, height and materials of new buildings, generating coherent, high quality solutions.

  **High quality landscape design:**
  Landscaping – both hard and soft – should be as much part of the development process as the architecture. Well planned and executed design may enable development to be accommodated by the site and wider landscape and has the potential to reinforce existing landscape features and character.

- All development within the Frontiers of the Roman Empire (Antonine Wall) World Heritage Site and Buffer Zone will be expected to be of good design, demonstrating: careful site selection; well considered development layout; appropriate building design; and high quality landscape design.

- Mitigating action which redresses the adverse impact of development within the Buffer Zone may be acceptable but must be discussed in consultation with – and be to the satisfaction of – the Council and Historic Scotland.

Please refer to sections 4 and 5 of the draft guidance for further information.
6.3 Assessment findings – key principles

6.3.1 Historic Environment

The key principles contained in the guidance should help those responsible for decision making to understand the types of developments which should be avoided due to their likely adverse impacts on the Outstanding Universal Value (OUV). It is particularly useful where the principles provide an explanation of how certain changes can affect the Antonine Wall and its setting e.g. impacts upon the authenticity, integrity and significance of the setting along with the character and quality of the immediate and wider landscape. Protection of the OUV, which involves consideration of the above, is the primary purpose of the guidance. It is also important to emphasise the Antonine Wall ‘was not constructed in isolation... and that its setting is a fundamental part of what makes the site so significant’.

During our assessment of the first iteration of the guidance we found that key principles relating to mitigation and enhancement could undermine the protection of the historic environment. Given the key purpose for the guidance is to protect the OUV we took the decision to place greater emphasis on protection and specifically noted that ‘All development within the (FRE) Antonine Wall World Heritage site must be of good design, demonstrating: careful site selection, well considered layout’ and that ‘Mitigation of adverse impacts will not be possible in some instances’. Likewise, the key principles include a ‘presumption against development within the Buffer Zone which would have an adverse impact on the WHS and its setting’. Overall, we consider that the provision of the key principles should result in significant positive effects for the historic environment by helping to influence the type and scale of development coming forward.

Our assessment also considered elements of the wording to ensure that a robust approach is taken to protecting the historic environment and we therefore consider that the key principles will result in a situation where the OUV is protected from harmful development. While it is the overarching policy that provides the protection, due to the clarity brought by the key principles (for the protection of the site) we consider that they will result in a significant positive effect for the historic environment.

While the focus of the key principles is upon protection, there may be opportunities to encourage proposals that enhance the landscape and restore important elements to help increase our understanding. For example, this may include forestry restructuring that help to open up lines to sight and key viewpoints.

Recommendation: Consider whether the key principles can be amended to encourage landscape enhancement that restore important elements of the wall to increase our understanding and appreciation of the landscape.
6.3.2 Landscape

Key issues for landscapes include the poor landscape settings of many urban and per-urban communities, loss of landscape diversity and local distinctiveness, generally poor design standards, loss of natural and cultural features and erosion of the rural character of lowland Scotland as a result of deterioration and loss of key features. It is quite difficult in this case to draw a distinction between the natural and cultural aspects of the landscapes but it is considered overall that providing more protection to the (FRE) Antonine Wall WHS and its Buffer Zone with clear principles on the need to protect the Outstanding Universal Value could also result in significant positive effects for the protection of landscapes.

Although the (FRE) Antonine Wall WHS designation is a cultural one, the sites cover quite large areas and may form part of wider landscapes valued for their natural features. The significance of the effects for the natural aspects will depend on the nature of the special qualities and characteristics of particular areas along the line of the wall. These are, however, likely to include elements such as viewpoints and lines of sight which tell us how the landscape was before, during and after the Roman occupation.

As noted above, the key principles should help those responsible for decision making to understand the types of developments which should be avoided due to their likely adverse impacts on the OUV, including its wider landscape context. For example, an adverse effects is identified as something which ‘reduces people’s appreciation or understanding of the WHS in its landscape setting’. The effects of the principles on landscapes should be positive, but as with the more general policies, it is more difficult to say whether these would be significant. This is because the significance of effects will depend on the nature of the application and the specific qualities of the section of the Antonine Wall that is involved. However given the restrictions that the principles impose for large scale development it seems reasonable to assume that the principles have the potential to result in significant positive effects for landscapes. As with the historic environment assessment above the principles could be strengthened to provide more clarity on the types of development which should be avoided and the rationale for this.

The assessment has also considered whether there is potential for conflicts to arise between the safeguarding of landscapes and the protection of the OUV. Overall the judgement has been taken that whilst there is potential that measures to enhance some elements of the site (e.g. forestry restructuring could be at odds with landscape objectives) it seems more likely that changes would be mutually beneficial.

**Recommendation:** Consider whether the guidance should include a caveat that enhancement measures should not negatively affect landscape character and scenic value.
6.3.3 Population and Human Health

Protecting the OUV through further explanation of the overarching policy should help to ensure that the positive and distinctive contribution they can make to our sense of history and identity, sense of place and well being is retained. Given the correlation between these factors and population and human health there is the potential that the implementation of the overarching policy and the key principles could result in minor positive effects for these environmental topics. Whether the effects are significant however would likely depend on the content of proposals that come forward. At present the key principles, because the focus is on heritage protection, do not actively seek to increase or promote access to the sites for recreation or enjoyment. It is therefore difficult to say that the key principles, as written, would result in physical changes to the way in which people appreciate the Antonine Wall.

Recommendation: Consider whether the key principles can be amended to encourage developers to consider at an early stage opportunities which promote access to and interpretation of the Antonine Wall.

6.3.4 Soil

The guidance does not include any key principles relating specifically to soils. During the preparation process we considered the inclusion of key principles that would support the restoration of contaminated land, regeneration of brownfield sites and the promotion of sustainable land use. While none of these have been taken forward we consider that the encouragement of site audits and pre-application discussions are likely to have consequential minor positive benefits for soils. One area where this could arise is through discussions regarding site access and existing paths where there may be issues relating to soil erosion and landslip. Overall however, we consider that the protection and enhancement of soils (and mitigation of adverse effects) is more appropriately tackled through the existing local development plans and related guidance.

6.4 Cumulative and synergetic effects

The cumulative and synergistic effects of the guidance for the environment as a whole will likely be significantly positive. This is mainly due to the significant benefits which have been identified for the historic environment (cultural heritage) and landscape topics as well as the potential minor positive effects for population and human health. Strengthened protection of the WHS may lead to minor restrictions on development in certain locations. For example the SPG would be a material planning consideration in the determination of planning applications and could result in further restrictions to the options for the design and siting of developments. No negative effects have been identified through the assessment which could accumulate and in fact the majority of other environmental factors have been scoped out of the assessment because the guidance does not affect these in any significant way. Overall, positive synergistic effects are anticipated as a result of the combined application of the FRE (AW) WHS management plan, local plan protection policies and the enhancing effect of this supplementary guidance.
6.5 Appropriate Assessment

The guidance qualifies as a land use plan to which Appropriate Assessment is applicable, in order to comply with Article 6 of the Habitats Directive.

The Antonine Wall and buffer zone adjoin the Firth of Forth SPA within the Falkirk Council area. Consideration has been given to the potential requirement for an Appropriate Assessment of the content of the guidance, and consultation was undertaken with Scottish Natural Heritage. Given that the role of the guidance is to protect the status and setting of the Antonine Wall and its buffer zone, and it is not a means for promoting development, there is no clear connectivity between this role and the qualifying interests of the Firth of Forth SPA. Therefore it is unlikely that the SPG would undermine the conservation objectives of the site, nor have a significant effect on any qualifying interests either directly or indirectly. It is therefore identified that an Appropriate Assessment is not required.

General view of Croy Hill fort and settlement, Antonine Wall
7. Monitoring and Mitigation

7.1 Monitoring

Although no significant negative effects have been predicted through the assessment it will still be important to understand how the guidance is affecting the environment once it is being implemented. This will help to identify any effects arising which were not predicted through the assessment and allow appropriate mitigation to be sought. Monitoring of the guidance will likely rely on local authority planning application data i.e. number of applications consented which have a significant effect on the Outstanding Universal Value. It would be particularly useful to standardise monitoring methods across the five Council areas. We could also monitor the instances and outcomes of detailed archaeological investigations. Our approach to monitoring will be considered further and outlined in our Post Adoption Statement.

**Recommendation:** Consider standardised monitoring indicators covering all five Councils so that the performance of the guidance (and its environmental effects) can be understood for the site as a whole.

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7 Any effect which would have compromise the value for which the property was inscribed (including its authenticity and integrity)
7.2 Recommendations

Through the strategic environmental assessment, mitigation can be achieved in a number of different ways. It can involve making changes to the guidance itself e.g. amending principles or policies. Mitigation can also involve adding environmental aims or objectives to the guidance to strengthen the inclusion of environmental issues and recommend more detailed measures that should be considered as the guidance is implemented.

Overall, we consider that the guidance will provide valuable advice relating to preparation of an appropriate design statement and the document also advocates discussion at an early stage between planners, Historic Scotland and prospective developers. The guidance will also provide, for both planners and prospective developers, a greater level of clarity on the procedures to be followed in determining an application.

The SEA has shown that the guidance positively addresses many environmental challenges associated with managing development along the Antonine Wall. In particular, we expect that it will offer a strong level of protection for the historic environment. This is likely to lead to significant positive effects over the long term. We also expect that there will be win-wins for other environmental topics including the wider landscape, population and soils.

No significant negative effects were predicted during the course of the assessment which would require specific mitigation measures to be identified. However it was possible to make a number of recommendations to further improve the clarity and coverage of the draft guidance to enhance the positive effects identified. These recommendations are explained in section 6 of the report and highlighted below:

- **[Approach]** Prepare a single guidance document adopted by each authority which contains a high level of protection for the Outstanding Universal Value of the property.
- **[Key principles]** Consider whether the key principles can be amended to encourage landscape enhancement that restore important elements of the wall to increase our understanding and appreciation of the landscape.
- **[Key principles]** Consider whether the guidance should include a caveat that enhancement measures should not negatively affect landscape character and scenic value.
- **[Key principles]** Consider whether the key principles can be amended to encourage developers to consider at an early stage opportunities which promote access to and interpretation of the Antonine Wall.
- **[Monitoring]** Consider standardised approach to monitoring the performance of the guidance and its environmental effects across all five Councils.

In addition to these recommendations, some mitigation measures have been built into the guidance document, such as the potential requirement for ‘detailed archaeological investigations... to accompany any proposals for development within the boundaries of the WHS’.
It is a requirement of the SEA Act to demonstrate how the environmental assessment (and all the comments expressed on the relevant documents) have influenced the preparation of the guidance. This will be explained in the SEA Post Adoption Statement which will be published along with the final version of the guidance. Having taken into representations made on this report, this statement will also include a final version of any monitoring indicators.

The public consultation period on the draft guidance and environmental report ends on 5 August 2011. A final version of the guidance will be prepared following the consultation period to take into account comments made. All changes will be screened to consider if they raise significant environmental issues that have not already been considered in the environmental assessment.

The next steps for consulting on and finalising the guidance include:

<table>
<thead>
<tr>
<th>Expected date</th>
<th>Stage</th>
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<tbody>
<tr>
<td>20 June 2011</td>
<td>Publication of consultative draft guidance and draft Environmental Report</td>
</tr>
<tr>
<td>July/August 2011</td>
<td>Public and stakeholder consultation on draft guidance and draft Environmental Report</td>
</tr>
<tr>
<td>5 August 2011</td>
<td>Closing date for responses</td>
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<tr>
<td></td>
<td>Analysis of comments received during consultation process</td>
</tr>
<tr>
<td>August/September 2011</td>
<td>Revision of draft guidance on basis of consultation findings</td>
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<tr>
<td>December 2011</td>
<td>Publication of Post Adoption SEA Statement and guidance</td>
</tr>
</tbody>
</table>