



United Nations
Educational, Scientific and
Cultural Organization



Frontiers of the Roman Empire
inscribed on the World Heritage List in 2005

Frontiers of the Roman Empire World Heritage Site Hadrian's Wall Management Plan 2008-2014



HADRIAN'S WALL
COUNTRY



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Preface

**by the Rt Hon Andy Burnham MP,
Secretary of State for Culture, Media and Sport**

The remains of Hadrian's Wall represent one of the most extraordinary achievements in our history and, as such, they deserve a response from us that is commensurate in sustaining them for the enjoyment of future generations. This Management Plan is a significant step in ensuring that the Wall will benefit from the highest standards of care and interpretation and maximise the appreciation and understanding of these exceptional landscapes.

Hadrian's Wall was the first World Heritage Site in the UK for which a Management Plan was published (in 1996); that Plan, and its revised version in 2002, became internationally regarded as an example of good practice. This is the second revision of the Plan for the Wall, and much has changed since 2002. In 2005, another section of the Roman imperial frontier - the Upper German-Raetian *Limes* - was inscribed and, together with Hadrian's Wall, formed the transnational Frontiers of the Roman Empire World Heritage Site. In 2008 this was extended further by the addition of the Antonine Wall, in central Scotland. This exceptional transnational site provides a real opportunity to unite the remaining sections of the frontiers of the Empire, which ran from northern Britain, through continental Europe to the Black Sea, to the shores of the Red Sea and across North Africa to the Atlantic.

Implementing Management Plans is a great challenge. In 2006, with the support of my Department, the Regional Development Agencies for the North East and the North West, together with English Heritage and Natural England, created a new not-for-profit company, Hadrian's Wall Heritage Ltd, which provides a strong focus for the implementation of the Management Plan. The company is tasked with promoting and enhancing the World Heritage Site, with achieving a balance between public access and conservation, and with realising the economic, social and cultural potential that such a special place can bring to local communities.

The Government takes very seriously the responsibility that it has, through my Department, to be accountable to UNESCO and to the wider international community for the conservation and management of each World Heritage Site. This Plan sets out the pressing issues in the conservation and management of the Wall, and outlines the mechanisms for implementation and for monitoring.

I am extremely grateful to the wide number of organisations and individuals who have contributed to the drafting of this Management Plan and particularly to the Hadrian's Wall World Heritage Site Management Plan Committee and Hadrian's Wall Heritage Ltd. I am confident that this Plan will rapidly prove its worth as a framework for effective and coordinated action along Hadrian's Wall over the next five years.



**Andy Burnham MP
Secretary of State for Culture, Media and Sport**



Foreword

by Professor Peter Stone
Chair, Hadrian's Wall Management Plan Committee

Welcome to the third iteration of a Management Plan for Hadrian's Wall. We have come a long way since the first Plan was published in 1996. I think it fair to say that that Plan was met with much scepticism and not a little concern. On reflection, such a response should not have been unexpected as the 1996 Hadrian's Wall Management Plan was the first ever such plan for a UK World Heritage Site and, as such, broke totally new ground. Expectations in some quarters were high but were matched by an unease as to the potential impact the Plan might have on those who lived and worked within the Site.

Over the last twelve years this unease has largely evaporated as both the first and second Plans have helped to deliver not only enhanced protection for the archaeological monuments and landscapes contained within the Site but, by addressing much wider issues, have also helped to redefine what we mean and understand by management of the cultural heritage.

This redefinition of heritage management is based on an unequivocal acceptance that the fundamental purpose of cultural heritage management is to ensure the effective protection of the heritage for present and future generations. However it is equally unequivocal and explicit in asserting that management is much more than this: it is the mechanism through which we strive to understand not only the history of the site but also its use and values for the present and the future. Management based on the values of the Site is a core principle, and the consultation, discussion and consensus building achieved during the process of writing this third Plan will play a crucial part in the future successful management of the Site.

Much has changed over the period of the second Plan with increased interest in the Site from the two Regional Development Agencies, epitomised by their funding of the Major Study, and the creation of Hadrian's Wall Heritage Ltd to help provide a focal point for Wall-wide initiatives. The latter has taken on many of the roles of the very successful Hadrian's Wall Tourism Partnership that worked so hard to make the Site relevant and useful to local communities.

The Plan has been drafted by a series of Interest Groups working to produce particular sections of the document that have been brought together under the supervision of a Steering Committee drawn from the membership of the whole Management Plan Committee. This has been a time-consuming (and not always smooth!) process but the end result is a document that commands broad support. It is a Plan written by those who will be affected by, and who will be tasked to deliver, its content. A new development linked to this Plan is that the Interest Groups will continue to meet throughout its lifetime in order to deliver and monitor its success.

The Plan rests firmly on the strong foundations laid over the last twelve years and in particular on the tireless work of two key individuals who have recently retired: Jane Brantom, who led and personified the successful Hadrian's Wall Tourism Partnership, and Paul Austen of the Coordination Unit and latterly of HWHL. It is invidious picking out individuals where so many have contributed so much, but I hope all of those involved will allow me to express my personal thanks to these two who together have taught me much about successful management and much about Hadrian's Wall. Finally, no Foreword to the Plan would be complete without a strong word of gratitude to Dr. Nigel Mills, World Heritage and Access Director at Hadrian's Wall Heritage Ltd, who has not only overseen the project but who has done so much more to ensure that the Plan is an effective, working document. It is now time for us to start this work.

Professor Peter Stone
Chair, Hadrian's Wall
Management Plan Committee

Acknowledgements

This Management Plan could not have been produced without the considerable contribution made by all of the organisations and individuals of the World Heritage Site Management Plan Committee, the Management Plan Steering Group, the Interest Groups, and the many individuals who have given their generous help and support.

We would like to recognise particularly the enormous amount of work that Paul Austen carried out in preparing this Plan and in establishing an extremely effective framework for consultation prior to his retirement. We would also like to thank English Heritage, and in particular Mike Collins, for their guidance and support in creating this Plan, and Kirsty Norman and David Brough for their work in project managing the later stages of the Management Plan process, and editing the Plan.

How to use the Plan

The Management Plan is a long and complex document, which is primarily intended to be used for reference, rather than to be read as a whole. It is presented in 7 Parts, or chapters.

Parts 1-5 and their supporting Appendices provide background information about the Site and its landscape setting, and why they are judged to be of importance; the management structures and context, and a review of the previous Plan.

Part 6 details the issues affecting management of the World Heritage Site over the next 6 years. The 15 themed Issues papers have been developed in consultation with stakeholder groups, and form the basis for decision-making and discussion during this Plan period.

Part 7 outlines the need for planning, resourcing, and monitoring, and its Appendices tabulate the objectives, policies and actions drawn from the Issues papers.

These are followed by the Bibliography, Glossary, Maps, a feedback form and the Appendices.

If you would like to find out more about any aspect of the management of the WHS please contact Hadrian's Wall Heritage Ltd on 01434 609700 or email enquiries@hadrianswallheritage.co.uk

The Management Plan together with all the Appendices can be downloaded from the website at www.hadrians-wall.org



HADRIAN'S WALL
Frontiers of the Roman Empire
WORLD HERITAGE SITE

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Introduction



HADRIAN'S WALL
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1: Introduction

1.1 The World Heritage Site

1.1.1 Hadrian's Wall was inscribed as a World Heritage Site (WHS) by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in 1987 as the most complex and best preserved of the frontiers of the Roman Empire¹.

1.1.2 In 2005, UNESCO inscribed the German *Limes* as a WHS. The term *limes* is used by UNESCO to refer to the border line of the Roman Empire at its greatest extent in the second century AD. UNESCO agreed at the same time to bring both Hadrian's Wall and the German *Limes* into a single, phased transnational WHS called Frontiers of the Roman Empire. It was determined that other parts of the frontiers could be added to the Site in time²; and in July 2008, the committee inscribed Scotland's Antonine Wall as part of the new WHS.

1.1.3 The complex of archaeological remains comprising Hadrian's Wall is among the best known and best surviving examples of a Roman frontier in design, concept and execution. Largely built in the decade AD 120-130, it served as the Empire's north-west frontier for nearly 300 years except for a period of approximately 20 years, when the frontier reached to the Forth-Clyde isthmus with the construction of the Antonine Wall. It is of significant value in its scale and identity, the technical expertise of its builders and planners, its documentation, survival and rarity, and in its cultural, educational and economic contribution to today's world. It is also the most extensively researched Roman frontier. Work on the Wall, particularly in the 19th and early 20th centuries, provided the motivation and techniques for the development of frontier studies in many other countries.

Terms

1.1.4 Throughout this Management Plan the term Hadrian's Wall WHS refers to the Hadrian's Wall part of the Frontiers of the Roman Empire World Heritage Site. Hadrian's Wall WHS has a Buffer Zone around it (see Part 2), which is referred to separately where applicable.

Location

1.1.5 Hadrian's Wall WHS crosses England from Newcastle upon Tyne (National Grid reference NZ 240640, latitude 54° 59' N, longitude 1° 35' W), to Bowness (National Grid reference NY 224627, latitude 54° 57' N, longitude 3° 13' W), and extends down the Cumbrian coast as far as Ravenglass.

UNESCO World Heritage

1.1.6 World Heritage Sites are places judged to be of universal importance to humanity, and are recognised by their listing under the terms of the UNESCO 1972 World Heritage Convention³. This encourages the identification, protection and preservation of cultural and natural heritage around the world that has been identified as meeting one or more of UNESCO's criteria for Outstanding Universal Value (OUV). The OUV must inform the discussion, formulation, review and implementation of the management of the site (see Part 4: Significance and values).

1.2 The need for a Management Plan

1.2.1 A fundamental purpose of management is to ensure the effective protection of the property for present and future generations. However, management is much more than this: it is the mechanism through which we strive to understand the history of the site, and its use and values for the present and the future. Management based on the values of the Site is a core principle, and the consultation, discussion and consensus-building achieved during the process of writing the Plan will play a crucial part in the future successful management of the WHS.

1.2.2 UNESCO now requires each WHS to have an appropriate management plan or other documented management system specifying how the property's OUV, authenticity and integrity will be preserved, preferably through participatory means, and reflecting the World Heritage Committee's Strategic Objectives⁴.

1.2.3 UNESCO suggests that common elements of an effective management system are:

- a thorough shared understanding of the property by all stakeholders
- a cycle of planning, implementation, monitoring, evaluation and feedback
- the involvement of partners and stakeholders
- the allocation of necessary resources
- capacity-building (improving the knowledge and understanding of managing the WHS)
- an accountable, transparent description of how the management system functions⁵.

¹ UNESCO 1987 *Report of the World Heritage Committee 7-11 December 1987, Eleventh Session*. SC-87/CONF.005/9.

² UNESCO 2005 29COM 8B.46 – *Extension of Properties Inscribed on the World Heritage List (Frontiers of the Roman Empire)*.

³ UNESCO 1972 *Convention Concerning the Protection of the World Cultural and Natural Heritage*.

⁴ UNESCO 2008 *Operational Guidelines*, 108

⁵ *ibid.* 111

1.2.4 In May 2008, the United Kingdom government's Department for Communities and Local Government (CLG) published a Draft Planning Circular on World Heritage⁶, supported by a draft English Heritage Guidance Note⁷. This further emphasises the need for comprehensive management plans based on a proper understanding of the OUV of the Site (see Appendix 1.1: Relevant extracts from policy and guidance documents).

1.2.5 *Management Guidelines for World Cultural Heritage Sites*, published by UNESCO, the International Council on Monuments and Sites (ICOMOS) and the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), advises that management plans should be prepared with both strategic long-term objectives of 30 years and medium-term aims for five to ten years⁸. The first Management Plan for Hadrian's Wall was published in 1996 for five years. A revised Plan was published in 2002 to run for six years to the end of 2007.

1.2.6 Once a management plan is completed and endorsed by the United Kingdom government, it is sent to the UNESCO World Heritage Centre, and a further review is carried out by ICOMOS.

1.3 The WHS Management Plan Committee

1.3.1 As a result of the first Hadrian's Wall Management Plan a number of mechanisms were set up to provide an overall management framework. At the heart of this is the Management Plan Committee (MPC). This has usually met twice a year, and brings together representatives of all organisations and bodies with responsibilities and interests in the WHS (see Appendix 1.2: Membership of the MPC).

1.3.2 The MPC was established 'to act as the primary forum for issues concerning the management of the WHS'⁹. One of its tasks in the 2008–2014 Plan period will therefore be to address the issues identified during consultation for this Plan, and laid out in Part 6.

1.3.3 The responsibilities of the MPC were originally agreed in the first Management Plan in 1996. Changes during the period of the 2002–2007 Plan (see 1.7) have necessitated a review of those responsibilities. The responsibilities of the MPC agreed for the period of the current Plan are to:

- oversee the implementation of recommendations made in the Management Plan
- champion Hadrian's Wall WHS and the values, principles and objectives of the UNESCO World Heritage Committee
- be a forum for management issues, and promote coordinated management of Hadrian's Wall WHS
- consider reports from responsible bodies and agencies and from the Interest Groups (see 1.4) on projects that affect Hadrian's Wall WHS and its Buffer Zone
- agree and oversee annual action programmes and priorities for developing specific aspects of the Management Plan

- consider reports on monitoring the condition of the WHS and on the progress and effectiveness of the Management Plan
- provide strategic direction on projects to ensure that the values of the Site are appropriately protected and promoted
- develop and agree further policies and codes of practice for the protection, recording, research, access, interpretation, and preservation of the WHS, safeguard the interests of those living and working in the Site and Buffer Zone, and encourage the adoption of such policies by responsible bodies and agencies
- oversee the production of the Periodic Report for Hadrian's Wall WHS
- review the conclusions and recommendations in the Management Plan
- determine the frequency of the updating of the Plan, and oversee this process.

1.3.4 The MPC will continue to be the principal forum for overseeing the implementation and periodic review of the Management Plan under the above terms of reference.

1.3.5 The strength of the committee is its wide spectrum of interest and comprehensive representation of organisations. One of its weaknesses however is that in the case of organisations that have multi-faceted roles, the breadth of their responsibilities cannot be fully reflected by their single representative on the committee. This is particularly true of Local Authorities, which protect the WHS through the planning process, and influence and deliver transport and access, tourism and education aspects of the Management Plan. Some Local Authorities are also the managers of sites and museums in the Site.

1.3.6 There are also some important interests that are difficult to include in the committee's structure, such as local communities and businesses connected to tourism. This has been particularly apparent since the ending of the Hadrian's Wall Tourism Partnership (HWTP) in 2006 (see 1.7), into which members subscribed, and which gave businesses a forum. Farming organisations, representing all sectors of their industry, are now present on the MPC.

1.4 The Interest Groups

1.4.1 In response to previous experience and as part of the process of developing the 2008–2014 Management Plan, a number of special Interest Groups have formed. Four new groups bring together those engaged on a day-to-day basis in planning and protection; conservation, farming and land management; visitor facilities, presentation and tourism; and access and transport. Members of the existing Site Managers Group and Museums Group have joined these new groups.

1.4.2 The Education Forum, which brings together the education and outreach staff of partner organisations, continues its activities under the name of the Education and Learning Group.

6 CLG 2008 *Protection of World Heritage Sites*, Draft Planning Circular, May 2008. London: Department for Communities and Local Government.

7 English Heritage 2008 *The Protection and Management of World Heritage Sites in England*, Draft Guidance Note. Annex to *Protection of World Heritage Sites* Draft Planning Circular, May 2008. London: English Heritage.

8 Feilden, K. and Jokilehto, J. 1993 *Management Guidelines for World Cultural Heritage Sites*, UNESCO, ICOMOS, ICCROM. p.2

9 English Heritage 1996 *Hadrian's Wall WHS Management Plan* 1996–2001, 9.4.2



1.4.3 Members of the Hadrian's Wall Research Framework Group have decided that a similar working group should also meet regularly to oversee the application of the Framework.

1.4.4 There will therefore continue to be six Interest Groups reporting to the Management Plan Committee. They are:

Planning and Protection
 Conservation, Farming and Land Management
 Access and Transport
 Visitor Facilities, Presentation and Tourism
 Education and Learning
 Research

Responsibilities of each Interest Group

- **1.4.5** Monitor the progress and effectiveness of the Management Plan in the respective area of interest of that group.
- **1.4.6** Gather data annually against the monitoring indicators in the relevant area of the Plan.
- **1.4.7** Review relevant policies of the Management Plan and, if needed, propose modifications and/or additions.
- **1.4.8** Compile an annual report to the MPC on progress and achievements against policies in the Plan.
- **1.4.9** Identify priorities in the relevant area for the annual action plan and report these to the MPC.

1.4.10 Where possible, each group will appoint its own chair and secretariat, as is already the case with the Education Forum. It may, however, require a continuing stimulus to ensure that the groups meet. Where a group is unable to provide its own secretariat, HWHL (see 1.8) will need to support it, as part of its role in supporting the Management Plan.

1.5 Preparation of the 2008-2014 Management Plan

1.5.1 Consultation and discussion during the preparation of the Management Plan has provided a framework in which those who have interests in the WHS have been able to develop common agreed aims to protect, conserve, present and transmit the values of the Site, and provide detailed understanding of the many facets of its management (see Appendix 1.2: Preparation of the 2008-2014 Management Plan: The process).

1.5.2 Knowledge gained from the process of creating the Plan can be found in Appendix 1.4: Preparation of the 2008-2014 Management Plan: Lessons learned.

1.6 The role of the Plan

1.6.1 The Plan describes the process, mechanisms and organisations through which protection of the OUV of the WHS can be achieved, and addresses the issues and opportunities that World Heritage status offers. These are entered into in more detail than has been the case in past Plans, thanks to the increasing participation of stakeholders. They are intended to generate periodic work programmes or action lists.

1.6.2 The new Plan covers six years from the end of 2008 to the end of 2014. Any issues, policies or actions still relevant from previous Plans have been incorporated.

1.6.3 The Management Plan will be monitored, and revised at short to medium-term intervals as a result of changing circumstances. This presents new opportunities and challenges, and new perspectives on existing challenges. The Plan should retain a degree of flexibility to adapt as necessary, even in its life. Review also provides the opportunity to assess the effectiveness or otherwise of the policies contained in the previous Management Plan; whether the actions identified in it have been carried out, and whether they need to be carried forward.

1.7 The status of the Plan

1.7.1 The Management Plan is not a statutory document and it does not supplant the responsibilities of individual organisations. As a result of wide consultation, it brings together into a single document the Hadrian's Wall-related policies and aspirations of a wide range of individuals and organisations with varying remits.

1.7.2 It is therefore a document that individual partner organisations should use to influence their own strategic plans and action plans as these are prepared, reviewed and implemented over the period of this Management Plan.

1.8 Hadrian's Wall Heritage Ltd (HWHL)

1.8.1 From 1996 to 2006, coordination across the WHS was provided by the Hadrian's Wall Coordination Unit (HWCU), funded by English Heritage. In May 2006 the role of the Unit was transferred to a new dedicated not-for-profit organisation, Hadrian's Wall Heritage Ltd (HWHL). It is a condition of English Heritage's funding to the company that HWHL takes on the Unit's responsibility as broker and champion of the Management Plan. HWHL has in addition absorbed the roles of the HWTP, and Natural England (in its management of the Hadrian's Wall Path National Trail) to become the coordinating body for the management and promotion of the WHS.

1.8.2 There are many areas of the Management Plan for which HWHL will be the primary coordinator and driver. These responsibilities represent a significant advance in the scope and scale of the coordinating body for the Wall from previous Management Plans, and require continuing and adequate resourcing if they are to be delivered effectively.

HWHL and the Management Plan

1.8.3 Working with the MPC and its Interest Groups, specific functions for HWHL in implementing the Management Plan will be:

- overall coordination of the implementation of the Management Plan
- national and international liaison on behalf of the WHS, as appropriate

- coordination of specific partnership projects
- coordination of funding bids for capital projects for the enhancement of the WHS
- housing of Wall-wide projects as appropriate: in particular, sustainable tourism development through the *Hadrian's Wall Country* brand, sustainable access development, and management of the National Trail
- regular communication with stakeholders on current activity relating to the WHS and progress towards meeting Management Plan objectives, including publication of *Frontier*, the Hadrian's Wall magazine
- promoting and coordinating the involvement of local communities in, or linked to, the WHS
- servicing the MPC and, if required, the Interest Groups as sub-committees of the MPC
- production of reports for the MPC on the overall condition of the WHS
- drawing up Annual Action Plans for endorsement by the MPC
- ongoing monitoring and review of progress in implementing the Management Plan, linked to formal revision of the Plan at approximately five-year intervals
- compilation of the Periodic Report when required by DCMS for the UNESCO World Heritage Committee.

HWHL and development

1.8.4 HWHL's complementary remit is to realise the economic, social and cultural regeneration potential of Hadrian's Wall WHS and of the communities and landscapes through which it passes.

1.8.5 HWHL will work with individuals and groups with interests in the WHS, to develop, manage and deliver Wall-wide strategic initiatives. This should be achieved through sustainable development, management and conservation activities that benefit the local community and the wider region, in a way that reflects the values embodied in the WHS Management Plan.

1.8.6 HWHL will promote Hadrian's Wall to wider markets and work with other partner organisations to develop and enhance the presentation of and access to the WHS.

1.9 The vision for Hadrian's Wall

- **1.9.1** A WHS universally recognised as being of importance to humanity as part of the Frontiers of the Roman Empire WHS, with all aspects of the WHS and its Buffer Zone appropriately protected, conserved and enhanced.
- **1.9.2** A WHS and its Buffer Zone made accessible for all to learn about and enjoy in ways that are sustainable.
- **1.9.3** A WHS that is a source of local identity and inspiration, and an exemplar of sustainable development.

- **1.9.4** An increased understanding and knowledge of how the WHS was created, has developed, and is now used, as a basic tool for all current management and development decisions.

Appendices to PART 1

Appendix 1.1 Relevant extracts from policy and guidance documents

Appendix 1.2 Current membership of the Management Plan Committee

Appendix 1.3 Preparation of the 2008–2014 Management Plan: The process

Appendix 1.4 Preparation of the 2008–2014 Management Plan: lessons learned



HADRIAN'S WALL
Frontiers of the Roman Empire
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2

Hadrian's Wall WHS and its landscape setting



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2: Hadrian's Wall WHS and its landscape setting

2.1 The Roman frontiers

2.1.1 Hadrian's Wall was inscribed as a World Heritage Site (WHS) by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in 1987 as the most complex and best preserved of the frontiers of the Roman Empire .

2.1.2 The Roman Empire extended at its height into three continents. During the waxing and waning of Roman power over a period of more than a millennium, a number of different frontier lines were established. At its greatest extent, in the second century AD, the imperial frontier stretched for over 5,000kms. Spanning northern Britain from the west to the east coast, it then followed the rivers Rhine and Danube, looping around the Carpathian Mountains to the Black Sea. The eastern frontier, from the Black Sea to the Red Sea, ran through mountains, great river valleys and deserts, and faced Parthia, Rome's greatest enemy. To the south, Rome's protective cordon embraced Egypt and then ran along the northern edge of the Sahara Desert to the Atlantic shore in Morocco.

2.1.3 There was considerable variety in the materials used to build these frontiers - stone, earth, turf, clay, mud brick, and timber - and in the type of installations constructed.

2.1.4 Walls, ramparts, forts, fortlets and towers are the physical evidence for these frontiers. The soldiers who manned them were required to protect the Empire and implement the regulations that governed movement across it. Successive emperors sought to defend their Empire not only by fighting wars but also by building new and more elaborate defensive structures.

2.1.5 Remains of Roman frontier installations can be seen in Britain, the Netherlands, Belgium, Germany, Switzerland, Austria, Slovakia, Hungary, Slovenia, Croatia, Serbia, Bulgaria, Romania and Turkey. East and south of the Mediterranean, there are remains in Syria, Jordan, Israel, Iraq, Egypt, Libya, Algeria, Tunisia and Morocco.

2.2 The boundaries of Hadrian's Wall WHS

2.2.1 The original nomination of Hadrian's Wall as a WHS included the Wall itself, its milecastles, turrets and forts, the *Vallum* and the roads, including the Stanegate and its forts, which housed the Wall garrisons before the decision was taken

to construct forts attached to the Wall. It also included the fort at South Shields (Arbeia) and the known milefortlets, towers and forts on the Cumbrian coast as far south as Ravenglass. These boundaries of the Site and the method of defining them were endorsed by the UNESCO World Heritage Committee in 1997.

The current boundaries of the WHS

2.2.2 The current boundaries of the WHS, which were not mapped in detail with the Site's original nomination in 1987¹, do not include all these elements in their entirety. A mapped and clearly defined extent of the Site itself was agreed during the development of the first Management Plan in 1996. This definition included as parts of the frontier those elements protected as scheduled monuments under the Ancient Monuments and Archaeological Areas Act 1979.

2.2.3 Some lengths of the Wall and the other linear features, and some areas of the forts and other structures are not scheduled. They are therefore not formally included in the WHS, but remain protected through the Town and Country Planning system. They all lie in the Buffer Zone (see below).

2.2.4 A further addition to the WHS made at the same time was the outpost fort at Bewcastle, on the road known as the Maiden Way, which connects it to the Wall via the intermediate signal station at Robin Hood's Butt. The justification for this addition was that this fort was first built at the same time as Hadrian's Wall, and its history of occupation until the start of the fourth century was closely associated with Hadrian's Wall.

2.3 The Buffer Zone

2.3.1 UNESCO recommends that each WHS should have a 'Buffer Zone', defined around it to provide additional protection².

2.3.2 In the rural parts of the Site, the Buffer Zone is mapped as a visual envelope, agreed by the Local Authorities and extending between 1 and 6km from the Site, depending on the topography. Its purpose is:

- to signal the sensitivity of this area and its role in sustaining the importance of the WHS, particularly protecting it from development that would be detrimental to its visual setting
- to define an area in which work can be particularly targeted to benefit the landscape setting of the WHS, where it impacts on the Site's OUV.

¹ Historic Buildings and Monuments Commission 1986 *United Kingdom Nomination: Hadrian's Wall Military Zone*
² UNESCO 2008 *Operational Guidelines*, 103-7

2.3.3 In the urban areas, the Buffer Zone is a narrow band. It includes the remains of Hadrian's Wall that are not visible and sometimes not precisely located, and that have not therefore been given the statutory protection of scheduling. These remains are, nevertheless, of national and international significance and are protected through the planning system. They include not only the Wall itself, but also areas of archaeological potential associated with the values of the WHS. Examples are the Buffer Zones around the fort sites at South Shields, Wallsend and Benwell.

2.3.4 In 1997 the World Heritage Committee was notified of and agreed the extent of the Site and its Buffer Zone in its rural sections.

2.3.5 Proposed amendments to the boundaries to be discussed with the Department for Culture, Media and Sport (DCMS) and submitted to the World Heritage Committee are discussed below in Part 6: Issue 1.

2.4 Hadrian's Wall and its associated archaeological remains

Pre-Hadrianic development of the frontier

2.4.1 Evidence from Carlisle shows that the Romans were established in the north by AD 72-3, before their advance further north into what is now Scotland in the early AD 80s under Agricola. That Agricolan advance, which culminated in a major Roman victory at *Mons Graupius* in AD 83, was not pursued after AD 86. Instead the Romans made a phased withdrawal over nearly 20 years, reaching the Tyne-Solway isthmus by AD 105. Here they established a chain of forts between Carlisle and Corbridge, using some existing forts and possibly others that were newly built. These were connected by a road known as the Stanegate (this is its medieval name: the Roman name is unknown).

The building of Hadrian's Wall

2.4.2 The Emperor Hadrian ordered the construction of the Wall as an artificial continuous barrier. Its purpose, according to his biographer, writing two centuries later, was 'to divide the Romans from the barbarians³. Hadrian brought one of his most trusted friends, A Platorius Nepos, to Britain as governor to oversee the construction of the new frontier. Most of it appears to have been completed during his governorship.

2.4.3 The curtain wall itself was intended to be 76 Roman miles long and to close off the Tyne-Solway isthmus. It was built in stone east of the River Irthing as far as the north side of the River Tyne at Newcastle. Initially built to a gauge of ten Roman feet, after two seasons it was decided to reduce the width to between six and eight Roman feet. In many places this 'Narrow Wall' was built on broad foundations laid the previous season. Between the River Irthing and the Solway estuary the Wall was constructed in turf, 20 Roman feet wide, with a steeper batter on the north side. It is suggested that the use of turf was dictated by the absence of building stone, although at a later date the Turf Wall was rebuilt throughout in stone.

2.4.4 The line of the Wall from Newcastle to Chesters was surveyed to run in straight sections between high points, with

the section from Newcastle to Wallsend added later. From Chesters to Sewingshields the Wall followed a broad crest with extensive views north over the North Tyne valley, but between Sewingshields and Walltown the line sinuously followed the crest of the Whin Sill. Through the less dramatic topography of eastern Cumbria the Wall again followed a straighter line between high points.

2.4.5 The Wall does not survive to full height at any point, although at Hare Hill the core stands 3m high. The faces were constructed of coursed rubble, weakly mortared, and the core was mainly clay bonded. There is no conclusive evidence as to how the top of the Wall was finished. Inscribed stones, of varying degrees of sophistication, recorded completion of individual sections by the units involved, including the names of centurions.

2.4.6 The Wall crossed three major rivers on substantial bridges, initially limited to pedestrians: the North Tyne at Chesters, the Irthing east of Milecastle 49 and the Eden at Carlisle. The major bridges were altered in the second half of the second century to accommodate vehicular traffic using the Military Way.

2.4.7 A V-shaped ditch protected the Wall on its north side, except where the natural topography made this superfluous. The dimensions of the ditch vary considerably with the topography and geology, from 7m across and 3m deep to 2m wide and 800mm deep. Where the ground fell away to the north, that side of the ditch was built up with a carefully constructed artificial bank, known as the counterscarp mound.

2.4.8 Small fortlets, or milecastles, approximately 25m square with characteristic rounded exterior corners, were attached to the rear of the Wall at intervals of approximately one Roman mile. A central road flanked by one or two internal barrack buildings linked north and south gateways. Of the supposed 80 milecastles, only 58 have been firmly located and partially excavated, and six have been fully excavated.

2.4.9 Between each milecastle, two turrets, approximately 6m square, were attached to the Wall at intervals of a third of a mile.

2.4.10 Milecastle 80 at Bowness-on-Solway was the westernmost point of the Wall, but the defences continued around the Solway coast. Between Bowness and Moricambe Bay, two parallel ditches are known from aerial photography and excavation, possibly with an associated wooden palisade. South of Moricambe Bay, there was no continuous barrier, but freestanding fortlets and towers running down to below Maryport. Forts were also constructed along this coast, at Beckfoot, Maryport, Burrow Walls, Moresby and Ravenglass. However the full extent of the Cumbrian coastal system remains uncertain.

Subsequent Hadrianic modifications

2.4.11 The first major change of plan during construction of the Wall was to build new forts attached to it. Some replaced earlier turrets and milecastles. At the same time the curtain wall was extended eastwards for four miles, wholly as Narrow Wall, to Wallsend on the north bank of the River Tyne.

2.4.12 The five eastern forts at Wallsend, Benwell, Rudchester, Halton Chesters and Chesters were all built in stone astride the

³ Anon, *Historia Augusta, Life of Hadrian*, 11, 2.



Wall, facing north. Other new forts at Housesteads, Great Chesters, Stanwix, Drumburgh and Bowness-on-Solway were attached to the rear of the curtain wall. There are also three forts of different ages known at Burgh-by-Sands, although their dates are not yet confirmed.

2.4.13 A further fort at South Shields stood on a bluff on the south bank of the Tyne near the mouth of the river. The initial function of this fort was most likely to guard a port at the mouth of the Tyne. It was subsequently expanded to function as a major supply base.

2.4.14 In addition to the forts on the Wall, three forts were built north of the western end of the Wall at Birrens, Netherby and Bewcastle. Of these only the latter is included in the WHS.

2.4.15 The *Vallum*, constructed in the same period as the new forts, runs south of the Wall. It consisted of a steep sided flat bottomed ditch, 6m wide and 3m deep flanked by two mounds each 6m across, with a third and smaller mound on the south lip of the ditch. The course of the *Vallum* was surveyed quite independently of the Wall, and the distance between the two linear elements varies from close proximity to nearly 1km. The precise purpose of the *Vallum* is still a subject for debate, but the generally accepted view is that it was to provide a secure area under direct military control to the rear of the Wall across which unauthorised access was virtually impossible.

2.4.16 Further modifications were made to the Wall later in Hadrian's reign. A new fort, approximately halfway between Housesteads and Chesters, was constructed at Carrawburgh, while the Stanegate fort at Carvoran and the easternmost five miles of the Turf Wall were rebuilt in stone. Around Birdoswald the stone replacement Wall was built on a new line approximately 300m to the north of the Turf Wall, with new turrets and a new milecastle. The Wall seems to have been largely abandoned after Hadrian's death when his successor, Antoninus Pius (AD 138-161), advanced the frontier to the Forth-Clyde isthmus.

Post-Hadrianic modifications

2.4.17 The Roman withdrawal from southern Scotland and the Antonine Wall, which began in the late AD 150s, saw further changes. A new metalled road, the Military Way, ran between the Wall and the *Vallum*, connecting all the forts and milecastles. Many of the turrets were seen as superfluous and were abandoned in the late AD 180s. Some of these were demolished in the early third century. The remainder of the Turf Wall was rebuilt in stone, incorporating the primary stone turrets, as were the turf and timber forts.

2.4.18 New outpost forts were established in the mid-second century on Dere Street, the Roman road between Eboracum (York) and the Antonine Wall, at Risingham, High Rochester and Newstead, all on the site of earlier Flavian and Antonine forts.

2.4.19 Two new forts were added to the Wall at the end of the second or early in the third century: these were at Newcastle, to guard the bridge crossing the River Tyne, and at Burgh-by-Sands.

Civilian settlements and cemeteries

2.4.20 Wherever the Roman army went, its wealth attracted a civilian following, and civilian settlements (*vici*) developed

outside the forts, initially south of the *Vallum*. Although little excavation work has taken place on these sites on Hadrian's Wall, recent geophysical survey and work elsewhere in Roman Britain suggests that they contained a mixture of official, semi official and commercial buildings, including bathhouses. A number of these have been identified along Hadrian's Wall, and are displayed at Chesters, Vindolanda and Ravenglass.

2.4.21 Cemeteries extended outside the civilian settlements, including those located at South Shields, Great Chesters, Vindolanda and Birdoswald, although a considerable number of tombstones from the Wall zone survive, mostly in museum collections.

2.4.22 The more detailed Structural description of Hadrian's Wall and its associated archaeological remains can be found in Appendix 2.1.

2.5 Geology and topography

2.5.1 The form and location of Hadrian's Wall is conditioned to a large extent by the geology and topography of the country through which it passes. The Tyne-Solway isthmus determined its general location, and its detailed route shows that its line was carefully selected to meet the needs of its builders, largely following the ridge of high ground north of the Rivers Tyne, South Tyne, and Irthing.

2.5.2 The Wall passes through very varied terrain along its length. Between South Shields and Chollerford, it crosses the lowlands of the North Sea coast and the Tyne valley. From the east coast to just west of Heddon-on-the-Wall, the Wall lies over Upper Carboniferous Coal Measures. These comprise a succession of sandstones, shales, siltstones and numerous coal seams. West of Heddon, the Wall passes over an earlier but similar group of Upper Carboniferous rocks (the Stainmore Group). For much of this stretch, the solid geology is masked by superficial deposits of boulder clay or till.

2.5.3 Between Chollerford and Brampton, the influence of the solid geology is much more obvious. Most spectacular is the Whin Sill, intruded here through Carboniferous rocks. The massive, hard and resistant columnar-jointed dolerite imparts a distinctive character to these outcrops, which contrasts strikingly with the generally lower ridges and crags formed by parallel outcrops of Carboniferous sandstone and limestone. There is a pronounced east-west oriented scarp and dip topography. Here the Wall follows the striking north-facing escarpment of the Whin Sill, while the accompanying earthworks lie on lower ground to the south.

2.5.4 West of Brampton, the Wall passes from Carboniferous strata to the softer sandstones, siltstones and mudstones of Permo-Triassic strata. Through most of this area, solid geology is masked by drift deposits, primarily of boulder clay or till. This gives rise to typically low-relief countryside. A number of sandstone quarries used for the construction of the Wall survive.

2.5.5 West of Burgh-by-Sands, the Wall crosses on to the silts and clays along the margins of the Solway. The slightly higher ground on which forts at Drumburgh and Bowness were sited is formed from boulder clay. South of Bowness, the frontier works lie mainly on glacial deposits.

2.6 The landscape

2.6.1 Criterion (ii) of the WHS inscription of Hadrian's Wall states that 'Hadrian's Wall exerted great influence on the spatial organisation of the British *limes* over approximately 300 years. This frontier zone is still a part of the landscape from Tyne to Solway⁴. Both the Wall's place in its modern landscape, and its effect on that landscape over previous centuries, are therefore important to an understanding of the Site, and indeed to its management.

The development of the landscape of the WHS and its Buffer Zone

2.6.2 The Tyne-Solway isthmus was heavily forested after the last glaciation, but pollen samples from mosses, as well as the surviving earthwork remains of pre-Roman settlements, show that clearance of the forest was already well underway, with vegetational indications of heathland. There is also a mounting degree of archaeological evidence for pre-Wall cultivation. This is demonstrated by ard-marks in the soil directly overlain by structures of Hadrian's Wall and by the remains of settlements and field systems in parts of the landscape.

2.6.3 The arrival of the Romans accelerated woodland clearance, no doubt partly for tactical and partly for logistical reasons, such as a demand for building timber and firewood. Indeed, while the initial construction of the western part of the frontier in turf and timber may be attributed to the absence of a ready source of stone, the converse might have accounted for the construction in stone east of the River Irthing, where stone could easily be obtained but timber may have been in short supply. The settlements attached to forts would probably have increased the need for cultivation and grazing near the Wall.

2.6.4 After the Roman withdrawal, and throughout the medieval period, small, nucleated settlements developed in the lowlands of the Tyne valley and Solway basin, with surrounding open fields of arable cultivation and pasture. Some of these grew from Roman sites, as at Corbridge, Newbrough, Stanwix, Burgh-by-Sands and Bowness.

2.6.5 As its primary use came to an end, the Wall served as a quarry for building material. The development of monasticism further spurred re-use of the masonry, initially by Anglo-Saxon houses at Tynemouth, Jarrow and Hexham and in the 12th century by Augustinian foundations. The monks of the latter foundations drained the inland marshes and built sea dykes, as well as clearing woodland.

2.6.6 Settlement in the upland parts of Hadrian's Wall was more scattered. It has been shown that the fort at Birdoswald was occupied periodically over several centuries as a ready-made defensible and stock-proof enclosure, and one of the granaries was adapted as an open building not dissimilar to an Anglo-Saxon hall.

2.6.7 Elsewhere further evidence survives for the re-use and adaptation of Roman structures on the Wall, including the Norman motte at Beaumont situated on the site of Milecastle 71. Between the 12th and 15th centuries, herdsman exploiting summer pastures for their sheep and cattle built shielings along

the Whin Sill. Some of these occupied milecastles, while others were built in the shelter of the Wall.

2.6.8 Hadrian's Wall itself continued to be a prominent feature of the landscape. In the eighth century, Bede described it in his *History of the English Church and People*, and in the mid-13th century it was still considered sufficiently significant to appear on Matthew Paris' map of Britain. Locally, the Wall was a focal point in manorial and estate documents as well as early charters and deeds. Documents such as the *Lanercost Cartulary* and the *Hexham Black Book*, Lord William Howard's *Survey of the Barony of Gilsland*, and the manorial plans of Benwell and Elswick all show that the line of the Wall had become fossilised in the landscape by the Norman period, and was being used as a property and field boundary, and as a boundary between parishes. The significance of the Wall is also retained in place names such as Walby, Walton, Walwick and Thirlwall.

2.6.9 In the late medieval period, the combined effects of the dissolution of the monasteries and prolonged periods of Anglo-Scottish warfare affected the development of the landscape. The period from the 14th to the end of the 16th century saw the building of new fortified bastle houses, fortified stone towers or 'peles', and more substantial castles, such as those as at Triermain, Bewcastle and Thirlwall. The east side of the south gate at Housesteads was converted and extended into a pele tower at around this time. Fortified church towers at Burgh-by-Sands and Newton Arlosh gave refuge to the local population on the Solway.

2.6.10 Many of these buildings in the proximity of Hadrian's Wall were, like stone churches before them, built of stone plundered from the Roman remains. 36 buildings of an ecclesiastical nature in the region incorporate Roman stone, as do over 30 fortified buildings in the vicinity of the Wall. The castles at Bewcastle and Thirlwall were built almost exclusively of Roman material.

2.6.11 The 1603 union of the crowns of England and Scotland began the transition to a more peaceful border situation, which saw the increasing creation of permanent, undefended settlements. New farmhouses of stone appeared and a significant amount of land was improved and enclosed. In the central sector, stone from the Wall and its associated structures served as a source of building material for these new houses and field walls, except where the Wall still served as a property boundary.

2.6.12 The construction of the Military Road in the mid-18th century added a new communications route to the landscape, but from Newcastle to Sewingshields it was built mostly on the remains of Hadrian's Wall. While it reduced the remains further, it also emphasised the route of the Wall and its linear impact in the landscape.

2.6.13 The Military Road and, in the 19th century, the Carlisle-Newcastle railway in the Tyne valley, opened up the Hadrian's Wall corridor to economic development. Improved agricultural methods led to field enclosures and land improvement. Many of the farmhouses in the corridor date from this time. In the 20th century, commercial forestry dominated the northern perimeter of the central sector of the Wall. Quarrying and mining also



made an impact on the landscape, particularly the quarries at Cawfields and Walltown, which between them destroyed nearly a mile of the Wall before this threat was halted. Mining and the railway in the Tyne valley boosted Haydon Bridge, Bardon Mill and Haltwhistle, while Gilsland developed as a spa in the 19th century. On Tyneside, and to a lesser extent in Carlisle, the Wall succumbed to urban development and industrialisation.

2.6.14 The 20th century saw an expansion of tourism. Since the Second World War, the increase both in car ownership and leisure, and in the number of sites managed for public access in the WHS, has accelerated this growth. This has made its own impact on the landscape with car parks and visitor centres, but it also contributes to the conservation of the WHS and its landscape setting, and to the local economy through entry to paid sites and use of local services and businesses.

2.6.15 The development of modern technologies in the 20th century has brought further elements into the landscape, such as overhead power lines and installations for telecommunications, particularly masts for mobile telephone networks. The transmission masts near Stagshaw are conspicuous landmarks, and the radio masts at Anthorn dominate the Solway plain. Nuclear power has also made a significant impact through the complex at Sellafield on the west Cumbrian coast and, until its demolition in 2007, the power station at Chapel Cross, which dominated the outlook from the Wall along the Solway shore. The latter demonstrates how intrusions into the landscape can be relatively temporary. The demand for renewable energy has seen a growth in the number of wind turbines visible from the WHS.

2.6.16 The predominant current rural landscape influence in the eastern part of Northumberland is arable farming, which has created large open fields, in some cases removing older field boundaries for the convenience of modern mechanised farming. In the central area, in west Northumberland, the landscape is predominantly a 19th century one, with scattered farms, and stone field walls. In Cumbria, the rural landscape east of Carlisle is largely derived from late 18th century re-planning of a late medieval landscape, while west of Carlisle it consists of hamlets and small villages of medieval derivation surrounded by 17th century stripfield enclosures, and late 18th century enclosures of mosses.

2.6.17 The urban landscape in Tyneside has evolved from its medieval features through expansion and industrialisation in the 19th and 20th centuries to subsequent post-industrial redevelopment. In the Carlisle area the urban landscape retains much of its 18th century character with notable 19th century industrial amendments and later 20th century development.

2.6.18 Hadrian's Wall WHS falls within four of the Joint Character Areas defined by Natural England (see Appendix 2.2).

2.7 The survival and condition of the resource

2.7.1 This development of the landscape has included several episodes that have affected the survival of Hadrian's Wall. The Roman remains were freely plundered for stone to build

churches, castles, field walls and farmhouses, and more intensive agricultural improvements have in places reduced the earthwork components such as the *Vallum* and temporary camps. Other developments, such as urban and suburban expansion, may have masked but not totally destroyed the archaeological remains. The Military Road both masks and protects the physical remains of the Wall itself, while emphasising its significance in the landscape. The degree of survival varies considerably across the WHS depending on, and often despite, the history of the landscape and the activities that influenced it.

The urban areas

2.7.2 In the urban areas of Tyneside and Carlisle, the best preserved parts of the visible elements of the frontier system are those that received the attentions of the early conservationists, for example the remains of the fort and supply base of Arbeia and the short length of Wall and Turret 7b at Denton. The depth of stratigraphy over most of the interior of Arbeia survives better than at some rural forts, such as Carrawburgh and Rudchester. Excavations have demonstrated that, remarkably, much does survive, and in places the degree of survival can equal that in rural areas. The south-west corner of the Westgate Road milecastle in Newcastle was discovered by chance during development and is displayed in the Westgate Road Arts Centre. The length of Hadrian's Wall in Buddle Street, Wallsend, stands up to eight courses high with excellent evidence of the sequence of partial collapse, repair and reinforcement.

2.7.3 Elsewhere, dumped industrial waste and post-medieval building have preserved the remains from damage as a result of robbing, which in many rural areas had continued until relatively recent times.

2.7.4 Over the last 25 years, the remains of the fort of Segedunum at Wallsend have been excavated and displayed, as well as parts of the forts at South Shields and in Newcastle. The scientific and educational value of the forts at Wallsend, South Shields and Benwell and Newcastle is equal to that of many of the forts in rural areas.

2.7.5 Investigations have explored lengths of surviving Wall west of Segedunum, in Walker, Byker, near St Dominic's Priory and Denton. Despite the condition of the remains, those at Denton yielded new evidence of possible plaster rendering on the south face of the Wall and a lightly metalled road close to it. Investigations at Wallsend, Byker, Melbourne Street and Throckley found a defensive entanglement of pits on the berm between Hadrian's Wall and the ditch. The discovery of this additional obstacle in ten investigations has raised new questions about the purpose and functioning of Hadrian's Wall: whether it was simply a demarcation line, an elaborate customs barrier, or whether it had a real military defensive role.

2.7.6 Observation of a gas pipe trench in Benwell in 1990 revealed part of a double granary in the fort surviving below West Road. In Carlisle, excavations in Stanwix fort found a similar level of survival in the built-up area.

2.7.7 In Carlisle city itself the depth of deposits and waterlogged conditions have outstandingly preserved organic remains of the pre-Hadrianic forts, including structural timbers and finds of organic materials such as wood, leather, and cloth.

The archaeological potential of the parts of the Wall in urban areas varies considerably, but it must not be underestimated. These areas have contributed some of the major discoveries in recent times.

The rural areas

2.7.8 In east Northumberland and in Cumbria west of Brampton, many archaeological sites, including the *Vallum* and temporary camps, are under intensive cultivation, either annually or occasionally in a rotation cycle. This has reduced and in parts entirely removed the surface indications, but significant remains can still survive despite the disturbance caused by ploughing. The most significant area that may be at risk from ploughing is the major part of the Roman town west of Corbridge.

2.7.9 None of the forts on the Wall are now under cultivation, although parts of the associated civilian settlements are subject to ploughing, particularly areas west of Halton Chesters and south of both Great Chesters and Castlesteads. Investigations of 12 milecastles in cultivated areas found only two actively being damaged by ploughing. The remaining ten had reached a level of stable survival below the plough soil. In places, cultivation has actually built up a cushioning layer of soil.

2.7.10 Details of the two forts south of the Wall at Burgh-by-Sands and the coastal fort at Beckfoot show well as crop-marks in appropriate conditions, as do those temporary camps in Cumbria that are under cultivation.

2.7.11 In the central sector, remains are generally much better preserved, partly because the upland nature of the land has not lent itself to intensive cultivation over the last century. Today the land is primarily used for stock rearing and grazing. In many places, the Wall has been preserved as a field and property boundary between estates, which accounts for its high level of survival.

2.7.12 Almost all of the visible Roman masonry in the WHS has been cleared and consolidated over the last 150 years. One of the strikingly visible lengths of the Wall in the central sector, between Steel Rigg and Housesteads, is in fact a 19th century restoration. Here, the faces are built up as dry-stone walling using Roman facing stones around the original Roman core (the so-called 'Clayton Wall'). Elsewhere stone enclosure walls on the line of Hadrian's Wall stand on the Roman foundations. Where a soil mound covers the Wall, the masonry and the evidence for its collapse in the surrounding tumbled survive well.

2.7.13 The earthwork components are also well preserved in the central sector. The *Vallum* banks are in places spectacularly preserved, particularly between Blackcarts and Sewingshields, where they stand between one and two metres high. Most of the temporary camps in the central sector survive as upstanding earthworks and the details of their entrances and ramparts are clearly visible. The group around the Caw Burn on Haltwhistle Common, including the Stanegate fortlet, is particularly well preserved. The unimproved and semi-improved pasture conditions here have helped preserve even the subtlest of features, such as a group of Roman barrows south of Great Chesters. Considerable lengths of the remarkable seven-mile aqueduct that served Great Chesters, a narrow channel 0.5m wide and 0.3m deep with an upcast retaining bank on the

downhill side, survive north of the fort. This subtle feature would be obliterated by a single ploughing, as has happened where improvement of pasture has occurred elsewhere along its length.

2.7.14 On the Solway coast, apart from the earthworks of the forts at Maryport and Moresby, and the displayed milefortlet at Swarthy Hill, the sites of the forts, milefortlets and towers are mainly known from excavation or aerial survey and are visible to varying degrees on the surface. Between Bowness and Moricambe Bay two parallel ditches are known from aerial photography and excavation: these may have had an associated wooden palisade. However, south of Moricambe Bay, there was no continuous barrier. Forts were constructed at Beckfoot, Maryport, Burrow Walls, Moresby and Ravenglass, but the precise extent of the Cumberland coastal system is uncertain; the milefortlets and towers have only been traced as far as Flimby, just south of Maryport.

2.7.15 There is considerable variation in the degree of survival of the 'positive' linear elements of the frontier: the Wall itself, the counterscarp bank, the Military Way, and the *Vallum*. However the 'negative' features, such as the substantial ditches of the Wall and *Vallum*, probably survive below ground for most of their length. The Wall ditch is intermittently visible to some degree from the western edge of Newcastle and is a prominent feature (where it was provided) from Heddon-on-the-Wall westwards to Banks, together with its counterscarp bank. After that it is visible intermittently, sometimes just as a shallow depression.

Forts

2.7.16 Of the 16 forts along the line of the Wall and the supply-base at South Shields, only one (Benwell) has been partially destroyed, by a reservoir on its north side. Its southern part is overbuilt, as are significant areas of a further five forts. The surviving archaeological potential of these has already been discussed above.

2.7.17 The remaining ten forts on the Wall are totally or mostly unencumbered by buildings. These survive either as substantial earthworks with buried masonry or with exposed consolidated remains at Chesters, Housesteads, Great Chesters and Birdoswald.

2.7.18 Of the Stanegate forts, apart from Corbridge discussed above, the most significant survival is at Vindolanda where the remains of the later stone forts are well preserved with several buildings, and the fort walls exposed and consolidated. As at Carlisle, the anaerobic conditions preserve structural timbers of the pre-Hadrianic forts, as well as a richness of organic finds unparalleled elsewhere in the WHS.

2.7.19 The structures in the six-sided fort at Bewcastle were shown through excavations between 1938 and 1978 to survive well as buried remains in the earthworks of the fort defences, despite the medieval castle, the church with its surrounding churchyard, and a working farm having been built within it. Geophysical survey has also shown further remains surviving outside the fort, although it is not certain whether these are of Roman date associated with the fort.

2.7.20 On the Cumbrian coast, Beckfoot, Maryport and



Ravenglass survive as substantial earthworks, while the rampart of the fort at Moresby is also visible west of the churchyard.

Civilian settlements and cemeteries

2.7.21 The condition of the civilian settlements and cemeteries of these forts is largely unknown, as few have been investigated by excavation. A number lie under modern towns and villages. A significant part of the settlement at Vindolanda has been excavated and consolidated for display. Elsewhere such evidence as there is indicates that the potential for good survival is very high.

2.7.22 There have been excellent results from recent geophysical surveys covering the civilian settlements at Halton Chesters, Chesters, Housesteads, Carvoran, Birdoswald, Castlesteads and Maryport. Only in three cases, Great Chesters, Castlesteads and Halton Chesters, are parts of the settlement under cultivation, although at Castlesteads the southern part is subject only to occasional ploughing. At this site in particular, geophysical survey has revealed that the area of the settlement is far more extensive than previously considered, and that much of it lies outside the protected area of the scheduled monument.

Roman urban complexes

2.7.23 Corbridge, the only Roman urban centre currently in the WHS, is undamaged by modern development apart from losses to its northern edge caused by the construction of the A69. Its central area was excavated and is now displayed for public access, while the remainder is mostly under cultivation. Carlisle, the other main Roman urban centre associated with the WHS, has also demonstrated enormous archaeological potential, with deep stratigraphy, well-preserved remains of both stone and timber phases and waterlogged deposits that contain important environmental and scientific evidence.

Destruction

2.7.24 Total destruction of all the elements at any point is only likely to have occurred in limited areas, in particular:

- where the frontier line has been crossed by new roads (eg the A1 Newcastle western bypass, the dualling of the A69 and the M6 motorway) and oil and gas pipelines
- Benwell reservoir
- quarrying at Walltown and Cawfields
- coastal erosion, which has destroyed the Cumbrian coastal milefortlets and towers in the area of Allonby Bay, and is still continuing, threatening the Roman cemetery associated with the fort at Beckfoot, the western part of the fort at Ravenglass and further milefortlets and towers
- a former mineral railway line bisected the fort of Burrow Walls on the Cumbrian coast, and the coastal railway from Carlisle to Barrow-in-Furness which cuts through the fort at Ravenglass
- the 18th century canal from Carlisle to Port Carlisle, which cut across the frontier in several places.

Acquisition and preservation

2.7.25 The increasing pace of destruction of Hadrian's Wall in the 19th century was matched by growing interest in its study and conservation. Antiquarians such as William Camden in the early 17th century and John Horsley in the 18th century recorded what survived in their times. William Hutton saved the Wall at Planetrees from being taken apart for field walls in 1811. Later in the same century John Clayton bought land on the line of the Wall in the central sector. He partially reconstructed lengths of the Wall between Steel Rigg and Housesteads and carried out associated excavations. The first decennial 'pilgrimage' of antiquarians to Hadrian's Wall took place in 1849, which spurred further excavation and study.

2.7.26 The combination of statutory protection in the form of scheduling and the Hadrian's Wall and *Vallum* Preservation Scheme (drawn up in 1931 but only confirmed in 1943), together with acquisition by public bodies and trusts, has stemmed the loss of fabric of the Wall.

Acquisitions

- **2.7.27** Although the site was originally acquired for housing, the creation of Roman Remains Park in South Shields in 1875 by South Shields Urban District Council, as a result of discoveries made during development, marked the first deliberate display of part of the WHS by a public body.
- **2.7.28** The state first acquired parts of the Wall in 1932, and the National Trust was given the nucleus of its Hadrian's Wall estate shortly after.
- **2.7.29** Three other Local Authorities - North Tyneside Council, Northumberland County Council and Cumbria County Council - have acquired forts on the Wall for conservation.
- **2.7.30** The establishment of the Vindolanda Trust in 1970, its subsequent work on this site and its acquisition of Carvoran have also contributed significantly to the commitment towards conserving the WHS.
- **2.7.31** The establishment of the Northumberland National Park in 1956, which includes the central sector of Hadrian's Wall from Carvoran to Tower Tye, has added to the cause of conservation and enjoyment of both the heritage and landscape.

Research and excavation

2.7.32 Hadrian's Wall was being written about and studied even before the end of the Roman Empire, and this has continued. From the 16th century antiquarians recorded their visits, and from the 18th century the Wall was mapped in detail. Archaeological excavations began in the 19th century and have continued to the present day. During the first third of the 20th century much effort was made to understand the various elements of the frontier.

2.7.33 Aerial photography, which began in the 1930s and became increasingly important after 1945, helped to define the frontier works and led to many new discoveries. The development of geophysical survey revolutionised existing knowledge by identifying extensive civilian settlements, which are larger than had been thought, at several sites outside forts.

PART 2: Hadrian's Wall WHS and its landscape setting

2.7.34 Research is also being undertaken into the study of Hadrian's Wall by previous generations, in order to understand changing attitudes to and interpretations of its function and purpose, and its place in the history of Britain.

2.7.35 Hadrian's Wall is one of the most extensively excavated of the frontiers of the Roman Empire and all the original above-ground masonry visible today is the result of excavation. Nevertheless:

- only 159m of the curtain wall, approximately 0.13% of the total length, has been excavated under modern conditions and consolidated since the late 1970s
- 6,055 m (5.12%) was cleared without archaeological supervision or recording under the Ministry of Public Works programme of the mid-20th century
- 2,416m (2.04%) is the result of 19th century restoration (the 'Clayton Wall' in the central sector)
- 108,210m (91%) of the curtain wall is either not visible or survives as buried remains, much of it under the B6318 Military Road, or as upstanding earthwork remains, while in Cumbria substantial lengths survive under the banks of field boundaries.

2.7.36 In the 19th century excavations took place at Chesters promoted by Clayton, at Housesteads by Robert Carr Bosanquet and at Great Chesters by Rev G R Hall.

2.7.37 Since the Second World War major excavations have been conducted at the forts at Birdoswald, Vindolanda, Housesteads, Wallsend and South Shields. Only one milecastle, Milecastle 35 (Sewingshields), has been wholly excavated and displayed under modern archaeological control, while the interior of the already exposed Milecastle 39 was excavated and displayed in the 1980s. Of the Wall turrets, only Turret 35a at Sewingshields and the additional tower in Peel Gap have been excavated in the past 30 years.

2.7.38 A number of other modern excavations have been carried out where the remains have been investigated but not displayed, in advance of development:

- Bowness-on-Solway in advance of new housing
- Bewcastle in advance of new agricultural buildings and an extension of the cemetery
- Corbridge Red House in advance of the A69 Corbridge bypass
- urban Tyneside.

2.7.39 Excavations were carried out at Ravenglass in the late 1970s in advance of coastal erosion.

2.8 Finds and collections

2.8.1 The processes of antiquarian and archaeological interest and excavation have collected together a huge assemblage of artefacts that illustrate the life of the Wall in the Roman period. While some survive in private collections, and others are in museums elsewhere in the United Kingdom (in particular the British Museum), most are housed in the principal museum collections directly associated with the Wall.

2.8.2 These artefacts are portable and no longer *in situ*, so by definition cannot formally be listed as part of the WHS itself. However this overall assemblage, the largest from any of the frontiers of the Roman Empire, is essential to the understanding of the structural remains in the WHS.

2.8.3 The text found on some of the building inscriptions and on altars identifies the names and country of origin of units occupying the forts at certain dates. A number of inscriptions confirm the Roman name of the site where they were found.

2.8.4 Excavations at Vindolanda have revealed an unparalleled collection of writing tablets, preserved in anaerobic conditions, ranging from official documents to personal correspondence. This is the largest such assemblage in the United Kingdom and contributes significantly to understanding of life on Hadrian's Wall. Although these documents are from a generation earlier than the building of Hadrian's Wall, they can be presumed to reflect life on the frontier from the building of the Wall onwards.

2.8.5 Taken together, the inscriptions and writing tablets form the largest collection of written Latin from the Roman world outside Italy.

2.8.6 The same anaerobic conditions at Vindolanda produced large quantities of shoes, other leather items, cloth and wood, while extensive finds of pottery across the Site illustrate not only table and cooking wares, but also the trade patterns by which the Wall was supplied.

2.8.7 Not surprisingly, the WHS has yielded significant assemblages of Roman military equipment, including the important Corbridge hoard of armour.

2.8.8 Coins and pottery from excavations on the Wall constitute very significant evidence for dating the construction, alteration and final abandonment or demolition of buildings on the frontier. Building inscriptions sometimes give close dating references to the reigning emperor(s), the provincial governor, or consulships. Many objects associated with religion attest the interaction of Roman and native cultural traditions, in particular the equating of Roman gods and goddesses with native deities.

Secondary sources

2.8.9 Another valuable resource is the body of archive material that has been assembled relating to the WHS. In the case of excavation records, the archive is often the only record of that part of the Site now available for research.

2.8.10 Other secondary sources are of value, particularly those that record aspects of the Site that have changed. The collections of the Museum of Antiquities, housed in Newcastle's Great North Museum from spring 2009, hold aerial and other photographic archives of the WHS, and other significant archival collections are located elsewhere, particularly at Cambridge University and in the National Monuments Record in Swindon. Antiquarian illustrations were frequently accurate in their detail. Several important collections show parts of the Site at that time and also record objects, particularly inscriptions, which have since been lost.



Source material for scientific analysis

2.8.11 These collections contain not only artefactual material, but also increasingly important material for scientific analysis.

- Pollen and faunal remains in material from earthworks, and deposits such as the fill of ditches and occupational layers can contain evidence of the environment and landscape at the time they were constructed, occupied or abandoned.
- Pollen samples from other nearby sources, such as peat deposits and mires, can provide significant comparative material.
- Food residues on pottery can reveal information about the diet of the army on the Wall, as can deposits associated with granaries, and where human waste has collected.
- Scientific analysis can contribute to an understanding of the technologies employed by the army on the Wall.
- English Heritage has recently carried out research on the mortar used to construct the Wall.

2.8.12 The Assessment volume of the Hadrian's Wall Research Framework sets out in more detail the history and pattern of research throughout the WHS over the past century and a half.

Appendices to PART 2

Appendix 2.1 Structural description of Hadrian's Wall and its associated archaeological remains

Appendix 2.2 Joint Character Areas defined by Natural England



HADRIAN'S WALL
Frontiers of the Roman Empire
WORLD HERITAGE SITE

3

Interests in the WHS



HADRIAN'S WALL
COUNTRY



3: Interests in the WHS

3.1 Introduction

3.1.1 The size and complexity of Hadrian's Wall WHS means that the number of those with an interest in it is very large. Some bodies have statutory, official or other promotional and economic links with the Wall. Those with an interest can be public or private individuals or organisations, operating at national, regional and local levels. With the inscription of Hadrian's Wall as part of the Frontiers of the Roman Empire WHS, there is now international interest in the Site's management.

3.1.2 This section sets out how these various interests are involved in the management of the WHS, the remits of the various organisations and individuals, and how the management of the WHS relates to them. Since the previous Management Plan, there have been a number of changes, particularly in the reorganisation of government departments and agencies. The principal statutory measures that play a part in the protection and management of the WHS can be found in Appendix 3.1.

3.2 International interests

3.2.1 UNESCO was established in 1945 with an overall objective 'to build peace in the minds of men'¹. Its **1972 Convention concerning the Protection of the World Cultural and Natural Heritage** (known as the World Heritage Convention) established the concept of World Heritage Sites. The World Heritage Committee is the decision-making body with regard to new inscriptions and changes to inscriptions (such as boundary changes). It also monitors the condition of each WHS through its system of periodic reporting.

3.2.2 The Summary Nomination Statement for the Frontiers of the Roman Empire WHS, to which UNESCO has agreed, states that

the responsibility for the management of individual parts of the WHS must rest with the individual State Party and be carried out by each in accordance with their legislative and management systems. Equally, it is essential that individual parts within the WHS are managed within an overall framework of cooperation to achieve common standards of identification, recording, research, protection, conservation, management, presentation and understanding of the Roman frontier².

3.2.3 The United Kingdom and German authorities have formed a governing body for the new WHS, **the Frontiers of the Roman Empire Intergovernmental Body**. As required by UNESCO, this is made up of an administrator and an archaeologist representing the State Party of each section of the frontier that has been inscribed as part of the Frontiers of the Roman Empire WHS. The four members from England and Scotland are representatives of the Department for Culture, Media and Sport (DCMS), Historic Scotland, the Antonine Wall, and Hadrian's Wall, with other advisers by invitation. The committee, which has had two preliminary meetings, will work to develop a common framework.

3.2.4 Any changes in the Hadrian's Wall element of the WHS need the approval of the other States Parties before being considered for approval by the UNESCO World Heritage Committee (see Part 6: Issue 1).

3.2.5 **The Bratislava Group**, named after the city in which it first met in 2003, is made up of experts in the history and archaeology of the Roman frontiers and of those currently involved in their management. It currently has members from the United Kingdom, Germany, Austria, Slovakia, Hungary and Croatia, as countries that are either responsible for parts of the Frontiers of the Roman Empire WHS already inscribed or which have established their intention to nominate their sections of the frontier by including them on their respective Tentative Lists. The nomination of the Frontiers of the Roman Empire WHS defined the group's role:

The Bratislava Group aims to share knowledge and experience of Roman frontiers and their identification, protection, conservation, management and presentation, leading to the distillation of a common viewpoint, and through technical and professional advice provides the scientific framework for the whole WHS. The Bratislava Group should form the core of an international scientific advisory group on the Frontiers of the Roman Empire WHS. Its role should be to support States Parties in the creation of the Frontiers of the Roman Empire WHS by:

- *advising States Parties on the significance of the Roman Frontiers and on the development of best-practice guides for its management and improving its understanding*
- *developing support structures such as an overall research strategy, an international Roman Frontiers database and websites³.*

¹ UNESCO website

² English Heritage 2004 *Frontiers of the Roman Empire WHS Summary Nomination Statement*, 4.1

³ *ibid* 4.1

3.2.6 The UNESCO World Heritage Committee receives expert advice from three international non-governmental organisations named in the World Heritage Convention. All three bodies advise on strategic issues and international assistance applications. They have their own areas of expertise as set out below.

3.2.7 The International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) is an international governmental body (IGO), which has training as its principal concern.

3.2.8 The International Council of Monuments and Sites (ICOMOS) is a non-governmental organisation (NGO), which evaluates the nominations of cultural sites, and reports on the state of conservation of cultural properties on the World Heritage List.

3.2.9 The World Conservation Union (IUCN) evaluates the nominations of natural sites, and reports on the state of conservation of natural properties on the List. Members represent both international governments and NGOs.

3.2.10 Both ICOMOS and the World Conservation Union have national committees.

3.2.11 ICOMOS UK provides advice on World Heritage Sites and the application of the World Heritage Convention in the United Kingdom, under an agreement with English Heritage, Historic Scotland and Cadw (Welsh Historic Monuments). ICOMOS UK may comment on planning applications affecting Hadrian's Wall WHS and does so independently of its relationship with English Heritage.

3.3 National government interests

3.3.1 Since the 1990s much United Kingdom government involvement in World Heritage Sites is now either organised through regional government offices or along regional boundaries. Hadrian's Wall WHS is split fairly evenly between the north-east and north-west regions.

3.3.2 The Government Offices for the North East and North West represent 11 central government departments across each region. The departments with particular relevance to the WHS include:

- Department for Culture Media and Sport (DCMS)
- Communities and Local Government (CLG)
- Department for Children, Schools and Families (DCSF)
- Department of Business, Enterprise and Regulatory Reform (BERR)
- Department of Environment Food and Rural Affairs (Defra).

3.3.3 The World Heritage Convention was ratified by the United Kingdom in 1984. Individual governments are responsible for the nomination of sites and for the protection of sites inscribed in the List. **DCMS** is the government department responsible for World Heritage Sites, and for the wider historic environment. It is the sponsoring department for English Heritage (see below). DCMS now has a presence in the government offices, but for most issues concerned with the WHS, the primary contact will still be in London.

3.3.4 One of the most important roles of the government offices in relation to the WHS is that of strategic planning, in which they act as a link between central government and the Local Planning Authorities in the region.

3.3.5 CLG is responsible for determining national planning policy and for the preparation of associated Planning Policy Guidance and related legislation.

3.3.6 DCSF is responsible for all aspects of policy affecting children and young people, as part of the government's aim to deliver educational excellence. It provides the national policy framework for much of the educational activity associated with the WHS.

3.3.7 BERR was formed at the disbandment of the Department for Trade and Industry (DTI) in 2007, and has taken over many of the DTI's functions. Its responsibilities include employment law, and the promotion of business growth and regional economic development.

3.3.8 Defra has a considerable influence on the WHS and its Buffer Zone through the support system for agriculture. Of particular value are the agri-environmental schemes, especially Environmental Stewardship. **Forest Enterprise** is important as it manages Wark Forest, which, in the central section of Hadrian's Wall, forms the northern edge of the Buffer Zone. **The Forestry Commission** is also important because of its general controls over woodland and forestry grants and licences. Defra is also the sponsoring government department for Natural England (see below).

3.3.9 The Ministry of Defence has interests in the WHS and its Buffer Zone because of its ownership and use of the military base at Albermarle Barracks at Harlow Hill and the ranges at Spadeadam north of Gilsland. These have the potential to generate considerable amounts of military traffic and, in the case of Spadeadam, low-flying military aircraft on exercise.

3.3.10 The Highways Agency has an interest because of its responsibility for the trunk roads in the WHS and Buffer Zone, particularly the A1, A68 and A69 roads. It therefore owns parts of the Site as well as contributing to transport and access management (see Part 6: Issue 10).

3.4 Other national organisations

3.4.1 The United Kingdom National Commission for UNESCO was formally re-established in March 2004. It is an independent body, working in partnership with the United Kingdom government and civil society, with the following overarching objectives:

- developing United Kingdom input into UNESCO policy making
- effecting reforms in UNESCO
- encouraging support in the United Kingdom for UNESCO's ideals and work.

3.4.2 It is also tasked with advising the government on all matters concerned with UNESCO. In particular, it works in close collaboration with the Department for International



Development (DFID) and the United Kingdom Permanent Delegation to UNESCO in Paris.

3.4.3 English Heritage is the only national body with a specific remit related to the World Heritage Site's inscription, including its protection and conservation. Its responsibilities and functions mainly derive from the 1979 Ancient Monuments and Archaeological Areas Act, as amended by The Heritage Act of 1983.

3.4.4 Sponsored by the DCMS, it is recognised by the government as the lead body for the historic environment. As such, English Heritage:

- advises DCMS on new or revised scheduling of sites
- is consulted on a statutory basis by Local Planning Authorities on planning issues affecting scheduled ancient monuments and their settings, listed buildings, and conservation areas
- is the government's official advisor on the implementation of the World Heritage Convention, and thus has a key role in the statutory protection of the WHS
- is empowered by the 1979 and 1983 Acts to offer advice and assistance to the owners of ancient monuments and listed buildings, and to manage directly those parts of the WHS in the care of the Secretary of State
- has in its care parts of the WHS
- manages important collections of artefacts from the Wall.

3.4.5 Natural England was formed in March 2006, by bringing English Nature together with the landscape, access and recreation elements of the Countryside Agency, and the environmental land-management functions of the Rural Development Service in Defra.

3.4.6 Natural England's remit is to conserve and enhance the natural and historic environment, for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings. Protection of the historic environment is primarily carried out through the Environmental Stewardship (ES) Scheme, designed to build on the success of the Environmentally Sensitive Areas Scheme and the Countryside Stewardship Scheme. Natural England's primary objectives are to:

- conserve wildlife (biodiversity)
- maintain and enhance landscape quality and character
- protect the historic environment and natural resources
- promote public access and understanding of the countryside
- protect natural resources⁴.

3.4.7 The Museums Libraries and Archives Council was launched in April 2000 as the strategic body working with and for museums, archives and libraries.

3.5 Regional organisations and local government

The Regional Development Agencies

3.5.1 The Regional Development Agencies (RDAs) **One NorthEast** and the **North West Development Agency** were established in 1999. They are responsible for economic and business development, including tourism, regeneration and

improvement. With the proposed abolition of regional assemblies in 2010, the RDAs seem likely to also become the Regional Planning Bodies responsible for preparing the new Integrated Regional Strategy. This will combine previously separate regional spatial and economic strategies from the two regions. They will also be responsible for scrutinising the Local Development Frameworks prepared by Local Planning Authorities against the Integrated Regional Strategy, and as such will have a role in the application of legislative protection of the WHS.

3.5.2 They have taken a particular interest in Hadrian's Wall as a strong driver in both regional economies through tourism. In 2002 the two RDAs commissioned the Major Study to explore ways in which the Site's contribution to the economy could be maximised. This study has led to the establishment of Hadrian's Wall Heritage Ltd (HWHL, see below), core-funded by the two RDAs, English Heritage and Natural England.

Local government

3.5.3 Hadrian's Wall WHS currently falls within 12 different Local Authority areas, some with overlapping jurisdictions and powers. In Tyneside, parts of the Site lie in the three **Unitary Authorities** of Newcastle, North Tyneside and South Tyneside. The remainder is in the **County Council** areas of either Cumbria or Northumberland.

3.5.4 In Cumbria, the frontier system passes through the **District Councils** of Copeland, Allerdale and Carlisle and the Lake District National Park. In Northumberland it runs through Tynedale and Castle Morpeth and the Northumberland National Park. Early in the period of this Management Plan Northumberland's Local Authorities will merge into one new authority covering the whole county, although the Northumberland National Park will remain, retaining its current responsibilities (see below).

3.5.5 The powers of **Local Authorities** that have most impact on the WHS relate to planning and economic development. Most of the Local Authorities are involved in developing and promoting sustainable tourism in the WHS. The County Councils and single-tier authorities also have responsibility for emergency planning.

3.5.6 Parish councils provide a further level of local government outside Tyneside. The WHS falls in the areas of 42 parish councils, with more parishes in its Buffer Zone. Their powers are limited but they do represent the interests of the local community and can become very involved in matters affecting the WHS.

National Parks

3.5.7 The WHS also extends into two National Park Authority areas: the Lake District and Northumberland National Parks. As well as conserving and enhancing the landscapes, wildlife, and cultural heritage, the National Parks must also promote opportunities for the public to understand and enjoy their special qualities. **The National Park Authorities** are the Local Planning Authorities for their areas, responsible for preparing their Local Development Frameworks and for determining planning applications. The National Park Authorities are also required to foster the economic and social wellbeing of their

⁴ Natural England website: Environmental Stewardship

communities, and they exercise considerable management powers.

Solway Coast Area of Outstanding Natural Beauty

3.5.8 The Solway Coast Area of Outstanding Natural Beauty (AONB) coincides with the part of the WHS and its Buffer Zone between Burgh-by-Sands and Maryport.

3.6 Cultural and academic interests

Academic interests

3.6.1 Academic interest in Hadrian's Wall has developed over 400 years from the interest of the first antiquarians.

3.6.2 Two local archaeological societies of long standing, the **Newcastle Society of Antiquaries** and the **Cumberland and Westmorland Antiquarian and Archaeological Society**, have been deeply involved in Wall studies since their foundation. They continue to promote these through their meetings and their journals, *Archaeologia Aeliana* and *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society*. These are internationally renowned and contain a significant proportion of the literature about the Wall. Both societies have also supported monograph series, and since 1849 have jointly held a decennial Hadrian's Wall Pilgrimage along the length of the Wall, to study archaeological developments in the understanding of Hadrian's Wall. The 13th Pilgrimage in 2009 will occur during the period of this Plan.

3.6.3 Prominent among the institutions involved in study of the Wall have been the **archaeology departments of universities**, particularly those at Durham, Newcastle upon Tyne and Manchester through teaching, research and excavation. Durham University, jointly with Durham County Council, managed the development of the **Research Framework for Hadrian's Wall** in the period of the previous Management Plan (see Part 6: Issue 9 for further detail).

3.6.4 **Tyne and Wear Museums Service** is active in research and excavation, both at its own sites of Wallsend and South Shields and in providing archaeological input on other parts of Hadrian's Wall when an area is about to be developed.

3.6.5 **The Vindolanda Trust** has excavated extensively over nearly 30 years at Vindolanda and the results of this work have contributed much to the understanding of both the complex site at Vindolanda and the development of the northern frontier.

3.6.6 **The British Museum** holds the majority of the Vindolanda writing tablets, and has contributed to their conservation and research.

3.6.7 Work undertaken by **Timescape Surveys** is an important example of individual involvement in WHS research, specialising in geophysical survey. To date it has conducted surveys at seven of the forts in the WHS, and represents a major contribution to research on the WHS.

3.6.8 Since 1992, **The Arbeia Society** has organised an annual conference on aspects of Hadrian's Wall and Roman Britain. It forms a focus for disseminating recent research on the Wall and

fostering interest in it. The Society also publishes its own journal, with papers focusing on archaeological research into the Roman period in the region, the results of re-enactment research, and excavation reports.

3.6.9 Research on Hadrian's Wall has led research on other frontiers of the Roman Empire. Academic interest in it extends beyond the United Kingdom, and new research on the Wall forms a significant part of the **triennial International Limes Congress**, which draws together scholars with interests in Roman frontiers. The next congress will be hosted in Newcastle upon Tyne in 2009, in the period of this Plan.

3.6.10 As well as housing and displaying the finds from the Wall, museums hold many of the archives of excavations and surveys that are an important resource for the study of the WHS. **The Museum of Antiquities in Newcastle upon Tyne**, **Cambridge University** and the **National Monuments Record** hold extensive collections of aerial photography of the Wall. The development of the former as part of the Great North Museum, which opens in 2009, will include improved access for those using its library and archives for research on Hadrian's Wall.

3.6.11 **Roman live re-enactment groups**, including the Ermine Street Guard and Quinta, part of the Arbeia Society, conduct research into the arms and armour of the Roman army as well as its organisation and military practices. These groups also attract large numbers of visitors to their events and so play a significant part in creating public interest in Hadrian's Wall and in providing an entertaining learning experience for visitors.

3.7 Economic and recreational interests

3.7.1 The main economic interests in the WHS and its Buffer Zone are tourism and agriculture.

Tourism

3.7.2 Tourism to the WHS has long been important in the economy of the north of England, and has increased as other industries in the region have declined, particularly ship-building, coal mining and iron and steel production. It is now a major feature of regional and local economic strategies.

3.7.3 The development of private car ownership since the Second World War accelerated the increase in visitor numbers, which reached a peak at pay-sites in 1973. However tourism can be vulnerable to events both in and beyond the region, and these have caused considerable fluctuations since 1973. In 2001 the outbreak of foot and mouth disease resulted in a 42% drop in visitors to the WHS.

3.7.4 The number of visits to staffed sites and museums is consistently recorded throughout the WHS and stood at 585,687 for 2007. However numbers have been in decline, with this figure (excluding Segedunum as this was not open in 1999) representing an 8% decrease on 1999. There are now more sites and museums open in the WHS than there were 30 years ago, and some of those that were open then have developed very significantly (Arbeia, Vindolanda, Birdoswald and Tullie House).



3.7.5 Tourism development and promotion is the responsibility of **Area Tourism Partnerships**. Those covering Hadrian's Wall are Northumberland Tourism, Tyne and Wear Tourism and Cumbria Tourism, all funded by DCMS through the RDAs. One NorthEast also promotes tourism directly in the north east. Until 2006 the Hadrian's Wall Tourism Partnership (HWTP) promoted Hadrian's Wall as a Wall-wide destination. On the formation of HWHL this role was transferred to the new company.

Agriculture

3.7.6 Agriculture is carried out in most of the WHS and its Buffer Zone outside the urban areas. In the central sector, farming is primarily upland grazing, while in parts of Cumbria dairy farming predominates. Farming in the remainder of Cumbria and east Northumberland is mainly arable-based. The sale of farms in the WHS is rare, the great majority having been farmed by the same family for several generations. Tenant farmers manage the National Trust's estate in the central sector. Farming interests are represented by the **Country Landowners and Businesses Association** and the **National Farmers Union**, which are national groups, organised on a regional basis.

3.7.7 There are approximately 700 farms that contain elements of the WHS, varying from large estates divided into tenanted farms to owner-occupied farms. The number of farms is greater if the Buffer Zone is included.

3.7.8 The importance of agriculture in the WHS is a significant contribution in kind that cannot be overstated, with many farmers directly responsible for managing and protecting the archaeology of the Site. Farmers are also the principal agents in managing the landscape that forms the setting of the WHS. Whether these interests are maintained, enhanced or spoilt depends on their farming practices.

3.7.9 In general, traditional features of the landscape have remained in the WHS corridor and many land managers are conscientious in their efforts to maintain those features that characterise the setting of the WHS, helped often by agri-environmental schemes. Moreover, viable income from farming and from diversification can contribute financially and practically to the conservation of the WHS by reducing commercial pressure towards intensification. Sympathetic farming maintains the beauty of the landscape setting of the WHS, which is a strong factor in attracting visitors to the Wall.

Diversification

3.7.10 The continuing decline of farming incomes over recent decades, together with changes in support from production subsidy to environmental benefits, and uncertainty about the future, particularly the future of the Single Farm Payment scheme after 2012, have all put pressure on farmers in the WHS. An increasing number of farms supplement their incomes through diversifying into other activities, including providing facilities for visitors. Events such as farmers' markets across the WHS zone give producers the opportunity to market their products locally.

Forestry and quarrying

3.7.11 A significant proportion of the Buffer Zone and the wider corridor is covered by forestry, which has an important role in

generating jobs and contributes to the local economy in rural areas. Quarrying is also significant in the Buffer Zone and the wider corridor, although there is no active quarrying in the WHS itself.

3.8 Local communities

3.8.1 The WHS and its Buffer Zone are part of a settled and heavily used landscape. The population in the ten miles either side of Hadrian's Wall numbers just under a million, inhabiting approximately 430,000 households. The extent to which this population is affected by the WHS is varied. Its relevance to many living in the urban areas may be negligible, whereas the WHS probably affects a higher proportion of the population in the rural areas where its economic impact is more significant.

3.8.2 Some issues such as transport and access are common to visitors, local residents and managers of the Site. These cannot be dealt with without consideration of all interests. There can be widely differing views on particular issues in local communities. Some welcome the new opportunities that the WHS can bring, while others object to development proposals that may intrude into the landscape.

3.8.3 Some of those most directly affected by what happens to the WHS live close to or farm around it, and may as a result be subject to restrictions on what they can do. Tourism to the Site, especially to the most heavily visited parts, can have a negative impact for some communities, particularly because of the volume of traffic generated, but tourism also presents development opportunities that can support existing and new businesses, with direct and indirect benefits to the local economy.

3.8.4 The opening of the National Trail found attitudes changing from concern about potential disturbance to a desire to make visitors aware of the richness of their part of the WHS. The recruitment of a body of around 70 local volunteers for the National Trail has created a new link between communities and the WHS.

3.8.5 A number of site and museum managers include community engagement projects among their activities, and developing participation is part of the agenda of HWHL. Education also provides links between local communities and the WHS.

3.9 Ownership pattern and management roles

3.9.1 The pattern of ownership and management in the WHS is very complex and fragmented. A fuller understanding of ownership would benefit its management.

3.9.2 The majority of the WHS is in private ownership, as is most of the Buffer Zone. In Northumberland and eastern Cumbria tenants of medium to large estates farm most of the land, with a greater number of owner-occupied farms west of Brampton. In the urban areas, there is a very wide range of ownership.

3.9.3 A considerable number of bodies own and manage approximately 10% of the WHS specifically for conservation and access.

3.9.4 The Vindolanda Trust owns the whole of the site at Vindolanda including the museum. The area of the displayed stone fort is in English Heritage Guardianship, but is managed under a local management agreement by the Trust, which owns the remainder of the site, including the museum. The Vindolanda Trust also owns the site of the fort and much of the associated civilian settlement at Carvoran, together with the Roman Army Museum.

3.9.5 The museum housed in the battery adjacent to the fort at Maryport is run by the **Senhouse Museum Trust**.

3.9.6 The National Trust's estate in the central sector covers around 1,100 hectares of land, including the fort at Housesteads and five miles (8km) of the Wall. It has in its care two of the six milecastles that have displayed remains, and also the fortlet and marching camps at Haltwhistle Common, together with considerable lengths of the *Vallum*, and Milecastle 38 at Hotbank, which survives as a particularly prominent earthwork.

3.9.7 English Heritage manages:

- some five miles (8km) of the Wall, including the remaining four visible milecastles
- 16 of the 18 visible turrets
- two temples
- the *Vallum* crossing at Benwell
- the bathhouse at Ravenglass
- the abutments of two bridges at Willowford and Chesters
- five forts that are in English Heritage Guardianship
- part of the centre of Roman Corbridge, which is in English Heritage Guardianship, although the greater part of the site of the town is privately owned with no access
- four museums on Hadrian's Wall at Birdoswald, Housesteads, Corbridge and Chesters and their collections.

3.9.8 Many English Heritage Guardianship properties are in fact in the freehold of other owners, including the National Trust (eg Housesteads, Milecastle 42) and the Vindolanda Trust (Vindolanda), so that there is a degree of overlap between holdings.

3.9.9 Eight **Local Authorities** manage parts of the WHS for the purposes of conservation and display. The main areas owned in this way are listed below.

- Part of the fort at Rudchester and a length of the Wall at Longbyre (Northumberland County Council).
- The forts at Wallsend (North Tyneside Council) and South Shields (South Tyneside Metropolitan Borough Council), both managed together with their museums on behalf of their owners by Tyne and Wear Museums Service.
- Newcastle City Council owns one short length of consolidated Wall at West Denton and part of the site of the fort at Newcastle.
- Allerdale Borough Council owns the excavated and displayed

milefortlet at Swarthy Hill on the Cumbrian coast.

- Carlisle City Council owns a length of Hadrian's Wall and the *Vallum* east of Carlisle as well as the presumed site of the bridge that carried Hadrian's Wall across the River Eden.
- Northumberland National Park Authority manages the public car parks in the National Park boundary, as well as the Once Brewed National Park Centre and the recreation sites at Walltown and Cawfields.
- Cumbria and Northumberland County Councils, and the three unitary authorities, are the highway authorities in their areas. As a result they have a specific role in the development of a Transport Strategy for the WHS. Large lengths of Hadrian's Wall lie under and beside modern roads in Northumberland, Cumbria and Newcastle and this also involves the Highway Authorities as owners of parts of the WHS.
- Lake District National Park Authority owns and manages the fort at Ravenglass.

3.9.10 In sum, public bodies own or manage for conservation purposes:

- six out of the 16 forts on the line of the Wall, together with South Shields
- three of the forts on the Stanegate, with parts of two others
- all six visible milecastles and one milefortlet
- all the visible and excavated turrets except Turret 44b at Mucklebank
- lengths of the Wall and *Vallum*
- a significant group of temporary camps.

Other organisations involved

Natural England

3.9.11 There are a significant number of natural habitats and species of both national and international importance in the WHS. Natural England has an important role in ensuring these are protected and enhanced where possible.

3.9.12 Natural England also contributes financially to land management along Hadrian's Wall through Environmental Stewardship, which ensures the landscape is managed in a sensitive but sustainable way, as well as assisting with individual conservation projects along the WHS. As part of its remit to improve access and enjoyment of the natural and historic environment, it also plays a role in supporting the management of the Hadrian's Wall Path National Trail.

Solway Coast AONB

3.9.13 A team employed by Allerdale Borough Council manages the protection and conservation of the cultural and natural heritage and the landscape of the AONB. It also promotes sustainable public enjoyment and learning about the AONB through the Discovery Centre at Silloth, and schemes such as history trails.

Hadrian's Wall Heritage Ltd

3.9.14 HWWHL has a key role in the overall management and promotion of the WHS. The company was established in May 2006 by the two RDAs, English Heritage and Natural England,



and took over the roles of the Hadrian's Wall Coordination Unit, and the HWTP. Further detail of its structure, remit and functions can be found in Part 1.8.

Appendices to PART 3

Appendix 3.1 The key legislative framework for the protection of the WHS and its Buffer Zone



HADRIAN'S WALL
Frontiers of the Roman Empire
WORLD HERITAGE SITE

4

Values and significance of Hadrian's Wall WHS



HADRIAN'S WALL
COUNTRY



4: Values and significance of Hadrian's Wall WHS

4.1 Assessing values

4.1.1 This section lies at the heart of the Management Plan, since it outlines the values of Hadrian's Wall WHS. These define the reasons for which it is judged to be important, or significant.

4.1.2 A values assessment first identifies all a site's values, without prioritising their relative strengths. The importance of a site can result from either one or a combination of different values: for instance its archaeological importance could rest on a mixture of the rarity of the archaeology, its integrity, and its research potential, while its overall importance may include a whole range of other values. For the purposes of this Plan, English Heritage's categories of evidential, historic, aesthetic and communal values have been used¹, with the addition of a further category of natural values.

4.1.3 Once values have been identified, it may be possible to assess them as being of international, national, regional or local importance. It is vital to understand how these interrelate if a site is to be managed effectively.

4.1.4 In order to be inscribed as a WHS, a site must be judged to have, among its values, particular Outstanding Universal Value (OUV), such that it represents:

cultural and/or natural heritage which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity².

4.1.5 The protection and enhancement of this OUV forms the basis for the management of the WHS.

4.2 The OUV of Hadrian's Wall

4.2.1 At inscription as a WHS, each site's individual OUV is now described by a Statement of Outstanding Value (or Statement of Significance), which must include:

- one or more of the ten criteria for selection (six cultural and four natural) established by the UNESCO World Heritage Committee
- assessments of the conditions of integrity or authenticity
- assessments of the requirements for protection and management in force³.

It is then the responsibility of the government of that country to protect, conserve, present and transmit the values of that site⁴.

Inscription as Hadrian's Wall WHS

4.2.2 When Hadrian's Wall was inscribed in 1987 it was considered to meet three of the six criteria established for cultural sites. These were that it should:

(ii) exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts or town planning and landscape design

(iii) bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or has disappeared

(iv) be an outstanding example of a type of building or architectural or technological ensemble or landscape which illustrates [a] significant stage [s] in human history⁵.

4.2.3 No formal statement of OUV was agreed then, though ICOMOS did suggest citations for each of the criteria listed (see below).

Inscription as Frontiers of the Roman Empire

4.2.4 The Frontiers of the Roman Empire WHS was considered to meet the same three criteria when it was inscribed in 2005.

4.2.5 An overall **Summary Statement of Significance** was submitted with the nomination for the Frontiers of the Roman Empire in 2004. This forms the basis for the overall statement of the Site's OUV agreed by the UNESCO World Heritage Committee which accepted this statement in July 2005. Relevant extracts can be seen in Appendix 4.1.

4.3 The draft formal Statement of Significance

4.3.1 The United Kingdom has now been asked to provide a formal Statement of Significance for Hadrian's Wall, based on the documentation from its inscription in 1987 and the inscription of the Frontiers of the Roman Empire WHS in 2005.

¹ English Heritage 2006 *Conservation Principles: Policies and Guidance*. London: English Heritage p.23-29

² UNESCO 2008 *Operational Guidelines*, 49

³ *ibid* 155

⁴ *ibid* 117

⁵ *ibid* 77

4.3.2 The statement is included below, but may require minor amendment once the Committee has considered it. It does not include formal assessments of the authenticity and integrity of the Site, since these were not required at the time of inscription.

FRONTIERS OF THE ROMAN EMPIRE WHS: HADRIAN'S WALL DRAFT STATEMENT OF SIGNIFICANCE

4.3.3 The Frontiers of the Roman Empire WHS has outstanding universal value for the following qualities:

- The scope and extent of the frontier reflects the unifying impact of the Roman Empire on the wider Mediterranean world, an impact that persisted long after the Empire had collapsed.
- The frontiers are the largest single monument to the Roman civilization.
- The frontiers illustrate and reflect the complex technological and organisational abilities of the Roman Empire which allowed them to plan, create and protect a frontier of some 5,000kms in length, garrison tens of thousands of men, and to manage the social, economic and military implications of this frontier.
- The frontier demonstrates the variety and sophistication of the response to topography and political, military and social circumstances which include walls, embankments, rivers, and sea.

4.3.4 As a whole the Frontiers of the Roman Empire satisfy criteria ii, iii and iv as follows:

4.3.5 Criterion ii: The *limes* as a whole reflects the development of Roman military architecture and the impact of the frontier on the growth of transport routes, urbanisation.

4.3.6 Criterion iii: The Roman frontier is the largest monument of the Roman Empire, one of the world's greatest pre-industrial empires. The physical remains of *limes*, forts, watchtowers, settlements and the hinterland dependent upon the frontier, reflect the complexities of Roman culture but also its unifying factors across Europe and the Mediterranean world. Unlike the Roman monuments already inscribed, the *limes* constructions are evidence from the edges of the Empires and reflect the adoption of Roman culture by its subject peoples. The frontier was not an impregnable barrier: rather it controlled and allowed the movement of peoples within the military units, amongst civilians and merchants, thus allowing Roman culture to be transmitted around the region and for it to absorb influences from outside its borders.

4.3.7 Criterion iv: The *limes* reflect the power and might of the Roman Empire and the spread of classical culture and Romanisation which shaped much of the subsequent development of Europe.

4.3.8 Hadrian's Wall, as the first part of the *limes* to be included on the World Heritage List, meets the criteria set out above. Part of the significance of the *limes* lies in the way in which the

Romans solved similar problems in many different ways according to local conditions. Built under the orders of Emperor Hadrian in about AD 122 the 118-kilometre long wall is a striking example of the organisation of a military zone, which illustrates the techniques and strategic and geopolitical views of the Romans. For almost 300 years, Hadrian's Wall was the northernmost frontier of the Roman Empire, one of the greatest empires the world has ever seen, both in extent and duration.

4.3.9 The complex of archaeological remains of Hadrian's Wall is the best known and best surviving example of a Roman frontier in design, concept and execution. Largely built in the decade AD 120-130, it survives today, some of it amidst strikingly majestic scenery. Its remains include stone, earthwork and timber built structures of robust Roman military workmanship, which, together with roads and control works, dominated the terrain.

4.3.10 The frontier formed a military zone with a wall across the isthmus along a distance of 118kms, from Wallsend to Bowness, which is the most symbolic element, if not the most important from the strategic standpoint. The wall, possibly 6.5m high, was not an insurmountable obstacle, rather a defence line reinforced every Roman mile (1,480m) by a milecastle and turrets between each milecastle at intervals of a third of a mile. The defence line was also reinforced, to the south, by a parallel *Vallum* nearly 40m in width, which included a deep ditch situated between two earth banks. There were major forts every seven miles or so along the zone. There were civilian settlements attached to the forts, and cemeteries, temples and other military works such as temporary camps, aqueducts, quarries and signal towers. The frontier extended along the Solway coast with forts, fortlets and towers but no continuous barrier.

4.3.11 When it was complete, Hadrian's Wall would have dominated the landscape, and, even in its ruined state, its upstanding masonry and earthwork remains are still a significant element in the modern landscape, demonstrating the care with which it was sited. Although eroded through the passage of time and subjected to episodes of deliberate destruction, much of the remains of the Wall and its structures still survive undisturbed as archaeological deposits. Although a significant length was utilised as the base of the Military Road in the 18th century, the lower courses survive below the road and the road itself dramatically marks the course of the frontier in the modern landscape. Understanding the Wall in its landscape and its role as a frontier is still very possible.

4.3.12 Hadrian's Wall was originally inscribed under criteria (ii), (iii) and (iv):

- **Criterion (ii)** Hadrian's Wall exerted great influence on the spatial organisation of the British *limes* over approximately 300 years. This frontier zone is still a part of the landscape from Tyne to Solway.

- **Criterion (iii)** This military zone bears exceptional testimony to Roman colonisation by the large number of human settlements associated with the defences: the *vicus* of Vindolanda (Chesterholm) is an excellent example of a garrison settlement which contributes to an understanding of how, in times of peace, away from the entrenched camp, soldiers and their families lived.



- **Criterion (iv)** Hadrian's Wall is an outstanding example of fortified *limes*. No other ensemble from the Roman Empire illustrates as ambitious and coherent a system of defensive constructions perfected by engineers over the course of several generations. Whether with respect to military architectural construction techniques, strategic design in the Imperial period or a policy for ground use and the organisation of space in a frontier zone, this cultural property is an exceptional reference whose universal value leaves no doubt.

Preservation, integrity and authenticity

4.3.13 Despite not being required, for technical reasons, to include formal assessments of integrity and authenticity in the statement submitted to the UNESCO World Heritage Committee, a statement on these matters is given below, because their maintenance should be a key aspect of the Site's management.

Materials and fabric

4.3.14 Although they have been eroded through the passage of time and subjected to episodes of deliberate destruction, many parts of the Wall's remains and structures still survive undisturbed as archaeological deposits, thereby retaining a high level of authenticity. But a significant length of the Wall was utilised as the base of the Military Road in the 18th century, the lower courses survive below the road and the road itself dramatically marks the course of the frontier in the modern landscape.

4.3.15 Above ground, significant parts of the original structure remain, enabling unambiguous interpretation of the archaeology and clear understanding of the materials, fabric and process of construction.

4.3.16 In the 19th century parts of the excavated structures were conserved by encasing them in a dry-stone wall built from fallen face stones of the Wall. This has preserved well the surviving Roman masonry, as well as being a significant contribution to the character of the Wall. Where other parts of the Site have been excavated and displayed, the policy pursued on almost every occasion since the 1950s has been to conserve carefully what has been exposed and not to restore or reconstruct it. *In situ* reconstruction has been minimal and is confined to a single site, where the reconstructions are reversible and based on extensive research.

Form and design

4.3.17 Evidence of many of the original structures survives, enabling detailed understanding of the original concept and its implementation, and of changes and modifications to the design carried out during construction and subsequent use over 300 years.

Location and setting

4.3.18 Hadrian's Wall was skillfully sited to take full advantage of the natural terrain and allow maximum visibility to the north as well as along the frontier system itself. The landscape setting of the Site is predominantly rural and it is still possible along most of the length of the frontier to appreciate fully why it was sited as it was, and how it functioned. This is especially the case in the central section of the Site in the Northumberland National Park, but is also possible in some sections of its urban landscape.

4.4 The values of Hadrian's Wall

EVIDENTIAL VALUES

Complexity

4.4.1 Hadrian's Wall demonstrates the evolving thoughts of the Roman army on frontier design over 300 years. This began with the temporary limits of advance through Britain in the first century AD to the proto-frontier of towers along the road on the Gask Ridge in what is now Scotland, and the line of forts established along the Stanegate road under the Emperor Trajan. The first design for a continuous wall with milecastles and turrets, with the main garrisons stationed in pre-existing forts to the south, was modified during construction, with 16 new forts, several of which replaced milecastles or turrets that had already been built, or on which construction had started. The unique *Vallum* was added to the south, creating a controlled military zone. Later changes included a new road, the Military Way, connecting the forts, milecastles and turrets, the demolition of a number of turrets, and the rebuilding of the turf and timber structures in stone. Associated sites included civilian settlements attached to the forts, cemeteries, temples and other military works such as temporary camps, aqueducts, quarries and watch and/or signal towers.

4.4.2 Although the Wall marked the frontier of the province, Roman military activity extended beyond it. In the early third century, four forts north of the Wall contained mixed thousand-strong garrisons of infantry, cavalry and scouts, which attests to Roman peacekeeping operations beyond the line of the Wall. These forts were abandoned in the early fourth century, after which the effectiveness of Roman control north of the linear frontier is largely uncertain.

4.4.3 The Antonine Wall, built yet further north by the Roman army on the orders of the Emperor Antoninus Pius following the Roman victory over its northern enemies in AD 142, was abandoned in the AD 160s. At some point after the withdrawal from the Antonine Wall and the re-commissioning of Hadrian's Wall, modifications to it, such as the abandonment of the *Vallum*, the provision of the Military Way, the reduction of the regularity and number of turrets, and the narrowing of many milecastle north gates, reflected yet a further stage in the development of a frontier.

Group value

4.4.4 The group value is high, as the individual sites described above are inter-related, both spatially and functionally. This includes the clustering of civilian settlements around forts, and, before the abandonment of the *Vallum* at some point in the late second century, the initial exclusion of civilian structures from the area between the Wall and the *Vallum*. It also includes the visual and spatial relationship between the Wall and the *Vallum*, which created a restricted zone under military control, and the spatial and visual relationship between the Wall and the Stanegate, as the soldiers on the Wall had to communicate with those in the forts on the Stanegate and *vice versa*.

4.4.5 The group value of the Hadrian's Wall frontier is also significant in the wider group of the Frontiers of the Roman Empire WHS. The form of the frontiers varied according to the local situation around the Empire, and the particular solution developed for the frontier in Britain across the Tyne-Solway

isthmus bears both comparison and contrast with other frontiers. For instance, the continuous barrier and pattern of interspaced forts and towers relates to the *Limes* in Upper Germany, while the defences extending from Bowness-on-Solway down the Cumbrian coast have more in common with the solutions adopted on the river frontiers of the Empire.

4.4.6 Also of high significance is the relationship of the Roman frontier works to the landscape and settlement patterns onto which they were imposed, and their subsequent influence on the development of that landscape. Excavations have shown that the Wall was built without regard to contemporary occupation and land-use, and in a number of locations the Roman remains overlie native field systems.

Archaeological evidence

4.4.7 Research, including survey, geophysics and excavation, has shown that the Site contains a wealth of evidential material, contributing to an understanding of its function and development, its environmental context, and its material culture, including evidence of workmanship and adaptation to the environment.

4.4.8 Approximately 7% of the Wall has been exposed through antiquarian and archaeological endeavour since the early 19th century. A number of milecastles and turrets have also been excavated, along with parts of seven forts. Other excavations in advance of development in the past have also contributed to the body of evidence, along with research excavations at a number of forts where the remains have not been left open for display. These excavations have yielded the largest assemblage of finds from any Roman frontier (see Appendix 2.1).

4.4.9 While excavation remains an important research tool, the development of non-invasive techniques, such as geophysical survey, offers new opportunities to investigate archaeological deposits. These techniques can better inform the identification of sites, and are powerful tools in decision-making with regard to where subsequent research, conservation or protection would be appropriate.

4.4.10 Most of the frontier survives as earthworks or as buried archaeology, even in modern urban areas, where major discoveries continue to be made. Uninvestigated or undiscovered archaeological deposits have high potential to develop understanding of the frontier. Geophysical surveys, particularly of a number of *vici*, have demonstrated that these were in some cases far larger in extent than previously understood and must have contained significant populations. Research into the precise location of milecastles and turrets and an examination of the way in which the line of the Wall was surveyed add to our understanding of how the frontier worked.

4.4.11 The WHS contains, in addition to its exposed and buried structures, a great deal of environmental evidence, and a unique collection of objects made from organic materials from anaerobic deposits at Vindolanda and Carlisle. All of this has considerable potential to inform future research on the WHS. Environmental evidence may also produce information about the landscape before the construction of the Wall, and the subsequent archaeology of the frontier.

Landscape value

4.4.12 The geology and morphology of the Hadrian's Wall landscape directly influenced the location of the frontier and are essential to our understanding of its design and function. They have also created particular habitats for both flora and fauna, which are considered below under *Natural values*.

4.4.13 The presence of the Wall has had a lasting effect on the landscape and perceptions of it, and on the evolution of ways of life. Examples are the legacy of the fortifications in the form of re-use of building materials, as at Birdoswald, and in the re-use of stone to build houses and farms, and the Military Road.

4.4.14 Particular characteristics of the landscape are its open aspect, the maintenance of space between rural settlements, the existing patterns of fields and open country, the use of traditional local materials in building, and woodland developed to reinforce the patterns of the landscape.

Scale

4.4.15 The scale of the planning and construction of the Wall gives an insight into the organisational abilities of the Roman army, in particular its very high level of surveying, technical, engineering and logistical skills.

4.4.16 When it was complete, Hadrian's Wall would have dominated the landscape. Even in its ruined state, its upstanding masonry and earthwork remains are still a significant element in the modern landscape.

Rarity

4.4.17 Hadrian's Wall is one of the two most significant artificial frontiers constructed by the Romans in the reign of the Emperor Hadrian, the most notable period of frontier definition in the history of the Empire. It is also one of the most concentrated and complex of Roman frontiers. It is unparalleled in the United Kingdom as a large and complex monument.

International influence

4.4.18 Research on Hadrian's Wall since the 19th century has inspired and influenced the development of Roman frontier studies in other countries.

HISTORICAL VALUES

Documentation

4.4.19 Hadrian's Wall is referred to in contemporary Roman accounts, such as Hadrian's biography, which outlines the reason for its construction. Events in Britain are also alluded to by a number of contemporary historians, including Cassius Dio and Pausanias. The writings of Tacitus relate the Roman advance in Britain in the late first century AD, providing the background to the building of the Wall. Numerous inscriptions relating to the construction and occupation of the Wall and its forts have been preserved and recorded over several centuries. The several thousand written documents on wooden writing tablets found at Vindolanda give a unique insight into life in the Roman army on the frontier.

4.4.20 The presence of Hadrian's Wall was noted and described by Gildas in the sixth century and Bede in the eighth, while both Hadrian's Wall and the Antonine Wall were shown on a map of Britain drawn in the 13th century by Matthew Paris.



Associative value

4.4.21 The building of the Wall has a direct link with the Emperor Hadrian, on whose orders it was constructed. Edward Gibbon saw his reign from AD 117 to AD 138 as the central reign of 'five good emperors'. Hadrian had a great interest in architecture: the Wall, though not showing any technical innovation or stylistic elaboration, therefore has direct association with a number of other major building projects he initiated or completed during his reign.

4.4.22 The building of Hadrian's Wall was an element in the Emperor Hadrian's confirmation of the boundaries of the Roman Empire at its peak. The subsequent decline and eventual collapse of the western Roman Empire created a vacuum in its former borders in which a number of fragmented tribal states evolved. This traumatic series of events has been recorded at a number of sites on the Wall.

4.4.23 The remains of the Wall have strong associations with the revival of interest in the classical civilisations and the Romans in particular, expressed both in antiquarian research from Camden's *Britannia*, published in 1599, and in the preservation of its fabric. The short section of the Wall at Planetrees saved by Hutton in 1811 may be the first recorded example of intervention to obtain the preservation *in situ* of the remains of the Wall. Other contemporary owners, such as Henry Norman at Birdoswald, oversaw the excavation and preservation of the fort walls and gates and commissioned paintings by the Richardson brothers of the surviving Roman remains.

4.4.24 Hadrian's Wall has provided an evocative setting for literature. Kipling's *Puck of Pook's Hill* is set on the Wall and it forms the background to Rosemary Sutcliffe's children's book *The Eagle of the Ninth*, as well as poems by writers such as W H Auden. Recently, the project *Writing on the Wall* brought writers and poets from the modern countries from which the auxiliary units attested on Hadrian's Wall were originally raised. These visiting writers expressed their own reaction to Hadrian's Wall in a published collection⁶.

4.4.25 Hadrian's Wall has also been used as a setting for a number of films, including *King Arthur* (2004).

Illustrative value

4.4.26 The single plan to build the Wall and its structures bears witness to the might and power of the Roman Empire, and in particular that of the emperor. The building of the Wall was on Emperor Hadrian's personal instruction, and the decision to abandon it after his death, and to move the frontier northwards to a new wall built across the Clyde-Forth isthmus was equally an illustration of the authority of his successor, Antoninus Pius.

AESTHETIC VALUES

4.4.27 The landscapes through which the remains of Hadrian's Wall run are varied, and include two National Parks and an Area of Outstanding Natural Beauty (AONB), two of the United Kingdom's highest landscape designations. The combination of the remains of the frontier in their landscape setting has produced over time a rich aesthetic experience.

4.4.28 The views across the Solway estuary from Bowness-on-Solway and as far as Maryport are of the Scottish Solway coast,

which was not wholly under Roman control, and is dominated by the evocative mountain of Criffel. These views in their different ways strongly evoke the sensation of being on the edge of the Empire.

4.4.29 In the central section, the views to the north from the Site are onto a beautiful, wild and tranquil landscape, much of it in Northumberland National Park. The scattered farmsteads blend into the landscape and the managed forests of Wark and Spadeadam form the northern fringe of the Buffer Zone. From the most elevated sections the views extend even further, encompassing southern Scotland and the Solway. To the south the view extends to the North Pennines and to locations as far as the northern fells of the Lake District. Further east, at Limestone Corner, the views stretch to the Cheviot Hills and into the North Tyne valley.

4.4.30 From Chollerford the frontier runs eastwards along ridges of high ground with commanding views north towards the Cheviots and south across the Tyne valley, and continues down to the Tyne estuary at Wallsend, ending at Arbeia overlooking Tynemouth and the North Sea.

4.4.31 The sections of the Wall restored and capped with turf by Clayton in the 19th century present a different approach to the modern one of conserving the remains as found. They provide a softer visual presentation of the remains, with the faces of the stone now mostly covered in lichens.

4.4.32 A quality much valued on the Wall is that of tranquillity, particularly in the areas away from roads and populated areas. It is a vulnerable and fragile value, easily disturbed by intrusions of modern everyday life, such as traffic noise from the Military Road and low-flying aircraft.

COMMUNAL VALUES

Academic value

4.4.33 The Site's value as a resource for the further understanding of both the Wall itself and of Roman frontiers more generally is a very significant one. The long tradition of the study of Hadrian's Wall that can be traced back to Camden has influenced the development of the study of other parts of the Roman Empire and its frontiers.

4.4.34 The Site's value as a research resource involves both the further study and understanding of elements that are already available, either in the form of the monument and its visible structures, or the finds that have been recovered from the Site over several centuries. This research does not require any loss of the archaeological resource, and similarly, further information about the Site can be derived from non-invasive techniques such as geophysics and remote sensing.

4.4.35 Because excavation involves the irreversible destruction of archaeological relationships, the accurate recording and dissemination of the results is an intrinsic element in this value. The domestic and international archaeological communities need to be involved in decisions balancing the loss of archaeological deposits with the research value gained through excavation.

4.4.36 The Site also has value for many other academic interests, including pre- and post- Roman archaeology, history,

⁶ Chettle, S. (ed) 2006 *Writing on the Wall*. Newcastle, Arts UK

geology, natural history, site management and economic development.

Educational value

4.4.37 The WHS is an inspirational resource for learning for people of all ages and interests, and for formal and informal audiences.

4.4.38 Archaeology and the study of the Romans is the main draw for school groups and university students. Schools, particularly at primary level, are now moving away from prescriptive use of the National Curriculum to a more cross-curricular approach. Experiences of the Wall cover many subject areas including archaeology, history, citizenship, religious studies, travel and tourism, enterprise, geography, IT, design technology, science, maths, art, English, geology and sustainable development. The many and complex issues related to protecting, conserving and valuing the Wall and its status as a WHS representing universal values provide a wide range of learning opportunities.

4.4.39 Academics, schoolchildren and members of the public have often worked together on excavations and will continue to do so. New research projects can facilitate the role of the Wall as a place where ideas and communities meet. The diversity of the population along the Wall in historic times has parallels with that of today, providing important opportunities for engagement. The Wall can also be an educational stimulus for creative arts and writing.

Recreational value

4.4.40 Hadrian's Wall and its landscape environment are associated with a variety of recreational activities.

4.4.41 Access to and appreciation of the historic environment is enjoyed by thousands of visitors each year. The Site's high level of authenticity, its landscape setting and the constant development of its presentation to meet modern expectations all contribute to its value as a destination for visitors.

4.4.42 As an accessible area with transport links to Tyneside and Carlisle, the beauty of the landscape makes it popular for physical recreation. This is not necessarily linked to visiting the Wall itself, but the open nature of the area makes it popular for walking and cycling, and the faces of the Whin Sill are valued as a dolerite climb. The Hadrian's Wall Path National Trail and the Hadrian's Cycleway, opened during the last Plan period, have significantly added to ways of accessing and enjoying the Site.

Social value

4.4.43 Hadrian's Wall is internationally known. It is an icon of the north of England, valued by those who live and work in the area as part of their geographic and social identity.

4.4.44 Those who own and/or manage the land across which the WHS runs have a particularly close association with the Wall. In many cases they are the third or fourth generations of families that have farmed the land, and they have a special pride in the landscape in which they grew up.

Economic value

4.4.45 The tourism generated by the fame and significance of Hadrian's Wall and facilities such as the National Trail supports a network of related businesses in the wider Hadrian's Wall zone, and there is potential for the development of further tourism-related businesses.

4.4.46 Industries in the WHS and Buffer Zone, whose activities may be assisted or constrained, include agriculture, forestry and quarrying. In the urban areas, there are numerous other businesses close to the line of the Wall, which have no direct connection with it, but which may nevertheless benefit from economic regeneration produced by the WHS.

4.4.47 The section of the frontier defences on the Cumbrian coast has a particular economic potential, albeit not yet fully developed, to the population of west Cumbria, and also to the large number of visitors to the Lake District. The proposed development of the fort and Camp Farm at Maryport is likely to enhance this value, both in terms of the stimulation of the local economy and in terms of community awareness.

NATURAL VALUES

4.4.48 The way in which Hadrian's Wall was positioned to exploit a narrowing of the country between two estuaries and the vantage point offered by the Whin Sill has resulted in the association of the Wall with a particular range of habitats for both flora and fauna. Among the habitats characteristic of the area are the loughs and mires in the central sector, the Whin grasses that flourish on account of the volcanic Whin Sill rock, the dunes of the Cumbrian coast, and the Solway estuary, important in the migratory pattern of a number of bird species and as a breeding ground for others.

4.4.49 The WHS and its landscape setting contain habitats and species that are of national and international importance. Many of these habitats and species are protected by national and European legislation. For more detail on the nature of the designations, the areas covered and the protected habitats and species, see Appendix 4.2 and the accompanying maps at the end of the Plan (Maps 6-8).

Appendices to PART 4

Appendix 4.1 Relevant extracts from the summary nomination for the Frontiers of the Roman Empire WHS (2004)

Appendix 4.2 Nature conservation interests of Hadrian's Wall WHS



HADRIAN'S WALL
Frontiers of the Roman Empire
WORLD HERITAGE SITE

5

Review of the 2002-2007 Management Plan period



HADRIAN'S WALL
COUNTRY



5: Review of the 2002-2007 Management Plan period

5.1 Introduction

5.1.1 There are three elements to this section. They are summaries of:

- significant changes affecting Hadrian's Wall since 2002
- progress on the policies and actions contained in the 2002-2007 Management Plan
- lessons learned during the course of the last Management Plan.

5.1.2 A detailed account of progress against policies and actions from the 2002-2007 Plan can be found in Appendix 5.1.

5.1.3 This section is a pivotal connection between the 2002-2007 Management Plan and the current one, in that by reviewing progress on the implementation of actions and policies under the previous Plan, it helps to identify further actions and policies that should be taken forward in this Plan.

5.2 Significant changes affecting Hadrian's Wall WHS since 2002

Altered UNESCO inscription

5.2.1 The re-inscription of the Site as part of the new Frontiers of the Roman Empire WHS and its implications are discussed in Part 1, and Part 6: Issue 1.

Updated UNESCO Operational Guidelines

5.2.2 The UNESCO *Operational Guidelines for the Implementation of the World Heritage Convention*¹ were updated in 2005, and slightly amended in 2008.

Planning policy changes

- 5.2.3 Introduction of Planning Policy Statements (PPS)
- 5.2.4 The Planning and Compulsory Purchase Act 2004
- 5.2.5 Government White Paper *Planning for a Sustainable Future*, May 2007
- 5.2.6 Department for Communities and Local Government (CLG)/Department for Culture, Media and Sport (DCMS) Draft Planning Circular *Protection of World Heritage Sites*, with

annex *The Protection and Management of World Heritage Sites in England, Draft Guidance Note* prepared by English Heritage, May 2008²

- 5.2.7 Review of Call-In Directions Consultation, January 2008
- 5.2.8 WHS included as Article 1(5) Land in the General Permitted Development Order (GPDO) April 2008
- 5.2.9 DCMS Draft Heritage Protection Bill: *Heritage Protection for the 21st Century*, April 2008

5.2.10 For detail of these, and their implications for Hadrian's Wall, see Part 6 Issue 3, and Appendix 3.1.

Northumberland Unitary Authority

5.2.11 Until now, the WHS has involved 12 Local Authorities. The decision was made in 2007 that Northumberland should have a unitary authority for the whole county, to replace the county council and (as far as Hadrian's Wall is concerned) the district councils of Tynedale and Castle Morpeth. This change will take effect in 2009, although Northumberland National Park Authority will still determine planning applications in the area of the National Park, and the structure of local government in Cumbria and Tyne and Wear will remain unchanged.

Hadrian's Wall Heritage Ltd

5.2.12 In 1996 English Heritage set up the Hadrian's Wall Coordination Unit in Hexham, to oversee the implementation of the first Management Plan. The Coordination Unit continued in the role until 2006.

5.2.13 In 2004 a team of consultants commissioned by the two Regional Development Agencies (RDAs), North West Development Agency and One NorthEast, published the *Hadrian's Wall Major Study Report*. The aim of the Study was:

*to assess the potential of Hadrian's Wall to support the regeneration of the north of England through the growth of tourism revenues and to deliver a new vision for Hadrian's Wall - one that would inspire, challenge and deliver a step change in the contribution made by the Wall to the economies of the north of England*³.

5.2.14 The *Major Study* recommended the creation of a single body to take forward a programme of development to deliver the aims of the Study, resulting in the formation of Hadrian's

¹ 2005 and 2008 UNESCO *Operational Guidelines for the Implementation of the World Heritage Convention*. Paris, UNESCO

² CLG 2008 *Protection of World Heritage Sites*, Draft Planning Circular, May 2008. London: Department for Communities and Local Government.

³ Includes English Heritage 2008 *The Protection and Management of World Heritage Sites in England, Draft Guidance Note*. Annex B

³ Economic Research Associates 2004 *Hadrian's Wall Major Study Report*, 1.2

Wall Heritage Limited (HWHL) in May 2006. The company took over the role of coordination and periodic revision of the World Heritage Site Management Plan from the Hadrian's Wall Coordination Unit. Some activities of the Hadrian's Wall Tourism Partnership (HWTP), as well as the management of the Hadrian's Wall Path National Trail, were also transferred to the company. See Part 1.8 for the remit of the new company.

The Hadrian's Wall Path National Trail

5.2.15 The Trail opened in May 2003, and although it experienced initial problems, these have now largely been overcome. It has fulfilled its purpose of providing a recreational facility and increasing access to the archaeological remains of the WHS, and the number of walkers using it has made a significant contribution to the local economy. Whereas previous Management Plans were focused on the development and construction of the Trail, now that it is open as a Public Right of Way, this Plan needs to focus on its proactive and reactive management so that it continues to fulfil its objectives in a sustainable way.

Hadrian's Cycleway

5.2.16 The Hadrian's Cycleway (National Cycle Route 72) was developed in the last Plan period and was officially opened in July 2006. It runs from Ravenglass up the Cumbrian coast and along the Hadrian's Wall corridor, ending at South Shields. A number of sections of the route around Carlisle and down the Cumbrian coast remain to be completed, while some questions surrounding ongoing maintenance responsibilities and funding are still to be resolved.

Foot and mouth disease

5.2.17 The 2002-2007 Management Plan was written in the immediate wake of the 2001 outbreak of foot and mouth disease, which directly affected significant areas of the WHS (particularly Cumbria as far east as Banks, and the central sector), and had a wider effect on farming and tourism. While these industries have largely recovered from the short-term effects, fresh outbreaks of the virus in Surrey in 2007 provided sharp reminders of the need for vigilance and preparedness for appropriate action.

Climate change

5.2.18 This Management Plan covers a period in which the threats of climate change are high on both national and international agendas. The Plan addresses this major issue (see Part 6: Issue 6). The World Heritage Committee has considered the effects of climate change at its last three meetings, and at the 30th session of the Committee in Vilnius in 2006 requested that the issue be addressed in WHS management plans⁴.

5.3 Assessment of the 2002-2007 Management Plan

5.3.1 The review detailed in Appendix 5.1 shows that significant progress has been made in most areas during the period of the previous Management Plan and that, overall, the Plan has been an effective one. The medium-term aims have not always been wholly achieved in the period, but significant effort has been made to follow these through into the current Plan.

Identifying and protecting the WHS

5.3.2 A start was made on reviewing the boundaries of the Site. A set of specific proposals is now ready to be examined in detail for its feasibility and desirability. It has not been possible to move forward with the review of protection through scheduling on Tyneside and through Carlisle, though it is considered that the archaeology of the Hadrian's Wall frontier has not suffered significantly because of this during the 2002-2007 period. The existing protection frameworks of scheduling and the planning policies of Local Authorities, backed by national policy, guidance, hard work by local archaeological curators and the enlightened attitudes of statutory undertakers, have been very effective in protecting the Site.

5.3.3 In terms of risk preparedness, disasters to which the WHS is potentially prone cannot entirely be prevented, but emergency planning has been successful in preventing loss when responding to them.

5.3.4 In this Plan period, serious flooding in Carlisle in 2005 left no impact on the Site. The excavation and full recording of the remains of the south abutment of the Roman bridge at Corbridge, followed by the removal of its remains to a new site safe from future flooding, retrieved the archaeological information of this structure, which would otherwise have been lost. All sites and museums maintained and reviewed their counter-disaster plans.

Conserving the WHS

5.3.5 In the area of strategic conservation, all visitor attraction sites have conservation management plans in place and use them to manage and prevent deterioration. A start was made to develop an overall conservation strategy for the WHS. This needs to be taken forward to provide a comprehensive and coordinated framework for all conservation issues.

5.3.6 The Plan period saw the completion of the Raphael proactive earthworks management project and publication of the *Manual of Good Practice* to give strategic guidance to their management. Research into lime mortars undertaken by English Heritage is due to be published in 2009, and is anticipated to make a significant contribution towards the conservation of masonry remains in the WHS, as well as more generally.

5.3.7 Conservation of specific parts of the Site made significant progress. In the 2002-2007 period the consolidation of Bewcastle was achieved after over 40 years of trying to clarify the issue of its ownership. The agreement of the Higher Level Stewardship Scheme at Great Chesters is a positive step towards achieving consolidation of the upstanding remains.

5.3.8 Four parts of the WHS were identified as at risk from water erosion (see Part 6: Issue 6).

5.3.9 In terms of the interaction of the conservation of the archaeological remains with other values, the targeting of management agreements and agri-environmental schemes has continued throughout the Plan period. It is a significant achievement that the level of uptake of both the former Countryside Stewardship Scheme and the new agri-environmental schemes is high throughout the Site: every farm in the central sector is covered by one of these except for one, which is in an Entry Level Scheme. Through this and the

⁴ UNESCO 30th Session of the Committee, Vilnius, Lithuania, 09 July-16 July 2006, Decision 30 COM 7.1



encouragement of farms to diversify into other activities, particularly into businesses linked with tourism, the National Trail and local produce initiatives, the WHS continued during the Plan period to make a contribution to viable farming.

5.3.10 Instances arose, particularly over management of the National Trail, where there was a potential clash of interests between the conservation of the archaeological values of the Site and nationally and internationally significant natural assets, and in all cases balanced solutions were found.

Using and enjoying the WHS

5.3.11 The HWTP's Single Regeneration Enrichment and Enterprise project ran from 2001 to 2006. The funding and collaboration resulting from this project, together with the opening of the National Trail in 2003, made substantial contributions to the sustainable use, enjoyment, and development of the WHS. As mentioned above, the National Trail opened up new opportunities for many farm-based and other businesses. This complemented the achievements of the *Hadrian Means Business* scheme, which created new linkages between the WHS and local businesses, including major developments in the use and provision of local produce, take-up of environmental business schemes, and awareness of the special qualities and issues of the WHS.

5.3.12 New approaches to marketing the WHS were developed and the *Hadrian's Wall Country* brand and new Hadrian's Wall website were launched. These, together with the associated marketing of the National Trail, helped businesses to recover from the economic impact of the 2001 foot and mouth disease epidemic, but visitor levels towards the end of the Plan period were showing some decline.

5.3.13 There were some instances of communication breakdown during the period of consultation for and implementation of the *Major Study*, when it was felt that the RDAs' emphasis on economic values might be a threat to the OUV of Hadrian's Wall. These were resolved, but not before some damage to business and consumer confidence was done.

5.3.14 Developments in the fields of education and links with local communities advanced considerably during this Plan, with the WHS Education Forum able to deliver more projects through the HWTP team. Initiatives such as the *Reaching the Wall* grants helped to generate innovative linkages with both community and education groups and to raise awareness of the WHS values. Work with trainee teachers and many other educators should reap rewards in the future. A new learning strategy was developed by English Heritage, which re-focused its sites and developed facilitated educational visits at Housesteads, Birdoswald and Chesters.

5.3.15 Progress was made on implementing the 1996 Interpretation Strategy with initiatives such as the new orientation panels at gateway sites funded by the Heritage Lottery Fund (HLF); the *Eagle's Eye* film at the Roman Army Museum; *Pax Britannica* education project at Walltown and the WHS-wide *Writing on the Wall* project making significant contributions. However, the strategy was not reviewed and this remains an action for this Plan.

5.3.16 Progress on investment in capital developments at the main WHS attractions was slow in most of the central section of the WHS, with a stop-start pattern on many proposals as work on the *Major Study* progressed. Much of the development work done during the 2002-2007 Plan is now ready for implementation in this Plan period. Investment proposals for the east and west parts of the WHS included the Great North Museum in Newcastle (opening 2009) and ambitious plans at Maryport developed towards the end of the Plan period.

5.3.17 The 2002-2007 Plan saw record increases in provision, awareness and usage of the *Hadrian's Wall Country* bus, with reduction in the percentage subsidy needed for the service. As well as the opening of the National Trail, another major development was the opening of Hadrian's Cycleway in 2006, and significant improvements were made in provision for walkers and cyclists at accommodation and sites. Some progress was made on the development of transport hubs, and work started on a review of brown signing that needs to be completed during this Plan.

5.3.18 Museum curators and site managers continued to collaborate on joint ventures such as exhibitions and marketing, although more work needs to be done on links between catalogues.

5.3.19 A number of tourism market research studies were commissioned during this Plan period, including a day visitor survey in 2002, brand development research in 2002-2003, and visitor surveys both as part of the *Major Study* and the work of the HWTP. Economic impact analysis was also commissioned and needs to be developed further during this Plan.

Managing the WHS

5.3.20 The WHS Management Plan Committee (MPC) continued to meet on a minimum twice-yearly basis. It also met more frequently to consider some recommendations made by the *Major Study* that were of concern, and was able to influence the shaping of HWHL.

5.3.21 The MPC endorsed the proposal to change the name of the WHS to Frontiers of the Roman Empire, thus aiding the submission of the Upper German/Raetian *Limes* nomination as an extension to Hadrian's Wall.

5.3.22 All organisations continued to meet their commitments for recurrent expenditure throughout the Plan period, although some public bodies indicated that limited resources mean that some targeted actions in the Plan have had to be set against other priorities, and have not therefore been carried forward.

5.3.23 English Heritage commissioned a partnership of Durham University and Durham County Council to develop a Research Framework for the WHS, supervised by a steering group drawn from the wider archaeological community. The development of this framework brought together those with an academic interest in Hadrian's Wall. A number of individuals prepared statements on the current status of research on the Wall, to form an assessment.

5.3.24 No progress was made on developing a Geographic Information Survey (GIS) for the WHS during the Plan period. A

brief was prepared for a GIS for the National Trail, but it was agreed that the need was for a GIS covering all aspects of the WHS, and that this needs to be taken forward in the new Plan period.

5.3.25 Digital mapping of aerial photography of the section of the Wall west of Carlisle, the central section, Tyneside and east Northumberland was achieved as part of the English Heritage National Mapping Programme. English Heritage has made the commitment to finish the project early in the new Plan period.

5.3.26 Historic Landscape Characterisation has now been completed at the county level for Northumberland and for Cumbria, but at a scale too large to materially inform the management of the WHS.

5.4 Lessons learned during the 2002-2007 Management Plan period

Challenges facing the management of the WHS

- **5.4.1** There are and will continue to be particular challenges to conserving the WHS, arising from some forms of land usage, the impact of visitors (particularly along the National Trail) and climate change, and associated erosion to the archaeology of the Site.
- **5.4.2** The scale of the WHS and the complexity of interests in it make its effective management inherently challenging.
- **5.4.3** The collective and mutual benefits of collaboration between stakeholders need to be more clearly demonstrated.
- **5.4.4** Understanding of the importance and values of the WHS remains limited, both locally and among wider audiences: although it has developed significantly, it needs continual refreshment, investment and resources.
- **5.4.5** The WHS falls short of realising its full potential in terms of economic and social regeneration, learning, research and academic opportunities.
- **5.4.6** The WHS continues to face widespread and growing competition from other tourism destinations and from alternative leisure and recreational activities: there nevertheless remains a belief among some stakeholders that their main competition comes from other stakeholders in the WHS.
- **5.4.7** For visitors, the component parts of the WHS need to be both differentiated from each other and clearly related to each other.
- **5.4.8** The quality and variety of interpretation and visitor facilities need to be upgraded.
- **5.4.9** Changes to protection legislation will continue to pose particular challenges and opportunities in the future application and management of statutory responsibilities.

- **5.4.10** The interests of conservation and economic regeneration need to continue to be balanced in such a way that the needs of each can be met where possible, without compromising the OUV of the Site.
- **5.4.11** All aspects of the accessibility of the WHS must be improved.

Approaches to managing the WHS

- **5.4.12** Meaningful engagement with and effective communication between all relevant stakeholder interests in the development of policies and actions is of central importance.
- **5.4.13** A central body with lead responsibility for coordinating activities and representing the WHS is essential to its effective management.
- **5.4.14** Greater Wall-wide coordination of activities is needed for more efficient use of resources, and for the development and delivery of effective action, particularly with regard to the understanding, conservation, interpretation and promotion of the WHS.
- **5.4.15** Appropriate and effective partnership structures with clearly defined responsibilities by which projects, initiatives and programmes can be developed and delivered must be established, and maintained.
- **5.4.16** A coordinated Research Framework, with efficient dissemination of information, is vital for the management of the Site, and can promote understanding of the WHS.
- **5.4.17** Appropriate systems of monitoring and review must be established, in order to improve management.
- **5.4.18** The principle of sustainability must run through all aspects of the management of the WHS.

Resourcing the management of the WHS

- **5.4.19** The effective management of the WHS and development and delivery of Wall-wide projects depend on adequate and sustained resourcing of a self-standing coordinating body.
- **5.4.20** The effective delivery of conservation management of the WHS is similarly dependent on adequate staffing and sustained funding.
- **5.4.21** The practical conservation of the Wall continues to be largely dependent upon resourcing and action by partner organisations.
- **5.4.22** The improvement of the visitor offer will require significant investment sustained over a period of time, including periodic reinvestment in refreshment and upgrading of facilities.
- **5.4.23** It is important to have clear, robust, sustainable proposals for capital and other projects that contribute to the values of Hadrian's Wall in order to secure funding and enable implementation; the development of such proposals must itself be adequately resourced.



- **5.4.24** More creative approaches have to be adopted to assembling investment including potentially greater use of private sector resources, as well as the utilisation of incentive and pay-back schemes as mechanisms for generating capital and revenue resources for investment.

Appendices to PART 5

Appendix 5.1 Summary Review of the 2002-2007 Management Plan



HADRIAN'S WALL
Frontiers of the Roman Empire
WORLD HERITAGE SITE

6

The management issues affecting Hadrian's Wall WHS



HADRIAN'S WALL
COUNTRY



Introduction

6.0.1 This section sets out issues relating to the management of Hadrian's Wall WHS as part of the Frontiers of the Roman Empire WHS. The issues arise both from the interests and responsibilities in the WHS already outlined, and from an assessment of the achievements of the previous Management Plan for 2002-2007 (and extended into 2008).

6.0.2 The issues are set out under five broad headings that reflect the responsibilities listed in the *Operational Guidelines* of the UNESCO World Heritage Convention:

- managing the WHS
- identifying the WHS
- protecting the WHS
- conserving the WHS
- presenting, enjoying, and transmitting knowledge of the WHS.

6.0.3 They are presented in 15 Issues papers. These are intentionally broad, drawing together issues that relate to each other, and are more usefully examined together. These papers are the results of consultation with the Interest Groups of the Management Plan Committee (MPC).

Managing The WHS

ISSUE 1: MANAGEMENT OF THE WHS

6.1.1 Objective: Integrated and fully informed management of Hadrian's Wall WHS as part of Frontiers of the Roman Empire, successfully communicating UNESCO's universal values.

1. Awareness of UNESCO World Heritage values

6.1.2 Created largely as a response to the horrors of the Second World War, UNESCO has ambitious aims to act as a crucible and clearing-house for ideas and knowledge, and to foster:

*global visions of sustainable development based upon observance of human rights, mutual respect and the alleviation of poverty*¹.

6.1.3 Cultural heritage in the form of World Heritage Sites offers opportunities to show what humanity holds in common –

what our universal values are – through the millennia of similar aspirations, struggles and achievements that lie behind our apparently very different sites and monuments. Developing the management of our cultural heritage offers further opportunities to understand and learn to respect other cultures, by exchanging what are often very different, but equally valid, approaches. Hadrian's Wall could share its management experience with other World Heritage Sites in the United Kingdom and abroad, building on partnership work that is already taking place, for instance with the Jurassic Coast WHS.

6.1.4 In the United Kingdom as a whole there are only 27 World Heritage Sites, three of which are in Overseas Territories. In north-east and north-west England, only Hadrian's Wall, Durham Castle and Cathedral and Maritime Mercantile Liverpool have WHS status. Consultation for the 2004 *Major Study* (see Part 3: 3.4) revealed that, although UNESCO World Heritage was generally accepted as a mark of quality, better understanding was needed of what it means, what it confers on the Site, and what it requires of its management². The 2006 UNESCO Periodic Report confirmed a particular lack of awareness among local businesses and communities³.

6.1.5 More locally, a better understanding of UNESCO's aims and the concept of Outstanding Universal Value (OUV) would allow both visitors and local stakeholders to better appreciate and contribute to the complex task of managing the Site.

6.1.6 One method of raising awareness would be to use the World Heritage emblem at sites and museums in the WHS, with accompanying interpretative material about UNESCO. This method is under-used, though a Hadrian's Wall WHS logo incorporating the emblem was agreed as part of the Hadrian's Wall Tourism Partnership (HWTP) 1997-1998 branding strategy. UNESCO's *Operational Guidelines* recommend that WH properties should make 'broad use' of the emblem, not only on plaques recording inscription, but also for instance on letterheads, brochures and staff uniforms⁴. It is up to the Site to decide on colour, size, and medium⁵.

6.1.7 UNESCO also accepts that the emblem can be used in marketing, but warns that 'a balance is needed between the Emblem's use to further the aims of the Convention.... and the need to prevent its abuse for inaccurate, inappropriate and unauthorised commercial or other purposes'⁶.

6.1.8 It recommends that approval should not routinely be given for its use on products with little or no educational value.

¹ UNESCO website: What is it? What does it do?

² Economic Research Associates 2004 *The Hadrian's Wall Major Study Report*, 6.11

³ UNESCO 2006 *Frontiers of the Roman Empire (Hadrian's Wall) in State of Conservation of World Heritage Properties in Europe. Section II.*

⁴ UNESCO 2008 *Operational Guidelines*, 273

⁵ *ibid* 258

⁶ *ibid* 264

The Department for Culture, Media and Sport (DCMS) must give its approval before the emblem can be used in Hadrian's Wall marketing.

6.1.9 General guidelines and principles for the use of the World Heritage emblem can be found in the UNESCO World Heritage *Operational Guidelines* 2008, Part VIII. Specific guidelines for its use in Hadrian's Wall WHS are in the 1997-1998 branding strategy referred to above.

6.1.10 Policy 1a: Raise awareness about World Heritage, in line with UNESCO guidelines.

ACTIONS

6.1.11 1. The Hadrian's Wall Management Plan Committee (MPC) and Hadrian's Wall Heritage Ltd (HWWHL) will champion the aspirations, aims and objectives of UNESCO's World Heritage Committee.

6.1.12 2. Site and museum managers and educators will aim to engage the public in the issues of World Heritage, and the management of Hadrian's Wall as part of the Frontiers of the Roman Empire WHS.

6.1.13 3. The design agreed for use of the World Heritage emblem on Hadrian's Wall should be used throughout the WHS, as part of the strategy to raise awareness of World Heritage.

2. Inscription as Frontiers of the Roman Empire WHS: implications and opportunities

6.1.14 Hadrian's Wall is now part of a transnational WHS that currently includes the German *Limes* and the Antonine Wall, and to which other parts of the Roman frontier are likely to be added over time. Mechanisms for managing this international dimension need to be incorporated into the management arrangements of each component site. UNESCO has already agreed that:

4.1 Responsibility for the management of individual parts of the WHS must rest with the individual State Parties and be carried out by each in accordance with their legislative and management systems. Equally, it is essential that individual parts of the WHS are managed within an overall framework of cooperation to achieve common standards of identification, recording, research, protection, conservation, management, presentation and understanding of the Roman frontier, above and below ground, in an inter-disciplinary manner and within a sustainable framework.

4.3 The United Kingdom government and the German authorities have undertaken to work with each other to develop thisframework.....As further States parties propose parts of the frontier for inclusion in the WHS, the United Kingdom government and the German authorities will discuss with them possibilities of a more formal structure for international cooperation.

4.4 The United Kingdom government and the German authorities will be supported in the development of the Roman Frontiers WHS by the Bratislava Group.

4.5 (The Bratislava Group).....is made up of experts of the history and archaeology of the Roman Frontiers and of those

involved in its management⁷ (see Part 3.1 for this and other international interests).

6.1.15 By their nature individual parts of the Frontiers of the Roman Empire WHS are among the most complex of all World Heritage Sites to manage. Hadrian's Wall WHS has the longest experience of these management issues.

6.1.16 Policy 1b: The potential for individual parts of the Frontiers of the Roman Empire WHS to be managed by their respective co-ordinators in a sustainable framework of interdisciplinary cooperation to achieve common standards of identification, recording, research, protection, conservation, management, presentation, promotion and understanding of the Roman frontier, above and below ground, will be explored.

ACTIONS

6.1.17 1. Develop and maintain appropriate international links through the Bratislava Group and the Frontiers of the Roman Empire Intergovernmental Body (see Part 3).

6.1.18 2. Work with international partners to develop a set of management principles on the identification, recording, research, protection, conservation, management, presentation, promotion, understanding and contribution to sustainable development of the Roman frontier, and guidelines for potential new members on the process, mechanisms and standards needed for inclusion in the Frontiers of the Roman Empire WHS.

6.1.19 3. Those responsible for managing Hadrian's Wall and the Antonine Wall will develop a close working relationship on all aspects of WHS management.

3. An overall conservation framework and values-based management

6.1.20 The Site and its Buffer Zone contain a rich variety of values beyond those for which the Site was inscribed (see Part 4). Many overlap and can impact on each other. Previous Management Plans proposed developing an overall strategy to integrate both proactive and reactive conservation of all the assets in the Site and its Buffer Zone. Some first steps towards developing this were taken in the period of the last Management Plan (see Part 5), and the process needs to be continued.

6.1.21 The current condition or status of the values of the Site needs to be evaluated, together with the resources that partner organisations can bring to conserving the OUV of the WHS. An integrated audit of the values of the WHS would then form a reference point against which the Management Plan's aims, objectives and actions could be reviewed. This values-based approach to conserving the WHS and its Buffer Zone could help identify ways to mitigate the effects of change through an agreed framework that addresses all values. It could also identify mechanisms to resolve any conflicts, ensuring the future integrated conservation management of the WHS.

6.1.22 Policy 1c: An overall conservation framework, which includes cultural and natural heritage, should be developed for the differing values in the WHS and Buffer Zone.



ACTIONS

6.1.23 1. Audit the values of the Site, and their current condition. Consider the resources the various organisations can bring to the conservation management of the Site and Buffer Zone.

6.1.24 2. Develop an agreed integrated conservation management framework to prioritise agreed values and identify conflicts, using guidance such as English Heritage's *Conservation Principles* and the Getty Conservation Institute's *Heritage Values in Site Management – Four Case Studies*⁸.

4. Preparation of the next Management Plan

6.1.25 This second update of the Hadrian's Wall Management Plan has, like its predecessor, broadened its scope. However, it includes projects that, with the necessary time and resources, will greatly inform the preparation of future Plans and aid in management, particularly through the further collection and analysis of data. Some are already under way, but others (such as the conservation framework mentioned above) will be started during the period of this Plan.

6.1.26 Policy 1d: HWHL will strive to be proactive in coordinating continuing research and data analysis as a basis for improved management of the WHS.

ACTIONS

6.1.27 1. Prepare a full audit, mapping and tabulation of ownership in the WHS and Buffer Zone.

6.1.28 2. Conduct a full baseline condition assessment of the standing masonry monuments and earthworks of the WHS.

6.1.29 3. Improve mapping of the WHS, including developing and using a uniform Geographic Information System (GIS).

6.1.30 4. Enhance information about the WHS, its management, and the Frontiers of the Roman Empire available on the Internet: eg explore the possibility of using the *Hadrian's Wall Country* website and improved mapping to offer layered mapping facilities.

6.1.31 5. Develop further specialist reports for the next Management Plan: eg geological Sites of Special Scientific Interest (SSSIs); population density and distribution in the WHS and Buffer Zone; a statement of principles governing archaeological work; the WHS Research Framework.

6.1.32 6. Undertake regular research into usage of and participation in the WHS.

6.1.33 Modern technologies, the creation of HWHL and the adoption of the Interest Groups as key mechanisms for delivery and review of the Management Plan allow for a more continuous, interactive and flexible approach to management and action planning, which should be explored, developed and implemented during the Plan period. This will assist the process of the next formal periodic review of the Management Plan.

6.1.34 Policy 1e: Preparation of future Management Plans should be resourced to allow continuous development and review during the next Plan period.

ACTIONS

6.1.35 1. The Management Plan Steering Group should continue to meet throughout the Plan period, to collect and analyse material for the next update.

6.1.36 2. The necessary centralised project coordination and management function currently provided by HWHL will be appropriately resourced, with appropriate contributions from partner organisations.

6.1.37 3. Partner organisations should be encouraged to contribute to the process of continuing development and review through the MPC.

5. The Management Plan committee and interest groups

6.1.38 The Plan brings together the large range of individuals and bodies that have responsibilities for managing and caring for parts of the WHS and its Buffer Zone in their own different functional and geographic areas. No one organisation can deliver the whole Plan. Its delivery depends on all those who have responsibilities and/or interests working actively together in formal and informal partnerships. For the Plan to be effective all organisations must buy into and accept ownership of it.

6.1.39 The size of the MPC sometimes makes it unwieldy, however. It can be hard to reach consensus, and members have sometimes been unwilling to speak up about contentious issues in such large meetings, as happened during the *Major Study* consultation. In these cases it is important to find other ways to draw opinions out. Research is also needed to understand why some organisations do not attend or fully participate in the MPC. The results of this will need to be tied to subsequent appropriate actions, to encourage participation.

6.1.40 Policy 1f: At all meetings, the MPC should aim to be as representative of all stakeholders as possible, with stakeholders accepting responsibility for and ownership of the Plan.

ACTIONS

6.1.41 1. Encourage partner organisations to incorporate Hadrian's Wall Management Plan policies and objectives into their own corporate plans.

6.1.42 2. Undertake research into MPC members' views on barriers to effective participation in the management of the WHS, and act to reduce these.

6.1.43 3. Strongly encourage members of the MPC to participate as often and as actively as possible, and keep all possible methods of participation under review.

6.1.44 During the period of consultation for this Plan, Interest Groups were set up to facilitate discussion of particular specialist issues (see Part 1). They reflect the particular complexity and scale of interests, and the challenges and issues facing Hadrian's Wall.

6.1.45 The new approach has worked well and these groups will be a permanent part of the management structure from the start of this Plan period, in order to maintain the momentum of their work.

6.1.46 The Interest Groups will continue to meet on a regular basis to monitor their areas of interest, report periodically to the MPC, and collate material for the Management Plan Steering Group and the next Plan update.

6.1.47 Policy 1g: Support the further development of the roles and responsibilities of the Interest Groups.

ACTIONS

6.1.48 1. HWHL will facilitate a review of the Interest Groups and formalisation of their membership and terms of reference under the oversight of the MPC. This should take place in the first nine months of the Plan period.

6.1.49 2. HWHL will support the Interest Groups in drawing up detailed action plans based on policies and actions identified in this Plan. The action plans should be drawn up and agreed in the first 12 months of the Plan period, and adapted in response to change.

6.1.50 3. The Interest Groups will be supported by HWHL in developing appropriate monitoring indicators within the first 12 months of the Plan period, by which progress in delivering the objectives of the Management Plan can be assessed.

6.1.51 4. The development of monitoring indicators will be informed by consideration of monitoring indicators used by other WHS Coordinators across the UK, in particular those recommended by ICOMOS UK. Where possible, common indicators will be developed for the several parts of the Frontiers of the Roman Empire WHS, to enable meaningful comparison between the Sites.

6.1.52 5. The assignment of responsibilities and provision of resources for developing and implementing the action plans will be negotiated between the relevant partners.

6. Reporting

6.1.53 The preparation of annual action plans and regular monitoring reports of both the condition of the WHS and progress of the Plan will provide the MPC with an overview of progress across the full range of the Management Plan's policies and proposals. A number of United Kingdom World Heritage Sites now publish annual reports on their websites showing progress on the implementation of their Management Plans, and some also produce printed copies.

6.1.54 Policy 1h: The MPC will consider publishing annual progress reports on implementation of the Plan.

Identifying the WHS

ISSUE 2: THE BOUNDARIES OF THE WHS AND ITS BUFFER ZONE

6.2.1 Objective: To establish and maintain WHS boundaries that comprehensively encompass all elements of the Roman frontier that reflect the Site's Outstanding Universal Value, authenticity and integrity.

1. Introduction

6.2.2 The current boundaries of Hadrian's Wall WHS, endorsed by the World Heritage Committee in 1997, encompass only those elements of the frontier that are protected by scheduling. There have been some minor changes to the scheduled areas since 1997 and the World Heritage Centre has asked the United Kingdom government to provide an up-to-date set of maps clarifying the present extent of the WHS.

6.2.3 The 2002-2007 Plan (Policy 1) raised the issue of whether these boundaries needed revision. Consultations were held on the case for boundary changes and the proposals that should be taken forward (see Appendix 5.1).

6.2.4 Although each site in the Frontiers of the Roman Empire WHS is responsible for its own management regime, it is intended to achieve a consistent approach to their identification and conservation. This section examines two issues:

- clarification of the existing boundaries
- wider inconsistencies of definition, the issues these raise, and possible resulting boundary reviews or changes.

2. Clarification of existing boundaries

6.2.5 Understanding of the present boundaries is essential both for ongoing management of the WHS and also as the basis for any future proposals for extending it. The UNESCO World Heritage Centre has sought clarification of the boundary as part of its *Retrospective Inventory of World Heritage Sites in Europe*. Since it does not involve any boundary changes, this clarification can be achieved by exchange of letters, enclosing definitive maps. It will be necessary to do this with the agreement of other partners in the Frontiers of the Roman Empire WHS. Since the World Heritage Committee, when adding the German *Limes* to the WHS, decided that modern buildings or reconstructions that overlie parts of the WHS should not be part of it, it will also be necessary to define areas where such structures occur, and identify them appropriately on the definitive maps.

6.2.6 Policy 2a: The existing boundary of the WHS should be clarified by supplying definitive maps to the World Heritage Centre.

ACTIONS

6.2.7 1. Produce a definitive set of maps of scheduled areas that form the WHS.

6.2.8 2. Seek agreement of other partners in the Frontiers of the Roman Empire WHS to this clarification of the boundary.

6.2.9 3. Confirm clarification of the current boundaries of the WHS with the UNESCO World Heritage Centre as part of the follow-up to the *Retrospective Inventory*.

3. Defining the boundaries

6.2.10 The *Summary Nomination Statement* for Frontiers of the Roman Empire included a definition of what the WHS might contain:

- a linear barrier in its entirety
- sites along a natural boundary, such as a sea or river



- the network of military installations, other ancillary features and their linking roads, on, behind and beyond the frontier⁹.

6.2.11 The Bratislava Group (see Part 3) agreed the following proposed definition for Frontiers of the Roman Empire WHS:

The Frontiers of the Roman Empire WHS should consist of the line(s) of the frontier at the height of the Empire from Trajan to Septimius Severus (about AD 100 to AD 200), and military installations of different periods which are on that line. The installations include fortresses, forts, towers, the limes road, artificial barriers and immediately associated civil structures.

6.2.12 There are areas of inconsistency between these definitions and the boundaries of Hadrian's Wall WHS agreed by the UNESCO World Heritage Committee in 1997. These areas are

- The Nomination Document and the Bratislava Group's definition include forts and their associated cities, towns and civil settlements. However, Hadrian's Wall WHS does not include the areas of the Annetwell Street fort in Carlisle, nor does it include the area of the Roman town that developed from the civil settlement outside this fort.
- The Bratislava Group's definition includes the whole line of the linear defence. This has been adopted by the German *Limes* and the Antonine Wall. However, those parts of Hadrian's Wall that are not scheduled are not included as part of the WHS, although they lie within the Buffer Zone. These areas have been shown by excavations to contain significantly preserved remains, but they have not been scheduled for pragmatic and legal reasons, particularly in built-up areas and where protection can be afforded through Local Authority planning policies.
- As a result of recent aerial photography and excavation the line of the Roman road from Carlisle to Maryport via Papcastle can be seen as a *limes* road, connecting the section south of Moricambe Bay with the remainder of the linear frontier. This new information means that the two forts at Old Carlisle and Papcastle, which guarded this road, could be included in the WHS, according to the definition in the *Summary Nomination Statement* of Frontiers of the Roman Empire and that of the Bratislava Group. At present they are not.

6.2.13 Policy 2b: The definition of the Hadrian's Wall part of the Frontiers of the Roman Empire WHS should be reviewed in the light of the approach to defining boundaries as set out in the Frontiers of the Roman Empire Summary Nomination Statement.

ACTIONS

6.2.14 1. Produce a clear statement of discrepancies between the present boundaries of Hadrian's Wall WHS and the policy set out in the Frontiers of the Roman Empire *Summary Nomination Statement*.

4. Proposed extensions to the WHS

6.2.15 The consultations referred to above led to general agreement that the following should be proposed for inclusion in the WHS:

- the non-scheduled lengths of Hadrian's Wall, to achieve consistency with the German *Limes* and the Antonine Wall definition
- the area of the Roman town and Annetwell Street fort in Carlisle
- the two outpost forts of Risingham and High Rochester, which are recognisable Roman permanent forts, with a connected function to Hadrian's Wall as a frontier
- the forts of Old Carlisle and Papcastle, which guard the *limes* road between Carlisle and the Cumbrian coastal system south of Moricambe Bay (and possible Buffer Zone for Papcastle).

6.2.16 These changes would not alter the criteria (ii, iv and v) under which Hadrian's Wall was originally inscribed and under which other parts of Frontiers of the Roman Empire WHS are also inscribed, nor would they change its Outstanding Universal Value (OUV). They would be in full accord with the definition of OUV for the whole Frontiers of the Roman Empire WHS as agreed by the World Heritage Committee in 2005.

6.2.17 All these proposals are also either scheduled, or fall in the areas of, Local Authorities that already have parts of the WHS within their boundaries, and have developed planning policies to protect the Site.

6.2.18 Any proposals would need to be agreed by the other partners in the Frontiers of the Roman Empire WHS.

6.2.19 The main reasons for making them would be to:

- ensure appropriate recognition of the importance of these sites as part of the Frontiers of the Roman Empire WHS
- have an approach to defining the Site that is more consistent with that of the Frontiers of the Roman Empire WHS nomination document
- raise public awareness of the significance of these sites, by linking them to the WHS.

6.2.20 It will be necessary to explore with the UNESCO World Heritage Centre whether such modifications would be considered minor, or significant, given that the OUV of the Frontiers of the Roman Empire WHS as a whole would not be changed. Significant modifications would need a fuller nomination, and it is generally agreed the costs and time needed to do this would not be justified.

6.2.21 Policy 2c: The boundaries of Hadrian's Wall WHS should be extended to include functionally connected sites and the entire length of the linear elements.

6.2.22 Policy 2d: Any areas proposed for extending the boundaries of the WHS must meet the test of authenticity and integrity, and must have adequate legal protection and management arrangements. They must also be consistent with the OUV of the WHS as accepted by the World Heritage Committee.

6.2.23 Policy 2e: Changes to the boundaries that would require full re-nomination will not be considered for notification to the World Heritage Committee.

6.2.24 Policy 2f: Changes in the boundaries resulting from the revision of the scheduling under the English Heritage Monuments Protection Programme will be notified to the Committee.

ACTIONS

6.2.25 1. Carry out a review of the boundaries of the WHS, coordinated by the HWHL Management Plan Coordinator and in cooperation with partner organisations and landowners in the WHS.

6.2.26 2. Identify implications of the review with respect to submission of proposed boundary changes to the World Heritage Committee.

6.2.27 3 Consult other partners in Frontiers of the Roman Empire WHS on any proposed submission to the World Heritage Committee.

6.2.28 4. Identify and take action on any implications arising from the boundary and nomination review.

5. The Buffer Zone

6.2.29 The Buffer Zone for Hadrian's Wall WHS was established in the 1996 Plan. In urban contexts, it highlights areas where non-scheduled archaeological remains can be given focused protection through Local Authority planning policies. It also protects the visual setting of the Site, particularly in the rural areas, though it is also important to have regard to the possible impact of major developments outside the defined Buffer Zone. The Buffer Zone as defined in 2002 has worked effectively and it is not necessary to propose changes at this stage unless and until changes to the boundaries of the WHS are proposed. Should this happen, it would also be necessary to review the Buffer Zone boundaries.

6.2.30 Policy 2g: The boundaries of the Buffer Zone agreed for the 2002-2007 Management Plan will remain unchanged for the period of this Management Plan.

Protecting the WHS

ISSUE 3: LEGISLATIVE PROTECTION FOR THE WHS

6.3.1 Objective: To secure protection of the World Heritage Site's OUV, fabric, integrity and authenticity through appropriate legislative provision.

1. Legislative reform affecting heritage protection

6.3.2 The Planning and Compulsory Purchase Act 2004
The Act has created a two-tier planning system:

- Regional Spatial Strategies are prepared by the regional planning bodies to set out long-term spatial planning strategies.
- Local Development Frameworks are developed by local planning authorities, and outline the spatial planning strategy for the local area. These include Local Development Documents (LDDs) and can include Supplementary Planning Documents (SPDs).

6.3.3 This is designed to speed up the plan preparation process, but it will be important to ensure that Hadrian's Wall remains adequately protected within the new system.

6.3.4 The following legislation and guidance is currently under consideration.

Introduction of Planning Policy Statements (PPS)

6.3.5 National Planning Policy is contained now in a series of Planning Policy Statements (PPS) (see Appendix 3.1), which are gradually replacing the existing Planning Policy Guidance (PPG) documents. In particular PPS1 Delivering sustainable development now provides the cornerstone of government planning policy, with specific reference to affording a high level of protection to natural and historic environments with national and international designations.

6.3.6 PPGs 15 and 16, which provide guidance on the historic environment and archaeology, are due to be combined within PPS15 in 2009. It is assumed that the basic principles will be continued in the new PPS.

Government White Paper *Planning for a Sustainable Future*, May 2007

6.3.7 In December 2005, the Chancellor and the Deputy Prime Minister commissioned an independent review of the land use planning system of England, focusing on the link between planning and economic growth. The White Paper builds on the resulting recommendations for improving speed, responsiveness and efficiency, and takes forward proposals for the reform of major infrastructure planning. It also proposes further reforms to the Town and Country Planning system¹⁰. None of these proposals are specific to World Heritage Sites, but there could be potential cases where there could be implications for the protection of the Site's OUV.

DCMS Draft Heritage Protection Bill: *Heritage Protection for the 21st Century*, April 2008

6.3.8 The main implications for Hadrian's Wall of the government Heritage Protection Bill are set out below.

- Existing separate regimes of designation by listing, scheduling, etc will be brought together in a single list of heritage assets, with gradings at I, II* and II.
- The current regimes of consent for scheduled monuments and listed buildings will be brought together in a united Heritage Asset Consent.
- Scheduled monuments are likely to migrate as Grade 1 assets, although this may in time be reviewed by English Heritage. The protected remains of Hadrian's Wall will therefore be in the highest category of Heritage Asset.

¹⁰ CLG 2007 *Planning for a Sustainable Future* White Paper, 21 May 2007



- Following the enactment of the proposed new legislation ten local authorities will grant and process Heritage Asset Consents, and it will be important to ensure consistent standards across the WHS.
- It is essential that Local Authorities be adequately resourced to cope with the work that the new legislation will bring.
- The Heritage Protection Bill acknowledges the potential impact of ploughing on archaeological sites and proposes the abolition of Class 1 Consent, which currently permits ploughing within scheduled areas, over the same area and at the same depth as carried out within the qualifying period prior to the 1979 Act, and within the past six years.
- The Heritage Protection Bill proposes provision for Heritage Partnership Agreements (HPAs) for complex sites, which could be used to advantage on Hadrian's Wall. It is a voluntary provision and it will be important that adequate resources are made available to local planning authorities for these, and to continue and adapt existing arrangements. The generic consent set up for the maintenance of the Hadrian's Wall Path National Trail is a precursor of this, and could be easily converted to an HPA.

6.3.9 The original White Paper (March 2007) also announced three changes to planning policy advice. These were the development of a new planning circular, a change to call-in regulations, and the inclusion of World Heritage Sites in Article 1(5) Land in the Town and Country Planning (General Permitted Development) Order 1995 (GPDO).

Proposed CLG Draft Planning Circular

6.3.10 A Draft Planning Circular dealing with World Heritage, with guidance notes prepared by English Heritage, was published for consultation in May 2008¹¹. Its remit as stated in the White Paper is to:

further recognise in national policy the need to protect World Heritage Sites as sites of outstanding universal value, and..... make more prominent the need to create a management plan for each WHS, including, where needed, the delineation of a buffer zone around it.

6.3.11 It provides:

- updated policy guidance on the level of protection and management required for World Heritage Sites
- an explanation of the national context
- the government's objectives for the protection of World Heritage Sites, the principles that underpin those objectives, and the actions necessary to achieve them.

6.3.12 The draft circular is supplemented and supported by a draft English Heritage Guidance Note. The Note focuses on the protection and management of World Heritage Sites. It sets out the international and national context of World Heritage Sites, considers the role of the planning system and sustainable community strategies in their protection, and explains the role and preparation of World Heritage Site Management Plans. It also covers the ways in which the UNESCO World Heritage

Committee and the UNESCO World Heritage Centre can become involved in the management of World Heritage Sites and sets out how these contacts should be handled¹². Consultation closed in August 2008, and the Planning Circular is expected to come into force shortly.

Review of 'Call-In' Directions

6.3.13 The review proposes that all existing directions be withdrawn, and a single new call in direction. Paragraph 18 however outlines the introduction of a specific notification and call-in requirements for significant development affecting World Heritage Sites where English Heritage is unable to withdraw objections following discussions with the local planning authority and the applicant¹³. It would still be open to individuals or organisations to request that an application be called in, by approaching their regional government office in the first instance. Consultation closed on 31 March 2008.

Review of the General Permitted Development Order (GPDO)

6.3.14 World Heritage Sites were included as Article 1(5) Land in the proposed revision of the GPDO, published for consultation in April 2008. Article 1(5) of the GPDO restricts certain permitted development rights within areas it covers. Areas currently covered include National Parks, Areas of Outstanding Natural Beauty (AONBs) and conservation areas. Article 1(5) restricts the size of extensions to houses and industrial buildings that can be built without specific planning consent. It also covers matters such as cladding of buildings. Parts of the WHS already fall within Article 1(5) land because they are within conservation areas. The changes to the GPDO would bring the whole WHS into Article 1(5). Consultation closed on 22 August 2008.

6.3.15 Policy 3a: The HWMPC will be alert to policy changes coming into force during the period of the Management Plan that have a bearing on the WHS.

6.3.16 Policy 3b: Local authorities and English Heritage should be adequately resourced to continue the same high standards of protection through Heritage Asset Consent as currently applied to the granting of Scheduled Monument Consent.

6.3.17 Policy 3c: Under the proposed reform of heritage protection, local planning authorities should be encouraged to adopt and apply standards that are both uniform, and consistent with the OUV of the WHS when granting Heritage Asset Consent.

ACTIONS

6.3.18 1. Alert stakeholders to the implications of policy changes relevant to the management of the WHS and the protection of its OUV.

6.3.19 2. Set up a mechanism to monitor and report on the impact of Heritage Asset Consent on protection standards, and on the consistency of policies to protect the universal values of the WHS.

2. Local Authority planning policies

6.3.20 Local Authorities have planning mechanisms that control development in their areas, backed by a range of national

¹¹ CLG 2008 *Protection of World Heritage Sites*, Draft Planning Circular, May 2008

¹² English Heritage 2008 *The Protection and Management of World Heritage Sites in England* Draft Guidance Note, Annex B. In CLG 2008 *Protection of World Heritage Sites* Draft Planning Circular, May 2008.

¹³ CLG 2008 *Review of Call-In Directions Consultation*

legislation. This is supported by guidance on the application of national policy legislation in the form of Planning Policy Guidance Notes (PPGs). These are being replaced by Planning Policy Statements (PPSs). The key legislation and policy documents that relate to the WHS are summarised in Appendix 3.1.

6.3.21 Regional policies support the national policies, currently through Regional Spatial Strategies (which will subsequently be incorporated in Integrated Regional Strategies) and Local Development Frameworks (LDFs) in each Local Authority. These structures, which will in the future together form Regional Plans, provide the core protection for the WHS, and Local Authorities' application of them is the main tool for protecting the WHS and its Buffer Zone. The role of Local Authorities may be expanded as a result of forthcoming changes to heritage protection legislation (see below).

6.3.22 As part of the development of the first Hadrian's Wall Management Plan, all 12 Local Authorities agreed a three-level planning policy framework. This proposed that:

- there should be a presumption in favour of preserving the fabric, integrity and authenticity of archaeological sites that form part of the WHS, and development that would have a detrimental effect on archaeological remains and their setting should be refused
- proposed development in the Buffer Zone should be assessed for its impact on the OUV of the WHS, and particularly on key views both into and out of it: development that would have an adverse impact on OUV should be refused
- proposed developments outside the boundaries of the Buffer Zone will be carefully assessed for their effect on the OUV, and any that would have an adverse effect on it should be refused.

6.3.23 Most Local Authorities have such protective policies in place. It is important that they are carried forward in new LDFs. This also needs to be remembered when Northumberland local government is restructured into a single-tier authority in April 2009.

6.3.24 Policy 3d: Local Authorities should carry forward the proposals of the three-level framework into new LDFs.

6.3.25 Policy 3e: Local Authorities will require formal environmental impact assessment for significant developments affecting Hadrian's Wall WHS and its Buffer Zone.

6.3.26 Policy 3f: Local Authorities should assess developments outside the Buffer Zone for their impact on the OUV. They should consult with appropriate expert advisers and where necessary require applicants to commission further information to allow this assessment. Development adversely affecting the OUV will not be permitted.

ACTION

6.3.27 1. Set up a mechanism through which Local Authorities share, monitor and review information, policies and actions

relating to development proposals and the protection of the OUV of the WHS with HWHL and the MPC.

3. Roman military sites not currently protected through scheduling

6.3.28 Survey and excavation carried out in the WHS not only add to understanding of the frontier system, but also raise the need to review protection.

6.3.29 Sites discovered by aerial photography could be considered for protection by scheduling, having been assessed for their character and significance. This would apply to Burgh-by-Sands III in Cumbria, and to any significant sites recorded from the air, or indeed new sites discovered by geophysical survey.

6.3.30 The revision of the scheduling of Hadrian's Wall in the mid-1990s did not include Wallmile 66 west of Carlisle between Stanwix and Davidsons Banks. It did not extend beyond the Newcastle and Northumberland boundary, with the exception of the area of the Roman fort in Newcastle, on part of which the medieval castle was built (see Part 5). The Old County Number schedulings are still unrevised, and leave archaeology worthy of protection unprotected. Subject to resources, the remaining scheduling of the Wall in urban areas should be revised to protect archaeology of national importance that is currently omitted.

6.3.31 Policy 3g: Legislative protection, either under the current regime or the new heritage protection legislation, should be reviewed where new discoveries are made.

6.3.32 Policy 3h: Existing anomalies in the legislative protection of sites in the WHS should be reviewed and brought into line where resources allow, and taking into account the level of threat to them.

ACTION

6.3.33 1. Set up a mechanism for regular review of areas protected by scheduling and for the scheduling or other appropriate protection of newly discovered sites.

4. Reconciling different legislation

6.3.34 A balance needs to be found between protecting other assets of national and sometimes international importance in the WHS, and protecting the OUV for which the Site was inscribed. Differing priorities can arise, including for example the protection of natural environments such as SSSIs, the legislation covering rights of way, and laws that preserve the integrity and setting of the archaeological remains. It is important that the special significance of the WHS is given due consideration in resolving such situations.

6.3.35 Policy 3i: Managers of all assets in the WHS will consider the OUV of the archaeological remains of Hadrian's Wall when managing other assets under other consent regimes in the WHS and its Buffer Zone.



ACTION

6.3.36 1. Set up a mechanism to monitor and review management practices and issues where assets are managed under multiple consent regimes.

ISSUE 4: PROTECTION OF THE ARCHAEOLOGICAL REMAINS IN URBAN AREAS

6.4.1 Objective: To maintain effective protection and management of remains of the Roman frontier in urban environments.

1. Protection in the urban areas

6.4.2 Throughout much of Tyneside and, to a lesser extent, Carlisle, the course of Hadrian's Wall is masked by more recent development, often leading to uncertainty about how much of the archaeological deposits and remains survive. In some cases the precise line of the Roman frontier remains unknown. Such remains are not a formal part of the current WHS, and are managed and protected through the Town and Country Planning system¹⁴.

6.4.3 Policy 4a: Local Authorities should protect or enhance non-scheduled elements that contribute to the OUV of the WHS.

6.4.4 The 1996 Hadrian's Wall Management Plan¹⁵ set an objective of leaving the line of Hadrian's Wall clear of development where possible and reasonable. However, although it remains desirable to keep already open land undeveloped, competing values of the historic environment such as streetscape and urban character should also be taken into account. Piecemeal clearance of the line of the Wall would erode the urban landscape.

6.4.5 Policy 4b: Local Authorities should not permit new development on currently open land on the line of the Wall.

6.4.6 Policy 4c: Townscape features that help people interpret and appreciate the Wall where it is not visible, such as street patterns, should be protected.

6.4.7 Where it is proposed to redevelop existing built-over areas that currently mask the line of the Wall, solutions that afford appropriate treatment of archaeological remains should be found. Planning Policy Guidance 16 (PPG 16) makes clear that nationally important archaeological remains should normally be preserved *in situ*, and decisions on the appropriate treatment for individual sites will be informed by this guidance, as well as the research potential and priority of remains.

6.4.8 PPG 16 further requires that where preservation *in situ* is not appropriate, developers must provide resources to ensure full recording of *in situ* and portable remains, with appropriate publication for the research benefits this will bring.

6.4.9 Policy 4d: Local Authority decisions about the excavation, recording and possible reburial of sites on the Wall, and conservation and publication of finds

should be informed by PPG 16, the Planning Policy Statement that will replace it, and the Hadrian's Wall Research Framework.

6.4.10 Local Authorities may also require developers to contribute 1% of the cost of development to interpretation and the arts.

6.4.11 Policy 4e: Local Authorities should, as part of the planning process, require from a developer interpretation of both exposed and reburied remains excavated as a result of development.

6.4.12 Policy 4f: Local Authorities will protect or enhance other, non-scheduled elements in their areas that relate to Hadrian's Wall WHS.

ACTION

6.4.13 1. Set up a mechanism through which Local Authorities share, monitor and review information, policies and actions relating to the protection and management of the remains of the Roman frontier in urban areas with the Planning Interest Group of the MPC.

ISSUE 5: METAL DETECTING

6.5.1 Objective: To protect the archaeological remains of the WHS and Buffer Zone from damage as a result of inappropriate metal detecting.

6.5.2 Metal detecting has contributed to the archaeological study of Hadrian's Wall, particularly when used as part of some recent archaeological excavations. It can however threaten the archaeology of the WHS, and other archaeological remains relating to the Roman frontier that are not currently protected as scheduled monuments. This threat derives from the removal of archaeological material without adequate record, either from its undisturbed archaeological context, or from ploughsoil. Both practices destroy archaeological information that would add to our understanding of the Roman frontier.

1. Current protection

6.5.3 According to Section 42 of the 1979 Ancient Monuments and Archaeological Areas Act it is an offence to operate a metal detector or to remove objects located using one on the site of a Scheduled Ancient Monument without a licence.

6.5.4 Metal detecting outside the scheduled monument area does not require a licence. Only permission from the landowner is needed, unless the area is subject to other controls such as SSSI designation or Higher Level Stewardship/Entry Level Stewardship (HLS/ELS) agreements, where permission from Natural England and/or the Department for Environment, Food and Rural Affairs (Defra) may be needed.

6.5.5 There are otherwise no statutory controls over such metal detecting.

2. The Portable Antiquities Scheme

6.5.6 The Portable Antiquities Scheme, coordinated through the British Museum¹⁶, has been set up to encourage people to report

¹⁴ Town and Country Planning legislation can be found at: <http://www.planningportal.gov.uk/england/genpub/en/1011888237913.html>

¹⁵ English Heritage 1996 *Hadrian's Wall World Heritage Site Management Plan*

¹⁶ Portable Antiquities Scheme website

and record the results of metal detecting. Regional experts attend metal detecting club meetings and rallies, as well as other outreach activities. Its aims include recording and disseminating information about finds, and raising public awareness of the educational value of archaeological finds in their context.

6.5.7 This scheme has recorded finds information in Hadrian's Wall area that would otherwise have been lost, but evidence of illegal and inappropriate metal detecting (see below) makes it overwhelmingly likely that undeclared finds are still being made. The unfortunate consequences of this may be that:

- objects are retrieved without adequate record
- damage is done to surrounding archaeology by their retrieval
- information about archaeological context is lost.

3. Monitoring metal detecting on Hadrian's Wall

6.5.8 Estimating the extent of illegal or inappropriate metal detecting continues to be difficult, since it is usually undertaken in secret and its results are rarely reported. Legal metal detecting is also difficult to estimate.

6.5.9 There are significant known areas of concern that have continued or increased during the period of the last Management Plan.

- **6.5.10** Long-running illegal detecting on the scheduled site of the Roman town at Corbridge continues. The area is in private ownership, and lies next to the Corbridge Roman site presented to the public by English Heritage. The fields are under arable cultivation, and are particularly attractive to illicit detecting after harvest and ploughing. Discussions have taken place about taking this site out of cultivation, which would make it less attractive to detecting, but in advance of any such agreement English Heritage has worked with the landowner and Northumbria Police on the issue, including employing an overnight security guard during the vulnerable post-ploughing period.
- **6.5.11** A number of metal detecting rallies have been organised close to Hadrian's Wall. Although organisers have taken the necessary steps to avoid scheduled monuments, and there has been some presence by the Portable Antiquities Scheme, they remain of concern. Some rallies take place where artefacts are not otherwise under significant threat because the fields are in pasture. The detecting does not take place in the context of a properly resourced and organised research project designed to maximise the archaeological information obtained. The extent of reporting of finds and the long-term fate of the artefacts recovered is also of concern.

4. Guidelines

6.5.12 In the period covered by the previous Management Plan, English Heritage has produced the guidance document on portable antiquities, *Our Portable Past*¹⁷.

6.5.13 Policy 5a: Metal detecting in the WHS and on other sites in the Buffer Zone will only be supported where it follows English Heritage guidelines, as part of a properly organised research project.

ACTIONS

6.5.14 1. Partner organisations along the Wall will develop and implement strategies to discourage inappropriate, and prevent illegal, metal detecting in the WHS and Buffer Zone, through cooperation with regional police forces.

6.5.15 2. Where illegal metal detecting is discovered, the relevant authorities will be urged to devote appropriate resources to investigate possible criminal offences, and prosecute offenders if appropriate.

ISSUE 6: RISK PREPAREDNESS AND DISASTER MANAGEMENT

6.6.1 Objective: To pre-empt where possible the effects of disasters and emergencies on the WHS and to effectively safeguard it in responding to these events.

6.6.2 WHS managers are now asked by UNESCO to identify likely risks to their sites¹⁸, and to identify measures, where possible and affordable, both to lessen the risk of disaster and to respond to a disaster should it occur.

1. Environmental risks

Climate change

6.6.3 The effects of climate change are a major long-term risk to the WHS, and some short and medium-term manifestations are starting to appear. Climate change is a global issue, and one that UNESCO is concerned about for its effects on World Heritage Sites. It is likely to have a significant impact on Hadrian's Wall, and its effects may be varied and difficult to predict.

Torrential rain/flooding

6.6.4 This may:

- cause flash flooding (as in Carlisle in 2005), resulting in damage to the Site or to its museum collections
- uproot trees, affecting buried archaeological remains
- exacerbate any erosion in the Site, since water runs off at high speed, and may follow and deepen existing erosion channels, rather than soaking into the ground
- raise the water table significantly, causing saturation and consequently increased damage to buried archaeological remains from such activities as stock poaching, agricultural vehicles and visitors.

Fluvial erosion

6.6.5 There are already threats to specific parts of the WHS from fluvial erosion, which could be exacerbated by increased levels of rainfall, or short episodes of heavy rain.

Examples include:

- Birdoswald, in the area immediately south of the fort and in the Roman cemetery
- Willowford
- the southern approach ramp to the bridge across the River Tyne at Corbridge
- Chesters, where the River North Tyne has moved since Roman times towards the fort.
- the milecastle at Harrowscar, near the River Irthing.

¹⁷ English Heritage 2006 *Our Portable Past*

¹⁸ UNESCO 2008 *Operational Guidelines*, 118



Coastal erosion

6.6.6 Coastal erosion is causing archaeological loss near Beckfoot, along the Cumbrian coast. One milefortlet has probably been lost over recent decades and cremation burials from the Roman cemetery south west of the fort (this is only partly in the WHS: see above) have become exposed in the sea cliff after storms.

There is a potential coastal erosion threat to the north-west corner of the fort at Ravenglass. Rising sea levels could endanger larger areas of the WHS, particularly on the Cumbrian coast.

Flora and fauna

6.6.7 Milder and shorter winters will see changes in vegetation and may see some natural habitats decline or change. This in turn could lead to some species of both flora and fauna declining, moving away or increasing to fill the vacuum. Examples of how this could impact on the WHS include:

- lack of grazing leading to fewer cattle or sheep would encourage the growth of shrubs and trees that could damage underlying archaeology
- loss of raptors could result in raised rabbit populations
- loss of grass in dryer summers could result in erosion problems.

Farming practices

6.6.8 Climate change will almost certainly impact on farmers, who manage around 90% of the WHS. While the precise ways are difficult to predict, it is likely to result in changes in land management practice, with potential adverse impacts on the Site.

Fire

6.6.9 The extremes of weather experienced through climate change can include longer droughts, which would increase the risk of fire damage in the WHS and in its wider landscape setting. Fire could directly damage archaeological remains or destroy museum collections, or indirectly damage the Site by increasing erosion through removal of protective grass cover.

Green energy

6.6.10 Measures to reduce the rate of climate change, such as wind turbines, may impact on other aspects of the Site, including the OUV. In some cases the need to protect the OUV will take precedence over such measures. This issue needs to be carefully considered, to find the best solution on a case-by-case basis.

2. Contagious livestock diseases

6.6.11 These can have a profound effect on the Hadrian's Wall corridor, as demonstrated by the 2001 outbreak of foot and mouth disease. The removal of stock from some areas can have detrimental impacts on the WHS due to the consequent re-growth of scrub on archaeological remains.

6.6.12 The 2001 outbreak emphasised the extent to which farmers manage the landscape setting and much of the Site itself sympathetically. The threat to their viability also threatened their role as managers of the Site.

6.6.13 The vulnerability of tourism to livestock disease outbreaks poses a risk to the regional and local economy of which the WHS is such an important element.

3. Air crashes

6.6.14 Parts of the air space over the WHS are heavily used by low-flying military aircraft. A number of domestic and international civil air routes also cross the Site, which lies in the approach and take-off paths of both Newcastle and Carlisle airports.

6.6.15 In the period of the previous Management Plan, a helicopter filming in the central sector crashed near Sycamore Gap but without causing damage to the archaeology of the WHS.

4. Adaptation to risks

6.6.16 Archaeological work has been carried out to deal with the results of coastal and fluvial erosion at the following sites:

- Corbridge: erosion of the southern approach ramp to the bridge across the River Tyne at Corbridge has been mitigated by excavation and relocation of the remains above the flood level.
- Beckfoot: a partnership bringing together a number of interested parties has assessed this ongoing erosion, culminating in an archaeological evaluation in early 2006. Coastal protection here is not viable, and it is important to find a solution that secures the archaeological information in the part of the cemetery under threat, through further archaeological fieldwork.
- Ravenglass: a programme of rescue excavation was undertaken in the 1970s. This addressed the issue of the erosion of the fort, but it also revealed a possible earlier fortlet, which remains under threat.

6.6.17 Increasing threats will however require prioritisation of time and resources.

6.6.18 Policy 6a: The Hadrian's Wall Research Framework should be used to prioritise archaeological fieldwork to mitigate threats to archaeological remains if *in situ* preservation of such areas at risk is not possible.

ACTIONS

6.6.19 1. Develop and implement plans to record the archaeology where protection is not possible, and publish the results fully.

6.6.20 2. Implement measures to conserve vulnerable sites where possible.

5. Mitigation of risks

6.6.21 While adaptation to risks and disasters may be necessary when they occur, a coordinated approach to the long-term mitigation of risk to the WHS is a more sustainable solution.

6.6.22 Policy 6b: The WHS will be managed to pre-empt the effects of climate change as far as possible, to prevent deterioration of its OUV.

ACTIONS

6.6.23 1. Identify, prioritise and regularly review sites or areas potentially at risk.

6.6.24 2. Monitor potentially harmful changes in flora, fauna, or the landscape.

6.6.25 Emergency planning officers already have plans to deal with disasters affecting the WHS. Fire management and response strategies have been developed, and government and Local Authority emergency planning teams have action strategies to contain and manage outbreaks of contagious livestock diseases.

6.6.26 It is, however, important that emergency planners and aviation managers maintain their awareness of the WHS, and safeguard its remains in responding to emergency situations. Greater public awareness of the risks of fires, and the damage they can cause to the WHS, should be encouraged.

6.6.27 Policy 6c: Emergency planners and aviation managers should be aware of the WHS and, emergency services should take it into account in their planned responses to incidents.

ACTIONS

6.6.28 1. Establish appropriate mechanisms to liaise with Local Authority emergency planning teams, aviation managers and emergency services, maintain contact with them, and carry out an annual review of provisions.

6.6.29 2. Develop strategies to reduce, if not to eliminate, the need to close sites during outbreaks of contagious livestock diseases.

6.6.30 Site managers and museum curators in the WHS already carry out risk assessment, and have developed strategies to counter any risks identified. Museums and their collections are principally susceptible to fire and theft.

6.6.31 The museums on the Wall should continue to review their disaster plans regularly, and this should involve museum curators as well as managers. Cooperation among all the museums associated with the WHS would be valuable in developing the most effective measures to deal with an emergency, such as a fire. These could include identifying emergency resources, such as temporary storage, which could be used for salvage work after a fire.

6.6.32 Museum managers need to maintain and update where necessary their security systems and appropriate planned responses to actual or attempted theft. Adequate records of objects in the collections are an essential part of this preparedness. Museum curators are already working on photographic records of their collections, which have research and security value.

6.6.33 Policy 6d: Mitigation of risk to sites and museum collections should be put in place.

ACTIONS

6.6.34 1. Keep appropriate, up-to-date emergency plans in place at all sites and museums.

6.6.35 2. Develop cooperation between sites for the management of emergencies.

6.6.36 3. Regularly check security systems on sites and in museums, and update where necessary.

6.6.37 4. Ensure collections are adequately recorded, with off-site backup records.

6.6.38 Site managers can ensure all existing and new site attractions are designed to be carbon lean. Reducing carbon emissions will also be an important element in developing and implementing an integrated transport and access policy (see Issue 10).

6.6.39 Policy 6e: Managers in the WHS should aim to reduce carbon emissions by implementing energy-efficient measures to reduce the rate of climate change.

ACTIONS

6.6.40 1. Produce and promote guidelines on sustainability principles for visitor facilities.

6.6.41 2. Audit all existing facilities against appropriate guidelines, and develop action plans to improve sustainability and energy efficiency.

6.6.42 3. Monitor progress in implementing measures to improve sustainability and energy efficiency.

Conserving the WHS

ISSUE 7: CONSERVATION OF THE ARCHAEOLOGICAL MONUMENTS AND SITES

6.7.1 Objective: To manage the archaeological remains across the WHS and Buffer Zone in a way that ensures their continued enjoyment by future generations.

1. Exposed masonry

6.7.2 Most of the standing masonry of the Wall and its forts, milecastles and turrets is in the care of English Heritage, The National Trust or other bodies committed to conservation, such as the Vindolanda Trust and Tyne and Wear Museums Service. There are however significant lengths of exposed masonry in private ownership. Few of these have been consolidated in the past.

6.7.3 The English Heritage Asset Management Plan project is undertaking condition surveys of all the sites in its care to create an objective, costed and prioritised work programme for the next 20 years.

6.7.4 Policy 7a: There should be regular monitoring and maintenance of exposed masonry by all organisations and individuals responsible for its care.

ACTIONS

6.7.5 1. Survey the condition of exposed masonry not covered by the English Heritage Asset Management Plan.



6.7.6 2. Coordinate action and resources to conserve and repair exposed sections of masonry.

2. The Clayton Wall

6.7.7 The conservation of the central sector lengths of the Wall restored by Clayton in the 19th century is a particular challenge. The faces were rebuilt without mortar and they are not tied into the core. Clayton's conservation does not now accord with modern conservation standards.

6.7.8 Nevertheless, these sections have their own value, representing the efforts of private individuals to conserve and restore the remains at a time when there was no ancient monuments legislation to protect them. Without the efforts of Clayton and his contemporaries, far less of the monument would survive today. However, the faces of Clayton's work are inherently unstable. Visitors walking along the top of the Wall, compressing and eroding the turf capping Clayton laid, have exacerbated this.

6.7.9 The creation of the Hadrian's Wall Path National Trail moved the public Right of Way off the unstable structure. National Trust signs, and the removal of steps up onto the Wall top have also helped. Nevertheless, many visitors still climb up onto the Clayton Wall, and water ingress and pressure causes collapses at all too frequent intervals. Stabilisation of the Clayton Wall, for example at Steel Rigg and Sewingshields, continues to be required.

6.7.10 Policy 7b: Preventative and active conservation measures for the Clayton Wall should be improved.

ACTIONS

6.7.11 1. Implement measures to discourage visitors from climbing and walking on the Clayton Wall.

6.7.12 2. Investigate and implement measures to increase stability of the Clayton Wall.

3. Archaeological earthworks

6.7.13 The earthwork remains of the WHS divide into two categories:

- features originally constructed with soil and turf, such as the *Vallum* banks, the ramparts of temporary camps and the Turf Wall itself, and ditches dug by the Romans
- the vestiges of masonry structures that have over time become covered by soil and vegetation: much of the line of the Wall survives in this condition.

6.7.14 In eastern Northumberland the Wall itself is mostly beneath the B6318 road, but the sites of some milecastles and turrets are visible as earthworks, and the reduced profile of the *Vallum* is largely visible even where it has been subjected to cultivation over many years. Both categories of earthwork are fragile, prone to erosion, non-renewable and contain authentic deposits.

6.7.15 Policy 7c: Archaeological earthworks must be protected from damage by erosion.

ACTION

6.7.16 1. Implement and monitor management regimes on archaeological earthwork sites that are prone to erosion.

4. Areas on the Heritage at Risk Register

6.7.17 English Heritage maintains a national register of Heritage at Risk, launched in 2008. Areas on it from Hadrian's Wall include:

- Great Chesters Roman fort and adjacent length of Hadrian's Wall: an HLS scheme has been agreed between the site owner and Natural England for consolidation work
- Burtholme Beck in Wall mile 54: there is a significant length of the Wall standing over 1m high, which has the core and some of the faces exposed, and substantial trees growing in the hedgeline: no solution is yet identified for this site
- the Wall between Port Carlisle and Bowness-on-Solway: again the core of the Wall survives over 1m high on either side of a field gate and under a hedge bank – but as cattle use the gate to move from one field to the other, there is a recurring danger of damage to the exposed remains, and no solution has yet been agreed for this site.

6.7.18 Policy 7d: All areas of the WHS on the Heritage at Risk Register should be removed, or reduced in risk on the Register, by the end of the life of this Plan.

ACTION

6.7.19 1. Improve the condition of all areas on the Heritage at Risk Register.

5. Causes of damage

Burrowing animals

6.7.20 Rabbit burrows can damage below-ground deposits substantially. A particularly serious area of burrowing on the north side of the Wall ditch at Black Carts has been a perennial problem. The extent of the burrows was so great that the profile of the ditch was in danger of collapse. This area has been addressed on several occasions and needs continual monitoring.

6.7.21 Mole activity and numbers appear to be increasing since the use of strychnine was banned in September 2006. Not only do their runs cause below-ground disturbance, but also the molehills kill the grass, putting the Site's archaeology at risk from erosion by visitors and stock. On the Hadrian's Wall Path National Trail, volunteers help spread the molehills to allow grass re-growth.

6.7.22 Farmers should be encouraged to manage rabbits and moles on their land, possibly through the help of English Heritage Management Agreements or generic consents, and Natural England may be able to help with capital works such as fencing through HLS agreements.

6.7.23 Badger setts can similarly threaten the conservation of the Site. They are protected by law, so their control is more problematic.

6.7.24 Policy 7e: The activities of burrowing animals in the WHS will be managed where it impacts on significant archaeological remains.

ACTION

6.7.25 1. Farming bodies, English Heritage and Natural England should develop a joint strategy for managing burrowing animals that impact on significant archaeological remains in the WHS and Buffer Zone.

Other causes of damage

6.7.26 These include:

- natural processes such as erosion of river banks, coastal erosion and landslip (see Issue 6)
- issues associated with land use (see Issue 8)
- recreational pressures (see Issue 10).

6. Generic consents

6.7.27 Once problems are identified, there is a need for a quick response to apply management solutions. All intervention that affects the components of the WHS currently requires Scheduled Monument Consent, even if the work involved is beneficial and superficial, and does not directly affect the archaeological deposits themselves. English Heritage has developed with the National Trail managers a generic consent to allow routine management and repair works on the Trail, without having to apply for consent individually every time. This allows immediate remedial action. A similar scheme was also developed with the Vindolanda Trust for such management responses as replacing stones that had become dislodged, and ground maintenance. This efficient approach to the legislative protection has enabled prompt responses, leading to the improved condition of the WHS.

6.7.28 English Heritage is currently extending the range of generic consents with bodies and companies such as British Telecom and Northern Electric. This approach is advocated, for appropriate cases, in the Heritage Protection Bill. The management of mole activity could also possibly be investigated as part of a generic consent through a body such as the National Farmers Union (NFU). Natural England is also keen to simplify the process for granting consent on SSSIs, to tie in with English Heritage's generic consent and to integrate landowner consent.

6.7.29 Policy 7f: The use of generic consents and Heritage Partnership Agreements should be further developed for the conservation of the OUV of the WHS.

ACTIONS

6.7.30 1. Develop further generic consents as appropriate.

6.7.31 2. Develop, post-Heritage Bill Heritage Partnership Agreements.

7. Research and publications

6.7.32 The period of this Management Plan will benefit from three important publications.

- 6.7.33 The English Heritage *Conservation Principles*,

published in 2006, is a model for decision-making in the historic environment, and will inform English Heritage's approach to work on the Wall in the Plan period.

- 6.7.34 The Raphael Proactive Management of Archaeological Earthworks project was completed during the period of the previous Management Plan. It carried out a programme of repair works, which in some cases tested experimental and innovative methods. In 2004 it published *Managing Earthwork Monuments*, a manual of good practice developed from a variety of sources.

- 6.7.35 In 2009, English Heritage will publish the results of its investigations into the use of lime mortars, which both follow historic practice and provide a mixture robust enough to withstand the Wall zone's harshest climates. This publication should be used to ensure effective and sympathetic repairs to masonry.

6.7.36 Policy 7g: Conservation and repair work carried out in the WHS should adhere to best practice and appropriate current research.

ACTION

6.7.37 1. Use appropriate research and guidelines in carrying out any conservation and repair work.

8. Assessment and monitoring

6.7.38 A weakness of the Raphael project was that many of the repair works were carried out through necessity towards the end of it, which did not give the project officer time to return to test their effectiveness. English Heritage assessed a number of them in 2005, two years after their completion, with varying results. Some had been very successful, while others had patently failed.

6.7.39 Policy 7h: The work of the Raphael project should be reviewed.

ACTIONS

6.7.40 1. Review and reassess the methodologies proposed in the Raphael project manual, and the work undertaken in the project period.

6.7.41 2. Continue with, and review the results of, the Trail Management day schools on managing paths in archaeologically sensitive areas.

6.7.42 3. Publish results of the reviews.

6.7.43 A key part of the management cycle is the regular monitoring of the condition of the archaeological remains, so that developing problems can be identified at an early stage and managed appropriately before they become more serious.

6.7.44 Parts of the WHS are already monitored three times a year through fixed-point photographs taken on the National Trail and the annual Trail 'snagging-walk', in which all maintenance problems involving both infrastructure and conservation of the path surface are noted. This monitoring does not cover parts of the WHS away from the Trail, however. When the English Heritage archaeologist post was created in the early 1990s, approximately half of the job remit was to carry out regular monitoring visits



over the whole Site and to liaise with landowners and tenants about the sections of the frontier on their land. This part of the post has changed over time to be more casework-focused, and the regular monitoring gap needs to be filled.

6.7.45 The Raphael project officer carried out a full condition survey of all parts of the Site under grass and woodland management in the early years of the previous Management Plan, and this needs to be repeated at regular intervals. A five-year cycle would probably be adequate. A further possibility would be periodic aerial photography, which would have a monitoring value, record changes of land use and could lead to new discoveries in the right conditions. The resources for a more systematic and regular monitoring of the whole Site need to be identified and secured.

The English Heritage register of Heritage at Risk (see above) provides further information on which condition surveys should be based.

6.7.46 Policy 7i: The condition of archaeological remains in the WHS should be surveyed and monitored on a regular basis.

ACTIONS

6.7.47 1. Repeat the condition survey of the archaeology of the WHS under grassland and forestry carried out during the Raphael project.

6.7.48 2. Develop a methodology for a survey of scheduled monuments at risk in the WHS, and carry out surveys every five years.

ISSUE 8: RURAL LAND MANAGEMENT

6.8.1 Objective: To achieve a sustainable balance that conserves the integrity of the WHS while accommodating current and future land use.

6.8.2 The WHS runs through a living, working landscape, and its conservation sits alongside a number of land uses and their varying priorities. Farming and forestry in particular play a key role in the economy, life and aesthetic qualities of the WHS, and in the physical protection of the Site itself. The management of the WHS therefore needs to contribute positively to their sustainability, where this contributes to the Site's OUV.

1. Farming and the landscape

6.8.3 Together with urban expansion, the greatest influence on the development of the landscape, particularly since the 18th century, has been agriculture in its various forms. The present landscape is the product of mainly beneficial traditional farming practices. Many of these now need to be protected and conserved because it is these practices that protect the archaeological remains of the WHS.

6.8.4 Over the past decades the farming industry has suffered severely declining incomes and it is faced by a number of challenges to its future viability. These in turn will impact on the management of the WHS and the setting that supports its OUV.

- **6.8.5** There are forthcoming changes in agricultural payments schemes which are anticipated may reduce payments to current recipients.

- **6.8.6** Stock levels are generally reducing, which may have an impact on both farming viability and on the landscape.

- **6.8.7** There is increasing volatility in world prices for agricultural commodities, which can result in significant fluctuations in farm incomes.

- **6.8.8** Sustained rises in commodity prices can increase pressure to more intensive farming, while lowering prices can result in less active land management.

- **6.8.9** All farmers are facing rising energy and livestock feed costs, neither of which can be readily translated into increased prices for their produce.

2. Protecting the WHS by assisting farming

6.8.10 The management of the Site cannot resolve the wider difficulties that the industry faces, but there are a number of mechanisms and initiatives through which farming can be assisted and which also provide protection to the Site.

Diversification

6.8.11 The Management Plan can help farmers further by supporting diversification projects. The opportunities for such assistance are dealt with more fully in Issue 11, which deals with sustainable development.

Environmental Stewardship

6.8.12 The previous Management Plan proposed investigating whether a special initiative for the Countryside Stewardship scheme could be developed. The replacement of Countryside Stewardship by the two levels of Environmental Stewardship changes this. The Higher Level Scheme (HLS) alone can provide for capital improvements that can benefit the Site and the farming industry. An example is the scheme agreed for Great Chesters Farm, which includes the conservation of the upstanding remains in the fort of Great Chesters and the exposed north face of Hadrian's Wall.

6.8.13 Further opportunities for land managers on Hadrian's Wall to use the HLS scheme for projects associated with conservation of the Site are likely. These should include both those farms with old Countryside Stewardship schemes when they expire, and farms that currently have no agreement. Those involved in delivery of the scheme will need to allocate increased resources of both staff and funding.

6.8.14 There may also be scope to raise the status of heritage sites to equal priority with ecological sites, and to secure a higher value of schemes for heritage sites. The importance of the HLS should be reflected in the monitoring indicators for the period of this Plan, and such measurements as the number of new agreements established and the area of land covered by agri-environment schemes expressed also as a percentage figure of the Site.

6.8.15 Policy 8a: Greater use of HLS schemes that prioritise the historic environment should be promoted across the WHS.

ACTIONS

6.8.16 1. Encourage farmers and landowners to enter into the

HLS schemes to benefit the conservation and sustainability of the WHS.

6.8.17 2. Encourage Natural England to prioritise projects in the WHS for support through the scheme.

6.8.18 3. Work towards a goal of having the majority of agricultural land in the WHS managed under Stewardship agreements.

3. Arable farming: ploughing

6.8.19 Significant areas of the Site are ploughed on an annual or less frequent basis. In some parts ploughing is likely to be causing continuing damage to buried archaeological remains. Long sections of the *Vallum* are still cultivated in east Northumberland, where decades of ploughing have reduced its profile.

6.8.20 English Heritage investigations in the late 1990s found remnants of the *Vallum* banks near Throckley surviving below the depth of ploughing. That section has since been put under pasture through an agri-environment scheme. The same programme of investigations however found that only two of the milecastles out of the 14 under cultivation were being actively damaged. Milecastle 19 at Matfen Piers has been almost totally destroyed, while Milecastle 9 at Blucher (which survives well) showed recent plough scores on the tops of the walls.

6.8.21 There are a number of sites in the WHS, often identified as high and medium risk, on the Heritage at Risk Register due to ploughing. These include parts of the Roman town at Corbridge, Beckfoot Fort and Nether Denton Fort.

6.8.22 Fields to the south of Great Chesters in which remains of the civilian settlement are likely to survive are also under cultivation and need to be assessed for plough damage. See Issue 2 for the proposals of the Heritage Protection Bill with regard to ploughing.

6.8.23 Metal detecting also presents a threat to the sites when they are ploughed, bringing material to the surface (see Issue 5).

4. Pasture and stock farming

6.8.24 The value of stock farming to the WHS is significant and the lesson of foot and mouth disease, when a substantial number of farms in the Site and Buffer Zone lost their stock, was that scrub would develop without adequate grazing. This would be harmful to archaeology and alter the appearance of the landscape significantly. The interests of farming and archaeology generally coincide, as a healthy grass cover is good for earthworks and provides good grazing for stock.

6.8.25 Farm animals can cause erosion, particularly where they tend to concentrate in one area. The ground near trees and field gateways can be susceptible to damage through poaching, and agricultural vehicles can churn up gateways further.

6.8.26 The infrastructure of the Site itself can generate erosion problems: low interpretative panels, such as that at Turret 35a, attract stock which use them as rubbing posts, and wear away the grass around them.

6.8.27 Stock feeders can also lead to considerable poaching. Farmers tend to place these on the driest land, which is sometimes on top of the upstanding earthworks of the monument (particularly the *Vallum* banks and temporary camps), and the earthworks can then suffer damage. The slopes of banks can also be damaged through sheep creating scars, which further deteriorate once started.

6.8.28 Policy 8b: The effect of agriculture on vulnerable sites throughout the WHS and its Buffer Zone should be monitored and assessed, to maintain a satisfactory balance between conservation and agricultural viability.

ACTIONS

6.8.29 1. Establish a mechanism for monitoring sites identified as being at risk from ploughing and apply appropriate solutions in cooperation with farmers.

6.8.30 2. Prioritise support for sites identified as at medium or high risk on the Heritage at Risk Register.

6.8.31 3. Encourage farmers to enter Stewardship and Section 17 agreements to manage their stock in a sympathetic manner that avoids damage to structures and prevents erosion.

6.8.32 4. Where earthworks are damaged by farm stock, identify proactive solutions to prevent erosion, enable rapid responses when damage occurs, and provide sustainable grazing.

5. Forestry and woodland

6.8.33 Forestry is already a major influence on the landscape with many hedges and small woodlands, copses and shelterbelts. Afforestation, deforestation, forest road and forest quarry projects above certain thresholds of scale must be referred to the Forestry Commission for consent and may require an Environmental Impact Assessment to be undertaken¹⁹.

6.8.34 In much of the central sector, the northern skyline seen from the Wall is dominated by the edge of Wark Forest. The Forestry Commission's planned replanting of the forest edge should substantially improve this view.

6.8.35 Current felling and restocking of shelterbelts, as at Grindon, provides an opportunity to influence and improve the planting for landscape and nature conservation, especially through incentives offered by the Northumberland National Park Authority (NNPA) for restocking with native broadleaves. Consideration needs to be given however to the potential impacts on native red squirrels, which are less suited to broadleaf woodlands than the greys.

6.8.36 New planting elsewhere could add to the character of the landscape in certain locations, particularly if reinforcing semi-natural ancient woodland species, but it should not be permitted to detract from the open aspect of the landscape where this is the dominant character.

6.8.37 In general, trees planted on top of or very close to archaeological features can be damaging, and replanting should be avoided. Nevertheless, overall landscape contribution and nature conservation interests need to be considered.

¹⁹ Forestry Commission 1999 *Environmental Impact Assessment of Forestry Projects*



6.8.38 The management of large trees where they are close to or on top of archaeology is important. If they are blown over, their uplifted roots cause considerable damage. This potential problem is particularly common in Cumbria, where trees form part of hedges growing on top of the remains of the Wall.

6.8.39 Policy 8c: Management of forestry and woodlands in the WHS and its Buffer Zone should take the OUV of the Site into account.

ACTIONS

6.8.40 1. Identify trees at risk from being blown over, which could as a result damage archaeological remains, and negotiate their removal.

6.8.41 2. Identify trees whose root growth is likely to result in damage to archaeological remains, and negotiate their removal.

6.8.42 3. Encourage the removal of intrusive conifer blocks and the planting of broadleaved native species where appropriate.

6. Managing the landscape to protect archaeological and natural values

6.8.43 In general, actions to conserve the historic and natural environments can be of benefit to both, particularly when both are considered at an early stage. It is important, however, to recognise that in some instances there may be difficulties in reconciling their needs. Each SSSI has different issues and sensitivities, and there are variations in the nature and preservation of the archaeology. As far as possible, the conservation of natural habitats should be integrated with that of the historic environment, a principle enshrined in the national Memorandum of Understanding between English Heritage and Natural England.

6.8.44 The development of plans for specific areas would be enhanced if complemented by an overall landscape strategy for the WHS, reflecting the landscape contribution to its OUV. The challenge in conserving the landscape is to accommodate necessary change while preserving the significant elements that form the landscape, and telling the story of its development. Decisions about which characteristics should be reinforced and whether there are elements that should be reversed must be developed through research.

6.8.45 A further technique that could have potential for use in future management of the landscape is Historic Landscape Characterisation (HLC). This has now been completed at the county level for both Northumberland and Cumbria, but at a scale too large to inform the management of the WHS at a detailed level.

6.8.46 As part of the management of the landscape, it is important to monitor change over identified periods. Periodic monitoring through fixed-point photography of key views in, out of and into the WHS would provide a measure of any change to the landscape. At the moment this has only been applied to the Hadrian's Wall Path National Trail.

6.8.47 Policy 8d: A strategy should be developed to manage and protect the rural landscape, in so much as it impacts on the OUV of the WHS.

ACTIONS

6.8.48 1. Create and implement management plans that take into account the needs of both the historic and natural environments for each SSSI.

6.8.49 2. Identify and implement the necessary processes to develop a wider landscape strategy appropriate for the WHS.

6.8.50 3. Carry out fixed-point photographic monitoring of key views.

ISSUE 9: RESEARCH

6.9.1 Objective: To enhance and develop a continuous, jointly coordinated, publicly accessible programme of research designed to inform academic and public understanding of the WHS, its management and its interpretation.

1. The Archaeological Research Framework

6.9.2 During the period of the previous Management Plan, a Research Framework for Hadrian's Wall has been developed. This has been generated through consultation and discussion among the frontier archaeological community and stakeholder groups. The document is divided into:

- an assessment, summarising current knowledge of the Wall
- an agenda, identifying gaps in knowledge
- the strategy, proposing initiatives by which to plug these gaps.

6.9.3 The projects advocated in the strategy represent the consensus view of the archaeological community, and funding should be sought to implement them. However, it must be emphasised that the role of the framework is to encourage research rather than stifle it. It should not prevent new ways of thinking or full advantage being taken of new opportunities. Projects should maximise public and academic benefit, with provision for the involvement of the public where appropriate.

6.9.4 Priorities for research:

- the development of a GIS and wide dissemination of research work in the WHS: these were identified in the previous Management Plan and in the Research Framework Strategy
- maximising the knowledge yield from sites being damaged by erosion
- strategic excavations of a range of site-types
- a complete set of geophysical surveys for the principal Wall and Stanegate sites, as well as the application of all appropriate techniques to identify the precise course of the Wall and its installations in the West.
- aerial reconnaissance whenever the conditions are suitable.

6.9.5 Policy 9a: A programme of ongoing survey, fieldwork and analytical research should be developed to take forward projects and priorities identified in the Research Framework.

ACTIONS

6.9.6 1. Develop and implement a GIS programme for the WHS that is informed by and builds on existing GIS operated by stakeholders.

6.9.7 2. Coordinate action to maximise the knowledge yield from sites being damaged by erosion.

6.9.8 3. Carry out strategic excavation and other research of a range of site-types.

6.9.9 4. Identify the precise course of the Wall and the boundaries of its installations using all appropriate techniques, including a complete set of geophysical surveys for the principal Wall and Stanegate sites.

6.9.10 5. Make resources available for aerial reconnaissance whenever the conditions are suitable.

2. Research coordination and funding

6.9.11 To date, funding for research not associated with commercial development has largely been obtained through individual academic endeavours, English Heritage, or locally through the fundraising efforts of the Vindolanda Trust and of Tyne and Wear Museums Service. Although this has been generally successful, future funding for research is unpredictable. This inhibits medium to long-term planning of research activities. More stability in future research funding would make the aspirations of the Research Framework much more achievable.

6.9.12 A research coordination forum would help secure funding and maximise the gain from opportunities that arise. The precise scope and make-up of such a body would have to be discussed in detail by the archaeological community, but it would create action plans and nominate responsible parties.

6.9.13 Policy 9b: Organisations with responsibilities and commitments to develop and implement research along Hadrian's Wall will work in partnership and coordinate their activities wherever possible.

ACTIONS

6.9.14 1. Set up a forum to provide liaison for research activity throughout the WHS.

6.9.15 2. Develop a coordinated approach to seeking funding for an ongoing Wall-wide programme of fieldwork and analytical research.

3. Ongoing and future archaeological research

6.9.16 As recognised in Part 4.4, non-invasive techniques such as aerial and geophysical survey are important research tools, which continue to provide new information without damaging the archaeological remains.

6.9.17 Archaeological excavation is essentially a destructive process, as it removes and destroys the deposits under investigation. Excavation may be necessitated in some cases by erosion or development. Research excavations however should only be carried out where they accord with the principles of the

archaeological Research Framework, and where sufficient funds are available to complete the project to an acceptable standard.

6.9.18 Current and planned field research and rescue projects are listed below.

- **6.9.19** Long-running research excavations are continuing at South Shields and Vindolanda.
- **6.9.20** A research strategy has recently been developed as a prelude to the planned campaign of excavations in the extramural settlement at Maryport.
- **6.9.21** Continuing erosion of the cemetery at Beckfoot has provided the context for interventions there, with scope for further work of this nature both at Beckfoot and elsewhere on the west coast.
- **6.9.22** English Heritage is currently investigating problems with slope stability at Birdoswald, which may involve rescue fieldwork.
- **6.9.23** Developer-driven work continues to provide important data, particularly in and around the urban areas of Newcastle and Carlisle.

6.9.24 Policy 9c: Wherever possible, non-invasive methods of archaeological investigation should be used in preference to excavation.

6.9.25 Policy 9d: Archaeological excavation will be undertaken under guidance from the Archaeological Research Framework.

6.9.26 Policy 9e: Archaeological excavation will only take place where there is adequate provision for post-excavation, publication and the conservation of finds.

4. Wider research

6.9.27 The Research Framework focuses on archaeological research for the Roman and immediate pre- and post-Roman periods. There is a need for a wider programme of research to understand the context of the WHS and its legacy in the landscape for local communities and others. Areas and themes that need to be covered include geology, natural habitats, the prehistoric and historic landscape, border history, the history and traditions of local communities, current use of the landscape and ongoing research on visitor behaviour. Following the example set for archaeology, a framework is needed to summarise current knowledge, to identify gaps and opportunities and to suggest initiatives.

6.9.28 Policy 9f: A wider Research Framework incorporating the natural, historic and present landscape and their use by visitors and local people should be developed, in order to contribute to understanding and management of the WHS, and maintenance of its OUV.

ACTION

6.9.29 1. Develop a broad, integrated Research Framework for the WHS.



5. The archaeological resource

6.9.30 Hadrian's Wall WHS constitutes an outstanding multi-period archaeological resource with a research potential that is hard to overstate. Only a tiny fraction has been excavated and modern work continues to deliver results that force a reappraisal of our perception of the frontier zone. Geophysical and aerial surveys have delivered outstanding results with major implications for both research and management. Sophisticated analyses of material culture, environmental indices and landscapes are providing an unprecedented insight into life during the Roman occupation, while the benefits of applying new techniques to material from old excavations have been demonstrated. Equally, the wealth of knowledge that has been gathered from the WHS is well suited to develop and test new theories. Further work in all of these areas can be expected to yield results of the utmost importance, with a commensurate increase in knowledge and profile that is of value to all.

6.9.31 Further research is also indispensable both to academic understanding of the Wall itself and to wider aspects of the Roman Empire, as well as informing management of the WHS. The research programme should now be coordinated across the Frontiers of the Roman Empire WHS.

6.9.32 Research on Hadrian's Wall also offers opportunities for unique and fascinating experiences that can engage the wider public. Accurate and imaginative communication of information gathered through this research process is an essential element of the perception, understanding and enjoyment of the WHS.

6.9.33 Policy 9g: Wherever possible opportunities should be sought to engage local people and visitors in the research process.

6.9.34 Policy 9h: The results of all research will be publicly accessible.

ACTION

6.9.35 1. Create opportunities to involve local people and visitors in the research process.

6.9.36 2. Communicate the results of research in accessible, informative and imaginative ways.

Presenting, enjoying and transmitting knowledge of the WHS

ISSUE 10: SUSTAINABLE PHYSICAL ACCESS

6.10.1 Objective: To develop a fully integrated range of sustainable options for transport and other forms of physical access to and along the WHS.

6.10.2 The provision of sustainable, integrated transport and other physical access facilities in the WHS, and the management of this access to protect the OUV of Hadrian's Wall, are crucial to the successful management of the Site.

1. Sustainable transport

6.10.3 Transport has been recognised as a contributing factor to

climate change on a world scale. The government's 2007 White Paper *Towards a sustainable transport system – supporting economic growth in a low carbon world*²⁰ highlights the need to promote sustainable transport. Issue 5 identifies the effects of climate change as a significant risk to the future of the WHS. The development of a transport system that is environmentally friendly, and in particular offers alternatives to private car usage, will reduce the carbon footprint of visitors and help to mitigate the effects of both visitor pressure and climate change on the Site.

2. Managing access to the WHS

6.10.4 The provision of well designed transport facilities and wide access for walkers, cyclists, and the disabled will benefit visitors, the Site, and local communities and businesses.

6.10.5 These would:

- increase sustainable access to the Site
- contribute to the conservation of the Site, for instance by persuading visitors away from the more vulnerable parts of the WHS by offering easy access to other equally enjoyable, less vulnerable parts
- stimulate visitor spending in local communities
- encourage further business opportunities in tourism (see Issues 10 and 11)
- encourage visitors to stay longer, for instance by offering the availability of walks of varied length and endurance.

6.10.6 However, visitors will only start to rely more on public transport if train and bus services suit their needs, are promoted well in advance of their visit, and have connections to each other that work well, so that they can plan with confidence.

6.10.7 At the same time, the policies of this Plan need to ensure transport provisions do not have a detrimental effect on the OUV of the WHS.

3. Hadrian's Wall Country Bus AD122

6.10.8 The *Hadrian's Wall Country* bus plays a central role in developing integrated and sustainable travel in the WHS. The service is also important to the local community for accessing services and employment at the sites and businesses along the Wall. This aspect of the service needs to be more fully recognised and researched.

6.10.9 The service has developed over a number of years. Buses now run between Newcastle and Carlisle, serving all the major sites and museums en route, as well as connecting with trains at Hexham and Haltwhistle. The Newcastle Metro provides an easy link to Wallsend, while in the west there are connecting bus services to Bowness. Regular services feature on-board guides who both increase understanding of the Site and convey important behavioural messages to visitors. There are opportunities to link the timetable of on-board guided services with guided site tours.

6.10.10 The level of service needs to be enhanced to increase usage and give visitors a real option to reduce their dependency

²⁰ Department for Transport 2007 *Towards a sustainable transport system – supporting economic growth in a low carbon world* White Paper

on private cars. The current schedule makes it difficult for them to visit two or more attractions in one day and return to the start of their journey using the bus. A more frequent minibus service between Birdoswald and Chesters in the central sector would complement the existing feeder services, and connect with transport hubs at Haltwhistle and Hexham. The pattern of services is currently weighted towards Carlisle and there is a potential Tyneside market that needs to be explored.

6.10.11 By having some capacity to carry bikes, the service already has a degree of integration with cycle routes, although the main role of the bus will continue to be to carry passengers.

6.10.12 Operation has in the past been limited by the available subsidy funding offered by a variety of organisations that make up the *Hadrian's Wall Country* bus partnership. Securing longer-term funding for the operation is essential to keep the service running consistently from year to year, so that visitors can factor it into their plans when booking trips to the Wall. Funding is also needed to promote it, and to make bus stops along the route more distinctive to raise awareness of the service. Newer buses will need to be provided in the lifetime of the Plan. This is an opportunity to look at more environmentally fuel-efficient vehicles.

6.10.13 To justify increased investment, and work towards eventual financial sustainability, it will be necessary to increase revenue from fares by increasing passenger numbers or to deliver sufficient additional visitors to sites to ensure that there is a sound business case to support it.

6.10.14 Policy 10a: The *Hadrian's Wall Country* bus service should be developed and enhanced to the greater benefit of visitors and communities in the WHS and to increase passenger numbers and the viability of the service.

6.10.15 Policy 10b: Site managers should consider offering incentives to visitors who travel to their sites using public transport exclusively.

ACTIONS

6.10.16 1. Increase frequency of the service, and explore incentives to increase bus usage.

6.10.17 2. Explore the provision of new buses in the lifetime of the Plan, using this as an opportunity to introduce more environmentally friendly fuel-efficient vehicles.

6.10.18 3. Continue to monitor and review the performance of the *Hadrian's Wall Country* bus service, and the needs and experience of visitors and local communities using it.

6.10.19 4. Develop better integration between the *Hadrian's Wall Country* bus service and other modes of transport.

4. Coach services

6.10.20 A significant number of visitors arrive at the WHS by private coach and it is important that adequate facilities are provided for coach access and parking. Tour operators should also be advised of the most suitable routes for coaches in the WHS, and of sites that are unsuitable for them. Improved information for tour operators and signage for the one-way coach advisory route to Birdoswald have helped to address this

issue. In other areas with restricted access and limited coach parking facilities, or where coaches are forbidden, such as Steel Rigg car park, options to improve access are likely to remain constrained, but should continue to be considered.

6.10.21 Policy 10c: Accessibility for coach services should be improved where this can be done without detriment to the OUV of the Site.

ACTIONS

6.10.22 1. Continue to consider options to improve coach access.

6.10.23 2. Maintain and improve liaison with coach operators to better understand their access and scheduling requirements.

5. Rail services

6.10.24 The Tyne valley and Cumbrian coast rail lines provide essential feeder routes to the WHS, and connections with the *Hadrian's Wall Country* bus service can be made at Carlisle, Haltwhistle, and Hexham and Newcastle railway stations. Northern Rail now promotes the Tyne valley line as the *Hadrian's Wall Country* line, emphasising its role as a route for both leisure and commuting.

6.10.25 One Northern Trains unit will carry the *Hadrian's Wall Country* livery, and will operate on routes in the north of England to promote the brand and improve awareness of the WHS.

6.10.26 Some of the rolling stock is old, particularly the Pacer units. Updated trains would make the line more appealing to visitors.

6.10.27 All services currently stop at Haltwhistle and Hexham for connection to the *Hadrian's Wall Country* bus, but it would be desirable to have more stops at intermediate stations, particularly where walkers and cyclists want to transfer. The Tyne Valley Community Rail Partnership has proposed reopening an intermediate station at either Gilsland or Greenhead. The 14-mile distance between Brampton and Haltwhistle stations is by far the longest gap between stations on the line. A new station at one of these places would give greater access by rail to sections of Hadrian's Wall, and would also create an additional interchange with the *Hadrian's Wall Country* bus route.

6.10.28 Although there is some provision of cycle space on trains and cycle storage facilities have been provided at a number of rail stations, there is a need to monitor and review these provisions to ensure they are adequate.

6.10.29 Policy 10d: The greater use of rail services should be promoted as a means of improving access to the WHS.

ACTIONS

6.10.30 1. Continue to work with rail service operators to promote the WHS.

6.10.31 2. Continue to work with rail service operators to provide better integration of services with other modes of transport.



6. Walking: the National Trail and beyond

6.10.32 The Hadrian's Wall Path National Trail opened in 2003 and runs on or close to the remains of the Wall, giving walkers a direct experience of its scale and complexity. It has also brought considerable business opportunities and economic benefits.

Maintaining the National Trail

6.10.33 It is important to balance the promotion of the Trail and the economic benefits it brings with the need to conserve its surface to protect the archaeology at those parts of the Trail on or close to the remains of the Wall and its associated structures. The parts of the Site that have experienced the most erosion through visitor pressure are on the National Trail.

6.10.34 The Submission to the Secretary of State for Environment for the creation of the Trail stated that:

The most appropriate footpath surface is a green sward path. This will be aimed for wherever practical, using vegetation management techniques as part of a regular maintenance regime. Where this is not possible, engineering solutions will be used, but these will be kept to a minimum and will only be used where lack of action would increase risk of damage by erosion²¹.

6.10.35 Management of the grass sward is the first option and alternative surfacing is only resorted to when intensive grassland management has proved to be unsustainable or conflicts with other designations, for example the sensitivity of SSSIs. Where hard surfacing is resorted to it must be implemented sensitively using materials that are in sympathy with the local geology. Ongoing research into the use of techniques and materials for maintenance of the Trail should be continued.

6.10.36 The condition of the path showed marked deterioration during its first two years of use, with lengths of erosion developing particularly where it crossed slopes diagonally. Where walkers had walked in a single line, the grass became compacted, and wear lines developed. In some areas of erosion it is now necessary to consider whether new routes can be identified in the same fields. A comparison of thrice-yearly fixed-point monitoring photographs revealed that the resources to manage the sward had been underestimated, even though the average of around 7,000 walkers a year covering the whole route was about a third of that originally predicted.

6.10.37 The appointment of two lengthsmen since 2005 was funded by Natural England, and is part of a comprehensive grassland management programme under the aegis of the Generic Grassland Management Scheduled Monument Consent. This approach embodies the principles of an HPA (as envisaged by the Heritage Bill, see Issue 3).

6.10.38 Undertaking this pre-emptive management has reversed the deterioration. The most heavily used parts of the Trail in the central section are managed and maintained in close collaboration with the Northumberland National Park Ranger team. Here and throughout the rest of the Trail the lengthsmen are supported by the Trail volunteers in both monitoring and maintenance, and through further collaboration with local Highways Authority Rights of Way officers.

6.10.39 The success of this routine management has

emphasised the need for proactive management of the Trail, as was anticipated in the Countryside Commission's Submission document. Consideration could be given to securing funding to provide more lengthsmen or to supplement the work of the existing ones through contractual agreements with local farmers and landowners to undertake specific works. It is also important to maintain the funding by Natural England to support the Trail Officer and the lengthsmen posts. The Hadrian's Wall Path has always been recognised as a special case among National Trails, because it runs through a WHS, with the additional responsibilities that come with this.

Generic consents

6.10.40 The development of generic Scheduled Monument Consent for routine maintenance and minor repairs to the path surface enables work to be done promptly and regularly, and has contributed to the improved condition of the Trail since 2005, while still retaining the statutory control of works to the monument. The new legislation covering heritage protection may provide an opportunity to develop generic consent further, potentially to include other public Rights of Way in the WHS.

6.10.41 Policy 10e: The Hadrian's Wall Path National Trail should be proactively managed primarily as a grass sward surface to protect the archaeology underfoot and the setting of the WHS.

ACTIONS

6.10.42 1. Continue to monitor and manage the National Trail through a dedicated and adequately resourced staff team, including lengthsmen.

6.10.43 2. Explore further with English Heritage the use and expansion of generic Scheduled Monument Consent for works on the Trail and its conversion to an HPA under the new heritage protection legislation.

6.10.44 3. Encourage Rights of Way Authorities to invest greater time and resources in the National Trail.

6.10.45 4. Continue to research, implement and monitor the use of techniques and materials for the maintenance of the grass sward on the Trail.

6.10.46 5. Promote local permissive footpath diversion agreements with landowners to help manage the grass sward and to provide alternative routes.

Marketing the Trail to ensure sustainability

6.10.47 The Trail opened to improve access to the WHS, with visitors encouraged mainly during the summer to allow the grass sward to rest and recover over the winter and early spring. The Hadrian's Wall Path National Trail Summer Passport scheme was introduced when the Trail opened²². Walkers use the passport to collect six stamps from stamping stations along the Trail: the scheme operates only from May to the end of October. *Every Footstep Counts*, a code of respect for the WHS, was published before the Trail opened in 2001²³, and provides key behavioural advice for walkers. This code should be reviewed to make sure its messages are effectively delivered and widely promoted. The lengthsmen and Trail volunteers are a visible reminder to visitors that the Trail needs to be actively managed, and that the archaeological remains are fragile.

²¹ Countryside Commission 1993 *The Hadrian's Wall Path. Submission to the Secretary of State for the Environment*. 48

²² Hadrian's Wall Path National Trail website

²³ National Trail *Every Footstep Counts – The Trail's Country Code*

6.10.48 The Trail has attracted some large groups, which use it mainly for sponsorship purposes. The damage they can do was demonstrated when a group of 800 walked from Steel Rigg to Housesteads in January 2003. The Trail managers must continue to be the prime contact for large groups and those groups should be discouraged from walking the Trail in the winter. The circular walks that have developed and promotion of wider walking opportunities in the area could be vigorously promoted as a winter alternative to relieve pressure on the Trail itself. As a public highway the Trail cannot be closed, so appropriate seasonal usage can only be encouraged by influencing potential users.

6.10.49 Many walkers are primarily attracted by the landscape, rather than by seeing the remains of the Wall and its associated earthworks. Away from the displayed sections of Wall and its associated structures, there is no interpretation of archaeology that survives as earthworks, so walkers are mostly unaware of it.

6.10.50 *The Essential Companion*²⁴ gives Trail walkers practical information, such as the location of cash points, post offices, and gradients.

6.10.51 Policy 10f: Promote the Hadrian's Wall National Trail in such a way that protects the archaeology underfoot and the setting of the WHS.

ACTIONS

6.10.52 1. Promote use of the Trail in the summer through the passport scheme.

6.10.53 2. Keep the *Essential Companion* booklet updated and available.

6.10.54 3. Develop alternative itineraries and destinations for the winter period, to take pressure off the National Trail and the WHS.

6.10.55 4. Update and promote *Every Footstep Counts*, the code of respect for the WHS, among visitors and tourism operators.

6.10.56 5. Develop and promote a code of practice for large parties of walkers in cooperation with other organisations such as the NNPA.

Other walks

6.10.57 A network of circular routes, such as the Roman Ring, the Haltwhistle Rings and the Moss Troopers' Trail, some of which take in parts of the National Trail, has also been developed. This network should be promoted and expanded to increase opportunities for walking and as a way of relieving visitor pressure on the Trail. Additional routes could be developed to include historic landscapes, outpost forts such as Risingham and High Rochester and links with the northern section of the Northumberland National Park.

6.10.58 The development of walking routes linking towns and villages within the WHS would increase sustainable access to the Site and, at the same time, stimulate visitor spending in local communities and encourage business opportunities in tourism (see below Issues 10 and 11). Promoting the availability of walks of varied length and endurance could encourage visitors to stay longer.

6.10.59 The development of the North West Coastal Trail extending down to Chester offers a link with the west end of Hadrian's Wall Path and the opportunity to walk further, to the parts of the WHS beyond Bowness-on-Solway as far as Ravenglass. This will help relieve pressure on the more sensitive parts of the Trail as well as creating additional economic opportunities in west Cumbria. Care needs to be taken that the North West Coastal Trail does not impact directly on buried archaeology; this can be ensured by active involvement with its development.

6.10.60 Policy 10g: Options should be developed to broaden choices for walkers and to improve the quality of their experience.

6.10.61 Policy 10h: The Rights of Way Authorities should invest adequate resources and prioritise works to maintain the network within the WHS and Buffer Zone, and linking them to their setting.

ACTIONS

6.10.62 1. Improve the Rights of Way network in the WHS and its Buffer Zone and develop and maintain a network of circular walking routes of varying length and ability.

6.10.63 2. Encourage Rights of Way Authorities to invest greater time and resources in the network linking with the National Trail.

6.10.64 3. Promote the development of the North West Coastal Trail and provide appropriate interpretative and promotional material linked to the National Trail.

7. Cycling: Hadrian's Cycleway and beyond

6.10.65 *Hadrian's Cycleway*, National Cycle Network Route 72, opened between Ravenglass and South Shields in July 2006 and adds to the sustainable forms of access in the WHS. Unlike the National Trail, its route is mostly on quiet roads and lanes, and there is no direct conflict with archaeology. It has not therefore raised the same archaeological conservation issues as the National Trail, with the possible exception of where a dedicated cycle path was created on Greenhead Bank, a short distance to the south of the fort at Carvoran.

6.10.66 There is still work to be done on the extension to Ravenglass and to agree the route in western Carlisle. The route between Greenhead and Gilsland is still being discussed, although funding is in place for its construction. Responsibility for maintenance of the cycle way needs to be clarified.

6.10.67 The cycle way opens a business opportunity for both cycle transport and hire. Although cycle storage facilities have been provided at some railway stations and secure cycle racks are provided at the main attractions in the WHS, more needs to be done to provide cycle security at places to stay. As with the National Trail, there is a need to provide practical infrastructure facilities along the route, such as toilets, refreshments, signage and associated support businesses (see Issue 11).

6.10.68 The development of a choice of day cycling routes and leisure routes of varying length could encourage visitors to spend longer in the area.



6.10.69 Policy 10i: Measures should be implemented to promote use of Hadrian's Cycleway and to improve the experience of cyclists using it.

ACTIONS

6.10.70 1. Develop and upgrade the cycle way along the Cumbrian coast to enable access throughout the WHS.

6.10.71 2. Clarify and confirm responsibilities and the provision of resources for the ongoing maintenance of the cycle way.

6.10.72 3. Improve and upgrade signage along the cycle way and link it to other routes and modes of transport.

6.10.73 4. Improve the provision of facilities for cyclists throughout the route and elsewhere in the WHS.

8. Car access

6.10.74 While it is a priority to develop means of accessing the WHS by public transport in this Management Plan, it remains a reality that the majority of visitors currently arrive by private car and will continue to do so, and that the development of new attractions will increase car numbers. Though many will go to attractions in the Site by car, it is important to continue to provide facilities for car users to leave their vehicles securely and use other means of transport in the Site. There is also a need to develop further interchange hubs near the Site with provision of essential information about the attractions. A park-and-ride scheme with frequent services in the central sector and with secure parking could remove some pressure for further expansion of car parks in the Site.

Parking

6.10.75 There are several locations in the Site where there is currently no car parking provision. New small car parks could be provided in some of these, but only if this can be done without having an adverse effect on the OUV of the WHS and the Buffer Zone where it supports this.

6.10.76 Organisations involved in managing the WHS have varying car park charging policies. The 1999 *Hadrian's Wall Transport Strategy*²⁵ recommended developing a standard policy of charging for all car parks across the WHS, and also suggested that revenue from these could support the operation of the *Hadrian's Wall Country* bus.

6.10.77 There can be a conflict at specific sites where longer-term parking puts pressure on space for visitors who just want to visit the attraction. There is a need to ensure sufficient provision for walkers and cyclists arriving by car, both for a one-day stay and longer. A better understanding of the pattern of car park usage throughout the year across the Site is needed to inform action.

6.10.78 The Transport Strategy recommended designating the approach road to Steel Rigg as a quiet lane and reserving the car park for disabled visitors, with parking for other cars and coaches at Once Brewed. This links to the proposal to create a Disability Discrimination Act (DDA)-compliant path north of the ditch at Steel Rigg as a case where access for the physically disabled can be provided, without damage to the archaeology of the Site.

The Military Road

6.10.79 The opening of the Trail has also emphasised the need to manage conflicts caused by the different speeds of users, particularly on the B6318 Military Road, as identified in the Transport Strategy. Both Hadrian's Cycleway and the Trail cross the road at a number of places, and the Trail also crosses the busy A6071 road at Irthington Newtown.

6.10.80 Local transport plans tend to focus on traffic calming in urban areas rather than rural, and it is important that speeds on these roads are constantly monitored to ensure the safety of all road users.

6.10.81 Some heavier traffic such as wagons to and from quarries in east Northumberland, timber wagons, military traffic to and from Albermarle Barracks and lorries supplying local farms and businesses need to use the B6318. It is also used by the police as a diversionary route when accidents or flooding block the A69.

6.10.82 Further research is needed to update the Transport Strategy to fully understand trends in traffic volume and speed, and the routes by which most car-using visitors access the Site from the A69 road, and to draw up and implement a 'route action plan' specifically for the Military Road.

6.10.83 Policy 10j: A review of recommendations for the management of private car usage in the 1999 Transport Strategy should be undertaken with the protection of the OUV of the Site and Buffer Zone as a central principle.

ACTIONS

6.10.84 1. Review car park charging policies, provision and usage across the WHS and make recommendations for improvements, including the potential provision of park-and-ride facilities.

6.10.85 2. Commission research to monitor road traffic volumes, speeds and usage.

6.10.86 3. Establish a Military Road action group to identify options and make recommendations to improve safety along the B6318.

9. Signage

6.10.87 The current signage to and in the WHS has developed on an ad hoc basis. The Transport Strategy suggested a route hierarchy and an integrated signing of the Site. Signs rarely direct traffic to attractions across Local Authority boundaries, and there is limited signing to Hadrian's Wall from the southbound A74 or A1 roads. There is also the difficulty of distinguishing between Hadrian's Wall as a generic destination and the names of specific attractions.

6.10.88 Signage is excellent along the National Trail. However, improvements are required to direct walkers from transport interchanges such as railway stations and towns, and to provide alternative routes to walking along the Military Road.

6.10.89 Railway stations are important gateways for visitors and should become orientation arrival points to the WHS and

²⁵ English Heritage 1999 *Hadrian's Wall Transport Strategy*. London, English Heritage

adjacent destinations such as the North Pennines and Solway AONBs. This will be achieved with improved information displays and directional signage.

6.10.90 A start was made during the period of the previous Management Plan to develop a road signage strategy.

6.10.91 Policy 10k: There should be an integrated strategy for signage for the WHS.

ACTION

6.10.92 1. Review current signage provision and make recommendations for improvement.

10. Strategic development and resources

6.10.93 Efforts to develop and promote sustainable transport options and networks are constrained by lack of adequate resources. Public transport options require sustained, long-term commitment. To gain public subsidy they must be both viable for private operators and justifiable in terms of the economic and social benefits they provide. Public transport policy priorities in Local Authorities are focused on the needs of local people rather than visitors.

6.10.94 Public transport services in the WHS, such as the *Hadrian's Wall Country* bus, provide benefits to local people, businesses and visitors. Although considerable progress has been made, a more integrated approach to transport provision is needed.

6.10.95 Policy 10l: Partners should work with HWHL to provide a strategic approach to sustainable transport provision to and in the WHS and to ensure adequate resources are provided to develop and maintain sustainable transport options.

ACTIONS

6.10.96 1. Actively develop and promote sustainable transport options including cycling and walking hubs and use of public transport for access to and in the WHS.

6.10.97 2. Invest in existing and new attractions that encourage sustainable modes of transport and limit growth of car-based travel, where possible.

6.10.98 3. Promote Hadrian's Wall WHS as a green tourism destination.

11. Widening access

6.10.99 The date of 2004 for compliance with the Disability Discrimination Act (DDA) came within the period of the previous Management Plan. Although much has been done to open up the WHS to those with disabilities, access to Hadrian's Wall is still not as comprehensive as it could be and needs to be developed over the period of this Management Plan.

6.10.100 The Defra 2003 Rural White Paper identifies the need for recreation for all. It particularly emphasises the need to encourage those groups who do not normally participate in countryside activities such as inner cities, young people, and ethnic minorities. Public transport is a key way of encouraging groups who do not normally visit the Site.

6.10.101 Access for all should be developed and applied as a key principle in all aspects of presenting and enjoying the WHS and transmitting its values to future generations, so long as the integrity and OUV of the WHS is maintained.

6.10.102 Policy 10m: Access to the WHS should be as widely inclusive as possible, without compromising its OUV.

ACTIONS

6.10.103 1. All those involved in management of access will examine what can be done to improve access within the WHS for all disabled visitors.

6.10.104 2. DDA compliance will be regularly reviewed by site and museum managers.

ISSUE 11: DEVELOPING THE VISITOR'S EXPERIENCE AND UNDERSTANDING OF THE WHS AND BUFFER ZONE

6.11.1 Objective: To establish an internationally acknowledged reputation for a range of first-class attractions offering diversified, integrated interpretation that is accessible, relevant and challenging to a wide range of audiences.

1. Introduction

6.11.2 The aspiration for Hadrian's Wall to be an essential destination for domestic and overseas visitors means that the WHS must compete with the best United Kingdom and international visitor attractions. The aim is for visitors to experience excellence in all aspects of their visit. This section focuses first on the main WHS visitor attractions, and then on the interpretation of the WHS and its Buffer Zone as a whole. Issues 12-14 relate to other visitor facilities, including accommodation and supporting infrastructure.

6.11.3 The general quality of existing attractions could clearly be improved, as evidenced by the HWTP visitor survey of 2005 and surveys included in the 2004 *Major Study*²⁶. There is also a need for significant improvement at all the main WHS visitor sites in the provision of wet-weather attractions, catering, toilets, and information, including easily accessible and understandable packages for domestic and international visitors.

2. Investment at the main WHS visitor attractions

6.11.4 It is important that visitors to the WHS, whatever their background or specific interest in visiting the Wall, are welcomed by attractions that meet or exceed their expectations, and conform to national standards in terms of quality. They should also be able to quickly appreciate the relationship between the different elements in the WHS, both to improve their experience and to encourage them to visit more than one site. Hadrian's Wall is inherently a very confusing place to visit because of its length, complexity, multiple ownership, poor signing and the number of sites and points of arrival. There are also many places that can be visited where facilities or interpretation are lacking, or inappropriate to the location, such as parts of the Wall itself, milecastles and turrets.



6.11.5 Research into the visitor experience and existing and potential markets for Hadrian's Wall was carried out during the 2004 *Major Study*, and HWHL monitors wider regional and national surveys. Surveys of existing visitors show expectations are being met to some extent for the traditional heritage market of well-educated and affluent domestic visitors, but that this market is declining in the face of worldwide competition. Investment is needed to maintain and increase visitor numbers, length of stay and visitor spend, but must be informed by a clearer evidence base of visitor experience and of existing and potential markets (see Issue 12).

6.11.6 Investment proposals that illustrate additional interpretative themes, including Christian heritage, the border history of Reivers and Jacobites and the wider landscape, are currently being brought forward for several sites along the Wall and in the corridor.

6.11.7 See Appendix 6.1 for a summary of current proposals for investment at the main Hadrian's Wall sites.

6.11.8 Policy 11a: Investment in first-class interpretation and visitor facilities that maximise understanding and appreciation of the WHS should continue at sites in the WHS and its Buffer Zone.

6.11.9 Policy 11b: Investment proposals should be the result of coordination between partner organisations along the Wall, and should contribute to an approach that sees Hadrian's Wall as a linked destination.

6.11.10 Policy 11c: Investment proposals must preserve the OUV of Hadrian's Wall WHS.

6.11.11 Policy 11d: All WHS museums should meet national museum accreditation standards and aspire to exceed these standards.

ACTIONS

6.11.12 1. Develop a coordinated programme for investment in first-class attractions and facilities at the sites, based on proposals in Appendix 6.1 and other appropriate opportunities.

6.11.13 2. Aim to provide better wet-weather attractions, family-friendly visitor facilities, catering, toilets and facilities for walkers and cyclists at the main WHS attractions and sites.

6.11.14 3. Coordinate a programme of WHS-wide research to monitor levels of visitor satisfaction.

6.11.15 4. Encourage all WHS attractions to participate in the national Visitor Attraction Quality Assurance Service (VAQAS) scheme and the Welcome suite of schemes operated by VisitBritain.

3. Investment at sites in the vicinity of the WHS

6.11.16 There is also significant potential for investment in interpretation at sites north and south of Hadrian's Wall, such as those along Dere Street, sites in Cumbria such as Hardknott, Old Carlisle, and forts such as High Rochester, and Whitley Castle in Northumberland. Although not currently included in the WHS,

these sites could contribute significantly to public understanding of the role and function of Hadrian's Wall as part of the Roman frontier in north Britain.

6.11.17 While interpretation is dealt with below, investment in other aspects of the visitor's experience (eg transport, accommodation and links with local communities) is covered in Issues 9, 11 and 12).

6.11.18 Policy 11e: Investment at hinterland and complementary sites should be explored where resources permit.

4. Interpretation

6.11.19 Interpretation has always been identified as important for Hadrian's Wall. Progress on the 1996 Interpretation Plan is summarised in Appendix 5.1. Much more needs to be done to improve and coordinate interpretation in the WHS. There is a need to refresh the approach and develop a new overarching framework for interpretation in collaboration with partners.

6.11.20 Some of the challenges for interpretation in the WHS are set out below.

6.11.21 Duplication: Unnecessary duplication of information across the WHS must be avoided, but at the same time visitors must be able to understand the whole, so that they will want to explore different parts of the Site. Each site or museum has a distinct appeal because of its location, accessibility and heritage assets, and each can tell a different part of the story.

6.11.22 Navigating the Site: Visitors need to know where to find the story presented in the way most appropriate for their interests, ways of absorbing information, and needs.

6.11.23 Lack of interpretation: Places of archaeological, historical and landscape interest such as milecastles, turrets and the Wall itself require interpretation as part of an overall plan. There is a particular need and opportunity to interpret the line of Hadrian's Wall where it is not obvious, especially in urban areas. Proposals were developed by the HWTP during the last Management Plan, and could be reviewed as part of an overall interpretation strategy. Visitors have also commented on the lack of guided tours on the sites themselves.

6.11.24 The need to communicate conservation messages: Interpretation around Hadrian's Wall needs to communicate to visitors the fragility and vulnerability of the WHS and its Buffer Zone.

New technologies

6.11.25 While initial investment costs, maintenance concerns and skill shortages may be a barrier, there will be opportunities to explore these during the course of this Plan. The Internet is already increasingly used to access information of all kinds, as well as to plan visits. The *Hadrian's Wall Country* website has a valuable role in interpreting the WHS as a whole, complementing the more specific approaches adopted by individual sites and museums (see also Issue 12).

The importance of individuals in communication

6.11.26 The power and flexibility of direct face-to-face

interpretation should not be forgotten.

- The *Hadrian's Wall Country* bus guides are popular and well received.
- The Hadrian's Wall Path volunteers programme has proved highly effective in communicating with visitors, and demonstrating that the WHS is being cared for and managed.
- There are many professional guides operating around the WHS, either specifically for the Hadrian's Wall area or as part of a wider tour. They contribute to accurate interpretation of the WHS, and need to be kept informed about issues and events.
- The Hadrian's Wall information line was developed to give a central point of contact for WHS-wide enquiries and to play a part in person-to-person communication and interpretation of the WHS.

Archaeological fieldwork

6.11.27 Fieldwork including non-invasive survey, conservation work, and the processing of finds can also provide dynamic and unique opportunities for interpretation and public engagement, as a by-product of research. The contribution of fieldwork to interpretation and its importance in engaging visitors and local communities with the WHS need to be considered further during the course of this Plan, as part of the Interpretation Plan. Fieldwork must however be undertaken as part of the Hadrian's Wall Research Framework or as part of a conservation agenda (see Issue 9).

Re-enactments

6.11.28 English Heritage, Tyne and Wear Museums Service and the Vindolanda Trust have a proven track record of delivering high-quality re-enactment events that illustrate Roman army life. The *Pax Britannica* programme developed during the previous Plan period piloted and then developed a more family-orientated programme of re-enactment exploring Roman and native civilian lifestyles alongside military life. English Heritage has also adopted this approach in its Hands on History events.

Arts-based interpretation

6.11.29 This can be extremely effective in engaging visitors and local people with the stories and themes connected with the WHS and its Buffer Zone, especially in identifying resonances with modern concerns and ways of looking at the world.

6.11.30 Policy 11f: Interpretation of the WHS and its Buffer Zone must be coordinated, based on accurate and up-to date information, explain the meaning and significance of the places being visited, be thought-provoking, and engender greater enjoyment of and care for the heritage by the visitor.

6.11.31 Policy 11g: The WHS should demonstrate best practice in public engagement that leads to better appreciation of the significance and values of the WHS and its Buffer Zone.

6.11.32 Policy 11h: Interventive fieldwork for interpretation reasons alone will not be supported.

ACTIONS

6.11.33 1. Develop an overall Hadrian's Wall WHS Interpretation Plan.

6.11.34 2. Develop and deliver a coordinated programme of maintenance of interpretation panels, especially in urban areas.

6.11.35 3. Explore opportunities to engage visitors and local people more positively in the management of the Site and its landscape.

6.11.36 4. Review the service provided by the Hadrian's Wall information line and the *Hadrian's Wall Country* website in the light of changing visitor information needs and provision in the regions, and develop as appropriate.

6.11.37 5. Encourage provision of Site-based tours by trained staff and volunteers where no other service is provided; training will include awareness of WHS issues and values.

6.11.38 6. Support and develop interpretative events and re-enactments, local cultural and heritage events and arts-based interpretation that contribute to WHS values.

5. Reconstruction

6.11.39 Both physical and virtual reconstruction can be a powerful means of bringing archaeological remains to life, conjuring up in the eyes and mind of the visitor the real scale, function and relationships of the original structures. However, decisions to use either need careful consideration.

Physical reconstruction

6.11.40 Hadrian's Wall has *in situ* physical reconstructions in the fort of Arbeia at South Shields, and the milefortlet on Swarthy Hill has been partially reconstructed *in situ* with earth banks to indicate the line of the rampart and modern posts to represent the gateways. The reconstructed bathhouse at Segedunum, and a length of Hadrian's Wall to the west of the fort are on the Site, but not *in situ*.

6.11.41 The power of full-scale reconstruction can attract some audiences more strongly and reconstructed features may support higher visitor numbers and densities where visitor pressure can erode original remains. In urban settings reconstruction is less likely to be intrusive, and could possibly be accommodated more sympathetically within a built environment. In some locations where there are no archaeological remains, such as at Walltown Quarry where the line of the Wall and Turret 45b were destroyed by past industrial activity, physical reconstruction could be considered without a detrimental impact on the archaeological remains.

6.11.42 Physical reconstruction however has limitations:

- it freezes interpretation at a particular stage or moment in time, which can deny the opportunity to display and interpret earlier and later development phases
- it runs the risk of misrepresenting the original, particularly where features (such as the upper parts of the Wall) are not fully understood



- *in situ* reconstruction may damage or destroy surviving remains
- although it can provide opportunities for research into the nature, construction and function of buildings, the resulting reconstruction may inhibit or prevent subsequent research.

6.11.43 These concerns are reflected in national and international guidance and policies on physical reconstruction. English Heritage's *Conservation Principles: Policies and Guidance* and its policy on reconstruction²⁷ articulate principles for the assessment of proposals. The specific guidance for World Heritage Sites is contained in UNESCO's *Operational Guidelines*, most recently updated in January 2008, which state that:

In relation to authenticity, the reconstruction of archaeological remains or historic buildings or districts is justifiable only in exceptional circumstances. Reconstruction is acceptable only on the basis of complete and detailed documentation and to no extent on conjecture²⁸.

6.11.44 These policies reflect the concern that while the interpretative and economic advantages of reconstruction may be strong, the preservation of the Site's authenticity must be the uppermost consideration. This principle was reflected in UNESCO's 2005 decision to designate reconstructions carried out since 1965 within the Upper German-Raetian *Limes* section of the Frontiers of the Roman Empire WHS as part of its Buffer Zone rather than as part of the WHS itself.

6.11.45 Any significant proposals for reconstruction should be referred to the UNESCO World Heritage Committee for comment in accordance with para 172 of the *Operational Guidelines*, (below) and also be discussed with other partners in the FREWHS before any decisions are taken on whether or not to proceed with such a scheme:

The World Heritage Committee invites the States Parties to the Convention to inform the Committee, through the Secretariat, of their intention to undertake or to authorize in an area protected under the Convention major restorations or new constructions which may affect the outstanding universal value of the property. Notice should be given as soon as possible (for instance, before drafting basic documents for specific projects) and before making any decisions that would be difficult to reverse, so that the Committee may assist in seeking appropriate solutions to ensure that the outstanding universal value of the property is fully preserved.

Virtual reconstruction

6.11.46 Virtual reconstruction provides an important means of bringing archaeological remains to life in ways that can be flexible, portable, dynamic and interactive without detriment to the authenticity and integrity of the original remains or their setting. The *Eagle's Eye* film at the Roman Army Museum is an excellent illustration of the power of virtual reconstruction and is very popular with visitors. Start-up costs can be high, and the ongoing cost of updating has to be remembered, but virtual reconstruction could in some cases be simpler and cheaper to modify than physical reconstruction, if new evidence becomes available.

6.11.47 Policy 11i: Any proposals for physical reconstruction will only be supported where they

follow English Heritage's 2001 Policy statement on reconstruction and 2006 Conservation Principles²⁹, and UNESCO's Operational Guidelines.

6.11.48 Policy 11j: Proposals for physical reconstruction must be founded on the best possible research and involve no significant conjectural element, and no *in situ* reconstruction will be undertaken if it damages significant archaeological deposits or makes them inaccessible for future research.

6.11.49 Policy 11k: Use of virtual reconstruction in line with the OUV of Hadrian's Wall should be researched.

ACTIONS

6.11.50 1. Assess any proposals for physical reconstruction on a case-by-case basis against established English Heritage and UNESCO policies and guidelines.

6.11.51 2. Investigate the use of appropriate, well-researched and stimulating virtual reconstruction on Hadrian's Wall, as part of an integrated strategy for interpretation.

Appendices to ISSUE 11

6.1 Summary of current proposals for investment at sites on Hadrian's Wall

ISSUE 12: SUSTAINABLE DEVELOPMENT AND ECONOMIC REGENERATION

6.12.1 Objective: To ensure that the WHS is a major, high-quality contributor to the local and regional economy.

1. Introduction

6.12.2 Hadrian's Wall is identified in the north-east and north-west regional economic strategies as a potential driver for regeneration. Its international fame has the power to attract visitors from all over the world and therefore it contributes directly to the United Kingdom economy. However, the 2004 *Major Study*³⁰, commissioned by both Regional Development Agencies (RDAs) in the north of England, concluded that it has great potential to contribute more to the economic regeneration of local communities and the wider regional economies. Its aspiration for the WHS to be a 'must-see, must-do' destination for domestic and overseas visitors can only be delivered if all surrounding communities and businesses both understand and are recognised for the invaluable part they each have to play in delivering an excellent experience for visitors to the WHS.

6.12.3 This section identifies economic issues relating to tourism, farming and other linked businesses that can contribute to and benefit from the sustainable development of the WHS.

2. Cooperation, support and networking

6.12.4 The longitudinal and cross-boundary nature of the WHS and its Buffer Zone presents unique opportunities and challenges. The agenda of sustainable development linked with the WHS encourages strategic working. Businesses and

²⁷ English Heritage 2001 *English Heritage policy statement on restoration, reconstruction and speculative recreation of archaeological sites including ruins*

²⁸ UNESCO 2008 *Operational Guidelines*, 86

²⁹ English Heritage 2006 *Conservation Principles: Policies and Guidance*

³⁰ Economic Research Associates 2004 *Hadrian's Wall Major Study Report*

communities can network to share buying and selling opportunities and good practice. They can develop projects and schemes, and add value to their enterprises and to the WHS and its Buffer Zone as a whole.

6.12.5 In some instances those wishing to diversify into tourism and leisure can find it difficult to access good advice. There can be fragmentation and duplication of effort, and the advice they get may not be tailored to the Hadrian's Wall WHS.

Communication and referral processes, constant monitoring and evaluation, and effective facilitation by HWHL will help business advice agencies to complement each other, and prevent duplication of effort. Cooperative working with the Tourism Network North East, Cumbria Tourism, Business Link and other economic development organisations is crucial to the business development and quality aspirations outlined in this Plan.

3. Raising awareness of the WHS

6.12.6 Work during earlier Management Plans raised awareness among businesses and linked economic interest groups about the special qualities of the WHS and its Buffer Zone, and the opportunities that they offer. This should be developed further during the period of this Plan along the lines of the proposed HWHL *Know Your Hadrian's Wall Country* scheme. This work will prioritise businesses and communities in the Hadrian's Wall corridor, but also include those outside the immediate area that have an interest in the WHS. It will involve working in partnership with other organisations.

6.12.7 Policy 12a: The WHS should be used to assist in the sustainable economic development of the local area, while maintaining and promoting the OUV of the Site.

ACTIONS

6.12.8 1. Establish cooperative working between organisations in the WHS and regional, sub-regional and local organisations that have responsibilities for supporting economic development.

6.12.9 2. Improve awareness of the special qualities of the WHS among businesses, business advisers, local communities and other stakeholders through a programme of roadshows, workshops, seminars, training, familiarisation visits and appropriate networking activity.

4. Guiding principles for all economic development work associated with the WHS

6.12.10 Adding value: the aim of all economic development activity should be to add value to the WHS as a whole, to the visitor experience and to individual businesses. Displacement factors need to be considered in all major development, since there is a danger that new sites and attractions may increase competition at the expense of existing facilities, rather than adding to visitor numbers.

6.12.11 Maximising impact: the scale of activity that will be delivered to maximise the economic regeneration potential of the Wall in the lifetime of this Plan will be significant, covering diverse but interrelated areas such as marketing and capital development. It is essential that partners become accustomed to a way of working that ensures that the benefits of this

important opportunity are felt by local communities and businesses throughout the corridor.

6.12.12 Integrity: it is important to make sure there are no adverse impacts on the integrity and OUV of the Site and its setting from economic development work. This requires good understanding of those values and of the impact of projects and developments.

6.12.13 Excellence: excellence in provision for visitors, and in anticipating and meeting their needs and wants, is essential for successful sustainable economic development linked to the WHS. National quality schemes, market intelligence and first-rate advice are important to this.

5. Extending the visitor season

6.12.14 Visitor numbers to all the main Roman attractions on Hadrian's Wall WHS are heavily weather-dependent. The urban sites typically perform better than the rural sites in poor weather. More wet-weather facilities and attractions could reduce the adverse impact of wet weather on attractions and businesses in the main season.

6.12.15 Creating a year-round visitor offering can add stability to the tourism economy particularly in the rural areas of the WHS, but needs to be balanced with the sensitivity of parts of the WHS and its Buffer Zone to intensive use in bad weather. This is particularly true of the National Trail, where it is undesirable to increase winter visitor numbers. Appropriate incentives and campaigns for times before and after peak seasons and winter visits, although not involving the Hadrian's Wall Trail for conservation reasons, could increase the sustainability of the tourism economy, particularly in the rural areas.

6. Developing high-quality, locally distinctive tourism businesses

6.12.16 The primary business activities associated with tourism and the WHS include accommodation, visitor attractions, catering, specialist retail, transport provision (eg cycle hire), and guides and tour operators. While there is some excellent catering and accommodation, the 2005 visitor research and the 2004 *Major Study* highlighted scope for better provision and quality. Further work is needed to update earlier gap analysis and visitor trend research and to identify business growth opportunities that meet changing visitor expectations (see Policy 12i). Use of the national tourism accommodation grading schemes, walking and cycling accommodation accreditation schemes, and the national VAQAS, Welcome Host and associated schemes (eg Welcome All) will help raise standards and promote successful businesses.

6.12.17 Visitors increasingly seek local distinctiveness and quality as part of their experience. Local products and services, authentic experiences and excellent local knowledge on the part of people they come into contact with are critical to this. The brand value of Hadrian's Wall for food and goods of local provenance presents many opportunities for local entrepreneurs and communities. The use of local products and services can feed back directly into the management of the WHS through supporting sustainable farming, as well as providing more



general benefits by raising the profile, and consequent appreciation, of the WHS.

6.12.18 Policy 12b: Provision of visitor infrastructure and facilities should be of the highest possible quality to meet the needs of visitors and to respect WHS values.

6.12.19 Policy 12c: Organisations involved in the WHS should source quality local products to both support local producers and to promote local produce to visitors.

ACTIONS

6.12.20 1. Assess all new development proposals seeking public support against their ability to meet agreed guiding principles.

6.12.21 2. Develop and support proposals to provide wet-weather facilities that extend the tourism season without impacting adversely on the condition of the National Trail.

6.12.22 3. Encourage businesses to participate in national accreditation schemes.

6.12.23 4. Develop the *Hadrian's Wall Country* Local Produce Scheme, and encourage retailers, accommodation providers and attractions to use and promote local suppliers.

7. Incentives for multiple-site visits

6.12.24 Ease of access is one of the most important factors in growing the visitor economy. Visitor research highlights a demand for easier ways to visit more than one site on Hadrian's Wall, and for better packages for exploring it. Examples can be found at other World Heritage Sites, such as Ironbridge. Clear evidence from national and international examples shows that joint incentive schemes can increase the number of visitors to the destination as a whole as well as spreading benefit to less-visited locations.

6.12.25 Private sector operators are interested in working on packages and this should be encouraged during the course of this Plan. Incentives could include links between WHS sites and other attractions and services in the area, as has already been achieved to some extent with the *Hadrian's Wall Country* bus service. Some organisations provide incentives to visit more than one of their sites already. Fragmented ownership and organisational aims that sometimes compete do not make extending this to other sites easy, but collaboration could be improved by clearly identifying benefits for each organisation during the development process.

6.12.26 Policy 12d: Wall-wide coordinated schemes should be developed that can add value to visits to the WHS by increasing the length of stay or the number of sites visited.

ACTIONS

6.12.27 1. Investigate the potential for joint incentive schemes between private and public sector stakeholders that meet visitor aspirations, bring operational benefits and add value to WHS visits.

8. Contributions to conservation and improved green business practices

6.12.28 The notion of visitors directly contributing to the conservation of the place they have come to visit, known as 'visitor payback', has been highlighted in previous Management Plans but not taken forward. While income from visitors to the paid-entry sites does go back into their management, and that of the Site in general, in most cases this is not clear to the visitor. Exceptions to this include the Vindolanda Trust, which explains that visitor income is used to fund its excavations, and the Northumberland National Park, which informs them that car park revenue is reinvested in conservation. Devising ways for visitors to contribute to the maintenance of heavily visited parts of the WHS where there is no entrance fee remains a challenge for this Management Plan period.

6.12.29 Visitors' environmental awareness is expected to grow during this Plan period in the light of climate change. This presents new opportunities for exploring schemes that would allow visitors to help the WHS decrease its carbon footprint. Existing visitor-funded initiatives, such as the *Hadrian's Wall Country* bus (see Issue10), should be better promoted, with a more direct relationship emphasised between payment and benefit. Businesses could be encouraged to join the green tourism business schemes in the WHS area.

6.12.30 UNESCO requires the management of World Heritage Sites to be both ecologically and culturally sustainable³¹ and Hadrian's Wall will be the first WHS to get Fairtrade zone status.

6.12.31 Policy 12e: Initiatives that encourage more environmentally sustainable provision of visitor facilities and services should be developed and supported.

ACTIONS

6.12.32 1. Encourage all involved in the visitor economy of Hadrian's Wall WHS to review and adapt their activities as far as possible to embrace environmentally responsible business practices, encourage sustainable visits to the WHS and explore opportunities for visitor payback schemes.

9. Business and IT support

6.12.33 Information Technology (IT) is an increasingly important tool in marketing the WHS. This is discussed in Issue 14. There is a specific need to work with the RDAs to promote the use of technology solutions such as the *Destine* online booking system in the north east. This would give accommodation, attraction and other businesses access to potential new markets and business opportunities.

6.12.34 Policy 12f: Businesses should be supported to exploit the opportunities presented by new and emerging information technologies.

ACTIONS

6.12.35 1. Develop appropriate networks, support and training to ensure communities and businesses linked to the WHS benefit from new developments in IT.

10. Skills and employment

Traditional skills

6.12.36 The WHS presents an excellent opportunity to develop skills and employment in conserving and managing the archaeological and cultural heritage resource. The traditional skills programme developed by the NNPA during the previous Management Plan has successfully provided training in dry stone walling, hedge laying and fencing. This should be continued and developed further to create a wider range of new skills and employment opportunities for local people. Skills gaps in the built heritage sector are recognised at a national level. Programmes that address these gaps, such as the NE Heritage Skills Initiative, should be encouraged.

Tourism skills

6.12.37 Skilled workforces and management teams are crucial to the provision of a high-quality visitor experience and to the growth of the Hadrian's Wall visitor economy. New capital investment and aspirations to expand the Wall's visitor economy will demand new skills and create employment opportunities during the course of this Plan. Recruitment difficulties and skills gaps have been identified in the corridor, especially in the catering sector.

6.12.38 Tourist agencies in both regions have developed strategies and programmes for tourism skills and employment, and regional skills initiatives have identified the need to provide more flexible training opportunities for individuals and small businesses.

Pathways to employment

6.12.39 The wide range of employment, volunteering, training, skills and experiences available through activities associated with the WHS provide many pathways for young people and others without jobs to develop personal and transferable skills and experience.

6.12.40 Policy 12g: More individuals and businesses across the WHS should participate in training, to sustain and increase the level of skills.

ACTIONS

6.12.41 1. Establish mechanisms to provide more effective coordination between agencies responsible for the delivery of training and skills.

11. Urban economies in the WHS

6.12.42 Many of the opportunities discussed above apply equally to urban and rural parts of the WHS and its Buffer Zone. The economies of the urban areas are, however, more diverse than those of the rural areas, and the direct economic influence of the Site is therefore less visible. Direct benefit is most obvious at the urban attractions, to employees and suppliers. The WHS is however of great importance to the wider visitor economy in both Tyneside and Carlisle. It is already used in many marketing campaigns to attract visitors to both conurbations, and there is scope for further development of this for generic and niche marketing.

6.12.43 Both cities are gateways to the WHS, with Tyneside having the added advantage of being an important point of entry to the country through the ferry terminals and the airport.

6.12.44 There is potential for further development of this gateway status during the period of this Management Plan. On Tyneside, the new Great North Museum offers an opportunity to generate increased awareness, interest and visits to the whole WHS.

6.12.45 Heritage also plays a significant part in the economy of Carlisle. While most of the visible attractions for visitors relate to the later history of the city, the cultural heritage of its Roman forts and settlements and its position as a western gateway to Hadrian's Wall can add a significant dimension to the city's economy through tourism. The WHS can also make a major contribution to the Carlisle Renaissance plans to capitalise on Carlisle's cultural heritage and develop it as a high-quality cultural centre. There are particular opportunities for greater partnership between Tullie House Museum and Carlisle Castle. These should be explored as part of the proposed Tullie House redevelopment, and further development of Tullie House Museum as a gateway site.

12. Market towns and villages

6.12.46 There are further opportunities during the course of this Plan to work with market towns in the Hadrian's Wall corridor as part of the regional market town strategies. This could include partnership working to audit tourism provision, participation in the Ministry of Trade and Industry (MTI) national benchmarking scheme, and other regional initiatives that focus on links with Hadrian's Wall. There could be similar activities with smaller settlements.

13. Links with the wider visitor economy

6.12.47 As a nationally and internationally famous attraction Hadrian's Wall both competes with and complements other visitor attractions over a wide area in the north east and north west. Its international status can drive many other elements of the regional tourist economy, while other regional heritage themes, including the Reivers and Christian heritage, have strong associations with the WHS and its Buffer Zone.

6.12.48 Many visitors will be drawn to spend a holiday in the region more by the combination of varied quality attractions rather than by a single site. Visitors staying in other parts of the region are still likely to include a visit to the Wall, and vice versa. The 2008 report on the contribution of the heritage to the regional economic strategy of the north east highlights these links and presents opportunities for further development.

Environmental tourism and activity holidays

6.12.49 There is a growing market for nature tourism and activity holidays including conservation, cycling, walking and horse riding. The programme of excavations at Vindolanda provide a particular type of activity holiday and there may be the opportunity for further activity holidays like this at new locations such as Maryport, with appropriate supervision and training.

6.12.50 Community archaeology projects could provide opportunities to engage visitors as well as locals with the heritage of the WHS and its Buffer Zone, as well as producing useful research (see Issue 13). Links could be made with activities in the regions surrounding Hadrian's Wall, for instance through walking and cycling campaigns promoting responsible and sustainable walking and cycling routes.



Building stronger links with other attractions

6.12.51 There are opportunities to investigate collaboration with other Frontier World Heritage Sites and destinations, in particular the Antonine Wall, through partnership marketing and PR campaigns, and promotional schemes, integrating sites beyond *Hadrian's Wall Country* and introducing signposting to Hadrian's Wall from other sites.

Collaboration and information sharing

6.12.52 There is consumer demand for more integrated product information and booking facilities, which could be exploited.

6.12.53 The sharing of image libraries and photo commissions could be investigated.

6.12.54 Non-tourism partner promotional campaigns could be used, for instance with Northumbrian Water, or EDF energy.

6.12.55 Policy 12h: Economic development opportunities presented by the WHS should be more fully exploited in the local and regional economy.

ACTIONS

6.12.56 1. Fully develop opportunities identified to develop Tyneside and Carlisle as gateways to the WHS.

6.12.57 2. Promote economic development opportunities associated with the WHS in market towns and smaller settlements throughout the WHS.

6.12.58 3. Develop and exploit greater linkages with other attractions and destinations across the regions.

14. Tourism business monitoring

6.12.59 A fundamental part of work on tourism and related economic development is monitoring of changes and trends. Previous research into tourism businesses in the Hadrian's Wall corridor has identified investments made, employment patterns and business trends, and highlighted priorities for the future. Further research and audits will ensure all business data is captured to help direct future investment into priority areas.

6.12.60 Policy 12i: A fuller understanding of tourism markets and economic development as it relates to the WHS should be developed and maintained.

ACTIONS

6.12.61 1. Regularly update gap analysis and market intelligence to identify opportunities for appropriate development. Communicate findings to stakeholders, and monitor business investment and developments.

15. Traditional land-based industry (farming, forestry and quarrying)

6.12.62 Agriculture's impact on and contribution to the conservation of the WHS is discussed in Issue 8, which identifies the importance of farming viability in the Site, and the various threats it faces.

6.12.63 Agriculture creates a supply chain of local businesses in, for example, haulage, animal marts, the manufacture and supply

of animal feeds and fertiliser, farm machinery and equipment, as well as specialist contractors in agricultural operations. While agricultural activity therefore remains central to the rural economy, the decline in core farm income creates a continuing need to diversify.

6.12.64 Physical development associated with both ongoing farm operations is in the main allowed under permitted development rights, while development involving diversification projects is controlled through the planning process, which takes into account the impact of development proposals on the WHS and its landscape setting. Similar considerations also influence the approval of other development in rural areas, notably in relation to erecting wind turbines, telecommunications masts and new buildings. The need to balance the objectives of promoting economic development in rural areas with protecting the OUV of the WHS will continue to present challenges for planning authorities and for businesses wishing to undertake development.

6.12.65 There is increased recognition that tourism businesses associated with farms can provide families with supplementary income and sustainable employment opportunities. Opportunities for more direct sales from farms to tourism businesses and to visiting and local consumers are increasingly important to support farming incomes and reflect increasing market demands for traceability and quality.

6.12.66 The existing opportunities for farmers to benefit from working to protect the WHS through Natural England's High Level Stewardship scheme and through management agreements with English Heritage are discussed in Issue 8. Further opportunities may arise to engage individual farmers to maintain the National Trail, although there is currently no direct mechanism by which this might be done.

6.12.67 It should be noted however that a number of farmers have said that, unless they have associated visitor businesses such as accommodation for walkers, they derive no financial benefit from the presence of the Trail and the WHS. To improve linkages between the WHS visitor economy and farming, there is a need to improve the use of coordinated information between organisations in the tourism industry and those supporting farm diversification.

6.12.68 Forestry and woodland management are also important contributors to the rural economy through direct generation of income to land managers and their associated supply chains of harvesting, haulage and timber processing. The ongoing viability of the sector needs to be maintained, ensuring that its management impacts positively on the WHS and its landscape setting, as discussed in Issue 8.

6.12.69 Quarrying is also a contributor to the land-based economy in the WHS corridor but is potentially damaging to its OUV, especially when carried out on a large scale. Large quarries have potential to impact on the setting of the WHS, while quarry traffic affects visitors' experience, access and road safety, and could also damage archaeology through vibration from vehicles. However, quarrying provides important local employment and generates substantial income for the local and regional economy.

6.12.70 There is a need to understand better the contribution

both forestry and quarrying in the WHS corridor make to the local and regional economy.

6.12.71 Policy 12j: The contribution of traditional land-based industries to the local economy of the WHS and its Buffer Zone should be recognised, and opportunities sought for land managers to maximise the benefits from their association with the WHS, where these do not harm the OUV of the Site.

ACTIONS

6.12.72 1. Identify mechanisms for closer engagement between land management industries and relevant support agencies.

6.12.73 2. Actively promote business development opportunities to land managers and identify appropriate measures of support to help them to exploit these opportunities.

6.12.74 3. Support development proposals in rural areas that do not adversely impact on the WHS and its landscape setting.

ISSUE 13: ENGAGING WITH COMMUNITIES

6.13.1 Objective: To offer communities in, neighbouring, and associated with the WHS opportunities to be engaged with the WHS, and to develop the contribution that the Site can make to community life.

6.13.2 Community engagement, empowerment and benefit are central tenets of sustainable development. The potential economic benefits for local communities of involvement with the WHS are discussed in Issue 12, while educational opportunities, and scope for individuals and communities to take part in interpretational activities can be found in Issues 15 and 11 respectively. Engagement however depends on individuals and communities being able to see the benefits of getting involved with the WHS. Successful projects can contribute to prosperity, improve understanding of cultural heritage, contribute to a sense of community, identity, and pride in the area, or they may simply make the Site an enjoyable place to be involved with.

6.13.3 Awareness of the WHS has undoubtedly increased since the original inscription, especially during the period of the last Plan. Examples of projects that have contributed to this are:

- the National Trail volunteer warden scheme: five years into the scheme, 70 active local volunteer wardens patrol the National Trail every month, monitoring conditions on the ground and giving advice to visitors
- the Hadrian Arts Trust's *Singing in the Bath* project: choirs from communities all along the WHS perform simultaneously at sites of Roman bathhouses along the WHS
- *Writing on the Wall* was a successful WHS-wide project during the last Management Plan with an international dimension that engaged communities in new writing³².

6.13.4 Part 5 and Appendix 5.1 give more detail of these projects.

6.13.5 Examples of participation by local communities include the villages of Horsley and Greenhead in Northumberland. In Horsley, the community identified and created circular walks, which link a popular community arts and crafts centre with the National Trail. In Greenhead, significant work was done to celebrate and interpret links between the village and Walltown quarry area of the WHS with village suppers, events and exhibitions.

6.13.6 Both local communities and Hadrian's Wall site managers have worked on developing links during the previous Management Plan period and new projects, such as the excavation of the Roman Bridge at Corbridge, provided fresh opportunities for local involvement. The Wall-wide HWTP education and community team brokered much work, including many innovative projects such as local Roman activity days and Roman evenings with talks and supper.

6.13.7 Communities and their needs change, however, and the momentum of engagement needs to be kept up. Building on the foundations set by this earlier work is a key issue for this Management Plan.

6.13.8 There are also specific opportunities to develop wider national and international social and cultural contacts. In the Roman period the units manning the Wall were of very varied origin, having been raised in Gaul, Germany, Spain, Dacia (modern Romania) and Syria, and also including Moors from North Africa. These historic connections could provide the basis for modern-day cultural exchanges with communities elsewhere in the United Kingdom and in other former provinces of the Roman Empire.

6.13.9 Policy 13a: Opportunities for greater participation in and engagement with the WHS by communities locally, nationally and internationally should be developed and exploited.

6.13.10 Policy 13b: WHS managers should follow a programme of proactive engagement to establish a better understanding of local community groups and interests.

ACTIONS

6.13.11 1. Create links with community development agencies along the WHS and facilitate collaborative working that engages local communities more actively in the WHS.

6.13.12 2. Develop a programme to raise awareness of the special qualities of the WHS among communities through local groups, talks, workshops, visits and appropriate networking events.

6.13.13 3. Support and develop WHS-wide community-based arts and cultural activities that are relevant to the WHS, reflect WHS values, and contribute to the interpretation framework.

6.13.14 4. Investigate potential for a community archaeology programme (both Roman and non-Roman) involving local communities in events, workshops and fieldwork, provided these are justified in research terms, properly resourced and organised (see Issue 9).



6.13.15 5. Work with volunteers and local agencies to develop circular walks that connect settlements with the WHS and National Trail, and improve existing circular walks.

6.13.16 6. Continue to develop mechanisms for regular communication between local communities and WHS management.

ISSUE 14: MARKETING THE WHS

6.14.1 Objective: To establish the WHS as a destination that is firmly on the agenda of the domestic and overseas visitor, with a visit to at least one of its major attractions included in a trip to *Hadrian's Wall Country*.

1. Introduction

6.14.2 Coordinated and well-resourced marketing of the WHS is essential, both for the visitor economy, and for sustainable management and development of the WHS.

6.14.3 Visitor numbers to the Roman sites along Hadrian's Wall have been slowly decreasing over recent years. The WHS has scope to accommodate more visitors if this is managed in a coordinated and sustainable way. Marketing is one key to this, not only as a means of generating visits and underpinning the planned capital investments but by influencing type and time of visit and contributing to visitor management.

2. Marketing and branding

6.14.4 Surveys, polls and research continually confirm that Hadrian's Wall is strongly identified as a major attraction in the north of England. However in more detailed research there is evidence that consumers have little sense of the location, the extent, or the availability of things to see and do along the WHS.

6.14.5 A strong brand based on true, pertinent and desirable values can deliver positive messages to potential visitors. The *Hadrian's Wall Country* brand was introduced in 2002/2003, and it continues to convey and reinforces values that encourage visitors. Larger than the official boundary of the WHS, *Hadrian's Wall Country* covers an area approximately ten miles on either side of the frontier and a stretch of land five miles in from the Cumbrian coast. The *Hadrian's Wall Country* identity helps to locate and promote the WHS via information on the *Hadrian's Wall Country* bus, the *Hadrian's Wall Country* railway line, through the *Hadrian's Wall Country* volunteers who assist walkers on the National Trail and through branding on *Hadrian's Wall Country Locally Produced* food, drink and crafts.

3. Partnership working

6.14.6 Given that the WHS spans the entire breadth of the north of England, the sometimes limited marketing resources of its stakeholders need to be managed to deliver maximum benefit by working in close partnership with regional and national stakeholders.

6.14.7 By building on a strong brand identity and its values, stakeholders can present their products to a receptive audience. This is best achieved through partnerships where the potential visitors receive a unified destination message that will also

deliver information on the component parts of any trip eg transport, accommodation, and visitor attractions.

4. Audience development

6.14.8 While stakeholders along the WHS may have different target audiences, there is broad agreement that the priority target markets (ie those that would deliver the highest return on marketing investment) are

- **6.14.9 UK ABC1s (upper to lower middle class):** predominantly over 45 years old with no dependent children, likely to have received tertiary education and living within a three-hour travel time of the WHS. This audience seeks active engagement, education and experience on a holiday and enjoys heritage, walking, cycling, culture, food and drink.
- **6.14.10 Northern European (Germany, the Netherlands) and North American:** with a similar demographic profile to the UK visitor.
- **6.14.11 Families with children:** these are a priority market for all visitor attractions along the Wall. Family markets have been in decline, and are at the forefront of development and investment plans for sites along the Wall.
- **6.14.12 Specialist audiences:** often with the same profile as the UK visitor, but with a highly active interest in heritage, walking and cycling. These activities are the main motivators for their trips and they have high levels of awareness of the Roman forts, the National Trail and Hadrian's Cycleway.
- **6.14.13 World Heritage:** research among current visitors shows a high awareness of Hadrian's Wall as a WHS, but indicates that although this was not a main motivation to visit, it did register as a more important factor for new visitors. This is a common finding at World Heritage Sites that are already established tourist venues. Continued appropriate use of the WHS emblem and inclusion of information about World Heritage in marketing material of all elements of the WHS is important (see Issue 16).
- **6.14.14 Educational and school visits:** numbers have dropped and this is a serious issue for many of the Roman sites, especially as a positive experience on an educational visit can stimulate future visits. The Hadrian's Wall Continuing Learning Strategy and Hadrian's Wall Education Forum (see issue 15) provide a framework for learning throughout the WHS. There is a need for greater collaborative work to generate additional visits, and effective partnership marketing can be delivered through the clear distribution channels that school groups use.
- **6.14.15 Visiting friends and relatives:** visitors can be encouraged to visit the Roman sites by their friends and families within the local communities. This market is difficult to target pro-actively, but if local communities are well-informed about the WHS, then more visitors are likely to want to experience the heritage and landscape. Opportunities for developing this market could be explored through incentive schemes.

5. Communication and distribution channels

Public relations and publicity

6.14.16 The use of print and broadcast media is a cost-effective way of increasing awareness if they present appropriate imagery and editorial. However, they face increasing competition from online media, and as a result see declining readership figures and advertising revenue as a result. Travel journalists also face competition from travellers sharing their tales and tips on websites. Nevertheless, effective PR remains a powerful tool and the objective should be to increase coverage of the WHS in the international, national and local print and broadcast media as well as on websites that are most relevant to target audiences aligned to marketing campaigns and key messages.

Web-based marketing

6.14.17 Technology now enables a destination to present itself in a multidimensional manner to multiple consumer types, and the web can be used to build holiday packages. The Internet has largely replaced travel agents as both adviser and booking service. It is anticipated that there will be further advances in web-related technologies in the course of this Management Plan and those involved in marketing the WHS should be prepared to harness these developments.

6.14.18 Investment in the websites that currently provide visitor information on the WHS, and in a central 'gateway' website could improve initial information and link through to other more detailed websites.

6.14.19 HWHL is developing a central website that will aim to

- attract both first-timers, and repeat visitors and convert interest into actual bookings
- provide the consumer with the practical material that they need for each visit (eg transport and site or museum tickets, books and maps)
- ensure clear and strong links to sites that will further engage and educate the visitor
- improve networking and sharing of best practice between stakeholders, local businesses and communities
- increase understanding of the WHS and the principles and actions relating to the Management Plan.

6.14.20 Partner destination websites such as golakes.co.uk and www.visitnortheastengland.com can also play a crucial complementary role in inspiring and influencing visitors.

Customer relationship management

6.14.21 As the stakeholders along the WHS develop their own database of past customers there is the opportunity to further engage these visitors to encourage repeat visits and new visitors through word-of-mouth recommendation. A partnership approach will avoid duplication of effort and open new markets.

Group travel, tour operators and travel agents

6.14.22 Despite some decline in importance, the travel trade is still a viable channel to reach the overseas visitor looking for niche and group holidays, as these are harder to organise on an individual basis, and business with them should continue to be developed. This is particularly relevant to larger markets such as Germany and North America, where economies of scale make the travel trade a cost-effective tool in reaching potential visitors. In addition the huge growth of the cruise market in the

last ten years requires travel industry specialists to organise and promote day trips to cruise passengers stopping at the Port of Tyne.

Investment projects

6.14.23 There will be a need to capitalise on new projects to upgrade sites or create new attractions proposed for this Plan period, in order to drive business. The next few years are potentially an exciting time for marketing the Wall, with many new opportunities to open up to new and target audiences.

6. Stakeholder communications

6.14.24 Local communities and stakeholders can be some of the strongest advocates for the WHS, and contribute to long-term economic growth. Engaging with community groups, tourism associations, small businesses, landowners, and farmers along the entire length of the WHS helps to develop a sense of shared ownership, pride, local identity, and a common vision for the Wall. This requires good communications to succeed, including the use of regular e-newsletters, a robust database of stakeholders, the *Frontier* newsletter of the WHS, and appropriate stakeholder events and forums.

7. Measuring the visitor economy

6.14.25 A variety of statistical measures can be used to assess the current state of the visitor economy in the WHS and help monitor the impact of the Management Plan. These can measure the effectiveness of marketing and communications activity. One caveat to bear in mind is that it is always difficult to establish a unique one-to-one linkage between marketing activity and resulting changes in the volume and value of tourism. However, statistics can be used to demonstrate overall trends in the market.

6.14.26 WHS marketing and communications should take into account the following measures of volume and value in the Site, among others

- visitor figures for each of the Roman forts, museums and other sites
- volume and value of visitors to *Hadrian's Wall Country*
- number of bed nights (for the staying visitor)
- average length of stay
- number of day visitors
- occupancy levels in tourist accommodation
- average amount spent per visitor
- full-time equivalent jobs (FTEs) in the Wall corridor
- number of businesses along the Wall corridor
- visitor satisfaction
- statistics relating to the central website for the WHS and *Hadrian's Wall Country*.

6.14.27 Policy 14a: Continued and coordinated marketing and communication should be used to increase the value of tourism in and around the WHS, provided that there are no adverse impacts on its integrity and OUV.

ACTIONS

6.14.28 1. Develop targeted marketing and communications campaigns through partnerships, building on previous work, and designed to attract new and existing audiences for the benefit of



all stakeholders along the WHS corridor.

6.14.29 2. Develop and maintain an improved understanding of market intelligence and of emerging techniques and technologies associated with audience engagement.

6.14.30 3. Share the results of market intelligence and economic impact research between stakeholders.

6.14.31 4. Encourage positive editorial coverage locally, nationally and internationally.

6.14.32 5. Continue to develop relationships with travel trade and tour operators, ensuring access to potential visitors through specialised distribution channels.

6.14.33 6. Continue investment in the central Hadrian's Wall website.

6.14.34 7. Deliver a continued and coordinated programme of WHS-wide communications that includes a robust database of stakeholders, the Frontier newsletter of the WHS and appropriate events.

ISSUE 15: EDUCATION

6.15.1 Objective: To ensure that the WHS is acknowledged nationally and internationally as a focus for high-quality, challenging, innovative and enjoyable learning and for the communication of new research and understanding of the Site through learning initiatives.

1. Hadrian's Wall as a learning resource

6.15.2 Hadrian's Wall has long been recognised regionally and nationally as an important educational resource. Educational activity associated with the Wall has grown from initiatives by individual educationalists, to the development of provision with schools to meet their particular requirements. The Wall also has a long history of being used as a learning resource by special interest groups and individuals, from professional academics and researchers, to antiquarian societies and amateurs.

6.15.3 There has been a gradual change in the way activities are delivered, with an increasing emphasis on teaching and learning being organised and run by the organisations responsible for running the sites, rather than by teachers bringing students to the Wall. This process has resulted in better, expanded facilities, the steady improvement of interpretative materials, and the appointment of dedicated learning and education staff. Site management organisations have become increasingly aware of the potential for education to act as a way in which more people can be introduced to the Wall, and become engaged with it.

6.15.4 The inscription of Hadrian's Wall as a WHS provided an impetus to educational activity. UNESCO's objectives and purposes specifically seek to promote greater participation in education through ensuring equality of access to learning.

6.15.5 Education is also seen as a means of promoting greater understanding of different cultures and as a driver of social and economic development and wellbeing. It is therefore essential to Hadrian's Wall fulfilling its obligations as a WHS.

6.15.6 Educational activity and provision have increased since the inscription of Hadrian's Wall, and there has also been a broadening of the definition of education towards the wider concept of learning. The concept of lifelong learning has also been encouraged, with provision directed to better suit the interests and requirements of different age groups.

2. Developments during the last Management Plan 2002-2007

6.15.7 In the course of the last Management Plan this activity increased, along with greater promotion of Hadrian's Wall as a learning resource to schools and to local communities across the WHS.

6.15.8 The Education and Community project supported a central team which coordinated this activity and developed the flagship *Pax Britannica* project, supported other projects such as *Writing on the Wall*, and produced an updated wall-wide Education Directory.

6.15.9 The Hadrian's Wall Education Forum (HWEF) was formed in 1999, bringing together those responsible for learning and education in the different organisations that manage the WHS. The HWEF is now one of the six key Interest Groups (see Part 1) responsible for developing the action plans by which the objectives and policies set out in this Management Plan will be achieved.

6.15.10 The HWEF has produced a Learning Strategy, *Aspire to Inspire* (see Appendix 6.2), which sets out the objectives and priorities for realising the opportunities to use the WHS more fully as a learning resource, and provides a framework on which to develop an action plan.

3. Challenges for the 2008-2014 Plan period

The coordination of learning provision

6.15.11 Educational and learning provision is managed by a range of different organisations in the WHS, and while there has been an increase in coordination through the HWEF, there is scope to improve this. Closer collaboration would provide the opportunity to use available resources more efficiently, share good practice and combine efforts in developing new initiatives. Working with other World Heritage Sites nationally and internationally would provide exciting opportunities for collaboration and exchange, and would promote UNESCO's aims of national and international cultural understanding.

6.15.12 Policy 15a: Opportunities to work in collaboration to develop learning provision should be identified and exploited in Hadrian's Wall WHS and with other World Heritage Sites nationally and internationally.

ACTIONS

6.15.13 1. Develop the work of HWEF to maintain and update the Learning Strategy and to coordinate the implementation of its actions.

6.15.14 2. Define and secure adequate resources for a central, jointly coordinated function for learning activities.

6.15.15 3. Prepare an annual programme of learning activities and events at individual sites across the WHS, and Wall-wide learning initiatives.

6.15.16 4. Develop and implement a programme of engagement with the education and learning staff of other World Heritage Sites.

The need to expand learning opportunities

6.15.17 Nationally there is an increasing emphasis on using the historic environment in teaching a range of subjects beyond history and archaeology, such as science and technology, art and design, social sciences, and environmental studies, and as a learning medium for numeracy and literacy.

6.15.18 While educational and learning provision in the WHS remains primarily focused on Roman military history, it has steadily broadened to include other cultural themes and historical periods. The Site however has potential for the exploration of a wide range of human cultural experiences. The Hadrian's Wall gallery at the new Great North Museum, due to open in spring 2009, will illustrate the potential of these wider themes. The proposed landscape centre to be developed at Once Brewed also responds to this opportunity to widen educational provision.

6.15.19 At the same time there has been an increasing demand for different levels of learning. At the moment, learning in the Hadrian's Wall WHS is primarily focused on the schools audience, and on Roman history as required by the school curricula. While this core activity must be maintained and must continue to be refreshed, new approaches would increase the accessibility and use of the WHS as a learning resource.

6.15.20 Policy 15b: The work undertaken to date to widen the learning offer provided by the WHS should be built upon and expanded.

ACTIONS

6.15.21 1. Research and identify opportunities for the expansion of subject areas, facilities and learning media.

6.15.22 2. Identify and adopt best practice in the provision of diversified learning provision.

Understanding audiences

6.15.23 The needs of schools education audiences are well understood, but provision must be regularly updated to reflect changes in curricula, the schools' own resources, and legislation. Learning providers on the Wall have developed good links with formal educational organisations, although these must be maintained if communication is to remain effective.

6.15.24 By contrast, understanding of the aspirations and requirements of non-traditional learning audiences has been limited, and further work is needed to address this.

6.15.25 Policy 15c: Understanding of the learning aspirations and requirements of all learning audiences should be improved and the potential of the WHS as a learning resource should be more proactively promoted.

ACTIONS

6.15.26 1. Provide a jointly coordinated service to formal learning organisations that is appropriate to their needs.

6.15.27 2. Establish and maintain a better understanding of the aspirations and requirements of non-traditional learning audiences in the WHS corridor and beyond.

6.15.28 3. Develop and implement an awareness-raising programme to improve understanding of the WHS as a learning resource in non-traditional audiences.

The adoption of innovative approaches

6.15.29 Both traditional and non-traditional audiences are becoming more sophisticated in their technological capabilities, and are demanding more accessible and flexible learning resources. Learners are also faced with an increasing array of subjects to study, ways of learning, greater interactivity and individually customised participation.

6.15.30 Some progress has been made in using approaches such as re-enactments, workshops and other participatory activity-based initiatives, but there is scope to further build on this work.

6.15.31 The ongoing emergence of new information technologies has created opportunities for different media and resources to be used to support learning, and for learners to access resources in a greater variety of ways. New means of accessing learning are also being increasingly demanded by formal learning organisations and informal learners alike, as traditional classroom or field study trip options become increasingly constrained by time, cost and safety regulations.

6.15.32 Policy 15d: The opportunities offered by new technologies and by learners' changing preferences for accessing learning should be explored and exploited.

ACTIONS

6.15.33 1. Identify and adopt best practice in the use of new technologies for learning.

6.15.34 2. Monitor developments in new technologies as they might potentially apply to learning provision.

Promoting the values of UNESCO

6.15.35 The inscription of Hadrian's Wall as a WHS in 1986, and then as part of the transnational Frontiers of the Roman Empire WHS in 2005, provides opportunities to tell the story of the greater frontier and its peoples, and also to use its WH status to increase understanding of the concept of a world heritage based on shared universal values.

6.15.36 Policy 15e: Understanding of the philosophy of UNESCO World Heritage should be promoted.

ACTIONS

6.15.37 1. Incorporate the concept of World Heritage and its OUV, and the reasons for the inscription of Hadrian's Wall into learning provided by the WHS.

Appendices to ISSUE 15

Appendix 6.2 Hadrian's Wall WHS Continuing Learning Strategy



HADRIAN'S WALL
Frontiers of the Roman Empire
WORLD HERITAGE SITE

7

Implementing the Management Plan



HADRIAN'S WALL
COUNTRY



7: Implementing the Management Plan

7.1 Action planning

7.1.1 The Management Plan's objectives and policies set out in Part 6 will be achieved through a wide range of projects, to be undertaken by a variety of organisations involved in the WHS.

7.1.2 These aims and objectives are laid out in Appendix 7.2, which lays out this Plan's:

- longer-term (30-year) aims
- short to medium-term (five to ten-year) objectives
- actions recommended as a result of consultation.

7.1.3 These will now form the basis for the development of detailed annual action plans. The HWHL Hadrian's Wall Coordinator will work with each Interest Group to draw up a summary of the key policies and actions in the remit of that Group, and to identify and resolve any overlapping areas between Groups. These summaries will then be drawn together to form a draft action plan for the WHS.

7.2 Funding and resources

7.2.1 It is important for the Management Plan's coordination and delivery to be adequately resourced in both funding and staff, if it is to succeed. All organisations involved should therefore fully recognise the significance of the WHS and devote adequate resources towards its management, and existing resources should not be diverted away from it.

7.2.2 A number of significant projects identified in Part 6 are additional to the core activities of partner organisations, and will require their joint input. Many will require input from existing staff resources, and those organisations involved should engage and commit the necessary time to collaborative schemes.

7.2.3 The role of HWHL in supporting the MPC, acting as joint coordinator, broker and champion of the Plan, and facilitating and delivering important elements of it, is central to its success. It is therefore essential that HWHL itself is adequately resourced.

7.3 Monitoring and reviewing the Plan

UNESCO periodic report

7.3.1 The UNESCO World Heritage Committee has agreed that all State Parties should report on a six-year cycle on the state of conservation of their World Heritage Sites. The aim of the Periodic Report is to assess the state of conservation of the site,

identify any problems that need to be addressed, and identify common trends and priorities for the UNESCO World Heritage Committee at an international level.

7.3.2 The first Periodic Report for Europe was compiled in 2004-2005, and included a specific Periodic Report for Hadrian's Wall. It is composed of two parts: a general report by the State Party and a report for each individual site prepared by the WHS Coordinator(s).

7.3.3 Because the start of the second worldwide cycle of Periodic Reporting has been delayed while the effectiveness of the first round has been reviewed, the next Periodic Report for Hadrian's Wall will be due after the end of this Plan period.

Monitoring indicators

7.3.4 A set of monitoring indicators for Hadrian's Wall WHS will be produced by the Interest Groups as part of their action plans. The aim of these indicators is to measure progress in the identification, protection, interpretation, enjoyment and management of the Site.

7.3.5 It is anticipated that for some of the indicators determined by the Interest Groups the processes by which they will be applied are already in place, while others may require additional financial and human resources to collect and analyse the data. The cooperation of all WHS partner organisations is essential for the effective monitoring of the Site, as they will need to agree the areas where they will supply information and/or conduct monitoring.

Appendices to PART 7

Appendix 7.1 Long-term aims and medium term objectives for the WHS

Appendix 7.2 Summary of issues, policies and actions



HADRIAN'S WALL
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Bibliography, Glossary and Maps



HADRIAN'S WALL
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Bibliography

Hadrian's Wall

Bidwell P. (ed) 1999 *Hadrian's Wall 1998–1999: A Summary of Recent Excavations and Research Prepared for The Twelfth Pilgrimage of Hadrian's Wall, 14-21 August 1999*. Cumberland and Westmorland Antiquarian and Archaeological Society and the Society of Antiquities of Newcastle upon Tyne

Birley, E. 1961 *Research on Hadrian's Wall*. Kendal, England: T. Wilson

Breeze D.J. and Dobson B. 2000 *Hadrian's Wall*. 4th Edition. England: Penguin Books

Breeze, D.J. and Young, C. 2008 Roman Frontiers World Heritage Site Summary Nomination Statement. In Breeze, D. J. and Jilek, S. *Frontiers of the Roman Empire, the European Dimension of a World Heritage Site*. Edinburgh, 29-35.

Breeze, D, Jilek, S. and Thiel A. 2005 *Frontiers of the Roman Empire*. Edinburgh, Esslingen, Wien: Historic Scotland and Deutsche Limeskommission

Chettle, S. (ed) 2006 *Writing on the Wall*. Newcastle: Arts UK

Countryside Agency (formerly Countryside Commission) 1998 *Countryside Character Volume 1 North East* CCP535

Countryside Agency (formerly Countryside Commission) 1998 *Countryside Character Volume 2 North West* CCP595

Countryside Commission 1993 *The Hadrian's Wall Path. Submission to the Secretary of State for the Environment*. Cheltenham: The Countryside Commission.

Cumbria County Council 2001 *A proposal for a Rural Action Zone, G1*

Darlington Amenity Research Trust 1976 *The DART Report. Hadrian's Wall: a strategy for conservation and visitor services*. Countryside Commission. CCP 98

de la Bedoyere, G. 1999 *Hadrian's Wall: History and Guide*. London: Tempus Publishing Ltd

English Heritage 1996 *Hadrian's Wall World Heritage Site Management Plan*. London: English Heritage

English Heritage 1999 *Hadrian's Wall Transport Strategy*. London: English Heritage

English Heritage 2004 *Frontiers of the Roman Empire WHS Summary Nomination Statement*. London: English Heritage.

Economic Research Associates 2004 *Hadrian's Wall Major Study Report*.
<http://www.onenortheast.co.uk/lib/liReport/981/Hadrians%20Wall%20MajorStudy%20Final%20Report%20140504.pdf>

Ewin, A. 2000 *Hadrian's Wall: A Social and Cultural History*. Lancaster: Centre for North-West Regional Studies/University of Lancaster

Fairclough, G., Lambrick, G. and McNab, G. (eds) 1999 *Yesterday's World, Tomorrow's Landscape: the English Heritage Landscape Project 1992-94*. London: English Heritage

Feilden, B. and Jokilehto, J. 1998. *Management Guidelines for World Cultural Heritage Sites*. Rome: ICCROM/ UNESCO/ ICOMOS

Gates T. 1999 *The Hadrian's Wall Landscape from Chesters to Greenhead*. Air Photographic Survey, commissioned by Northumberland National Park Authority

Hadrian's Wall Coordination Unit *News from Hadrian's Wall World Heritage Site*. Published three times per year from 1996. London: English Heritage

Land Use Consultants (in association with Heritage Site and Landscape Surveys Ltd) 1995 *Hadrian's Wall Landscape and Planning Study: Final Report*.

Lawrence, D.J., Arkley, S.L.B., Everest, J.D., Clarke, S.M., Millward, D., Hyslop, E.K., Thompson, G.L., and Young, B. 2007. *Northumberland National Park: Geodiversity Audit and Action Plan*. British Geological Survey Commissioned Report CR/07/037N, 128 pp.

Mason, R. et al. 2005 Hadrian's Wall World Heritage Site. In de la Torre, M., Maclean, M. and de la Torre M. (eds) 2005 *Heritage values in site management: four case studies*. Los Angeles, Getty Conservation Institute, 172-213

McGlade, D. 2007 *The Essential Companion to Hadrian's Wall Path National Trail*. Hexham, Hadrian's Wall Heritage Ltd

MLA 2004 *Inspiring Learning For All*
www.inspiringlearningforall.gov.uk

NNPA *Every Footstep Counts – The Trail's Country Code*
<http://www.nationaltrail.co.uk/hadrianswall/text.asp?PageId=27>

Olivier A. 1996 *Frameworks for Our Past: A Review of Research Frameworks, Strategies and Perceptions*. London: English Heritage

ONE NorthEast 2006 *Regional Economic Strategy: leading the Way*.
<http://www.onenortheast.co.uk/lib/liReport/9653/Regional%20Economic%20Strategy%202006%20-2016.pdf>

Pickett, E., Young, B., Lawrence, D., Clarke, S., Everest, J., Thompson, G., and Young, R. 2006 *Ancient Frontiers – Exploring the geology and landscape of the Hadrian's Wall area*. British Geological Survey, 64pp.

TRIBAL 2008 *Maximising the Contribution of Heritage to the North East Regional Economic Strategy and North East Tourism Strategy*, January 2008. Commissioned by One North East

Whitworth A 2000 *Hadrian's Wall – some aspects of its post-Roman influence on the landscape*. BAR British Series 296

Young B. 2000 *Geology and Landscape features of the Hadrian's Wall Corridor*. British Geological Survey Technical Report No. WA/00/48C

Young, C. 2000 Hadrian's Wall, UK. In *Management planning for archaeological sites*. Los Angeles: Getty Conservation Institute, 60-67

Regional

Government Office for the North East 2008 North East of England Regional Spatial Strategy to 2021

Government Office for the North West 2008 North West of England Plan Regional Spatial Strategy to 2021

English Heritage

English Heritage 2000 *Power of Place – the future of the historic environment*. London: English Heritage

English Heritage 2001 *English Heritage policy statement on restoration, reconstruction and speculative recreation of archaeological sites including ruins*. London, English Heritage

English Heritage 2006 *Conservation Principles: Policies and Guidance*. London: English Heritage

English Heritage 2006 *Our Portable Past*
<http://www.english-heritage.org.uk/upload/pdf/Our-Portable-Past.pdf>

United Kingdom government legislation

Ancient Monuments and Archaeological Areas Act 1979

Ancient Monuments (Class Consents) Order 1994

Town and Country Planning Act 1997

Planning (Listed Buildings and Conservation Areas) Act 1997

Countryside and Rights of Way (CRoW) Act 2000

Draft Heritage Protection Bill: *Heritage Protection for the 21st Century* 2008

United Kingdom government Planning Policy Statements and Guidance

DoE 1994 *Planning Policy Guidance Note 15: Planning and the Historic Environment* Department of the Environment / Department of National Heritage

DoE 1994 *Planning Policy Guidance Note 16: Planning and Archaeology* Department of the Environment / Department of National Heritage

Department for Transport 2007 *White Paper: Towards a sustainable transport system – supporting economic growth in a low carbon world*
<http://www.dft.gov.uk/about/strategy/transportstrategy/pdfsustaintranssystem.pdf>

ODPM 2005 *Planning Policy Statement 1: Delivering Sustainable Development*. Office of the Deputy Prime Minister.

CLG 2008 *Protection of World Heritage Sites*, Draft Planning Circular, May 2008. London: Department for Communities and Local Government. In English Heritage 2008 *The Protection and Management of World Heritage Sites in England, Draft Guidance Note*. Annex B

ICOMOS

Bedu, I. et al. 2007 *Tool kit for World Heritage Site Monitoring Indicators*. UK ICOMOS

UNESCO

UNESCO 1972 *Convention Concerning the Protection of the World Cultural and Natural Heritage*. UNESCO, Paris

UNESCO 1987 *Report of the World Heritage Committee 7-11 December 1987, Eleventh Session*. SC-87/CONF.005/9. UNESCO, Paris.

UNESCO 1995 *Operational Guidelines for the Implementation of the World Heritage Convention*. UNESCO, Paris

UNESCO 2005 29COM 8B.46 - *Extension of Properties Inscribed on the World Heritage List (Frontiers of the Roman Empire)*. UNESCO, Paris

UNESCO 2008 *Operational Guidelines for the Implementation of the World Heritage Convention*. UNESCO, Paris.



Glossary

agri-environmental scheme – see Environmental Stewardship Schemes.

Antonine Wall – Roman Empire frontier system running across central Scotland from Firth of Forth to Clyde Estuary, constructed c AD 142 on the orders of Emperor Antoninus Pius; inscribed as part of the Frontiers of the Roman Empire World Heritage Site, July 2008.

AONB – Area of Outstanding Natural Beauty, a form of protected landscape designated by Natural England.

berm – area of level ground between north face of Hadrian's Wall and the ditch.

Buffer Zone – area surrounding the scheduled area of Hadrian's Wall World Heritage Site as a means of protecting the landscape setting of the Site.

Central sector – that section of the World Heritage Site between Greenhead and Chollerford.

(the) Clayton Wall – a stretch of the Wall between Steel Rigg and Housesteads consolidated and partly rebuilt in the mid-19th century under the direction of antiquarian John Clayton.

CLG (the Department for Communities and Local Government) – United Kingdom government department responsible for determining national planning policy and for the preparation of associated Planning Policy Guidance and related legislation.

(the) corridor – an informal term used to describe the area roughly ten miles either side of the Wall which is most directly impacted by the presence of the World Heritage Site.

CuCC – Cumbria County Council.

curtain wall – a wall which does not bear any load from any other building; here used to refer to the linear stone wall itself.

DCMS (the Department for Culture Media and Sport) – United Kingdom government department with overall responsibility to UNESCO for management of World Heritage Sites.

DDA (the Disability Discrimination Act(s) 1995, 2005) – primary legislation, which prohibits discrimination against those with disabilities.

Defra (the Department of the Environment Food and Rural Affairs) – United Kingdom government department, which sponsors Natural England.

English Heritage – non-departmental public body of the United Kingdom government Department for Culture, Media and Sport, with a broad remit of managing the historic environment of England.

English Nature – non-departmental public body of the United Kingdom government responsible for ensuring that England's natural environment is protected and improved. It was established by the Natural Environment and Rural Communities Act 2006, and brought together English Nature, the landscape, access and recreation elements of the Countryside Agency and the environmental land-management functions of the Rural Development Service.

Environmental Stewardship Schemes – generic term for a range of schemes administered by Natural England, which provide grant payments to land managers to manage land to protect the natural and historic environment.

Frontiers of the Roman Empire (FRE) World Heritage Site – a collective designation by UNESCO established in 2005. A phased transnational site, which currently includes the German *Limes*, the Antonine Wall and Hadrian's Wall World Heritage Sites.

generic consents – consents provided by English Heritage to allow specific forms of land management activity to be conducted without individual approvals.

geophysical survey – process of identifying below-surface features, including archaeology, without excavation.

German *Limes* (Obergermanisch Raetische *Limes*) – the Roman frontier system developed under the Emperors Hadrian and Antoninus Pius between the Rhine and the Danube in south-western Germany, inscribed as a World Heritage Site in 2005.

GIS (geographic information system) – process of recording, displaying and managing all forms of geographically referenced information.

GPDO (General Permitted Development Order) – legal instrument exempting certain types of development from having to seek planning permission.

(English Heritage) Guardianship – arrangement by which a site is maintained and managed by English Heritage on behalf of the UK government in perpetuity.

Hadrian's Cycleway – National Cycle Route 72 opened in July 2006 running across Hadrian's Wall WHS from Ravenglass to South Shields.

Hadrian's Wall – the complex of frontier systems originally built on the orders of Emperor Hadrian in AD 122 and including its subsequent Roman modifications; also used to refer to the linear stone and earthwork barrier itself.

Hadrian's Wall Country – brand name through which the World Heritage Site and its corridor are promoted.

Hadrian's Wall Education Forum (HWEF) – the Interest Group responsible for developing the Continuing Learning Strategy.

Hadrian's Wall Heritage Limited (HWHL) – body established in 2006 by English Heritage, Natural England, North West Development Agency and ONE NorthEast to coordinate management, promotion and development of the World Heritage Site.

Hadrian's Wall Management Plan Committee (MPC) – supervisory body, which represents interests in the World Heritage Site and which oversees the preparation and delivery of the Management Plan.

Hadrian's Wall National Trail – one of 12 nationally designated public Rights of Way opened in 2004.

Hadrian's Wall Tourism Partnership (HWTP) – predecessor body to HWHL established in 1995 to coordinate promotion of the World Heritage Site.

Hadrian's Wall Transport Strategy – study report produced in 1999 commissioned by English Heritage.

Hadrian's Wall World Heritage Site (Hadrian's Wall WHS) – that area of scheduled monuments and site specifically included in the Nomination Document for Hadrian's Wall; proposed boundary changes to the Hadrian's Wall WHS will require amendment to the Nomination Document.

Heritage Asset Consent – mechanism in the Heritage Protection Bill (2008) by which works affecting scheduled monuments can be authorised, replaces the former Scheduled Monument Consent mechanism.

Heritage Management Agreements – mechanism in the Heritage Protection Bill (2008) by which management of scheduled monuments can be authorised by English Heritage.

Higher Level (Stewardship) Scheme – see Environmental Stewardship Schemes.

Historic Landscape Characterisation (HLC) – method of recording and describing rural landscapes run in partnership between English Heritage and County Councils.

HWCU – Hadrian's Wall Coordination Unit (now absorbed into Hadrian's Wall Heritage Ltd).

HWHL – see Hadrian's Wall Heritage Limited.

HWTP – see Hadrian's Wall Tourism Partnership.

ICOMOS (International Council on Monuments and Sites) – international non-governmental organisation of professionals, dedicated to the conservation of the world's historic monuments and sites.

inscription – formal registration of World Heritage Sites by UNESCO.

in situ – in the original location.

Integrated Regional Strategy (IRS) – proposed statutory policy documents relating to regional development; combines previous Regional Spatial and Regional Development strategies.

Interest Groups – six sub-groups of the Management Plan Committee established to develop action plans for specific aspects of the implementation of the Management Plan.

Interpretation Framework – proposed mechanism and set of principles which will guide development of interpretation across the World Heritage Site.

lengthsman – an individual responsible for maintenance of sections of the Hadrian's Wall National Trail.

limes – Latin term for frontiers; see also German *Limes*.

Local Development Framework (LDF) – statutory document produced by Local Planning Authorities setting out local development policies; replaces previous Local Development Plans.

Local Planning Authority (LPA) – local government bodies with responsibility for managing planning systems; include Borough, County, District and Metropolitan Councils and National Park Authorities.

(the) Major Study – report produced in 2004 commissioned by RDAs North West Regional Development Agency and ONE NorthEast into the future management of the Hadrian's Wall World Heritage Site as a driver of economic development.

Management Plan – management framework document required by DCMS of all World Heritage Sites.

milecastle – small forts added to the Wall after its original construction at a distance of approximately one Roman mile apart; milecastles are referred to by their sequential numbers from east to west along the Wall.

milefortlet – freestanding structures similar to milecastles running along the Cumbrian coast from Bowness to Maryport.

(the) Military Road – B6318 public highway which runs from Heddon-on-the-Wall to Greenhead built by General Wade in the late 1740s; between Heddon-on-the-Wall and Sewingshields it runs almost continuously directly over the Wall itself.

(the) Military Way – a Roman metalled road running generally between the southern face of the Wall and the *Vallum*.

(the) Military Zone – the area between the Wall and the *Vallum*.

mosses – raised, usually lowland, bogs created by glacial erosion.

MPC – see Hadrian's Wall Management Plan Committee.

National Trail – see Hadrian's Wall National Trail.

NNPA – Northumberland National Park Authority.

Nomination Document – the submission document provided by United Kingdom government to UNESCO for the inscription of Hadrian's Wall as a World Heritage Site.

Operational Guidelines – guidelines for the implementation of the 1972 UNESCO World Heritage Convention, which set forth the procedure for the inscription, protection and conservation of World Heritage Sites.

Outstanding Universal Value (OUV) – formal statement endorsed by the World Heritage Committee setting out justifications for inscription as a World Heritage Site.

Periodic Report – monitoring reports required by UNESCO for all World Heritage Sites.

Pilgrimage, the Hadrian's Wall – decennial conference of academics and antiquarians to review developments in archaeological understanding of Hadrian's Wall.

(the) Plan – the 2008-2014 Hadrian's Wall Management Plan.

Planning Policy Guidance notes (PPG) – United Kingdom government planning policy documents, in the process of being replaced by Planning Policy Statements (PPS).

poaching – churning up of ground by livestock.

Portable Antiquities Scheme – voluntary scheme run by DCMS to record archaeological objects found by the public which fall outside the Treasure Act 1996, raise awareness among the public of the educational value of archaeological finds in their context and facilitate research in them.

Raphael Project – European Union-funded research project into the management of earthwork monuments.

RDA – see Regional Development Agency.

Regional Development Agency (RDA) – non-departmental public body established for the purpose of development, primarily economic, of one of England's nine Government Office regions.

Research Framework – a framework created for the review and implementation of academic research about the World Heritage Site.

Rural Development Service – ceased to exist on 1 October 2006 when it became part of Natural England: had been charged with the implementation of the England Rural Development Programme (ERDP), as well as a range of other rural services.

Scheduled Ancient Monument (SAM) – sites and monuments of national significance as defined in the Ancient Monuments and Archaeological Areas Act, 1979.

scheduling – process by which sites and monuments are registered as Scheduled Ancient Monuments.

Scheduled Monument Consent (SMC) – see Heritage Asset Consent.

(the) Site – Hadrian's Wall World Heritage Site.

shielings – upland shelters used by farmers during summer livestock grazing.

SSSI (Site of Special Scientific Interest) – a form of protected landscape designated by Natural England,

(the) Stanegate – the Anglo-Saxon name for the pre-Hadrianic Roman road understood to have run between Corbridge and Carlisle.

States Parties – term used by UNESCO to refer to nations that have signed and ratified the 1972 World Heritage Convention.

Steering Group – the sub-group of the Management Plan Committee responsible for overseeing the production of the Management Plan.



Stewardship Schemes – see Environmental Stewardship Schemes.

Supplementary Planning Documents (SPD) – documents prepared by Local Planning Authorities to provide more detailed policies in support of Local Development Frameworks.

(the) Trail – see Hadrian's Wall National Trail.

Transport Strategy – see Hadrian's Wall Transport Strategy.

turret – small towers placed between mileforts at a distance of approximately one third of a Roman mile; turrets are numbered a and b as they occur east to west in each.

UNESCO (United Nations Educational, Scientific and Cultural Organisation) – agency of the United Nations; aims to contribute to peace and security by promoting international collaboration through education, science and culture; responsible for implementation of the World Heritage Convention, and the inscription and regulation of World Heritage Sites.

(the) Vallum – U-shaped ditch with mounds on either side situated to the south of the Wall.

vicus – civilian settlement of Roman period situated adjacent to Roman forts.

VisitBritain – United Kingdom national tourism agency responsible for marketing the United Kingdom worldwide and for developing England's tourism economy.

(the) Wall – abbreviated reference to the linear stone or earthwork barrier.

wallmile – reference number to identify sections of the Wall between mileforts.

(the) Whin Sill – dolerite outcrops, which characterise the course of the Wall between Sewingshields and Greenhead.

World Heritage Committee – elected committee of nations that are parties to the World Heritage Convention: tasks are to identify nominated cultural and natural properties of Outstanding Universal Value (OUV) to be protected under the Convention, and to list them on the World Heritage List; decide if properties on the list should be inscribed on the List of World Heritage in Danger; and determine how and under what conditions the World Heritage Fund can be used to assist countries in protection of their World Heritage property.

World Heritage Convention - international treaty formally called the Convention concerning the Protection of the World Cultural and Natural Heritage, adopted by UNESCO in 1972 to establish an effective system of collective protection of the cultural and natural heritage of outstanding universal value.

World Heritage Site – official designation by UNESCO of sites of universal significance to humanity that have been inscribed on the World Heritage List.

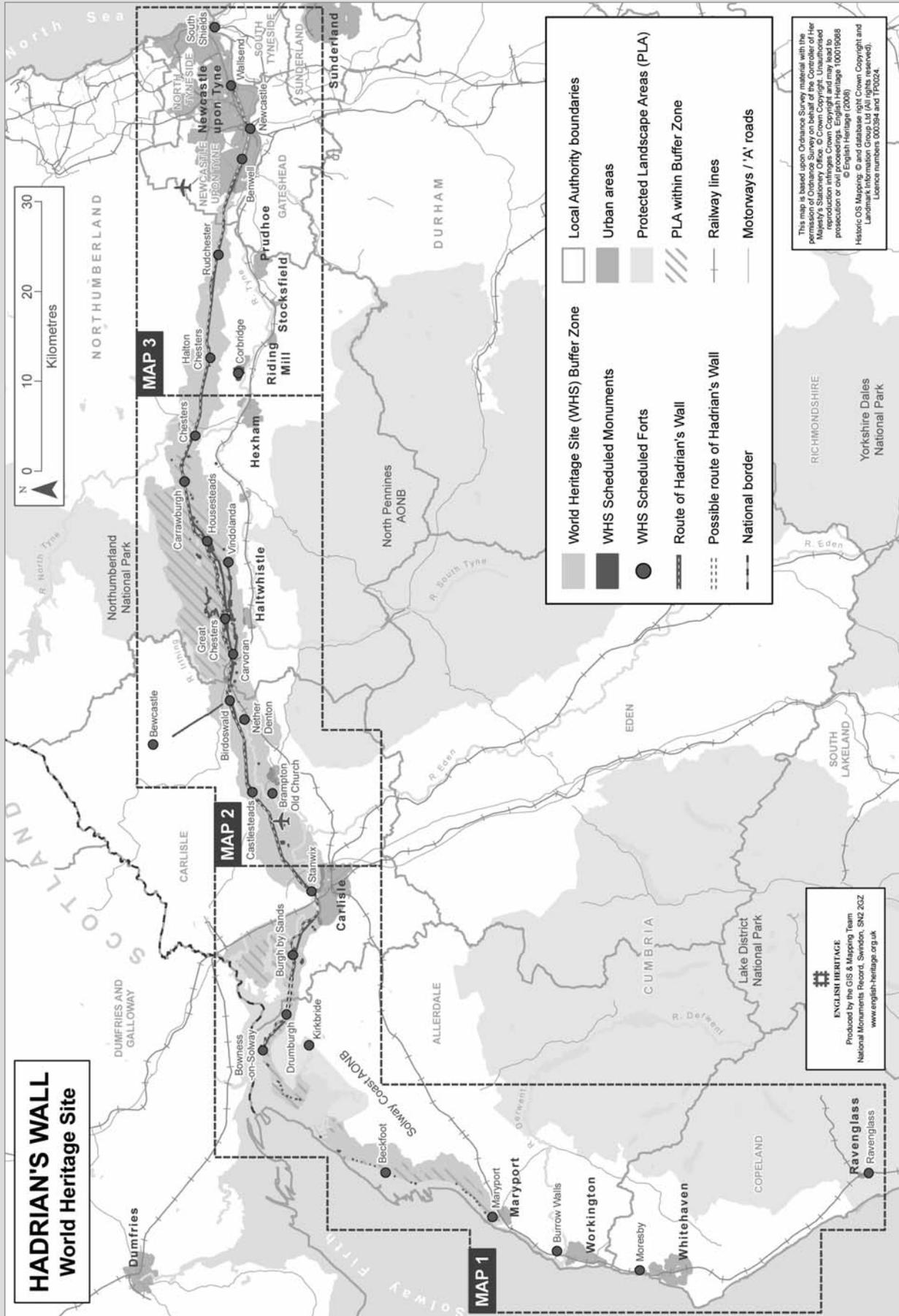
(the) World Heritage Site (the WHS) – Hadrian's Wall World Heritage Site.

Map 1 The Frontiers of the Roman Empire

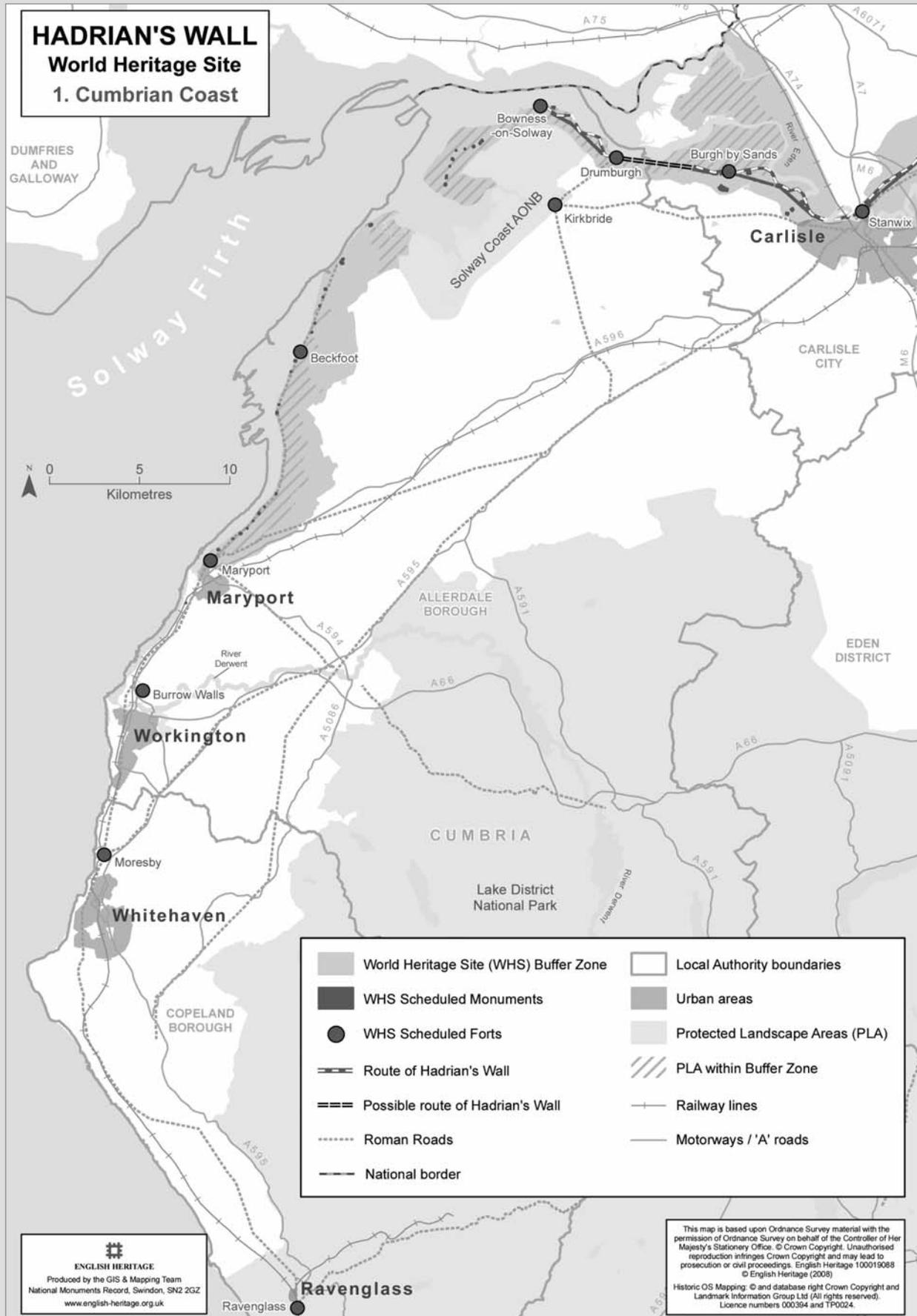




Map 2 Hadrian's Wall WHS Overview

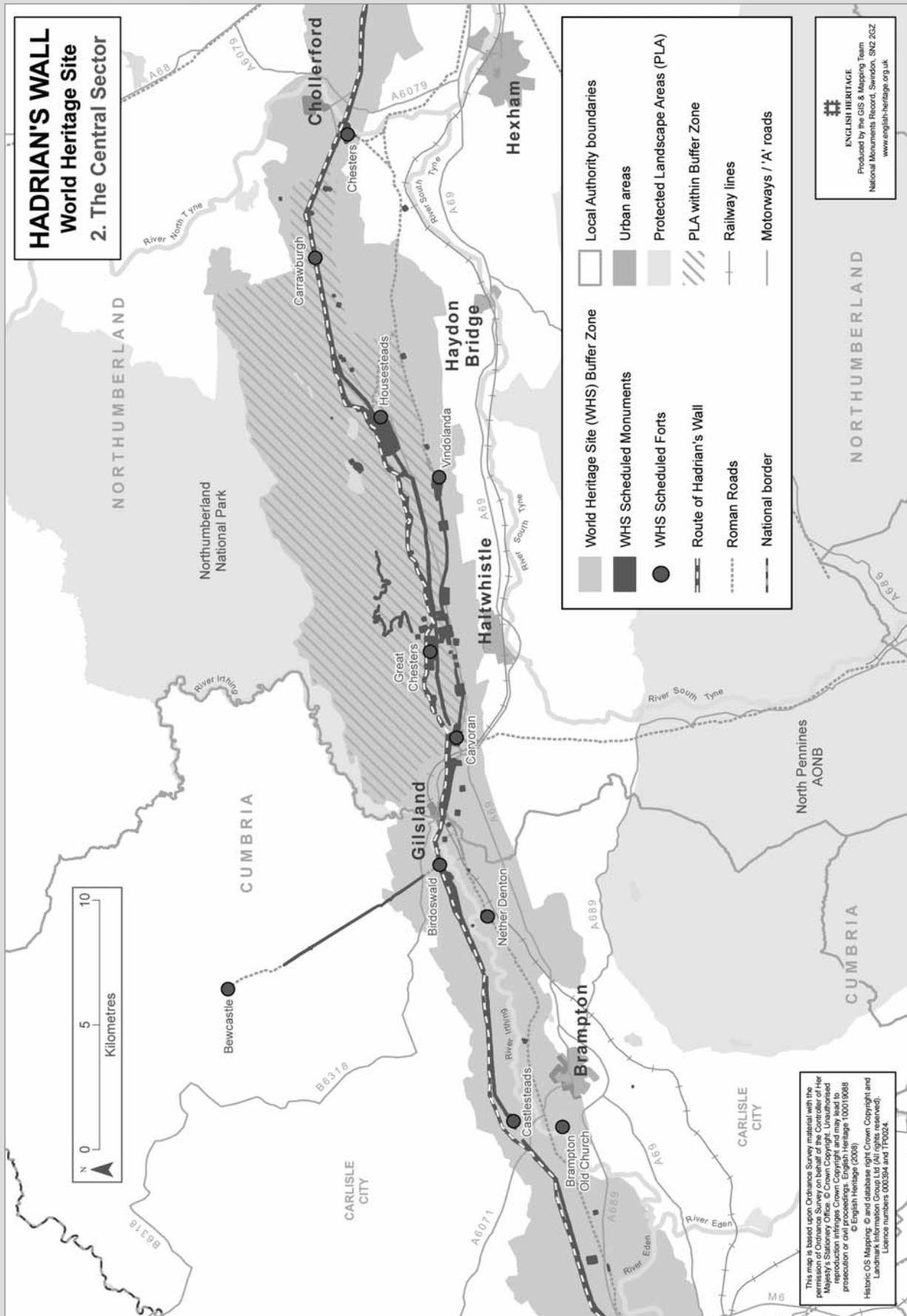


Map 3 Hadrian's Wall WHS Cumbrian Coast

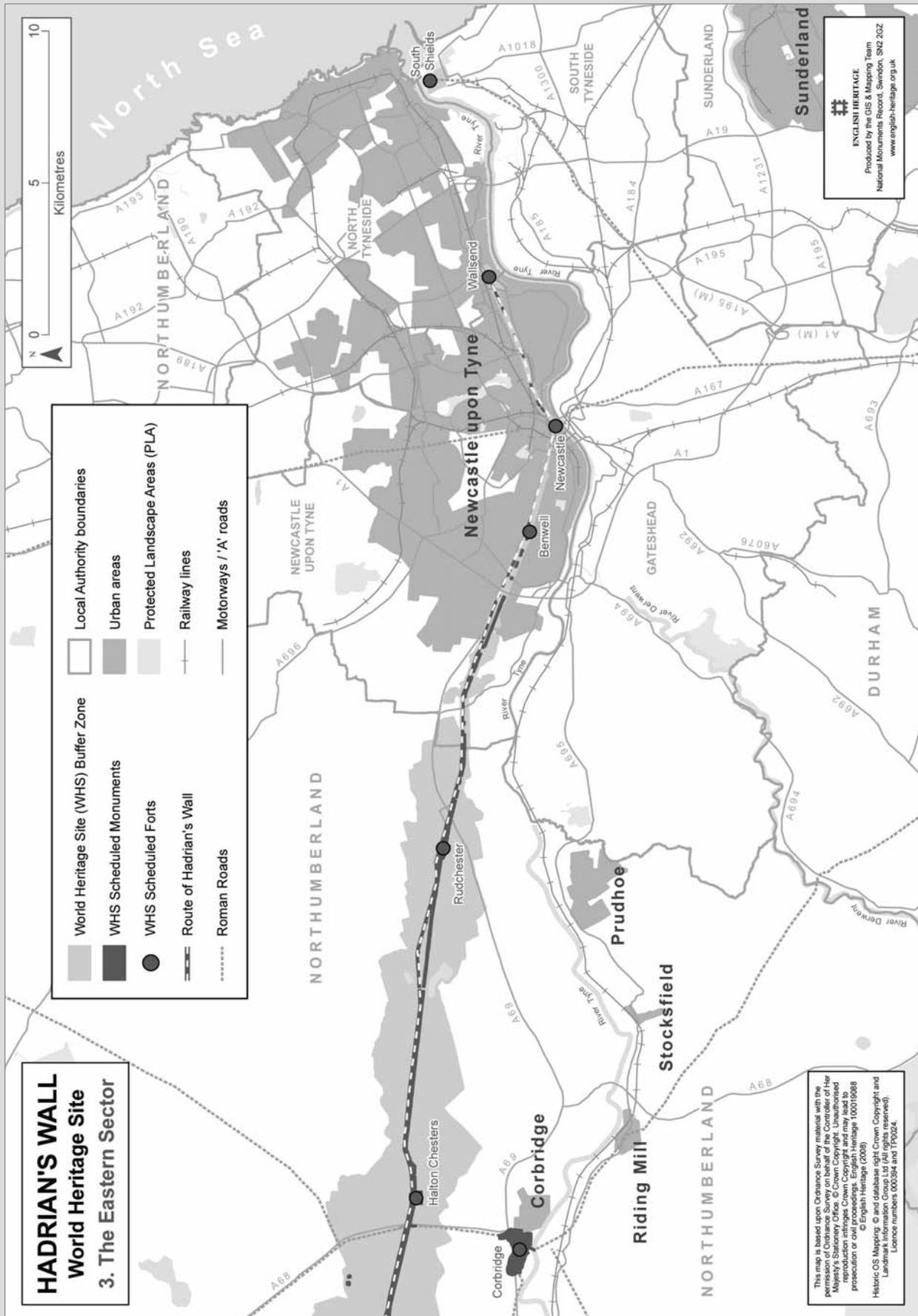




Map 4 Hadrian's Wall WHS Central Sector

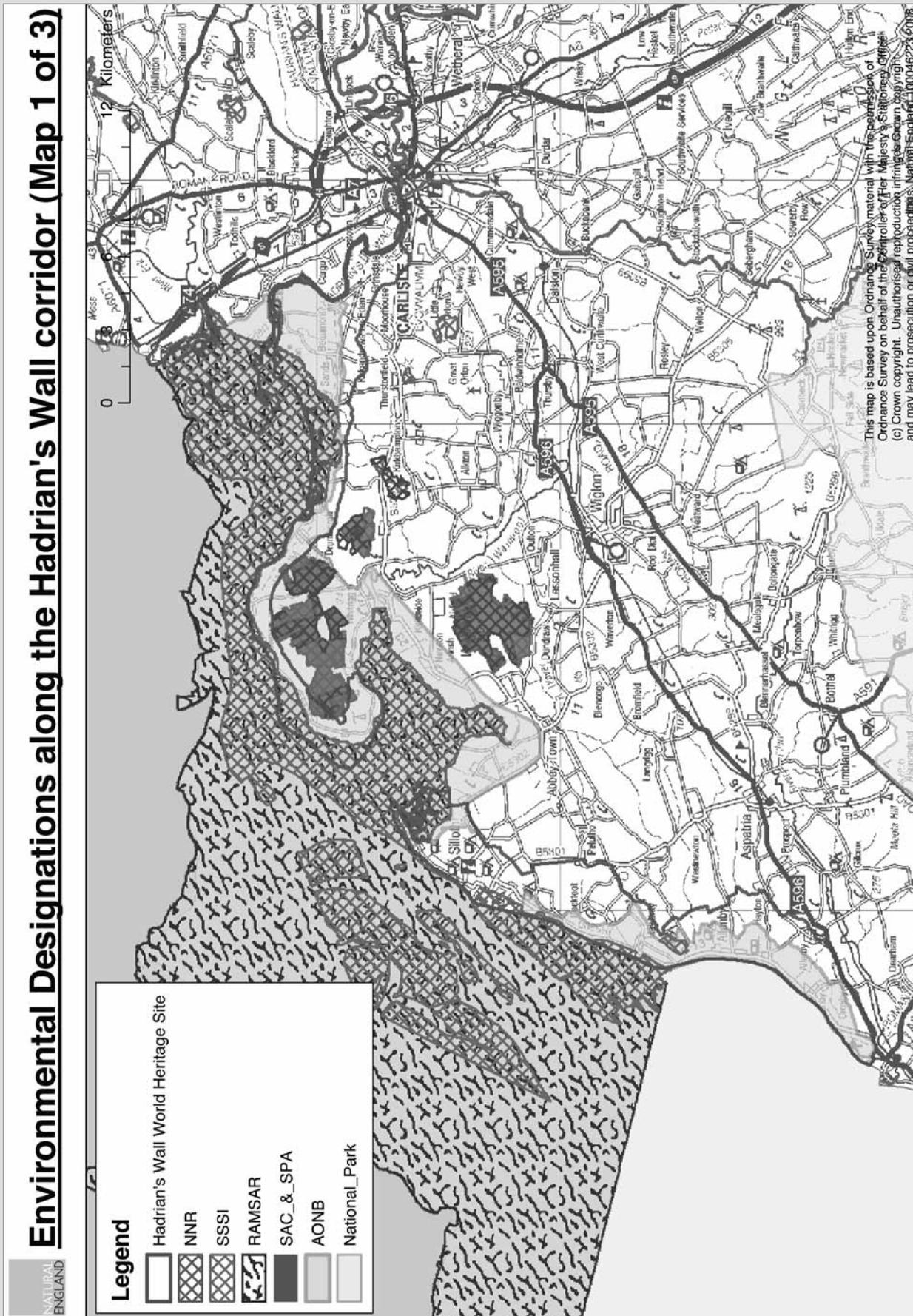


Map 5 Hadrian's Wall WHS Eastern Sector

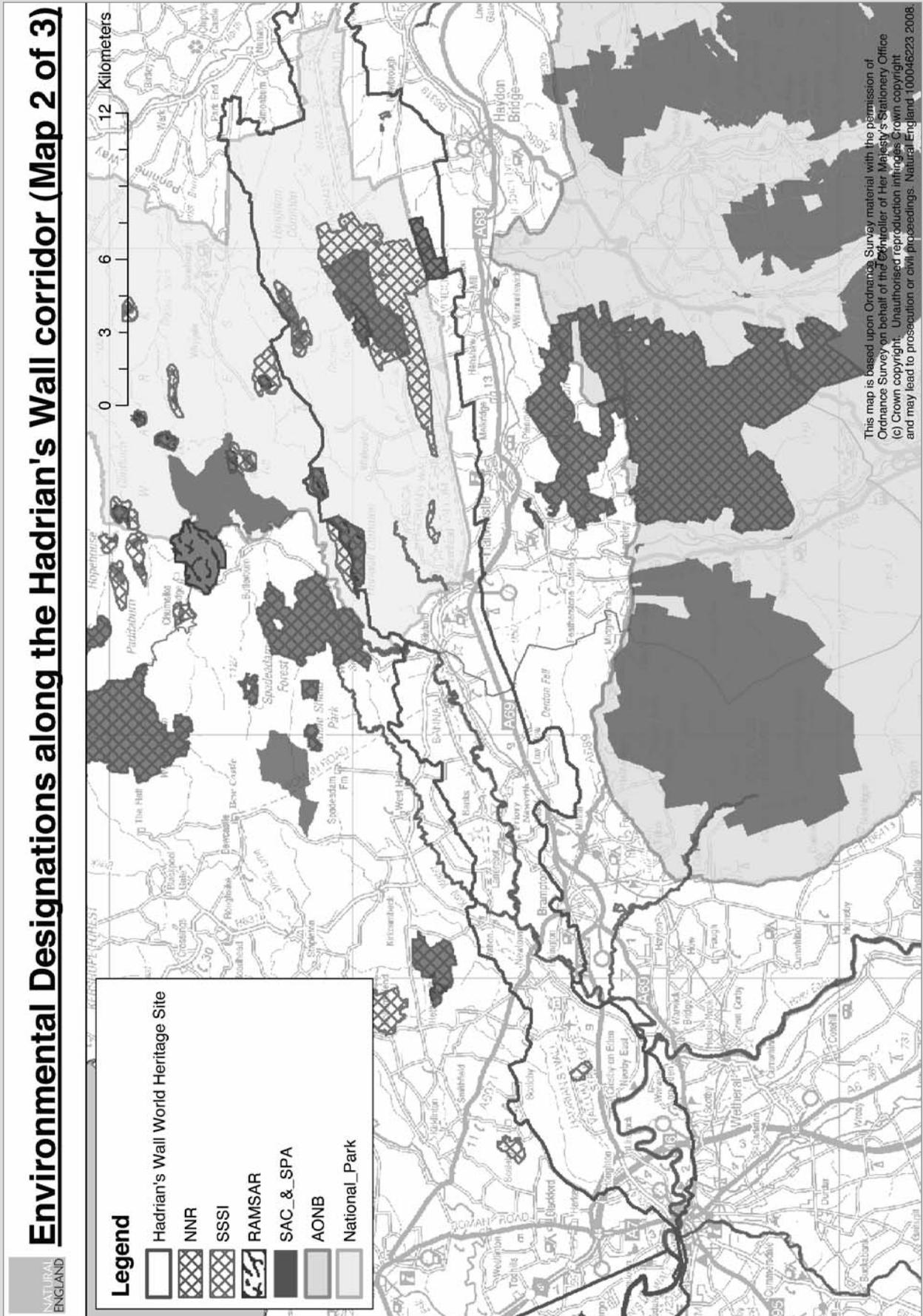




Map 6 Environmental designations 1. Cumbrian Coast



Map 7 Environmental designations 2. Central Sector





HADRIAN'S WALL
Frontiers of the Roman Empire
WORLD HERITAGE SITE

Have your say



HADRIAN'S WALL
COUNTRY



Have your say

Hadrian's Wall World Heritage Site Management Plan acknowledges the very broad range of interests and constituencies involved in the WHS, including all those who live and work in the corridor of the Wall. It fully recognises the importance of engagement with all stakeholders in both developing the Plan, and in monitoring its effectiveness.

Comments on the following are welcome:

How easy is the Plan to read? Are there ways in which it could be made more reader-friendly?

Is the Plan complete? Are there things missing that should be added?

How easy is it to find the Plan, and how easy is it to find what you want in it? Are there ways in which it could be made easier to access?

Does the Plan provide an adequate description of the World Heritage Site?

Does the Plan reflect all the interests involved in the management of the Site?

Are all the issues and challenges of managing the Site captured in the Plan?

Are they adequately described?

Does the Plan explain well enough the mechanisms by which its policies and actions will be implemented and progress will be monitored?

Do you feel that the Plan assists the effective management of the World Heritage Site?

Do you have any other comments about the Management Plan or about the issues it raises?

Your comments would be welcome at any time during the period of this Management Plan (2008-2014), and will greatly assist the process of the preparation of the next Management Plan.

Please send your comments to: enquiries@hadrianswallheritage.co.uk
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Appendix 1.1

RELEVANT EXTRACTS FROM POLICY AND GUIDANCE DOCUMENTS

UNESCO Operational Guidelines for the Implementation of the World Heritage Convention, WHC 08/01 January 2008

Management systems

108. Each nominated property should have an appropriate management plan or other documented management system which should specify how the outstanding universal value of a property should be preserved, preferably through participatory means.

109. The purpose of a management system is to ensure the effective protection of the nominated property for present and future generations.

110. An effective management system depends on the type, characteristics and needs of the nominated property and its cultural and natural context. Management systems may vary according to different cultural perspectives, the resources available and other factors. They may incorporate traditional practices, existing urban or regional planning instruments, and other planning control mechanisms, both formal and informal.

111. In recognising the diversity mentioned above, common elements of an effective management system could include:

- a) a thorough shared understanding of the property by all stakeholders;
- b) a cycle of planning, implementation, monitoring, evaluation and feedback;
- c) the involvement of partners and stakeholders;
- d) the allocation of necessary resources;
- e) capacity-building; and
- f) an accountable, transparent description of how the management system functions.

UK policy is that the requirement for a management system is met through the development of a Management Plan.

The full text of the 2008 UNESCO Operational Guidelines can be found at:

<http://whc.unesco.org/archive/opguide08-en.pdf>

Draft Circular on World Heritage Sites. Annex A in Protection of World Heritage Sites, Consultation Paper. CLG May 2008

World Heritage Site Management Plans

13. A Management Plan needs to cover all the issues affecting the site, some of which do not relate to planning matters, and to reflect the advice cited in the UNESCO Operational Guidelines. It needs to be developed in a consensual way, fully involving all interested parties, including those responsible for managing, owning or administering the Site. The key stakeholders should form a Management Plan Steering Group, which will, in many

cases, be led by the relevant local or regional authority. The plan needs to draw its policies from a proper understanding of the significance of the site and focus on protection of the outstanding universal value, authenticity and integrity of the site. The plan should take account of sustainable community strategies as relevant. Further guidance on the preparation of Management Plans is provided in [the English Heritage Guidance Note].

14. The Secretaries of State for Communities and Local Government and for Culture, Media and Sport expect local authorities to treat relevant policies in Management Plans as material considerations in making plans and planning decisions, to take them fully into account when devising core strategies and other local development documents, and to give them due weight in their other actions relating to World Heritage Sites. For some sites it may be useful for Management Plan Steering Groups to develop the section of the Management Plan dealing with development control in such a way as to allow adoption of that section within a local development document.

English Heritage *The Protection and Management of World Heritage Sites in England, Draft Guidance Note. Annex B in Protection of World Heritage Sites Consultation Paper. CLG May 2008*

9 World Heritage Site Management Plans

9.1 All effective conservation is concerned with the successful management of change. Conserving each World Heritage Site is fundamental but change is inevitable if the Site is to respond to the needs of present-day society. Effective management of a World Heritage Site is therefore concerned with identification and promotion of change that will conserve and enhance the Outstanding Universal Value, authenticity and integrity of the Site, and with the modification or mitigation of changes that might damage that value. It is also necessary to develop policies for the sustainable use of the site for the benefit of the local population and economy.

9.2 These uses may be economic, for example for tourism or through adaptation of a historic building or area to a new function. Uses can also be social, for example by using a historic site as a focal point for a local community, or educational activity. It is entirely legitimate that a World Heritage Site should be used in these ways, provided that this is done in ways that do not harm its Outstanding Universal Value. Use of English Heritage's *Conservation Principles* can aid assessment of proposals.

9.3 It is therefore essential that change is planned and that competing uses are reconciled. The UNESCO World Heritage Committee has said that all World Heritage Sites must have an appropriate management system in place which should specify how the Outstanding Universal Value, authenticity and integrity of the site should be maintained, preferably through participative means. The Committee's *Operational Guidelines* recognise that an effective management system will vary according to the nature of the site as well as the legal system of the state party concerned. They say that effective management involves a cycle of long-term and day-to-day actions to protect, conserve and present the Site.

9.4 They recommend that common elements of an effective management system should include:

- a) a thorough shared understanding of the property by all stakeholders
- b) a cycle of planning, implementation, monitoring, evaluation and feedback
- c) the involvement of partners and stakeholders
- d) the allocation of necessary resources
- e) capacity building
- f) an accountable transparent description of how the management system functions

9.5 Most English World Heritage Sites are complex and large and generally in multiple ownership. There can also be large numbers of official bodies with an interest in the Site. World Heritage Site Management Plans are intended to resolve such potential challenges and to achieve the appropriate balance between **conservation, access and interpretation, the interests of the local community, and sustainable economic use** of the Site. World Heritage Site Management Plans should be prepared on a participatory basis by a Steering Group or Committee made up of the key stakeholders in each Site. These will vary according to the site but should include representatives of the owners, local authorities including parish councils, DCMS, English Heritage (or Natural England in the case of a natural site) and other official bodies or NGOs with an interest in the site. ICOMOS UK is normally a member of Steering Groups. The leader of the Group will also vary according to the nature of the site but is often the relevant local authority or the key owner of the site.

9.6 As far as possible Plans should be based on consensus and involve all the stakeholders in each Site and be subject to public consultation. Implementation mechanisms and resources should also be identified. Steering Groups and Management Plans are most effective when there is a World Heritage Site Coordinator in place. For a complex site, this is likely to be a full time function. On sites in single ownership, the coordinating function can be combined with other roles.

9.7 UNESCO and the Advisory Bodies recommend that World Heritage Site Management Plans should have an overall **vision** for the Site, **long-term aims** looking forward 30 years, and **policies** for five years. The vision and aims provide a long term continuum in which effective policies can be developed. Five or six years is about the longest period for which it is possible to plan ahead effectively and with any certainty. From these policies, it should then be feasible to develop annual work plans.

9.8 Successful World Heritage Site Management Plans will be focused on the identification, conservation and sustainable use of the values of the site and particularly on its Outstanding Universal Value, authenticity and integrity. To achieve a successful outcome, it is necessary to know:

- 1. What is there:** description of the site covering all its aspects, including uses, and not confined just to those which give its Outstanding Universal Value;
- 2. What is important and why:** identification of the Site's values through analysis of the description. All values should be identified and if necessary prioritised. This should focus on the Outstanding Universal Value as agreed by the UNESCO World Heritage Committee but should also identify other national, regional and local site values. It may be helpful to follow the

methodology set out in English Heritage Conservation Principles; **3. What makes the values vulnerable:** Identification of ways in which the values (particularly its Outstanding Universal Value, authenticity and integrity) of the Site are vulnerable, and also of ways in which they can be enhanced and used sustainably;

4. What policies need to be in place to protect the values: development of policies to counter the vulnerabilities and to enhance the character of the Site and its sustainable use, including education, promotion and access;

5. How will the policies be implemented and monitored: identification of the ways in which the Plan will be implemented, and of arrangements to monitor and review its effectiveness.

9.9 This is the same basic methodology as is used for Conservation Plans but expanded to include proposals for sustainable beneficial use. A World Heritage Site Management Plan will normally be at a higher and less detailed level than a Conservation Plan. Conservation Plans may supplement World Heritage Site Management Plans for particular parts of complex sites, such as specific assemblages of ruins or individual buildings.

9.10 It may be helpful to group policies under four headings: **Protecting the Site's Outstanding Universal Value:** protection of a site is about the prevention of activities which might damage its Outstanding Universal Value, authenticity and integrity either on the site itself or through the effects of development in its setting, including any buffer zone **Conserving the Site:** conservation is about the positive actions needed to conserve and enhance the site. They can include works such as repair of buildings or ruins, changes to agricultural regimes to protect buried archaeology, or landscape works to improve the setting of the site.

Using the Site: sustainable use of a site is often the best way of conserving it. The way in which the site is used will depend on the nature of the site. What is appropriate in an urban centre will be very different to what may be needed on an archaeological site. On any site proper provision for visitors is essential. The primary focus of sustainable use is clearly the conservation of the Site's Outstanding Universal Value, authenticity and integrity. All projects should be designed and implemented with this in mind. It is also important, though, that any use of a site should be economically sustainable. Sustainable use of a site is often the best way of conserving it. Policies for use of the Site should include not just economic use but also education, outreach, promotion and access.

Managing the Site: clear policies for putting the Plan into effect are essential if it is to be effective. It is essential that all key stakeholders are involved in the management process. That process must provide for this involvement, and allow all interests to input to definition of the appropriate balance between conservation, access, sustainable use, including tourism, and the interests of the local community.

9.11 The process by which the plan is developed and put into effect is as important as its content. Essentially the development of the plan will go through three stages:

- 1. The preparation of a draft plan through involvement of all stakeholders;** discussion and participation through this process is essential to develop consensus on the policies of the plan. Public consultation on the draft plan is the last step of this stage although there may be public meetings and consultations throughout the preparation process as required.



2. Publication of the agreed plan and its adoption by all the key stakeholders; this is a key stage in the process since it presents a programme of work and an agreed vision and direction for the management of the site.

3. Implementation: without agreed means for implementation, the plan will be of little use. It is essential that someone is responsible for implementing the plan and acts as its champion. The Plan Coordinator should also be responsible for reviewing and monitoring the effectiveness of the plan on a regular basis.

9.12 Many World Heritage Sites are affected by natural or man made emergencies. The UNESCO World Heritage Committee have requested that Management Plans should assess the possible impact of climate change and the likely risk of flood, fire and other emergencies and prepare mitigation strategies as appropriate for the WHS and amongst other things their collections. Steering groups are advised to consult closely with the relevant regional resilience authority and with county and local authority emergency planners and encourage owners within the WHS to make their own preparations. English Heritage and the Museums, Libraries and Archives Commission can also provide valuable advice.

9.13 Successful management planning is key to the satisfactory conservation and sustainable, beneficial use of World Heritage Sites. Essentially the process is cyclical. The success of the plan should be reviewed on a regular basis (say every five years) and the plan revised in line with the results of the monitoring and review. Also essential is continued research and analysis of the history and significance of the Site, and of how it is used, since only through such work is it possible to refine the definition of why the Site is important and thus to improve the plan's policies. Improved understanding also enables the site manager to improve interpretation for visitors.

9.14 Management Plans are essential documents in the management of a World Heritage Site. The World Heritage planning circular advises that relevant policies in them should be material considerations in making plans and planning decisions, and that Management Plans should be taken fully into account when devising core strategies and other documents in the local development framework. It may be appropriate in some cases to develop the section of the Management Plan dealing with development control in such a way as to allow adoption of that section within a local development document. It is therefore essential that they should be subject to full public consultation. Once completed, Management Plans should be formally endorsed or adopted by the bodies that have to put them into effect.

9.15 Management plans may be subject to European *Directive 2001/42/EC* on the assessment of the effects of certain plans and programmes on the environment (the *Strategic Environmental Assessment (SEA) Directive*). Advice on how to establish whether the Directive applies, and on its requirements, is in *A Practical Guide to the SEA Directive*, published in September 2005.
<http://www.communities.gov.uk/documents/planningandbuilding/pdf/practicalguidesea.pdf>).

The full text of *Protection of World Heritage Sites, Consultation Paper*. CLG May 2008

can be found at:

www.communities.gov.uk/documents/planningandbuilding/doc/869111.doc

Appendix 1.2

CURRENT MEMBERSHIP OF THE WHS MANAGEMENT PLAN COMMITTEE

Julian Acton	National Farmers Union, Northumberland
Lindsay Allason-Jones	Museum of Antiquities
John Bell	Carlisle County Council
Paul Bidwell	Tyne & Wear Museums Service
Maggie Birchall	Tyne and Wear Museums Service
Patricia Birley	Vindolanda Trust
Felicity Blanks	Castle Morpeth County Council
Professor David Breeze	Professor of Archaeology
Angus Collingwood-Cameron	Country Land and Business Association
Mike Collins	English Heritage
John Crouch	Allerdale Borough Council
Cllr Mrs Anne Dale	Tynedale Council
Susan Denyer	ICOMOS UK
Austen Dodds	National Farmers Union, Northumberland
Alan Eales	Carlisle City Council
Hugh Edmundson	Castle Morpeth Borough Council
Graham Gill	Forestry Commission
Tom Gledhill	Natural England
Nicky Grace	The National Trust
Richard Greenwood	Cumbria Tourist Board
Ian Haynes Chair	Roman Archaeology, Newcastle University
Dr Richard Hingley	Durham University
John Hodgson	Lake District National Park Authority
Ken Hutchinson	North Tyneside MBC
Giles Ingram	Northumberland Tourism
Brian Irving	Solway Coast Area of Outstanding Natural Beauty (AONB)
Major P Johnson	Country Land and Business Association
Paul Johnston	Castle Morpeth Borough Council
Raymond Knapton	Carlisle City Council
David Lawrence	British Geological Survey
Dr Nigel Mills	World Heritage and Access Director, Hadrian's Wall Heritage Ltd (HWHL)
Jonathan Mullard	Northumberland National Park Authority
Catriona Mulligan	Northumberland National Park Authority
David Murray	National Farmers Union, Cumbria
Julian Nelson	NE Country Land and Business Association
Henry Owen-John	English Heritage North West
Ian Payne	Allerdale Borough Council
Andrew Poad	The National Trust
Carol Pyrah	English Heritage North East
Phil Reddy	North West Development Agency
Elaine Rigg	Northumberland National Park Authority
Sara Rushton	Northumberland County Council
Dr Brian Selman	Community Council of Northumberland
Professor Peter Stone (Chair)	Newcastle University
Rob Terwey	Cumbria County Council
Hugh Thomson	Senhouse Museum Trust
Lynn Turner	Tynedale Council
Adrian Vass	Department for Environment, Food and Rural Affairs (Defra)
Hilary Wade	Tullie House Museum, Carlisle
Humphrey Welfare	English Heritage/HWHL Board
Jason Wood	Leeds Metropolitan University representing the Council for British Archaeology
Heather York	Natural England
Dr Christopher Young	English Heritage London



Appendix 1.3

PREPARATION OF THE 2008-2014 MANAGEMENT PLAN: THE PROCESS

This was undertaken as a staged sequence, with parallel strands of consultation and discussion.

Jan–end March 2007: initial public consultation

A discussion paper outlining the issues to be addressed in the new Management Plan for the period 2008–2014 was circulated in January 2007, inviting all those organisations and bodies with an interest in the WHS to submit their comments by the end of March 2007.

Early 2007: first stage of informal consultation

Interest Groups were formed to discuss the responses to the issues arising from the public consultation, in early 2007. Members of these groups had been invited to take part in this informal consultation process because of their wide-ranging experience and expertise rather than as representatives of their organisations.

Autumn 2007: second stage of informal consultation

The Interest Groups were reorganised in the autumn of 2007, cutting down their number to provide a more integrated approach to the concerns of each sector, and the membership of each group was reviewed so that the representation of the diverse interests of the WHS was more comprehensive. The new Interest Groups are:

- Planning and Protection
- Conservation, Farming and Land Management
- Access and Transport
- Visitor Facilities, Presentation and Tourism

The Education Forum and the Research Framework Steering Group continued to contribute to the process of developing policies in the areas of education and learning, and academic research.

June–end Aug 2008: formal public consultation

The draft Management Plan prepared for the WHS for the six-year period 2008–2014 was made available for comment to all organisations and bodies with an interest in the WHS and to the general public at the beginning of June 2008. The consultation draft was available from the Hadrian's Wall Heritage Ltd (HWHL) website at www.hadrians-wall.org and in hard copy format on request from HWHL.

The consultation process period was for three months from 2 June to 31 August 2008.

A steering group formed from a cross-section of the WHS Management Plan Committee (MPC) met regularly throughout the development of the Plan. The Interest Groups and steering group also met at regular intervals to discuss the key issues to be addressed in the new Management Plan, and to review the emerging draft text for the new Plan.

December 2008: Management Plan Committee and DCMS sign-off

The new Management Plan was published in December 2008 following a sign-off by the MPC, and formal endorsement by the Secretary of State for Culture, Media and Sport.

Appendix 1.4

PREPARATION OF THE 2008-2014 MANAGEMENT PLAN: LESSONS LEARNED

The preparation of this Management Plan has been coordinated by HWHL on behalf of the Hadrian's Wall Management Plan Committee (MPC). The process has involved a considerable number of staff from a range of stakeholder organisations and bodies.

The principal lessons learned from the process are set out below.

Planning and timetabling

1. Preparation of the Management Plan should be coordinated by a dedicated project manager, supported by a team with a range of relevant skills and experience in archaeology, site management, national and international heritage policy, economics, public consultation, and editing processes. This requires adequate resourcing to be in place.

2. Early consensus on format, scope, purpose, target audiences and editorial conventions to be applied speeds the process of preparation.

3. Continuity of individual responsibilities should be built into planning for the preparation of a Management Plan.

4. Careful planning in advance of staff time and resources needed for the many and complex stages of preparation, consultation and editing, where at times phases of work will be happening in parallel, will ease the process.

5. The timetable for the preparation of the Plan must allow the full range of stakeholders to take part in the consultation process.

6. Having calculated the timescale, extra time should be built in for unforeseen circumstances!

Consultation

7. Preparation of a very basic framework for the Plan and outline of possible issues speeds consultation at the beginning of the process, giving consultees concrete ideas to agree or disagree with.

8. Although consultation has been wider than for previous Plans, more effective mechanisms still need to be found to encourage wider participation among the very numerous stakeholders and interests in the WHS: this is particularly true for local communities.

9. It should be borne in mind that, during the period of public consultation, the great majority of responses will come in during the last two or three weeks: time needs to be allocated to process these accordingly.

Content of the Plan

10. If sections of the Plan are to be written by Interest Groups, clear advance guidelines on the purpose, style, tone and length of the piece required makes integration into the Plan much easier.

11. A mechanism for the exchange of good or best practice in terms of the structure and format of consultation processes for UK World Heritage Sites would assist those preparing Management Plans in future.

12. The establishment of clearer guidance on these issues, perhaps through a national frequently-asked questions (FAQs) online resource for all UK World Heritage Sites, would be useful.

13. The Plan should include not only a review of success in delivering aims and objectives, but also an assessment of the usefulness of the Plan itself (ie its format, structure, length, degree of detail etc) as a tool in the management of the WHS.

Editing

14. At the end of the consultation and editing process, a copy editor not involved in the creation of the Plan should be employed to carry out a final edit, in order to ensure that there is an overall consistency of style and tone.

Publication

15. The hard copy full-length colour version of the 2002-2007 Plan with images had a relatively small take-up in comparison to the summary: 3,000 copies of the summary were printed, and most have been used.

It has been decided as result of consultation that three versions of the 2008-2014 Plan will be created. All will be available on the web.

- The full-length Plan with images: Copies of the full colour version will be printed using desktop publishing facilities, for the major stakeholders along the Wall. If further copies are needed, they can be requested and will be printed out at HWHL. This has decreased printing costs considerably.
- The summary version of the Plan: this has an important role in wider public communication, and as a form of recognition to stakeholders for their input into the planning process. It is written in a more popular, accessible style, will go out in hard copy, and should be distributed directly to stakeholders, and at sites along the Wall.
- The publication of a text-only 'grey' version of the Plan on the web, with each paragraph numbered, and with detailed footnoted referencing will allow the Plan to be printed out more economically by those who need a hard copy, and provides an easily referenced document for planners and researchers.

The next Plan

16. The Management Plan Steering Group (a sub-committee of the much larger Management Plan Committee) should continue to meet periodically throughout the next Plan period, in order to review the preparation of this Plan, to design at an early stage the approach to writing the next Plan, and to oversee consultation and writing, in order that useful experience is passed on.



Appendix 2.1

STRUCTURAL DESCRIPTION OF HADRIAN'S WALL AND ITS ASSOCIATED ARCHAEOLOGICAL REMAINS

The WHS is centred on the frontier works constructed by the Roman army from AD 122 on the orders of the Emperor Hadrian. Hadrian visited most provinces of the Roman Empire to define stable frontiers as statements of the extent of Roman expansion, in contrast to the fluid expansion policies of his predecessors. Hadrian's Wall itself is a complex structure, which was subsequently altered and adapted from the moment of its initial conception until the fourth century. It continued to be adapted and altered after the Roman period. The WHS also includes other Roman sites and structures which pre date the construction of Hadrian's Wall itself. These are important evidence of the intervention of the Roman army between the years when it first reached the isthmus and the building of the Wall. The agreed Setting or Buffer Zone of the WHS also includes a wealth of both pre-Roman and post-Roman archaeological sites and landscapes relating to the cultural development of the Tyne-Solway isthmus over 3,000 years, of which Hadrian's Wall was but one, albeit universally significant, episode. This wider archaeological landscape provides a context for Hadrian's Wall, important evidence for the interaction of the Romans with the existing native population which led to an element of intercultural fusion, and the lasting impact that the Roman remains have had on the subsequent history of the region.

Native pre Roman

A number of excavations along the length of Hadrian's Wall have produced evidence of activity by the pre-Roman native population directly underlying Roman structures, which dramatically indicate how the Roman appropriation of land for military installations disrupted the native population. Further evidence from the Setting or Buffer Zone comes from the surviving earthworks and crop-mark sites of native pre-Roman settlements, hill forts, burial cairns and traces of cultivation, particularly 'cord rigg', an early form of cultivation on narrow ridges, approximately 1m to 1.5m across, formed by a spade or hoe rather than a plough. A number of these site-types, such as settlements and cord rigg, survive in close proximity to reveal areas of pre-Roman archaeological landscape into which Hadrian's Wall intruded. The sum of the evidence demonstrates that the zone around Hadrian's Wall was already extensively populated before the arrival of the Romans, with a developed agricultural subsistence economy. The evidence suggests that, if anything, the emphasis in the upland areas was on mixed farming including the growing of cereals and other crops rather than solely on stock farming, as it is now¹.

The Romans in the north, AD 70 to the building of Hadrian's Wall

Evidence from Carlisle shows that the Romans were established in the north by AD 72/3 under the Flavian governor Cerialis, before their advance north into Scotland in the early AD 80s under Agricola. A second site, the supply base at Corbridge Red House, partly excavated in 1975 in advance of the construction of the Corbridge bypass, also belongs to this period.

The Agricola advance into Scotland, which culminated in a major Roman victory at *Mons Graupius* in AD 83, was not pursued after AD 86, but instead the Romans made a phased withdrawal over nearly 20 years through what is now Scotland, reaching the Tyne-Solway isthmus by AD 105. Here they established a chain of forts between Carlisle and Corbridge, some using existing forts and possibly others were newly built, connected by a road known as the Stanegate (the medieval name – its Roman name is unknown). The forts that are associated with this period are those at Corbridge, Newbrough, Vindolanda, Haltwhistle Burn, Carvoran, Throp, Nether Denton, Boothby, Old Church Brampton and Carlisle. There are forts west of Carlisle at Burgh-by-Sands and Kirkbride which probably also date to this phase. A further small fort was proposed at Crosby on Eden in the 1930s but no positive evidence for it has ever been identified. Successive forts of varying size at Vindolanda, the earliest of which is dated to the mid AD 80s, as well as multiple-phase forts at Carvoran and Nether Denton, demonstrate that the period leading up to the building of Hadrian's Wall saw several changes in garrison and strategic reappraisal. Dendrochronology has established rebuilding at both Carlisle and Vindolanda c AD 105.

It is possible that not all the forts on the Stanegate were added at the same time. The small forts at Haltwhistle Burn and Throp may have been additions to the line of larger forts. The Stanegate itself may post date the earliest forts, built to connect them rather than the forts being constructed along its line. At Vindolanda, two milestones survive beside its line. A number of temporary camps on Haltwhistle Common are probably associated with the Stanegate, and the most western of these, Fell End, actually straddles the Stanegate. Signal towers, such as that at Mains Rigg east of Nether Denton, assisted Roman control of this zone. West of Nether Denton the overall course of the Stanegate is not clearly defined, and how it reached Boothby, Brampton Old Church and Carlisle is uncertain.

The building of Hadrian's Wall

The Emperor Hadrian ordered the construction of the Wall that bears his name as an artificial continuous barrier, the purpose of which, according to his biographer writing two centuries later, was 'to divide the Romans from the barbarians'.² Hadrian brought one of his most trusted friends, A Platorius Nepos, to Britain as governor to oversee the construction of the new frontier, and most of it appears to have been completed within his governorship.

The curtain wall itself was intended to be 76 Roman miles long and close off the Tyne-Solway isthmus. It was built in stone east of the River Irthing as far as the north side of the River Tyne at Newcastle. Initially built to a gauge of ten Roman feet, after two seasons a decision was made to reduce the width to between six and eight Roman feet. In many places this narrow Wall was built on broad foundations laid the previous season. The line of the Wall in the eastern sector was surveyed to run in straight sections between high points. From Chesters to Sewingshields the Wall followed a broad crest with extensive views north over the North Tyne valley, but between Sewingshields and Walltown the line sinuously followed the crest of the Whin Sill. Through the less dramatic topography of eastern Cumbria the Wall again followed a straighter line between high points.

¹ Tim Gates, 1999: *The Hadrian's Wall Landscape from Chesters to Greenhead: An Air Photographic Survey*. Commissioned by NNPA and supported by English Heritage and the RCHME.

² Anon, *Historia Augusta, Life of Hadrian*, 11, 2.

Nowhere does the Wall survive to full height, although at Hare Hill the core stands 3m high. The faces were constructed of coursed rubble, weakly mortared, and the core was mainly clay bonded. There is no conclusive evidence as to how the top of the Wall was finished, whether with a walkway and parapet, or possibly with a sloping top to shed water, although some stones found could suggest that there was a crenellated parapet on the north side. Inscribed stones, of varying degrees of sophistication, recorded completion of individual sections by the units involved, including the names of centurions.

Between the River Irthing and the Solway estuary the Wall was constructed in turf, 20 Roman feet wide, with a steeper batter on the north side. Some sections of the Turf Wall west of Carlisle at Burgh by Sands have been found to have been constructed on a stone base, comparable to the later Antonine Wall, whereas elsewhere the turves were stacked directly on the stripped subsoil. It is suggested that the use of turf was dictated by the absence of building stone, although at a later date the Turf Wall was rebuilt throughout in stone.

The Wall crossed three major rivers – the North Tyne at Chesters, the Irthing east of Milecastle 49 and the Eden at Carlisle – on substantial bridges, initially limited to pedestrians. The major bridges were altered in the second half of the second century to accommodate vehicular traffic using the Military Way, and the evidence indicates they were impressive architectural statements, with columns rising above the parapets possibly carrying statues of emperors or Roman deities. The east abutments of the bridges crossing the North Tyne and Irthing survive as excavated consolidated remains, and the cutwaters of the Chesters Bridge can be seen in the riverbed when the water is low. In both cases the rivers have moved, destroying the west abutments, although the approach ramp to the Chesters Bridge survives. The Wall also crossed a number of smaller rivers and streams although there is little evidence of how this was achieved.

Wall ditch and counterscarp mound

A V-shaped ditch protected the Wall on its north side, except where the natural topography made this superfluous. This was the case where the Wall followed the Whin Sill in the central sector, although short sections of ditch were provided in the gaps and west of Carlisle where it followed the south bank of the River Eden. The dimensions of the ditch vary considerably with the topography and geology, from 7m across and 3m deep to 2m wide and 800mm deep. Where the ground fell away to the north, the north side of the ditch was built up with a carefully constructed artificial bank, known as the counterscarp mound. Elsewhere the counterscarp mound takes a variety of forms whose purpose is not yet fully understood. The ditch had a dual role of providing materials for the construction of the Wall, as well as placing an additional barrier to the north of the Wall when completed. Additionally a number of Roman quarries, identified by inscribed Roman graffiti, are known close to the Wall.

Milecastles

Small fortlets, approximately 25m square with characteristic rounded exterior corners, were attached to the rear of the Wall at intervals of approximately one Roman mile. North and south gateways were linked by a central road flanked by one or two internal barrack buildings. Of the supposed 80 milecastles, only

58 have been firmly located and partially excavated. Only six have been fully excavated.

The milecastles on the Turf Wall were constructed with turf ramparts and timber gates and buildings. Evidence from the post holes for the gateways suggest that the north gate was more elaborate than the south and was probably surmounted by a tower. Both stone and turf and timber milecastles had an *ascensus* leading to the rampart walk, of which the first four steps survive at Milecastle 48 (Poltross Burn).

The function of milecastles as first built is enigmatic, as the double gates were wide enough for vehicular traffic. It is now considered likely that most milecastles were initially provided with a causeway to provide access across the Wall ditch, although a recent survey (Welfare, 2000) found only scant traces surviving and suggests that causeways may have been removed by the Romans. This could have been at the same time as the north gates were narrowed. Whether the north gates were restricted to military use or provided access for civilian traffic is unknown. The Wall cut across the farmland of the native population and would have isolated the scattered settlements north and south of the Wall. The main north-south communication routes crossed the Wall through substantial gateways, at Portgate on Dere Street and probably also at Carlisle on the road to Birrens, while a later gateway was provided at the Knag Burn, east of Housesteads.

Turrets

Between each milecastle, two turrets, approximately 6m square, were attached to the Wall at intervals of one third of a mile. Like the milecastles, these towers were built in advance of the Wall with projecting wing walls. These wing walls, built to the full ten Roman feet width of the 'Broad Wall', were conspicuous when the Wall was subsequently constructed following the decision to reduce its width.

The turrets in the Stone Wall sector east of the River Irthing were partly recessed into the Wall and projected to its rear. Access was by a doorway in the rear wall and probably also from the Wall top. Turrets in the Turf Wall sector were constructed as rectangular stone towers set wholly within the width of the Turf Wall.

The turrets probably rose above the level of the Wall parapet, although the details of their superstructure are matters of conjecture. The position of the Turf Wall turrets in relation to the later replacement Stone Wall suggests that there were side doors on the first floor giving access onto the Wall walk. Slight differences of detail in the construction of both the milecastles and turrets are generally thought to indicate the individual building methods of the legions engaged.

Cumberland coastal system

Milecastle 80 at Bowness-on-Solway was the westernmost point of the Wall as described above, but the defences continued around the Solway coast. Between Bowness and Moricambe Bay, two parallel ditches are known from aerial photography and excavation, possibly with an associated wooden palisade. However, south of Moricambe Bay, there was no continuous barrier, where the defences faced the sea. From immediately west of Bowness to at least south of Maryport there were free-standing fortlets and towers, corresponding to and similar in size



to milecastles and turrets attached to the Wall. The turf and timber milefortlets were surrounded by a ditch with a causeway opposite the north and south gates. The towers were stone structures but at Tower 2b the stone tower replaced two earlier timber towers. Forts were also constructed along this coast, at Beckfoot, Maryport, Burrow Walls, Moresby and Ravenglass. The precise extent of the Cumberland coastal system is uncertain; the milefortlets and towers have only been traced as far as Flimby, just south of Maryport, but the earliest phase at Ravenglass was a small fortlet, not dissimilar in size to the milefortlets. It is this earliest phase at Ravenglass that justified its inclusion within the WHS, despite its distance from Moresby, the next known fort northwards.

Forts added to the Wall

The first major change of plan during construction of the Wall was to build new forts attached to it. Some replaced earlier turrets and milecastles. At the same time the curtain wall was extended eastwards for four miles, wholly as Narrow Wall, to Wallsend on the north bank of the River Tyne.

The fort decision has until recently been regarded as a single decision with the exception of later additional forts. The evidence now suggests that this was a much more complicated development, and that certainly the Stanegate forts at Vindolanda and Carlisle continued to be occupied during the Hadrianic period, and possibly also that at Corbridge.

The five eastern forts at Wallsend, Benwell, Rudchester, Halton Chesters and Chesters were all built in stone astride the Wall, facing north. Other new forts at Housesteads, Great Chesters, Stanwix, Drumburgh and Bowness-on-Solway were attached to the rear of the curtain wall and, with the exception of Drumburgh, were constructed with their long axis east west and the fort facing east.

The new forts within the Turf Wall sector were all initially constructed in turf and timber. The Stanegate fort at Carvoran, close to the line of the Wall continued in use. It is uncertain whether the fort at Castlesteads, also detached from the Wall, was a new fort or was rebuilt on the site of an earlier fort.

Three forts are known at Burgh by Sands: Burgh I, 1km south of the modern village, was probably associated with the Western Stanegate (see above) and was built over an earlier signal tower within a circular ditch. The second fort (Burgh II), attached to the Wall and partly overlain by the modern village, was probably a later addition, although its exact date remains to be determined (see below). A further fort (Burgh III), also detached from the Wall at the west end of Burgh-by-Sands and possibly guarding Burgh Marsh, is known from aerial photography but its date and how it related to the frontier are not known. This fort is not protected by scheduling and thus is not formally included in the WHS (see Part 6, Issue 1).

A further fort at South Shields stood on a bluff on the south bank of the Tyne near the mouth of the river. There was probably a Hadrianic fort, which has as yet not been located but is hinted at by a rammed gravel parade ground. A fort was certainly here in the Antonine period and this was enlarged and converted into a supply base, initially containing 15 granaries. Further alteration increased this to 24 granaries, to supply the campaigns of the Emperor Severus into Scotland in the early third century. The

initial function of this fort was most likely to guard a port at the mouth of the Tyne from which Hadrian's Wall was supplied from the east, although changes to the river mouth have destroyed all evidence of a Roman harbour. Kirkbride may have continued to serve a similar function on the Solway coast, and it is also suggested that the low-lying land north-east of the fort at Maryport may in Roman times have been a navigable creek. These emphasise the importance of sea trade in the Roman period to supplement the road network and the potential for maritime archaeological research, a little-realised aspect of Hadrian's Wall studies.

Outpost forts

In addition to the forts on the Wall, three forts were built north of the western end of the Wall at Birrens, Netherby and Bewcastle. The latter was on a newly established site, occupying a hexagonal platform, initially with a turf rampart, stone gates and a mixture of timber and stone internal buildings. It was connected to the Wall fort of Birdoswald by a road, the Maiden Way. Because of its particularly close and exclusive relationship with Hadrian's Wall, it is included within the WHS. The other two Hadrianic outposts were built on the site of earlier Flavian forts and, because of their greater distance from the Wall and their dual function as outpost forts of Hadrian's Wall and hinterland forts to the Antonine Wall, are not included within the WHS. It is also uncertain that significant remains of the fort at Netherby survive from the construction of Netherby Hall in the 18th century. At this period there were no outpost forts covering the eastern end of the Wall.

Vallum

The *Vallum*, contemporary with the decision to build forts attached to the Wall, runs south of it. It consisted of a steep sided flat bottomed ditch, 6m wide and 3m deep flanked by two mounds, each 6m across. A third and smaller mound on the south lip of the ditch was once thought to result from cleaning out of the ditch, but is now recognised as a primary feature. The mounds were built from spoil from the excavation of the ditch. The course of the *Vallum* was surveyed quite independently of the Wall, and the distance between the two linear elements varies from close proximity to nearly 1km west of Kirkandrews on Eden. The precise purpose of the *Vallum* is still a subject for debate, but the generally accepted view is that it was to provide a secure area under direct military control to the rear of the Wall across which unauthorised access was virtually impossible. At each of the forts a causeway with a gateway was constructed across the *Vallum*, making these the only points at which access for civilian traffic through the frontier was possible.

Civil settlements and cemeteries

The wealth of the military attracted a civilian following wherever the Roman army went, and civil settlements (*vici*) developed outside the forts, initially south of the *Vallum*. The best evidence for the *vici* comes from other forts away from Hadrian's Wall and suggests a mixture of official, semi official and commercial buildings to satisfy the requirements of the soldiers. Important buildings outside forts in most cases were bathhouses. A number of these have been identified along Hadrian's Wall, and surviving bathhouses are displayed at Chesters, Vindolanda and Ravenglass. Other buildings known include a *mansio* (rest house for travelling officials), temples and shrines, shops, industrial buildings, taverns and most likely brothels. The *vici* also

contained accommodation for the families of serving soldiers. The type of building most associated with *vici* is the so-called strip-house, built with a gable end facing the street. Although many of the buildings would have been robust stone-built structures, there is likely to have been considerable variety in construction and some buildings may have been of humble construction, leaving only ephemeral traces. Only a few buildings from a handful of the *vici* on the Wall have been explored by excavation: recent geophysical surveys however indicate that some may have been more extensive than previously thought, such as at Birdoswald, Halton Chesters, Carvoran and Castlesteads. Geophysical survey has revealed the ground plan north of the fort at Maryport, which includes the largest Roman buildings known within the frontier zone. Cemeteries extended outside the civil settlements (as Roman law prohibited burial within an inhabited settlement). A few of these have been located, at South Shields, Great Chesters, Vindolanda and Birdoswald, although a considerable collection of tombstones from the Wall zone survives, mostly in museum collections. Much more remains to be discovered about the locations and extent of the cemeteries on the Wall.

Late Hadrianic modifications

Further modifications were made to the Wall later in Hadrian's reign. A new fort, approximately halfway between Housesteads and Chesters, was constructed at Carrawburgh while the Stanegate fort at Carvoran and the easternmost five miles of the Turf Wall were rebuilt in stone. Around Birdoswald the stone replacement Wall was built on a new line approximately 300m to the north of the Turf Wall, with new turrets and a new milecastle. At the same time the fort at Birdoswald was rebuilt in stone (though possibly not completed), initially to project north of the Turf Wall, and then wholly to the rear of the new Stone Wall. The Wall seems to have been largely abandoned after Hadrian's death when his successor, Antoninus Pius (AD 138-161), advanced the frontier to the Forth-Clyde isthmus.

The Military Way, reduction in turrets and conversion of the Turf Wall

The Roman withdrawal from southern Scotland and the Antonine Wall, which began in the late AD 150s, saw further changes. A new metalled road, the Military Way, connected all the forts and milecastles, running between the Wall and the *Vallum*. Many of the turrets were seen as superfluous and abandoned in the late AD 180s. Some of these were demolished in the early third century. The remainder of the Turf Wall was rebuilt in stone, incorporating the primary stone turrets, as were the turf and timber forts. The lack of a suitable building stone west of Carlisle involved the importing of stone from elsewhere, possibly from the Eden valley and also from the northern shore of the Solway near Annan where a red sandstone outcrop occurs. The function of the *Vallum* to segregate the military area appears to have been relaxed and *vici* crowded around the forts inside the *Vallum*.

Additional forts

New outpost forts were established on Dere Street in the mid-second century at Risingham, High Rochester and Newstead, all on the site of earlier Flavian and Antonine forts, although Newstead, along with Birrens in the west, was given up c AD 180. The forts at Risingham and High Rochester were, however, along with Bewcastle and Netherby in the west, occupied until

the first decade of the fourth century. Although they were functionally part of the Roman frontier, and in the third century held powerful and versatile garrisons of infantry, cavalry, scouts and irregular units, these forts are not (with the sole exception of Bewcastle) included in the WHS. However, a case is made (see Part 6, Issue 1) that the two forts at Risingham and High Rochester should be considered as extensions to the Site.

Two new forts were added to the Wall at the end of the second or early in the third century: these were at Newcastle, to guard the bridge crossing the River Tyne, and at Burgh-by-Sands (Burgh II), replacing the earlier detached fort south of the Wall.



Appendix 2.2

JOINT CHARACTER AREAS DEFINED BY NATURAL ENGLAND

Landscape Character Assessment is a technique used by Natural England to develop a consistent and comprehensive understanding of what gives the countryside of England its character. It uses statistical analysis and application of structured landscape assessment techniques. Landscape Character Assessments provide more detailed descriptions at a local level within **Joint Character Areas**.

Descriptions below summarise the Joint Character Area assessments for the areas through which the WHS runs. The full texts can be accessed via the web links.

Character Area 14, the Tyne and Wear Lowlands

In the east, urban Tyneside falls within Character Area 14, the Tyne and Wear Lowlands. The landscape in this sector is dominated by the conurbation of Tyneside, the result of urban and suburban expansion linking previously separate settlements. Predominant influences were the industries of shipbuilding, coal extraction and the railways as well as the developing prosperity of Newcastle as the commercial capital of the north east. Essentially, in much of this area, the archaeological remains of the WHS have been dislocated from their landscape setting.

For Natural England's Assessment, see:
http://www.countryside.gov.uk/Images/JCA14_tcm2-21122.pdf

Character Area 11, the Tyne Gap and Hadrian's Wall

This stretches from Heddon-on-the-Wall to Brampton, a varied corridor that separates the North Pennines to the south from the Border Moors and Forests to the north. From Heddon to the A68 trunk road, the landscape consists of undulating countryside between 100m and 150m above sea level with rich soils where the predominant land use is arable. This is punctuated by clusters of largely broadleaf woodland and pockets of improved pasture.

The higher ground, between 200m and 250m above sea level, within the section between the A68 and Chollerford, contains substantial areas of semi- to unimproved grassland. Broadleaf trees give way to small conifer plantations, some of which act as windbreaks in this more exposed landscape. Settlement between Heddon-on-the-Wall and Chollerford is mainly dispersed farms with a few hamlets. From central Newcastle to Chollerford the B6318, the Military Road, follows the line of Hadrian's Wall with only short divergences.

By contrast, the Tyne valley with its fertile soils is intensively managed and is more densely populated. The small towns of Corbridge, Hexham, Haydon Bridge and Haltwhistle are the main settlements as well as a number of smaller villages and dispersed farms. The landscape character of the Tyne valley is strongly influenced by its strategic importance as a major east-west communications corridor through the high Pennines, both historically and in the present day, as demonstrated by the Carlisle to Newcastle Railway, the A69 trunk road, and overhead power lines. The gently sloping valley sides contain a mosaic of

pasture and woodland. The parkland estates within the Tyne valley are also characteristic, epitomised by those at Beaufront and Chesters.

Between Walwick and Greenhead the land rises above 150m with no settlements apart from the scattered farms and no modern cultivation. Hedges give way to stone walls as field boundaries, and the smaller hedged fields of east Northumberland are replaced by larger fields of semi-improved pasture. The dramatic eruption of the Whin Sill above the upland plateau becomes the most prominent feature of the landscape from Sewingshields to Greenhead and the land rises to over 300m above sea level. From the line of Hadrian's Wall throughout this section there are extensive views south to the North Pennines and north across the loughs, mires and commons.

The artificial Wark and Spadeadam Forests extend to within 2km of the Whin Sill and Hadrian's Wall, and cover the northern horizon. These predominantly coniferous forests were planted for timber production in the 20th century, with harsh geometric boundaries. Forest Enterprise is now managing these to soften their impact by diversifying the species to include broadleaf woodland and modifying the boundaries to follow natural landscape features. The aim is that the very visible forest edge should act as a transition zone between the open landscape in the foreground and the vast area of Kielder Forest that extends into the far distance.

From Greenhead to Brampton the landscape undulating around the 150m contour is characterised by upland grassland, little of which has been improved. At Greenhead, Hadrian's Wall crosses the Tipalt Burn which is a tributary of the River South Tyne, but 2km to the west at Gilsland, the Wall meets the River Irthing, which runs westwards, through a steep gorge biting into the soft red sandstone, into the River Eden. Whereas east of Greenhead the major communication lines – Hadrian's Wall and its precursor the Stanegate, the A69 road, the railway and overhead powerlines – all cling to the north side of the river valley, west of Greenhead all keep to the south of the River Irthing with the sole exception of Hadrian's Wall itself. From vantage points at Birdswald, the hamlet of Banks and Craggle Hill, the view south of the managed landscape of the Irthing valley, densely wooded and framed by the looming wild uplands of the North Pennines, contrasts with the thinly populated wastes stretching north of the Wall.

For Natural England's assessment, see:
http://www.countryside.gov.uk/Images/JCA11_tcm2-21073.pdf

Character Area 6, the Solway Basin

West of Brampton, Hadrian's Wall runs through Character Area 6. This is an intensively managed landscape of sheep and cattle farms. The Solway Basin is open and exposed with wide views to the Dumfries and Galloway coast, the Cumbrian Fells and across the Irish Sea, with a foreground of intertidal mudflats and saltmarshes. Further south the coastal fringe is composed of low cliffs of eroding drumlins, sand and pebble beaches, sand dunes and raised beaches formed by sea level changes, backed by dune headlands. The coastal resort of Allonby was said in 1748 to have had 'considerable concourse for bathing in the sea'. In the following century Silloth was developed as a planned holiday resort on a grid of streets. Since the closure of the branch

railway from Carlisle in the 1960s it has struggled as a resort, although its elegant character is retained.

For Natural England's assessment, see:
http://www.countryside.gov.uk/Images/JCA6_tcm2-21068.pdf

Character Area 7, the West Cumbria Coastal Plain

South of Maryport, the WHS includes only the fort sites of Burrow Walls (on the outskirts of Workington), Parton or Moresby and Ravenglass overlooking the estuary of the Rivers Esk and Mite. These lie within Character Area 7, the West Cumbria Coastal Plain. This is an undulating landscape with sea cliffs, punctuated by the urban centres of Maryport, Workington and Whitehaven. These towns arose from sea trade and as outlets for the former industries of coal mining, iron smelting and shipbuilding. Dereliction in the form of abandoned railways, reclaimed former ironworks and colliery workings contrasts with intensive pastoral activity on fertile soils.

For Natural England's assessment, see
http://www.countryside.gov.uk/Images/JCA7_tcm2-21069.pdf



Appendix 3.1

THE KEY LEGISLATIVE FRAMEWORK FOR THE PROTECTION OF THE WHS AND ITS BUFFER ZONE

Although there are many national and regional statutes and policies that protect associated values within the WHS, such as its natural values, the principal current measures that aim specifically to protect the Outstanding Universal Value (OUV) for which Hadrian's Wall was inscribed as a WHS, and its authenticity and integrity, are listed below. It needs to be considered that some of these will change during the period of the Management Plan, particularly heritage protection legislation, currently in the form of the draft Heritage Protection Bill, now anticipated to be introduced into Parliament in the 2009-10 session.

The Ancient Monuments and Archaeological Areas Act, 1979, amended by the Heritage Act 1983 is the current statutory framework for establishing and maintaining a schedule of archaeological and historical monuments deemed to be of national importance. It provides the mechanism for protecting and controlling change to these sites through the process of scheduled monument applications, which must be made to the Secretary of State for Culture, Media and Sport. English Heritage was created by the 1983 Heritage Act, and became the Secretary of State's statutory adviser on such applications and on additional sites on the schedule. The Acts also cover the management of those monuments in the care of the state, which responsibility the 1983 Act transferred to English Heritage. It is proposed to replace these Acts by new legislation within the period of this Management Plan (see below Part 6, Issue 2).

The Ancient Monument (Class Consent) Order 1994 details certain activities – including established agricultural operations – that are deemed to already be in receipt of scheduled monument consent. Class consent can be revoked for specific activities on a scheduled site but, if this is done, compensation is normally payable. The principal activity that affects Hadrian's Wall is Class 1 Consent, which permits land management activities that were carried on for the five years prior to the Ancient Monuments and Archaeological Areas Act 1979 coming into effect, and that have been continued to be carried out without applying for scheduled monument consent within the past five years. Class 1 Consent permits ploughing to the same depth and in the same area. Other consents apply to specific activities such as 'minimum works necessary in the interests of health and safety' (Class 5)³ or those carried out by specific bodies such as the British Waterways Board for specific purposes.

The Town and Country Planning Act 1990 requires authorities to have regard to environmental considerations, including those relating to the historic, natural and cultural heritage in preparing their development plan policies and proposals.

The Planning and Compulsory Purchase Act 2004 modernises the development plan system by introducing Regional Spatial Strategies and Local Development Frameworks (LDFs), and abolishing Structure, Local and Unitary Development Plans. LDFs will relate to local community strategies and contain the core spatial policies and proposals for the development and use of

land in their area over a period of at least ten years. They must take into account the national and regional planning policies. LDFs comprise a portfolio of documents including area action plans for those areas with significant regeneration or conservation needs, and non-statutory Supplementary Planning Documents.

National Planning and Policy Guidance Notes (PPGs). Those most relevant to the WHS are PPG 15 and PPG 16.

Planning Policy Guidance Note 15 Planning and the Historic Environment, published in 1994, sets out government policy in relation to the wider historic environment. It deals primarily with listed buildings and conservation areas, but it is also the only formal document referring to World Heritage Sites.

Local Authorities are required to formulate specific policies to protect World Heritage Sites, and to place great weight on the need to protect them for the benefit of future generations as well as our own. Development proposals should be scrutinised for their likely effect on the Site and its setting or Buffer Zone and the PPG also suggests that formal environmental assessment should be generally required for significant development. It also recommends the preparation of management plans for World Heritage Sites. The new Planning Circular on World Heritage Sites should come into force during 2009.

Planning Policy Guidance 16, Archaeology and Planning, published in 1990, sets out government policy on how ancient monuments and archaeological sites should be handled under the development plan and development control system. It is designed to provide advice to local planning authorities, property owners, developers, archaeologists, amenity societies and the general public. The PPG is based on the principle that archaeological sites are a finite, non-renewable resource and are valuable both for their own sake and for their role in education, leisure and tourism. Where nationally important archaeological remains (whether scheduled or not) and their settings are affected by proposed development there is a presumption in favour of their physical preservation *in situ*. It also places the responsibility on developers to provide adequate information to satisfy the planning authority of the impact of proposals on archaeological remains and how this will be mitigated. Although this PPG does not specifically refer to World Heritage Sites and their settings or Buffer Zones, the reference to archaeological remains of national importance clearly includes Hadrian's Wall and its associated elements. That this PPG does not distinguish between whether such sites are scheduled or not adds protection to those parts of Hadrian's Wall which are not scheduled for pragmatic reasons, particularly in urban and other built-up areas, and which are not formally part of the WHS.

PPGs are in the process of being replaced by Planning Policy Statements (PPS). **Planning Policy Statement 1** sets out the government's commitment to preserving places of national and international importance:

The government is committed to protecting and enhancing the quality of the natural and historic environment, in both rural and urban areas. Planning policies should seek to protect and enhance the quality, character and amenity value of the countryside and urban areas as a whole. A high level of

³ Statutory Instrument 1994 No. 1381, The Ancient Monuments (Class Consents) Order 1994, 5.

*protection should be given to most valued townscapes and landscapes, wildlife habitats and natural resources. Those with national and international designations should receive the highest level of protection.*⁴

Regional Planning Guidance (RPG) provides the regional framework for the plans and strategic decisions of public, private and voluntary organisations, including the preparation of local authority development plans. Since The Planning and Compulsory Purchase Act 2004, Regional Planning Guidance became the Regional Spatial Strategy (RSS) in each region outside of London, and now forms part of the statutory development plan. Regional Spatial Strategies will subsequently be amalgamated with Regional Economic Strategies into integrated Regional Strategies.

The **North East of England Regional Spatial Strategy** was published in July 2008 and the **North West of England Plan Regional Spatial Strategy to 2021** was published in September 2008. These both stress the significance of Hadrian's Wall as a WHS and the need to protect and conserve it for present and future generations.

Policy 32: Historic Environment of the North East of England Regional Spatial Strategy requires that strategies, plans and programmes and planning proposals should seek to conserve and enhance the historic environment of the region by:

*encouraging and supporting the preparation and review of the management plans for Hadrian's Wall Military Zone World Heritage Site, Durham Cathedral and Castle World Heritage Site, and the candidate World Heritage Site at Jarrow and Monkwearmouth and incorporating their principles and objectives.*⁵

The North West of England Plan Regional Spatial Strategy to 2021 does not feature Hadrian's Wall as prominently as the North East Regional Spatial Strategy but **Policy EM1 (A): Landscape** does require that plans, strategies, proposals and schemes should identify, protect, maintain and enhance natural, historic and other distinctive features that contribute to the character of landscapes and places within the north west including 'the characteristics and setting of World Heritage Sites'.⁶

In addition **Policy W6: Tourism and the Visitor Economy** requires that plans, strategies, proposals and schemes should seek to deliver improved economic growth and quality of life, through sustainable tourism activity in the north west. This should be in line with the principles outlined in **Policy W7: Principles for Tourism Development**, which states that:

*opportunities should be sought which take place in locations adjacent to the National Park and Areas of Outstanding Natural Beauty, thus spreading the economic benefit of tourism; opportunities related to Regional Parks, Hadrian's Wall and Liverpool World Heritage Sites. Tourism activity in these locations should be promoted within the context of the relevant Strategic Frameworks and Management Plans.*⁷

The central sector of Hadrian's Wall forms part of the Northumberland National Park, which was designated in 1956. National Parks are the highest landscape designation, reflecting the natural beauty of their areas.

The Environment Act (1995) updated the purposes of designation:

- conserving and enhancing natural beauty, wildlife and cultural heritage (of the National Park);
- promoting opportunities for the understanding and enjoyment of the special qualities of the areas by the public.⁸

The National Park Authority also has a duty to 'seek to foster the social and economic wellbeing of the local communities.'⁹

Section 62 of the Environment Act also places a duty on all public bodies and public utilities to have regard to the purposes of designation in carrying out their work. **Circular 12/96**, which implemented the Act, explains that this:

*ensures that they take account of Park purposes when coming to decisions or carrying out their activities relating to or affecting land within the Parks.*¹⁰

4 ODPM 2005 Planning Policy Statement 1 (PPS1): *Delivering sustainable development*, 7

5 Government Office for the North East 2008 *Regional Spatial Strategy to 2021*, 137

6 *ibid* 93

7 *ibid* 54

8 DoE 1995 *The Environment Act, Part III: National Parks*, 9

9 *ibid*

10 DoE 1996 *Circular 12/96 Environment Act 1995, Part III: National Parks*



Appendix 4.1

RELEVANT EXTRACTS FROM THE SUMMARY NOMINATION FOR THE FRONTIERS OF THE ROMAN EMPIRE WORLD HERITAGE SITE (2004)

The Roman Empire is of undoubted outstanding universal value. Spanning three continents, the Empire developed and transmitted over large parts of Europe a universal culture based on Greek and Roman civilisation. Its influence reached far beyond its actual boundaries in Europe and around the Mediterranean. Its culture framed and guided the cultures of Europe and beyond up to and including the present day.

The frontiers of the Roman Empire form the single largest monument to this civilisation. They helped define the very extent and nature of the Roman Empire. As a whole, they represent the definition of the Roman Empire as a world state. They also played a crucial role in defining the development of the successor states to the Roman Empire. The frontiers and their garrisons were also a crucial tool of Romanisation on both sides of the border line.

The frontiers also have high significance as illustrating the complexity and organisational abilities of the Roman Empire. With only the technology and communications of a pre-industrial society, the Empire was able to plan, create and protect a frontier of some 5,000 kms, and garrisons of tens of thousands of men. It was then able to manage and use this system, on the whole successfully, for periods of many centuries, both as a physical barrier, and also as the basis for diplomatic and military intervention far beyond the actual frontier line itself.

Physically, the frontiers demonstrate the variety and sophistication of the responses of the Roman Empire to the common need to demarcate, control and defend its boundaries. This had to be done in widely differing circumstances, reflecting the interaction of political, military and topographical features. Mostly, the Empire faced a variety of tribal groups, but on their eastern front they were confronted by the Parthian Empire, a state of equal sophistication and complexity.

In some places the boundary ran along rivers. Elsewhere it edged the desert and elsewhere again it ran through areas with no natural barriers. In each case, the Romans developed a local solution, making use of topographical features and political circumstances to provide a barrier that was an effective control of movement across the frontier as well as a strong military defence. The variety of physical remains have outstanding value in demonstrating the complexity and success of this society in using boundary works to define and protect itself in ways appropriate in each case to the local circumstances.

Criteria under which Frontiers of the Roman Empire World Heritage Site was inscribed

As a whole, the Frontiers of the Roman Empire World Heritage Site meets three criteria for inscription as a cultural WHS, which are those that Hadrian's Wall met in 1987. These are:

Criterion (ii) exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town planning or landscape design

Taken as a whole, the frontiers of the Roman Empire show the development of Roman military architecture from temporary camps through winter quarters for whole armies to the establishment of permanent forts and fortresses. These show through time a development from simple defences to much more complex arrangements.

Linked to this is the development of the infrastructure of roads and waterways, along with systems of linear barriers and watchtowers. The frontier also promoted the development of urbanisation, particularly in central and western Europe, from which it had previously been largely absent.

Criterion (iii) bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared

The Roman frontier is the largest monument of the Roman Empire, one of the greatest of the world's pre-industrial empires. The physical remains of the frontier line, of the forts and fortresses along it, as well as of the cities, towns and settlements associated with it, and dependent upon it, demonstrate the complexities of Roman culture and its spread across Europe and the Mediterranean world.

Unlike the great monuments from the urban centres around the Mediterranean already inscribed as World Heritage Sites, the frontiers show a more mundane aspect of Roman culture, both military and civilian. As such they are evidence of the spread of Roman culture and its adoption by the Empire's subject peoples.

Inscriptions and other evidence demonstrate the extent to which the frontier led to an interchange of peoples across the Empire. To a large extent, this was the result of the movement of military units (eg British units in Romania, or Iraqi boatmen in northern Britain) but there is also strong evidence of civilian movement (eg merchants from the Middle East who settled in Britain, Germany and Hungary). The frontiers also acted as the base for the movement of Roman goods (and presumably ideas) to pass well beyond the Empire.

Criterion (iv) be an outstanding example of a type of building or architectural or technological ensemble or landscape which illustrates a significant stage in human history

The physical remains of the frontiers of the Roman Empire demonstrate the power and might and civilisation of the Romans. As such they are evidence of the development of the Roman Empire and its spread across much of Europe and parts of Asia and Africa. They therefore illustrate the spread of classical culture and of Romanisation which shaped much of the subsequent development of Europe.

Appendix 4.2

NATURE CONSERVATION INTERESTS OF HADRIAN'S WALL WORLD HERITAGE SITE

1. Introduction

The aim of this document is to highlight the main nature conservation interests that exist within Hadrian's Wall WHS. It details objectives and targets for the maintenance and enhancement of geological and geomorphological features and biological habitats that are deemed particularly important within the Site. It is the biodiversity and geodiversity processes, both locally and nationally however, and not the Hadrian's Wall WHS Management Plan, that will be delivering these objectives. The WHS Management Plan will however engender greater awareness and understanding of the World Heritage Site's biodiversity and geodiversity as a means of encouraging and facilitating wider participation in its conservation.

Hadrian's Wall World Heritage Site (WHS) encompasses a wide range of features of natural history interest, including sites of geological, geomorphological and wildlife importance. Geological features include long stretches of the rocky escarpments of the Whin Sill, important outcrops of Carboniferous sedimentary rocks, including several fossiliferous limestones, exposures of red Permo-Triassic sandstones and mudstones, mineralogical sites of international importance, as well as numerous areas of glacial and post-glacial deposits and landforms. Biological habitats and species range from the blanket bogs and heathlands of the rolling upland moors, to the Solway Firth mud and sandflats. Many of these habitats are of international importance, while others are distinctive locally; and while some habitats and species are secure, increasing numbers face a complex range of issues. All of these natural features however, form an integral part of Hadrian's Wall WHS setting, both influencing, and being influenced by the presence of the Wall itself. In order to satisfactorily manage and protect the WHS, the full range of these varied nature conservation interests must be addressed.

2. This document

This document has drawn upon several sources of information, bringing together the nature conservation aspirations of the following.

2.1 Biodiversity Action Plans (BAP)

Having signed up to the Convention on Biological Diversity at the 1992 Earth Summit in Rio de Janeiro, the United Kingdom government published its national strategy for the conservation and sustainable use of biological diversity *Biodiversity: The United Kingdom Action Plan*, in 1995. At the same time, the government established a Biodiversity steering group, whose remit was to develop detailed action plans for the conservation of a range of habitats and species, to explore ways of improving accessibility to and coordination of biological information, to increase public awareness of and participation in nature conservation, and to establish a process to review the delivery of commitments contained in the Biodiversity Action Plan.

One of the key recommendations was that local Biodiversity Action Plans (BAPs) be developed in parallel to the national process, to ensure that national targets for habitats and species be translated into effective action at the local level. There are two local BAPs that cover the majority of Hadrian's Wall WHS: Cumbria and Northumberland. The Newcastle and North Tyneside local BAPs also cover some of the WHS.

2.2 Geodiversity

Geodiversity is the variety of geological environments, phenomena and active processes that make landscapes, rocks, minerals, fossils, soils and other superficial deposits that provide the framework for life on earth. Geodiversity is the link between people, landscapes and their culture through the interaction with biodiversity, soils, minerals, rocks, fossils, active processes and the built environment. Geodiversity is thus fundamental to biodiversity.

It is important to understand the physical basis of the natural landscape in order to fully understand the biological and human landscape. Despite this, the concept of geodiversity is just establishing a place in planning policies, following some time after the incorporation of biodiversity planning. A local geodiversity action plan has been written for the Northumberland National Park and surrounding area and is just starting to be implemented. The incorporation of geodiversity issues within the present document contributes to one of the actions in the Plan. The publication of *Ancient Frontiers*¹¹, which describes the geology and landscape of the central part of the Hadrian's Wall area, also helps to make links between the geology and archaeology of the WHS.

3. Nature conservation interests

3.1 Overview of nature conservation interests

There are many key features of nature conservation interest within Hadrian's Wall WHS.

Geological sites embrace a variety of features of interest across a wide spectrum of earth science. In addition to possessing numerous sites of importance in illustrating key geological features of importance in both the local and national context, Hadrian's Wall WHS includes several sites with more specialised interest and significance. These include several localities of considerable palaeontological, stratigraphical, structural, mineralogical, and geomorphological significance. Sites of geological interest include natural exposures, abandoned quarry workings, spoil heaps from quarries and underground mines, natural springs and landscape features, including landscapes partly modified by human intervention. The distribution and essential features of sites within each of these broad topics are discussed more fully below, together with comments on likely or potential threats to their integrity.

Wildlife sites comprise several types of mires, including upland blanket bogs and lowland raised mires, which both have very characteristic plant and animal communities of international importance. Heathland is another important upland habitat, not only for its invertebrate communities, but also as a feeding and breeding ground for several key wader bird species. The WHS

¹¹ Pickett, E., Young, B., Lawrence, D., Clarke, S., Everest, J., Thompson, G. and Young, R. 2006 *Ancient Frontiers - Exploring the geology and landscape of the Hadrian's Wall area*. British Geological Survey.



holds several loughs that have naturally moderate nutrient levels, and are nationally significant for their wetland plant communities. The River Eden is an example of an entire river system in good condition from source to sea and is internationally designated as a result. Herb-rich Whin Sill grasslands are an extremely distinctive habitat within this WHS in Northumberland, where rare species such as wild chives and maiden pink can be found. Coastal habitats of importance include saltmarsh, mudflats, sand flats, and sand dunes. These are of national and international importance for wintering wildfowl and wading birds and the Solway Firth forms a vital link in a chain of west coast estuaries for migrating birds. The saltmarshes are home to the natterjack toad, which is endangered in the United Kingdom.

In addition, there are several other habitat types of great importance, such as upland semi-natural woodlands and hay meadows. In section 5.1 the key habitats have specific action plans, while summary information is given for the remainder. Details are given of how the habitats are covered by national and local BAPs, and from which Habitat Action Plan (HAP) the targets are selected.

There are many **species of international importance**. Section 6.1 has details of those listed for internationally designated sites within the WHS. These include otter, a resident of the River Eden; three species of lamprey of the River Eden and Solway Firth; and numerous waterfowl and waders, including whooper swan, barnacle geese and golden plover, all of which regularly use the upper Solway Firth. In addition there are numerous examples of species of national or regional importance, such as: the red squirrel; wild chives, which only grow in the Whin Sill grasslands; the large heath butterfly, present on many of the bogs; and several waders that use both the Solway Firth and the uplands. Section 6.2 has details of these.

4. Nature conservation designations

Hadrian's Wall WHS contains many areas that have been designated in order to conserve landscape and nature conservation interests. While the distribution of wildlife and natural features does not follow human boundaries there is a case for establishing, promoting and resourcing nature conservation within identified areas. The identification and designation of special areas helps to define management objectives and can help to bring in funds for land management. There is a range of designations that include statutory and non-statutory sites and those originating from an international, national, or local level. See accompanying maps and section 6.3 for details and locations of designated sites.

4.1 International

RAMSAR SITES

These sites are designated for the protection of wetlands of international importance, especially as a waterfowl habitat. There are three Ramsar Sites in Hadrian's Wall WHS.

The Upper Solway Flats and Marshes: Located in Cumbria, this site forms one of the largest continuous areas of intertidal habitat in the United Kingdom. This site qualifies for its wintering wildfowl population, which includes internationally important numbers of the following migratory species: barnacle geese, bar-tailed godwit, curlew, knot, oystercatcher, pink-footed geese, pintail, redshank, scaup and whooper swan. It also

qualifies for supporting over 10% of the British population of natterjack toad and a population of great-crested newt.

Irthing Mires: In both Northumberland and Cumbria, The Wou component Site of Special Scientific Interest (SSSI) is within Hadrian's Wall WHS. While the majority of the Irthing Mires are classified as raised mire, The Wou is a valley mire.

Northumbria Coast: In the WHS setting at South Shields, Northumberland, this proposed Ramsar Site qualifies for the internationally important populations of purple sandpiper and turnstone.

SPECIAL PROTECTION AREAS (SPAs)

Sites that contain internationally significant assemblages of birds may be designated as SPAs under the EC *Directive on the Conservation of Wild Birds* (known as the *Birds Directive*). Once established, appropriate steps must be taken to avoid pollution or deterioration of habitats or any disturbances affecting the birds. There are two SPAs in Hadrian's Wall WHS.

The Upper Solway Flats and Marshes: This qualifies as an SPA for supporting the following Annex 1 species: barnacle goose, whooper swan, Bewick's swan and golden plover. It also qualifies for its internationally important assemblage of waterfowl, which include the following migratory species in internationally important numbers: pink-footed goose, shelduck, oystercatcher, sanderling, knot, curlew, redshank and turnstone.

Northumbria Coast: This is a potential SPA; see above for description.

SPECIAL AREAS OF CONSERVATION (SACs)

Implemented under the EC Habitats Directive 1994, this designation offers wider-ranging protection to SSSIs that contain good examples of habitat types and species that are rare or threatened in a European context. All sites within the WHS are now fully designated SACs. SACs and SPAs are called *Natura 2000* sites and are covered by **The Conservation (Natural Habitats, etc) Regulations 1994 (Habitats Regulations)**. Under these regulations, plans or projects likely to have a significant effect on the European sites require that an appropriate assessment be completed before consent is granted for the plan or project. Habitats and species included in the reasons for site recommendation are either of European priority interest or European interest.

NORTHUMBERLAND

Border Mires, Kielder – Butterburn: Also in Cumbria, Muckle Moss component Site of Special Scientific Interest (SSSI) is within the WHS. It is recommended due to the European priority interests of the blanket bog. Two types of heathland habitats are of European interest.

Roman Wall Loughs: This SAC is designated because the loughs are good examples of naturally nutrient-rich lakes with emergent and submerged vegetation.

CUMBRIA

Drigg Coast: This site is recommended due to the European priority interests of the coastal dune heathland, for which this is considered to be one of the best areas in the United Kingdom. The estuaries and dunes with creeping willow are of European interest.

River Eden: This site is recommended due to the European priority interests of the alder woodland on floodplains; the presence of five fish species, otter and riparian habitats are of European interest.

Solway Firth: This site is recommended due to the European priority interest of the dune grasslands. A further eight habitats present are of European interest.

Solway Mosses: This site is also in Dumfries and Galloway; only Bowness Common, Drumburgh Moss and Glasson Moss component SSSIs are within the WHS. This site is recommended due to the European priority interest of active and degraded raised bogs.

4.2 National

SITES OF SPECIAL SCIENTIFIC INTEREST (SSSIs)

SSSIs form the backbone of statutory site protection in the United Kingdom. They are designated by Natural England under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), in recognition of their national importance for the entire spectrum of nature conservation, including, geological, geomorphological and wildlife interest. There are eight SSSIs in the Northumberland section of the WHS. The main habitats are mesotrophic loughs, Whin Sill grasslands and mires, together with four geological designations. In WHS in Cumbria there are 14 SSSIs. The main habitats are lowland raised mires, coastal saltmarsh, mud and sand flats and sand dunes.

NATIONAL NATURE RESERVES (NNRs)

These reserves, declared under the Wildlife and Countryside Act 1981, are SSSIs that are either owned by or managed by agreements with Natural England, and are deemed to be of national importance. There are four in Hadrian's Wall WHS; Greenlee Lough and Muckle Moss in Northumberland and Drumburgh Moss and South Solway Mosses in Cumbria.

4.3 Local

SITES OF NATURE CONSERVATION IMPORTANCE (SNICIs)

These non-statutory sites are considered to be of nature conservation importance at a county level, and are selected by the county Wildlife Trust. In Northumberland, designations are made on an ecological and geological basis, while in Cumbria the selection is purely ecological with the Regionally Important Geological/Geomorphological Sites (RIGS) system running parallel. Although appropriate management cannot be assured on these sites, they are subject to planning protection within both structure and local plans. In the WHS within Northumberland there are 20 SNICIs, and in the Cumbria area there are 24; both county's SNICIs cover a wide range of features, habitats and species.

REGIONALLY IMPORTANT GEOLOGICAL AND GEOMORPHOLOGICAL SITES (RIGS)

These non-statutory sites are considered to be of conservation or research importance at a regional level. Hadrian's Wall WHS is covered by two RIGS groups, which select and propose designation of sites for RIGS status. The Cumbria RIGS group covers the Cumbrian sector of the WHS and the RIGS sites so far designated in Cumbria are listed in section 6.3. The

Northumbria RIGS group covers the Northumberland sector but has not been very active in recent years. There are plans to reinvigorate this group and investigate the designation of RIGS sites in Northumberland.

Although appropriate management cannot be assured on these sites, they are subject to planning protection within both structure and local plans.

5. Key landscape and geological sites and features

Hadrian's Wall WHS includes many important landscape and geological sites and features. A geodiversity audit and action plan has been produced for the Northumberland National Park and surrounding area, which covers the central section of the WHS¹². This document identifies and highlights important features of sites and discusses some attributes that may be interpreted in the future. This work is supported by that of Young¹³ which identified and outlined the attributes of key sites within geologically distinct sections of the WHS. This author also drew attention to the very considerable potential to develop a variety of interpretation initiatives, at a variety of levels, to bring the importance and interest of many of these to a wide audience.

The geological and landscape interest within the WHS encompasses a variety of thematic issues. In the following section the main areas and sites of interest within each of these themes are briefly outlined. More detailed comments on individual sites and features can be found in the *Geodiversity Audit and Action Plan* (2007) and Young (2000). A list of the most important literature references to the geology and landscape of the WHS can also be found in these publications.

5.1 The main geological and landscape themes in the WHS

EXPOSURES OF CARBONIFEROUS ROCKS

Numerous exposures, both in natural outcrops and in abandoned quarry workings, are to be seen throughout the WHS, especially within the upland areas. Only those exposures considered to exhibit some feature, or features, of particular interest or importance are listed by Young (2000).

Good exposures of Coal Measures sandstones are to be seen in the eastern portions of the WHS, mainly within the western suburbs of Newcastle upon Tyne. Quite apart from their interest as typical examples of these important elements in the geological succession, several of these sandstones have been quarried for building stone: some Roman quarrying is likely to have supplied stone for construction of the Wall and its associated structures.

Coal Measures rocks, including several coal seams, are again seen in well-exposed coastal sections on the Cumbrian coast near Parton, especially in Providence Bay.

Exposures of sandstones and limestones within the Stainmore Formation, the Carboniferous lithostratigraphical unit which lies immediately beneath the Coal Measures, are to be seen at various places in the country between Heddon-on-the-Wall and Greenhead. Particularly important sites include the old quarries

¹² Lawrence, D.J., Arkley, S.L.B., Everest, J.D., Clarke, S.M., Millward, D., Hyslop, E.K., Thompson, G.L., and Young, B. 2007. *Northumberland National Park: Geodiversity Audit and Action Plan*.

¹³ Young, C. 2000 Hadrian's Wall, United Kingdom. In *Management planning for archaeological sites*. Los Angeles: Getty Conservation Institute, 60-67



at Harlow Hill, where fine sections through the Newton Limestone may be seen. The quarries at Brunton Bank and Black Pasture, east of Chollerford expose sections through the Great Limestone and the overlying sandstone respectively: Brunton Back Quarry offers one of the finest sections through the Great Limestone in this part of Northumberland and includes features of considerable palaeontological significance (see below). Black Pasture Quarry reveals spectacular exposures of ripple-marked sandstone bedding planes. The older parts of the quarry were formerly maintained as a Local Nature Reserve by the Northumberland Wildlife Trust. Adjacent parts of the quarry are still worked intermittently as a source of high-quality building stone. The remaining sections of Crindledykes Quarry expose further fine sections through the Great Limestone. Of particular interest is the eastern quarry, which exposes a striking anticlinal fold of a type characteristic of this part of Northumberland. Such folds, or 'rolls' as they were known by the quarrymen, are thought to give evidence of significant earth movements related to major structural features during deposition of the Carboniferous rocks. The gorge-like valley of Haltwhistle Burn provides dramatic sections through several thick sandstone units, together with some valuable sections through limestones and coal seams, within this part of the Carboniferous succession.

Rocks belonging to the Yoredale Group, of Lower Carboniferous age, crop out within parts of the upland sections of the WHS. Fine sections through the Three Yard Limestone and its associated beds, including former workings for ironstone in the shales above this limestone, are to be seen in the Brackies Burn and Bradley Burn near Vindolanda. Abandoned quarries in the Four Fathom Limestone are important elements in the landscape in the vicinity of the Milecastle Inn, north of Haltwhistle. There are, in addition, traces of old workings for coal and ironstone from the beds beneath the limestone in this area. Nationally important fossiliferous exposures of the Lower Bankhouses Limestone are exposed in the Tipalt Burn, near Greenhead (see below).

The nature and physical properties of the numerous sandstones within this part of the WHS have clearly had a profound influence on the design and construction of the wall and its associated structures. Moreover, these, together with the limestones and other rocks, clearly play a major role in influencing the distribution and character of numerous plant communities.

EXPOSURES OF PERMO-TRIASSIC ROCKS

West of Brampton the route of Hadrian's Wall crosses extensive outcrops of Permo-Triassic rocks. In north-west England these comprise parts of the St Bees and Kirklington sandstone formations of the Sherwood Sandstone Group, together with the Stanwix and Eden shale formations, the local representatives of the thick succession of mudstones and shales known as the Mercia Mudstone Group. Over much of the area covered by the WHS these rocks are concealed beneath superficial, or drift, deposits of Quaternary or later date, though good exposures are seen in places.

The basal breccias of the Permo-Triassic succession are exposed locally in streams near Lanercost Priory and the overlying Eden Shales are seen near Lanercost Bridge.

Excellent exposures of the red St Bees Sandstone are seen in the

sides of the River Gelt gorge in Geltsdale, where this rock has been much quarried for building stone. The famous Written Rock of Gelt is a Roman inscription on a Roman quarry face. St Bees Sandstone is also seen in the sea cliffs and foreshore at Maryport.

The rather similar Kirklington Sandstone is exposed in the Cam Beck and in the River Irthing near Ruleholme Bridge. Especially fine sections through these beds are exposed in the low sea cliffs at Rockliffe on the Solway coast.

SITES OF PALAEOLOGICAL IMPORTANCE

Several of the geological sites outlined above also exhibit features of palaeontological importance.

The large exposures of Great Limestone in Brunton Quarry, near Chollerford, include fine sections through the Chaetetes Bed, a bed rich in fossils of the sclerosponge *Chaetetes depressus*, which has very considerable significance as an important stratigraphical marker horizon across large parts of northern England. Brunton Quarry is the original site from which this bed was described and thus has considerable significance as an important key reference section.

Exposures of the Lower Bankhouses Limestone in the Tipalt Burn, upstream from Thirlwall Castle, exhibit highly fossiliferous limestones with a rich fauna of molluscs, echinoderms, bryozoans, corals and brachiopods. The occurrences have been compared with the reef-knoll limestones of the Craven area of Yorkshire and are important in understanding the evolution and palaeoecology of the Carboniferous rocks of Northumberland.

Intermittent exposures of submerged forest deposits on the Solway coast near Glasson and Cardrunk contain abundant remains of Holocene plant remains.

EXPOSURES OF WHIN SILL ROCKS

Hadrian's Wall WHS includes extremely important sections of this major unit in the geology of northern England. The Whin Sill-swarm comprises a suite of closely related sills and dykes composed of dolerite, intruded into the surrounding Carboniferous rocks about 295 million years ago. The Whin Sill of Northumberland is the original sill of geological science. The name 'sill' originated in the north of England as a quarryman's term for any roughly horizontal body of rock. 'Whin' is another quarryman's term meaning a hard black rock. Since the intrusive igneous origin of the Whin Sill was recognised in the 19th century, the term 'sill' became adopted throughout the world to describe any more or less flat-lying, concordant body of intrusive igneous rock.

The intrusion of huge volumes of molten rock at temperatures of around 1000°C caused substantial alteration, or metamorphism, of the surrounding rocks. Such metamorphic rocks can be seen locally adjoining the Whin Sill in the WHS.

The most striking exposures of Whin Sill within the WHS are also some of the area's most striking and best known scenic features. For much of the central parts of its course the Wall is sited on the naturally defensive, north-facing escarpment of the Whin Sill: the crags around Housesteads, Steel Rigg and Hotbank Crags are some of the best known landscape features in the north of England. Particularly fine sections through the entire thickness

of the sill, and showing the top and bottom contact with Carboniferous rocks, are beautifully exposed in the abandoned quarries at Cawfields and Walltown. Large, detached blocks, or rafts, of sandstone and limestone, broken off during the intrusion of the sill can be seen embedded in dolerite near Sewingshields Farm. Erosion of joints and faults within the sill give rise to conspicuous gaps in the escarpment at such places as Busy Gap, Windshields Crags and the Nine Nicks of Thirlwall.

The Whin Sill supports a distinctive thin alkaline soil, which in turn supports characteristic plant communities.

SITES OF MINERALOGICAL IMPORTANCE

Hadrian's Wall may be seen as marking the northernmost extremity of the base metal mineralisation of the Northern Pennine Orefield. No definite evidence of Roman working of these deposits has ever been established, though in view of the Roman exploitation of similar deposits elsewhere in Britain it seems inconceivable that the Romans were unaware of the substantial deposits close to the Wall country. A number of veins, belonging to the Northern Pennine suite, crop out close to Hadrian's Wall, and several enjoyed distinguished histories of exploitation in the 18th, 19th and 20th centuries. Lead was worked from mines at Fallowfield, near Acomb; Langley Barony, near Haydon Bridge and Stonecroft, Greyside and Settlingstones, near Newbrough. Associated with the lead ore (galena) were substantial quantities of other, non-metallic, or gangue, minerals. These include minerals such as baryte (barium sulphate) and witherite (barium carbonate). With the demise of lead mining towards the end of the 19th century, following a collapse in world prices, some of these gangue minerals attracted commercial interest as a source of raw materials for the manufacture of a wide variety of chemical products.

Of particular interest in Northumberland was the mineral witherite. Whereas elsewhere in the world this is a very rare mineral, it occurs in Northumberland in very large concentrations. Most notable of these were the deposits at the Fallowfield and Settlingstones mines. Many thousands of tonnes of the mineral were worked here with production coming to an end at Settlingstones as recently as 1969. Associated with witherite at Fallowfield was another very rare mineral, the double carbonate of barium and calcium, known as alstonite. This extremely rare mineral, known from only a small handful of other world localities, was first recognised as a new mineral in the 19th century, from specimens collected both from Fallowfield and another mine near Alston. Fallowfield is today the world's only easily accessible source of samples of this mineral: it can be found on several of the spoil heaps. Witherite can still be found at Fallowfield, though it is much more abundant on the remaining spoil heaps at Settlingstones. Both sites are designated as SSSIs for their mineralogical importance.

The remaining spoil heaps at Stonecroft and Langley Barony mines also contain important concentrations of interest mineral assemblages including baryte, sphalerite and locally the uncommon barium zeolite mineral known as harmatome.

Several of these spoil heaps are also important hosts for small, but extremely important communities of heavy metal-tolerant plants, known collectively as metallophytes. These small plants, which include spring sandwort (*Minuartia verna*), alpine pennycress (*Thlaspi alpestre*), scurvy grass (*Cochlearia officinalis*)

and mountain pansy (*Viola lutea*) have evolved to be tolerant of otherwise prohibitively toxic concentrations of metals such as lead and zinc.

SITES OF QUATERNARY AND RECENT GEOLOGICAL INTEREST

Hadrian's Wall WHS includes several sites with deposits or landscape features formed during, or since, the last glacial period.

Glacial scouring of the pre-glacial landscape has resulted in a dramatic accentuation of the east-west striking features associated with the alternating resistant and less-resistant Carboniferous rocks and Whin Sill of the upland sections of the Wall country. Several of the loughs, including Bromlee Lough, Greenlee Lough and Crag Lough, which are so characteristic of this area, occupy shallow basins eroded by glacial scour. Accumulations of till, or boulder clay, mantle large areas, in places forming ovoid hillocks known as drumlins, good examples of which can be seen in the area between Greenhead and Carlisle. Natural sections in boulder clay are comparatively rare, as the material rapidly becomes vegetated. However, the banks of the River Irthing, below the Roman fort at Birdoswald, have been made steep by river erosion and commonly exhibit small sections through typical stony boulder clay.

Extensive accumulations of sands and gravels, formed in part by glacial meltwaters, form highly distinctive hummocky country in places, notably around Brampton.

The development of bogs in shallow basins on the post-glacial land surface has resulted in the formation of many of the ecologically important bogs and mires. Substantial accumulations of peat have also developed within the alluvial deposits of the Solway lowlands.

Fluctuations in sea level in the post-glacial period resulted in the formation of forests at levels below present day sea level. Subsequent sea level adjustments have drowned these deposits, some of which are preserved and are commonly exposed on the foreshore at Glasson and Cardrunk.

Marine and estuarine sedimentation around the margins of the Solway has produced extensive flat, low-lying accumulations of mainly silt and clay grade sediments, including the Solway saltmarshes.

Accumulations of Roman material, including numerous artefacts, in unusual conditions at Vindolanda have yielded a wealth of remarkably preserved material. These deposits are of some interest mineralogically for the abundance within them of the uncommon mineral vivianite (an iron phosphate) formed by reactions of iron- and phosphorous-rich debris in an anaerobic environment.

Landscape features

The landscape of Hadrian's Wall WHS owes much to the underlying geology. Reference has already been made to the distinctive landforms associated with particular geological units. It is, however, worth emphasising that the relationship and influence of geology on the character of landforms is more clearly apparent in this area than in most parts of the United Kingdom.



5.2 Designations

Several sites recognised as having conservation importance are designated as SSSIs, RIGS or SNClS. These are listed in section 6.3 of this appendix.

5.3 Threats

The main threat to the continued availability, and thus usefulness, of geological sites applies to abandoned quarries. Abandoned quarries commonly attract interest for landfilling. Whereas large-scale use by Local Authorities may not constitute a major threat to such sites in this area, their use as sites for disposal of farm waste, or as unauthorised sites attracting fly tipping, may pose a significant threat. In addition, natural deterioration by progressive degrading of the exposed faces and by the progressive growth of vegetation may ultimately lead to the obliteration of features of interest.

5.4 Opportunities

Many sites offer considerable research and educational potential, both in terms of their intrinsic geological interest and as an important aspect of continuing investigation of the archaeological and historical interest of the WHS. The very considerable volume of sandstone employed in the construction of Hadrian's Wall and its associated buildings was clearly supplied from local sources. Whereas Roman exploitation of stone can be recognised with some confidence at several sites, there is considerable scope for further work in this field. No systematic examination of the nature, properties or sourcing of individual sandstone types within the Wall has yet been attempted. This is perhaps surprising in view of the large volume of detailed examination to which the structures of the WHS have been subjected over many decades. Up-to-date geological information, combined with modern techniques in petrological examination, offer important opportunities for studies of this sort. The availability of geological exposures, both natural and man-made, is an important element in undertaking investigations of this sort.

Several sites offer scope for incorporating the features they display into a modern interpretation of the landscape and the area's natural heritage. Very limited on-site, or local, interpretation exists for the WHS. In view of the crucial role of the geological materials and features in shaping the natural and human landscape, as well as their direct involvement in the construction and characteristics of the monuments, enormous and hitherto unexploited opportunities exist to incorporate appropriate geological elements into future interpretation, thus creating valuable links between geology and biodiversity.

Individual themes worthy of consideration for special interpretation include the use of geological materials by Roman and later builders; the geological background and constraints that influenced the nature and siting of the Wall; the unique heritage interest of the Whin Sill and rare minerals such as witherite and alstonite.

5.5 Objectives and targets

Geological and landscape features should be seen as essential parts of the WHS. Their protection, use and interpretation should be accepted as key elements in the overall approach to sympathetic management of the entire natural history resource of the WHS. A geodiversity action plan has been produced for

the area of the WHS within, and immediately adjacent to, the Northumberland National Park (Lawrence *et al* 2007). Objectives and actions from this plan pertaining to the WHS area should be implemented.

A Hadrian's Wall geodiversity action plan should be prepared to cover the entire length of the WHS. This should sit alongside the Northumberland National Park geodiversity plan and existing biodiversity action plans and provide a framework/context for the conservation/management/interpretation of Hadrian's Wall WHS.

6. Key wildlife habitats

6.1 Blanket and raised bog

DESCRIPTION

Peatlands are habitats that develop over several thousands of years as a result of slow vegetation decay in the cool humid conditions of the north and west of the United Kingdom. They tend to be dominated by dwarf shrubs, bog mosses, cottongrass or deergrass, and are important for invertebrate communities, including large heath butterfly, spiders, dragonflies and water beetles. While both blanket and raised bogs are exclusively rain-fed, raised bogs are recognisable by their gently sloping mound form. Lowland raised mires tend to develop on low-lying, level ground, mostly on marine, estuarine or fluvial deposits adjacent to estuaries or on the floodplains of rivers. Active bogs are those in which the peat is still able to accumulate because of the growth of the surface vegetation.

STATUS

Although extensive where it occurs, blanket bog is a globally scarce habitat and it is thought that 10 to 12% of the world's resource is in the United Kingdom. From a total United Kingdom estimate of 1,500,000 hectares, the majority is found in Scotland, with 215,000 hectares occurring in England. Many of the blanket bogs are located along the central section of the WHS and are only five to 20 hectares in size. Many are visible from the Wall itself. Intact lowland raised bog is one of Europe's rarest and most threatened habitats. The 6,000 remaining hectares in the United Kingdom are scattered across a large number of small sites, however one of the largest concentrations of relatively intact raised mire is within the Solway basin. Bogs are also important in storing carbon and ameliorating flooding.

DESIGNATIONS

Blanket bog is listed in Annex 1 of the EC 1992 *Habitats Directive*, and active examples are a priority habitat. Blanket bog is highlighted as being of European priority interest in the Border Mires SAC, for which the area is considered to be one of the best in the United Kingdom. This SAC is also considered to be one of the best areas in the United Kingdom for transition mires and quaking bog. In addition, Solway Mosses SAC is considered to be one of the best areas in the United Kingdom for active and degraded raised bog.

ISSUES OF LOCAL CONCERN

Most blanket bogs are still at risk from past drainage (gripping) which has left them drier and subject to oxidation and erosion. Current issues include excessive grazing, inappropriate burning and possible erosion from recreational use. In addition some areas of high quality are not designated and as a result are not

recognised as high priority for restoration and protection. Lowland raised bogs are mainly threatened by lowering of the water table, and in limited cases, peat and mineral extraction. Blanket bog is covered in the national, Northumberland, and Cumbria BAPs; the objectives and targets below are an amalgamation of all three.

OBJECTIVES AND TARGETS

The resource should be primarily secured through the provision of financial incentives to promote appropriate management, for example through Environmental Stewardship. Priority should be given to safeguard remaining areas of primary bog, ensuring that the full functioning hydrological units supporting the habitat are maintained. Appropriate grazing regimes should be established (though grazing may not be appropriate management for some raised mires), along with the cessation of burning and gripping; afforestation proposals should be directed away from important bog areas. Implications of the *Countryside and Rights of Way (CRoW)* Act may include disturbance to important species of ground-nesting birds and possible erosion. This should be monitored where appropriate. Alternatives to peat should be promoted, and all appropriate sites should be protected by designation.

- Maintain the current extent and overall distribution of blanket and raised bog.
- Improve the condition of those areas of blanket and raised bog that are degraded but readily restored, so that the total area in, or approaching, favourable condition by 2005 is around 30% of the total extent that is restorable.
- Introduce management regimes to improve to, and subsequently maintain in favourable condition a further 25% of degraded blanket and raised bog by 2010, and a further 20% by 2015; resulting in a total of around 75% of the total extent of restorable blanket and raised bog in, or approaching, favourable condition.

6.2 Heathland

DESCRIPTION

Heathland is a general term applied to describe treeless landscapes dominated by dwarf-shrubs of the heather family. There are several types of heathland. Dry heaths are found on free-draining, nutrient-poor generally acidic soils, which characteristically occur as mosaics with acid grasslands. They are most commonly dominated by ling, along with bell heather, bilberry, crowberry, bearberry and western gorse. Wet heaths are distinguished by cross-leaved heath and/or purple moor grass, and tend to occur in acidic, nutrient-poor shallow peat or sandy soil with impeded drainage, where they are often present with blanket bog. Heathlands are found in both the lowlands and uplands. Although this habitat type is generally poor in plant species it supports specialised communities of bird and invertebrate fauna. Heathlands have traditionally been maintained by low-intensity grazing.

STATUS

Upland heathland is recognised as being of international importance because its distribution is largely confined to the western sea-board of Europe. The United Kingdom resource is very significant, comprising an estimated 2,500,000 hectares; with the English extent estimated at 215,000 hectares. Upland heathlands are found mainly along the central sections of the WHS.

DESIGNATIONS

The Border Mires SAC holds several types of heath included on Annex 1 of the *EC Habitats Directive*. It is considered to be one of the best areas in the United Kingdom for European dry heath and the area is also considered to support a significant presence of northern Atlantic wet heaths with *Erica tetralix*.

ISSUES OF LOCAL CONCERN

Upland heathland has suffered losses due to excessive grazing, especially in winter, conversion to grassland and forestry (which not only causes direct loss, but also provides habitat for corvids, which predate ground-nesting birds), poor burning practices leading to grass domination, agricultural intensification and recreational disturbance.

Heathland is covered in the national, Northumberland, and Cumbria BAPs; the objectives and targets below are an amalgamation of all three.

OBJECTIVES AND TARGETS

The resource should be primarily secured through the provision of financial incentives to promote appropriate, sympathetic management, for example through Environmental Stewardship. Priority should be given to reverting to more traditional low-intensity grazing, and appropriate burning practices should be encouraged. Afforestation proposals should be directed away from important heathland areas; implications of the *CRoW* Act need to be considered. Re-creation of heathland should aim to reduce habitat fragmentation, where appropriate, by linking small, vulnerable areas; while at the same time favouring the creation of mosaics and transitions with other habitats. All appropriate sites should be protected by designation.

- Maintain the current extent and overall distribution of the heathland that is in favourable condition.
- Achieve favourable condition on all upland heathland SSSIs by 2010, and achieve demonstrable improvements in the condition of at least 50% of semi-natural heath outside SSSI by 2010 (compared with their condition in 2000).
- Seek to increase dwarf shrub cover to a minimum 25% where it has been reduced or eliminated due to inappropriate management.
- Initiate management to recreate areas of heath by 2005 where it has been lost due to agricultural improvement or afforestation, with a particular emphasis on reducing fragmentation of existing heathland.

6.3 Mesotrophic loughs

DESCRIPTION

Loughs can be classified according to their nutrient status. Mesotrophic waters have naturally moderate nutrient levels and can potentially support the highest diversity of plants and animals of any waters. Within mesotrophic loughs there can be a number of different aquatic plant communities depending on substrate, depth and exposure to wind-induced turbulence. In sheltered bays with stable water columns, pondweeds dominate with quillwort and water milfoil, while in shallower waters water lobelia is more common. Dragonflies, water beetles, stoneflies and mayflies are well represented in mesotrophic waters, as are coarse and salmonid fish. Wildfowl use these loughs as wintering and breeding habitats. Crayfish have been recorded in Broomlee Lough and Greenlee Loughs. Otters also use the loughs.



STATUS

Mesotrophic loughs and lakes are relatively infrequent in the United Kingdom, and largely confined to the margins of upland areas in the north and west; there are no exact figures. There are several important mesotrophic loughs along the central sections of the WHS, from which most are visible.

DESIGNATIONS

The loughs in the Roman Wall Loughs SAC are considered to be some of the best in the United Kingdom, with magnopotamion or hydrocharition-type vegetation (pondweeds), which are of European interest. Greenlee Lough, which is covered by this SAC, is also a NNR, managed by the Northumberland National Park. In the River Eden SAC the oligotrophic to mesotrophic standing waters are of European interest. Here the area is considered to be one of the best in the United Kingdom, to be characterised by vegetation of the shoreweed (*Littorelletea uniflorae*) and/or quillwort (*Isoetes macrospora*).

ISSUES OF LOCAL CONCERN

These waters are vulnerable to artificial nutrient enrichment (for example, from sewage effluent, nutrient-rich water running off adjacent agricultural or forested land), changes in adjacent land use (for example, ploughing of land, land drainage, afforestation), water abstraction, lowering of the water table, acid deposition, recreation, fishing and angling.

Mesotrophic waters are specifically covered in the national and Cumbria BAPs; the objectives and targets below are an amalgamation of both.

OBJECTIVES AND TARGETS

The resource should be primarily secured through the provision of financial incentives to promote appropriate, sympathetic management, for example through Environmental Stewardship. Priority should be given to implementing measures to improve water quality and maintain the characteristic ecology of the loughs. Disturbance from forestry and agriculture should be tackled by creating and maintaining sufficiently large buffer zones, and zoning schemes implemented to reduce recreational impacts. Appropriate management of the margins of standing water should be promoted, for example by the exclusion or management of livestock. General awareness and understanding of the wildlife value of the loughs should be raised.

- Maintain and enhance the current extent, diversity, condition and characteristic ecology of the loughs and associated habitats through site safeguard and appropriate management.
- Encourage sympathetic management of the loughs' catchment areas.
- Allow for the creation or restoration of additional wetland habitats where appropriate and extend the wetland resource.
- Control pollution and recreational impacts on the loughs.
- Monitor levels of eutrophication and blue green algae blooms.

6.4 Rivers and riparian habitats

DESCRIPTION

Rivers are dynamic systems which, in their natural state, continually modify their form and consequently their immediate environment. They have a diverse range of features, such as riffles, shingle banks and pools, which each support a diverse range of plant and animal species. These channel features are complemented by bank features (riparian habitats), such as earth or rock cliffs, stands of reeds, woodland or herb-rich

grasslands. The nutrient status and physical structure of the river are the main determinants of river habitat quality. Rivers act as natural wildlife corridors.

STATUS

The true extent of this habitat in the WHS is unknown. The WHS follows the Rivers Eden and Irthing along much of their lengths in Cumbria.

DESIGNATIONS

Rivers with floating vegetation often dominated by water crowfoot (*Ranunculus spp.*), are of international conservation importance, and as such are listed in Annex 1 of the EC *Habitats Directive*. This habitat is highlighted as being of European interest in the River Eden SAC, as the area is considered to be one of the best in the United Kingdom.

ISSUES OF LOCAL CONCERN

Rivers are currently at risk from pollution, including nutrient enrichment, toxic discharges and sheep dip, the spread of invasive pernicious species, inappropriate channel and bankside management, and the effects of catchment land use including agricultural intensification and developments in the flood plain.

Rivers are covered in the national, Northumberland, and Cumbria BAPs; the objectives and targets below are an amalgamation of all three.

OBJECTIVES AND TARGETS

Best practice has developed from the acknowledgement that river management has to be addressed in a more holistic manner, not on a site-by-site basis, taking account of catchment influences on the river. Water quality and flows should be maintained and, wherever appropriate improved, and appropriate bankside management should be promoted. Priority should be given to increasing our understanding of the status and requirements of key species and the impact of water abstraction on ecological processes in watercourses. Degraded river channels and floodplain features should be restored and rehabilitated. All appropriate sites should be protected by designation.

- Maintain the quality of existing natural channels, floodplain features and wildlife.
- Protect, maintain and, wherever appropriate, improve water quality. Achieve good (class A or B) Biological Water Quality on all watercourses by the 2010 General Quality Assessment (EA).
- Enhance degraded river channels, floodplain features and dependent wildlife. Increase the area of bankside agricultural land in conservation management agreements by 25% by 2005.

6.5 Herb-rich Whin Sill grasslands

DESCRIPTION

The Whin Sill, upon which west Northumberland sections of the Wall are built, is intruded igneous rock, which forms 'cuestas' (asymmetric ridges formed by the edge of a tilted resistant rock stratum, comprising a scarp slope and a dip slope). These thin soils support an unusual and specialised flora. The many outcrops support an impressive array of basiphilous spring annuals and drought-tolerant perennial herbs, while the scarp crags and block scree under the Wall are rich in ferns. Of particular note are field garlic, chives, maiden pink, several species of hawkweeds and stonecrops, spignel and spring

cinquefoil. In the dip slopes, where drainage is impeded, very different plant communities dominate, often including purple-moor grass.

STATUS

The extent and status of Whin Sill grasslands in Northumberland has been surveyed by the Northumberland Wildlife Trust. The quality of the grasslands seems to have declined since the last survey in the 1980s and is some cause for concern. These grasslands occur in localised sections along the central portion of the WHS.

DESIGNATIONS

The Allotee to Walltown SSSI in Northumberland has been specifically designated for Whin Sill grasslands. There are no internationally designated sites for this habitat type.

ISSUES OF LOCAL CONCERN

These grasslands are at risk from increased erosion as a result of recreational activity along the Wall, improvement of agricultural land and overgrazing, and rabbit grazing.

Whin Sill grasslands are covered in the Northumberland BAP; the objectives and targets below incorporate some of the targets in the plan, are similar to those set for other grassland types.

OBJECTIVES AND TARGETS

The resource should be primarily secured through the provision of financial incentives to promote appropriate, sympathetic management. These should include appropriate grazing levels and management of recreational activity. Due to the small and fragmented nature of this resource, the restoration and enhancement of degraded Whin Sill grasslands should be an essential element of the conservation strategy of this habitat. All appropriate sites should be protected by designation.

- Protect herb-rich Whin Sill grasslands from inappropriate land use and recreational pressures.
- Encourage environmentally sensitive management of herb-rich Whin Sill grasslands.
- Review and use where appropriate existing measures, such as Environmental Stewardship, to encourage appropriate management.
- Find appropriate sites for restoration of the habitat working with partners such as quarry operators.
- Establish a source of local provenance seed for site restoration.

6.6 Saltmarsh

DESCRIPTION

Saltmarsh in the United Kingdom comprises the upper, vegetated portions of intertidal mudflats, and is usually restricted to sheltered locations, such as estuaries. The development of saltmarsh vegetation is dependent on the presence of intertidal mudflats, and consists of a limited number of salt-tolerant species. Although the lower limits tend to be fairly species poor, with only the pioneer glasswort (*Salicornia spp*) generally present; the mid-upper marsh is more species-diverse and traditionally grazed. Saltmarshes act as breeding sites for waders, gulls and terns, feeding sites for wildfowl, food sources for passerine birds, and coastal defence. The Upper Solway saltmarshes support over 10% of the United Kingdom's rare natterjack toad, where they breed in landward edge pools.

Saltmarshes provide sheltered nursery sites for several species of fish.

STATUS

The most recent estimates put the total extent of saltmarsh in the United Kingdom at 45,500 hectares, with 35,500 hectares of this in England. There is a total of 2,278 hectares of saltmarsh in the Solway Firth area of the WHS. Together with mudflats, the extent of this habitat in the upper Solway Firth forms one of the largest continuous areas of intertidal habitat in the United Kingdom.

DESIGNATIONS

Estuaries as a whole are of European interest in both the Solway Firth and Drigg Coast SACs, both of which are considered to be among the best areas in the United Kingdom for the resource. Atlantic salt meadows are also highlighted as being of European interest in the Solway Firth SAC, again because the area is considered to be one of the best in the United Kingdom. The Royal Society for the Protection of Birds (RSPB) owns a nature reserve at Campfield Marsh, where saltmarsh is one of the three main habitat types. Most of the saltmarsh habitat in the WHS is in the Solway Coast Area of Outstanding Natural Beauty (AONB).

ISSUES OF LOCAL CONCERN

Since medieval times saltmarshes have been reduced in extent by land claim, which has continued until very recently. Saltmarshes have traditionally been extensively grazed. Either intensive grazing, or a complete lack of it, can have a detrimental effect. Other issues include erosion and 'coastal squeeze', and other human influences such as waste-tipping and pollution.

Saltmarsh is covered in the national BAP, from which the objectives and targets below are selected. The Cumbria BAP has a group HAP for all coastal habitats.

OBJECTIVES AND TARGETS

The resource should be primarily secured through the provision of financial incentives to promote appropriate, sympathetic management, for example through Environmental Stewardship. Priority should be given to offsetting the current losses due to coastal squeeze and erosion, in order to maintain the existing habitat and restore the area of saltmarsh to 1992 levels.

- There should be no further net loss.
- Create further saltmarsh each year in a plan to replace all that has been lost between 1992 and 1998, based on current estimates.
- Maintain the quality of the existing resource in terms of community and species diversity and, where necessary, restore the nature conservation interest through appropriate management.

6.7 Mudflats and sandflats

DESCRIPTION

Mud and sandflats are sedimentary intertidal habitats created by deposition in sheltered areas, especially estuaries. They are intimately linked by physical processes to, and may be dependent on, other coastal habitats such as saltmarshes. Although they are characterised by high biological productivity, these flats generally have low diversity with few rare species.



However, due to their high number of invertebrates, mud and sandflats, together with other intertidal habitats, support large numbers of wildfowl and fish. They provide feeding and resting areas for migrant and wintering waterfowl, and are also important nursery areas for flatfish. The Upper Solway regularly supports 85,000 wintering waders. Mudflats play an important role in protecting saltmarshes from erosion, coastal defences from damage and low-lying land from flooding.

STATUS

The total United Kingdom estuarine resource has been estimated at 588,000 hectares, of which 55% is mud and sandflats. The total extent in the WHS is unknown, however the upper Solway Firth forms one of the largest continuous areas of intertidal habitat in the United Kingdom.

DESIGNATIONS

Estuaries as a whole are of European interest in both the Solway Firth and Drigg Coast SACs; both are considered to be among the best areas in the United Kingdom for the resource. Intertidal mudflats and sandflats are also of European interest in the Solway Firth SAC, as are subtidal sandbanks. Most of the mudflat habitat in the WHS is in the Solway Coast AONB.

ISSUES OF LOCAL CONCERN

Mud and sand flats face threats from land claim, barrage schemes for water storage, amenity and flood defence, diffuse and point source discharges from agriculture, industry and urban areas, oil and gas extraction, fishing and bait digging. Sea level rise is likely to result in future coastal squeeze of intertidal habitats.

Mudflats are covered in the national BAP, from which the objectives and targets below are selected. The Cumbria BAP has a group HAP for all coastal habitats.

OBJECTIVES AND TARGETS

The overall objectives of this Plan are to offset the current losses, to maintain the existing habitat, and restore degraded areas of mud and sand flats. Financial incentives should be made available that promote appropriate management.

- Maintain at least the present extent; this target will require compensating predicted losses to development by the restoration of mudflats.
- Create and restore sufficient intertidal area over the next 50 years to offset predicted losses to rising sea level in the same period.
- Restore estuarine water quality to ensure that existing mud and sand flats fulfil their important ecological and conservation role.

6.8 Coastal sand dunes

DESCRIPTION

Coastal sand dunes develop where there is an adequate supply of sand in the intertidal zone and where onshore winds are prevalent. There are many different types of dunes, which accord to their physiographic location. Embryonic and mobile dunes occur mainly on the seaward side, where sand deposition is still occurring, and tend to support few plants. The most stable dunes are those on the landward side where vegetation is well established and some soil development has taken place. Dune heaths, although very rare, are found in Hadrian's Wall WHS,

where dunes have become acidified by leaching. Dune systems along the Cumbria coast are a stronghold for natterjack toads and other rare animal and plant species. Appropriate grazing of sand dunes is required to ensure the maintenance of the habitat and species diversity. Coastal heath, which is a component of dune systems, can be found in Hadrian's Wall WHS, where heathland plants are joined by sand dune plants such as sand sedge.

STATUS

The *Sand Dune Survey of Great Britain* (1993-5) gives the total area of sand dunes as 11,897 hectares in England. The total extent in Hadrian's Wall WHS is unknown.

DESIGNATIONS

While dune grasslands and coastal shingle vegetation are highlighted as being of European priority interest in the Solway Firth SAC, these do not occur in the WHS. Most of the sand dune habitat in the WHS is in the Silloth Dunes SSSI and on the Drigg coast. The Drigg Coast SAC is considered to be one of the best areas in the United Kingdom for coastal dune heathland. Here the resource is of European priority interest, due to the total extent in the United Kingdom being estimated at less than 1,000 hectares. Dunes with creeping willow, which too are considered to be rare, are also of interest in this SAC.

ISSUES OF LOCAL CONCERN

Threats to sand dune systems are many. They include erosion; falling water tables, which put at risk dune slack plant communities; inappropriate or lack of grazing; recreation; sea defence and stabilisation; inappropriate dune management and military use at Eskmeals.

Sand dunes are covered in the national BAP, from which the objectives and targets below are selected. The Cumbria BAP has a group HAP for all coastal habitats.

OBJECTIVES AND TARGETS

The overall objectives of this plan are to offset the current losses, to maintain the existing habitat, and restore degraded areas of sand dunes. Again, the resource should be primarily secured through the provision of financial incentives to promote appropriate management.

- Protect the existing sand dune resource from further losses to anthropogenic factors, whether caused directly or indirectly.
- Offset the expected net losses due to natural causes of about 2% of the dune habitat resource over 20 years by encouraging new dunes to accrete and where possible by allowing mobile dune systems to move inland.
- Seek opportunities for restoration of sand dune habitat lost to forestry, agriculture or other human uses.
- Encourage natural movement and development of dune systems, and control natural succession to scrub and woodland where necessary.
- Maintain dune grassland, heath and lichen communities on the majority of dune systems.

7. Other habitats of interest

7.1 Upland semi-natural woodlands

Upland semi-natural woodlands in Hadrian's Wall WHS include oak, mixed ash and wet woodland types. All are now extremely

limited in their extent, and tend to occur as isolated fragments, often in steep-sided gorges; they regularly appear in association with each other. While oak woods tend to occur on acidic, well-drained soils, ash and elm woods are found on more base-rich soils, and alder woods occur in wetter areas. Irthing Gorge, which straddles the Cumbria and Northumberland border, is an excellent example of how these woodland types concur in the uplands.

DESCRIPTION

Upland oak woodland is dominated by sessile oak, along with pendunculate oak, downy and silver birch, with an under storey of holly, rowan and hazel; the ground flora varies with soil type and the degree of grazing. Diverse lichen communities are often present and a distinctive breeding bird assemblage is associated with them throughout much of their range. There are no precise data for the total extent of oak woodlands, but there is believed to be between 70,000 and 100,000 hectares in the United Kingdom.

Upland mixed ash woods have ash as the major species. However, oak, birch, elm, small-leaved lime and even hazel may be the most abundant species locally. Mixed ash woods are among the richest habitats for wildlife in the uplands, notable for bright displays of flowers such as bluebell, primrose, wood cranesbill and wild garlic; they tend to be fern-rich. They harbour a rich invertebrate fauna and, when coppiced, are noted for butterflies such as high brown fritillary. The dense shrub layer found in some examples provides suitable habitat conditions for dormice. There are no precise data on the total extent of upland ash woods in the United Kingdom, but estimates are of between 40,00 and 50,000 hectares.

Wet woodland occurs on poorly-drained or seasonally wet soils and is usually dominated by alder, birch and willow. The ground flora is enormously variable depending on the hydrological condition, soil type and management. On sites with a rich, mineral soil there can be a mixture of flowering herbs, sedges and grasses; on peat, bog mosses may be abundant. There are no precise data on the total extent of wet woodland in the United Kingdom, although estimates have been made of 50,000 to 70,000 hectares; only half of this is thought to be of ancient origin.

ISSUES

Upland semi-natural woodlands are currently at risk from uncontrolled grazing by stock and deer, the cessation of traditional management practices, invasion by non-native species, disturbance through recreational pressures, fly-tipping, clearance and conversion to other land-uses, and possible effects of air pollution. Wet woodlands are also at risk from lowering of the water table through drainage and abstraction, poor water quality, flood prevention measures and the virulent disease *phytophthora*.

OBJECTIVES

Priority should be given to securing the future of the existing resource through livestock exclusion or a reduction in grazing pressure, the removal of non-native species, and measures to facilitate regeneration where required through traditional management practices, for example, coppicing. Resource expansion through planting should avoid existing areas of importance for nature conservation and take into account the

increasing isolation, attempting to link existing fragments of particular importance, while buffering these sites from adjacent land, creating habitat mosaics. The restoration of former oak and ash woodlands should also be targeted, for example where the sites have been degraded by planting with conifers.

For wet woodlands, appropriate management regimes should be put in place, for example, the re-establishment of natural hydrological systems by blocking drains or removing unnecessary embankments. In order to expand the area of wet woodlands, natural regeneration is highly desirable, and due to its general success, less planting is likely to be required. For all woodland types, appropriate sites should be protected by designation.

7.2 Upland hay meadows

DESCRIPTION

Traditionally managed meadows form part of the 'in by' land of the hill farms where they are cut for hay between early July and August, and grazed in the autumn and then again in the spring; traditionally meadows receive only light applications of farmyard manure and lime to maintain fertility and neutral pH. Such fields support a characteristic northern montane meadow community, notable for its diversity, with up to 30 species per square metre and as many as 120 species per field. Hay meadows are especially important as feeding areas for insects including butterflies and bees, and for insect-feeding bats. They are also of great importance for breeding birds such as yellow wagtail and lapwing, and for feeding birds such as twite, curlew and golden plover.

It is estimated that less than 1,000 hectares of upland hay meadow now survive in northern England, and only two meadows are thought to exist in Hadrian's Wall WHS in the Northumberland National Park. This grassland community is now one of the most rare in the United Kingdom. Mountain hay meadows are of international importance, and as such are listed in Annex 1 of the EC *Habitats Directive*.

ISSUES

Hay meadows are currently at risk from the use of fertilisers, herbicides and pesticides, ploughing and reseeding, conversion to silage, early cutting, heavy grazing pressure, drainage, and neglect.

OBJECTIVES

The resource should be primarily secured through the provision of financial incentives to promote appropriate management following traditional practices. These should include halting ploughing and reseeding, the application of artificial fertiliser and slurry, and returning to hay production in place of silage. Due to the small and fragmented nature of this resource, the restoration and enhancement of degraded hay meadows should be an essential element of the conservation strategy using local native seed to increase diversity. All appropriate sites should be protected by designation.



8. Species

8.1 Species of international importance

The internationally designated nature conservation sites in Hadrian's Wall WHS qualify as such by supporting internationally important populations of the following species:

MAMMALS

Otter - *Lutra lutra* (River Eden SAC)

Formerly widespread throughout the United Kingdom, the otter underwent a rapid decline in numbers from the 1950s to the 1970s, largely due to the use of organochlorine insecticides in farming. In addition to utilising large river systems, otters also use a wide range of wetland habitats, such as loughs, ditches, moorland streams and ponds. Current factors causing declines include pollution of watercourse, insufficient prey associated with poor water quality, impoverished bankside habitat features, and incidental mortalities. The otter is listed in Annex II of the EC *Habitat Directive*.

BIRDS

Barnacle goose - *Branta leucopsis* (Upper Solway Firth and Marshes SPA and Ramsar Site)

The barnacle goose winters in the United Kingdom, but is limited to a few important sites. The feeding grounds in winter are mainly pasture and coastal saltmarshes, but the bird increasingly uses agricultural pasture sown for cattle-feeding. Threats include disturbance and alterations to habitat. The barnacle goose is protected under the Wildlife and Countryside Act 1981, and is listed in Annex I of the EC *Birds Directive*.

Bar-tailed godwit - *Limosa lapponica* (Upper Solway Firth and Marshes SPA and Ramsar Site)

The bar-tailed godwit is a localised winter visitor and passage-migrant to the United Kingdom. It is almost entirely restricted to estuaries, and particularly to a few major sites. The major threat comes from estuarine land-claim arising from large developments, disturbance and bait-digging. The bar-tailed godwit is protected under the Wildlife and Countryside Act 1981, and is listed in Annex II/2 of the EC *Birds Directive*.

Curlew - *Numenius arquata* (Upper Solway Firth and Marshes SPA and Ramsar Site)

The curlew breeds and winters in the United Kingdom. About half of the wintering populations are found on non-estuarine coasts and adjacent farmland. In winter the main threat is from estuarine land-claim, while land-use changes - particularly re-seeding, over-grazing and afforestation - represent the major threat to the breeding population. The curlew is protected under the Wildlife and Countryside Act 1981, and is listed in Annex II/2 of the EC *Birds Directive*.

Golden plover - *Pluvialis apricaria* (Upper Solway Firth and Marshes SPA)

The golden plover typically nests on blanket bogs and areas with very sparse vegetation on high moors. However, in winter it is a familiar sight in lowland and coastal areas, where large flocks feed in intertidal mudflats and roost on arable fields at high tide. Threats include the loss of upland breeding habitat. The golden plover is protected under the Wildlife and Countryside Act 1981, and is listed in Annex I of the EC *Birds Directive*.

Knot - *Calidris canutus* (Upper Solway Firth and Marshes SPA)

The Knot is a localised winter visitor and passage migrant to the United Kingdom. It is almost entirely restricted to estuaries, and is found in very large concentrations on a few sites. At present, the major threat comes from estuarine barrages and development involving land-claim. The knot is protected under the Wildlife and Countryside Act 1981, and is listed in Annex I of the EC *Birds Directive*.

Oystercatcher - *Haematopus ostralegus* (Upper Solway Firth and Marshes SPA and Ramsar Site)

A United Kingdom resident, with numbers supplemented by many north-west European birds arriving in the autumn and remaining through to late winter. The wintering population in Britain is localised. Pressures on the species come from estuarine land-claim and persecution, due to claims of damage to commercial beds of cockles, one of its main foods. The oystercatcher is protected under the Wildlife and Countryside Act 1981, and is listed in Annex II/2 of the EC *Birds Directive*.

Pink-footed geese - *Anser brachyrhynchus* (Upper Solway Firth and Marshes SPA and Ramsar Site)

This species winters in the United Kingdom, and frequents arable fields and pasture in 30km of nocturnal roosts, which are mainly on estuarine flats and sandbanks, freshwater lakes and reservoirs. Threats include disturbance at wintering areas, but potentially more serious are the threats that may affect the breeding grounds in Iceland. The pink-footed goose is protected under the Wildlife and Countryside Act 1981, and is listed in Annex I of the EC *Birds Directive*.

Pintail - *Anas acuta* (Upper Solway Firth and Marshes SPA and Ramsar Site)

The pintail is a rare breeder and a localised winter visitor. In winter it occurs mainly on estuaries, but it is also found on inland floodplains; on estuaries its most important food is the mollusc *Hydrobia*. The most severe threat to wintering birds is land-claim on estuaries, particularly through the construction of barrages. The pintail is protected under the Wildlife and Countryside Act 1981, and is listed in Annex II/2 of the EC *Birds Directive*.

Purple sandpiper - *Calidris maritima* (Northumbria Coast Ramsar Site)

In the United Kingdom, the purple sandpiper is a regular passage-migrant and winter visitor, from October to May or from July to May, depending on region, chiefly on rocky coasts of eastern and northern parts of the country. It is also a rare breeding bird. Threats include human disturbance and egg-collecting. Fortunately though, this species sits very tightly on the nest and is easily overlooked. The purple sandpiper is protected under the Wildlife and Countryside Act 1981, and the EC *Birds Directive*.

Redshank - *Tringa totanus* (Upper Solway Firth and Marshes Ramsar Site)

The wintering population of redshank in the United Kingdom is localised, and has declined by 25% since 1975/76. About 18% of the European total also breed in Britain, with the majority nesting on saltmarshes. Outside the breeding season, three-quarters of those wintering in the United Kingdom frequent estuaries. Threats include those which generally affect birds

using an estuarine habitat; particular problems for the redshank include loss of habitat, severe weather and agricultural encroachment. The redshank is protected under the Wildlife and Countryside Act 1981, and is listed in Annex II/2 of the EC *Birds Directive*.

Scaup - *Aythya marila* (Upper Solway Firth and Marshes SPA and Ramsar Site)

The scaup is an occasional breeder and a winter visitor in localised concentrations. In the winter the bird occurs mainly in coastal or estuarine areas, where a strong attraction to sewage outfalls has been noted in the United Kingdom. Threats to individual pairs may include disturbance and the loss of eggs to collectors, while threats to the wintering birds may include oil pollution and loss or reduction in food supplies. The scaup is protected under the Wildlife and Countryside Act 1981, and is listed in Annex II/2 of the EC *Birds Directive*.

Turnstone - *Arenaria interpres* (Northumbria Coast Ramsar Site)

The turnstone is a winter visitor to the United Kingdom, and is confined to coastal habitats where they are widely distributed on estuaries, sandy beaches and rocky shores. Turnstones generally forage in small groups, congregating in larger flocks - and with other species - at high-tide roosts. Threats include those which generally affect birds using an estuarine habitat. The turnstone is protected under the Wildlife and Countryside Act 1981, and the EC *Birds Directive*.

Whooper swan - *Cygnus cygnus* (Upper Solway Firth and Marshes SPA and Ramsar Site)

The whooper swan is a rare breeding bird, which also winters in the United Kingdom. It breeds on banks or islets of lochs, or on hummocks in northern marshes; it is solitary. Food in the breeding season includes roots and shoots of aquatic plants and aquatic invertebrates. In winter the birds eat a variety of emergent and submerged water plants as well as grass, spilled grain and winter cereals. Threats include human disturbance and poisoning by lead and agricultural chemicals. The whooper swan is protected under the Wildlife and Countryside Act 1981, and is listed in Annex I of the EC *Birds Directive*.

AMPHIBIANS

Natterjack toad - *Bufo calamita* (Upper Solway Firth and Marshes Ramsar Site)

The natterjack toad requires a combination of suitable breeding pools for egg laying and larval development and an adequate area of terrestrial habitat for adults and juveniles. Outside the breeding season natterjack toads live on dry land and this is as important a habitat as the breeding ponds. Cumbria supports approximately 50% of all the United Kingdom's natterjack sites, although the Workington site has recently become extinct. Threats include loss and deterioration in quality of breeding pools and terrestrial habitat though lack of suitable management. The natterjack toad is protected by the Wildlife and Countryside Act 1981, and is listed in Annex IVa of the EC *Habitats Directive*.

Great-crested newt - *Triturus cristatus* (Upper Solway Firth and Marshes Ramsar Site)

The great-crested newt is one of our six native amphibians, and the largest of our three native newts. Newts spend a great deal of the year out of water, only returning to breeding ponds when

weather permits in early spring. Around these ponds newts prefer areas of mixed habitat in which to feed and shelter, such as tall grassland, piles of logs and rubble. The main reason for the decline of the great-crested newt is the loss or decline in quality of habitats; particularly of ponds through neglect, infilling and development pressures. The great-crested newt is protected by the Wildlife and Countryside Act 1981, and is listed in Annex II and IV of the EC *Habitats Directive*.

FISH

Atlantic salmon - *Salmo salar* (River Eden SAC)

The Atlantic salmon is the largest of our migratory fish and spawns in the least polluted rivers of north-west Europe. It has declined due to over-fishing at sea, pollution and barriers to migration in its spawning rivers. The United Kingdom supports a large proportion of the salmon population in the European Union. The salmon is listed in Annex II of the EC *Habitats Directive*.

Brook lamprey - *Lampetra planeri* (River Eden SAC)

The brook lamprey is a primitive, jawless fish resembling an eel, and is the smallest of the lampreys found in the United Kingdom. It lives entirely in fresh water and occurs over most of the United Kingdom in streams and occasionally in lakes. This lamprey is listed in Annex II of the EC *Habitats Directive*.

Bullhead - *Cottus gobio* (River Eden SAC)

The bullhead is a small bottom-living fish found in upper reaches of lowland rivers and lower and middle rivers in England and Wales. It is not found in badly polluted rivers. The bullhead is listed in Annex II of the EC *Habitats Directive*.

River lamprey - *Lampetra fluviatilis* (River Eden and Solway Firth SACs)

The river lamprey is a primitive, jawless fish resembling an eel. Confined to western Europe, it migrates from the sea to spawn in silt beds of many rivers in the United Kingdom. The river lamprey is absent from some rivers because of pollution and barriers to migration. The river lamprey is listed in Annex II of the EC *Habitats Directive*.

Sea lamprey - *Petromyzon marinus* (River Eden and Solway Firth SACs)

The sea lamprey is a primitive, jawless fish resembling an eel. It is the largest of the lampreys found in the United Kingdom. It inhabits North Atlantic coastal waters and migrates to spawn in rivers. It has a widespread distribution in the United Kingdom, although populations have declined due to pollution and barriers to migration. This lamprey is listed in Annex II of the EC *Habitats Directive*.



8.2 Species of national/local importance

While the above species are of international importance, there are many other species that are of importance on a national, regional or local scale. Many of these species will be protected through the relevant habitat action plan.

This list below has drawn upon the SSSI citations, which list rare and scarce species, the *flora* references for the counties, and following consultations with interested parties in the area. As tends to be the case, there is an inevitable bias towards plants, while other taxonomic groups, such as invertebrates, tend to receive less attention.

SPECIES	INTERESTS / LOCATIONS	HABITAT ACTION PLAN
PLANTS		
Bog Orchid <i>Hammarbya paludosa</i>	Scarce - bogs/wetlands	Blanket and raised bogs
Chives <i>Allium schoenoprasum</i>	Particular to Whin Sill grasslands	Herb-rich Whin Sill grasslands
Cinquefoil sp. <i>Potentilla neumanniana</i>	Particular to Whin Sill grasslands	Herb-rich Whin Sill grasslands
Field garlic <i>Allium oleraceum</i>	Particular to Whin Sill grasslands	Herb-rich Whin Sill grasslands
Great sundew <i>Drosera anglica</i>	Rare and on only a few bogs	Blanket and raised bogs
Hairy stonecrop <i>Sedum villosum</i>	Particular to Whin Sill grasslands	Herb-rich Whin Sill grasslands
Isle of Man Cabbage <i>Coincya moensis</i> ssp. <i>Monensis</i>	Scarce - Solway Firth	Sand dunes
Knotted clover <i>Trifolium striatum</i>	Particular to Whin Sill grasslands	Herb-rich Whin Sill grasslands
Lax-flowered sea-lavender <i>Limonium humile</i>	Scarce - Drigg Coast SSSI	Saltmarsh
Maiden pink <i>Dianthus deltoides</i>	Particular to Whin Sill grasslands	Herb-rich Whin Sill grasslands
A moss <i>Dicranum undulatum</i>	Rare RDB - Drumburgh Moss SSSI	Blanket and raised bogs
A moss <i>Sphagnum pulchrum</i>	Scarce - Drumburgh Moss SSSI	Blanket and raised bogs
A moss <i>Sphagnum balticum</i>	One of five known United Kingdom locations at Muckle Moss SSSI	Blanket and raised bogs
A moss <i>Sphagnum dusenii</i>	Only known United Kingdom location at Muckle Moss SSSI	Blanket and raised bogs
Oysterplant <i>Mertensia maritima</i>	Scarce - Solway Firth	Sand dunes
Portland spurge <i>Euphorbia portlandica</i>	Scarce - Drigg Coast SSSI	Sand dunes
Purple/Yarrow broomrape <i>Orobanche purpurea</i>	Rare - Maryport Harbour SSSI is the only Cumbria location	-
Rough clover <i>Trifolium scabra</i>	Particular to Whin Sill grasslands	Herb-rich Whin Sill grasslands
Seaside centuary <i>Centaureum littorale</i>	Scarce - Solway Firth	Sand dunes and Saltmarsh
Slender trefoil <i>Trifolium micranthum</i>	Particular to Whin Sill grasslands	Herb-rich Whin Sill grasslands
Spignel <i>Meum athamanticum</i>	Particular to Whin Sill grasslands	Herb-rich Whin Sill grasslands
Upright chickweed <i>Moenchia erecta</i>	Particular to Whin Sill grasslands	Herb-rich Whin Sill grasslands
Variiegated horsetail <i>Equisetum variegatum</i>	Rare - Irthing Gorge SSSI	-

Appendix 4.2

MAMMALS

Red squirrel <i>Scirus vulgaris</i>	One of the last English strongholds	Upland semi-natural woodlands
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BIRDS

Black grouse <i>Tetrao tetrix</i>	Upland heathland	Heathland
Dunlin <i>Calidris maritima</i>	Solway Firth and uplands	Saltmarsh, mudflats and sandflats, heathland and bogs
Goldeneye <i>Bucephala clangula</i>	Solway Firth	Saltmarsh, mudflats and sandflats
Grey plover <i>Pluvialis squatarola</i>	Solway Firth	Saltmarsh, mudflats and sandflats
Ringed plover <i>Charadrius hiaticula</i>	Solway Firth, Northumbria Coast	Saltmarsh, mudflats and sandflats
Roseate Tern <i>Sterna dougallii</i>	North Tyneside - one of the only known congregation sites away from breeding colonies	-
Sanderling <i>Calidris alba</i>	Solway Firth, Northumbria Coast	Saltmarsh, mudflats and sandflats
Shelduck <i>Tadorna tadorna</i>	Solway Firth	Saltmarsh, mudflats and sandflats
Shoveler <i>Anas clypeata</i>	Solway Firth	Saltmarsh, mudflats and sandflats
Teal <i>Anas crecca</i>	Solway Firth	Saltmarsh, mudflats and sandflats

INVERTEBRATES

Large heath butterfly <i>Coenonympha tullia</i>	Blanket and raised bogs	Blanket and raised bogs
Small blue butterfly <i>Cupido minimus</i>	One of only three Cumbria sites at Maryport Harbour SSSI	-
Spider <i>Centromerus laevitarsis</i>	One of only four localities in England at Glasson Moss SSSI	Blanket and raised bogs
White-faced dragonfly <i>Leucorrhinia dubia</i>	Rare, found at Scaleby Moss SSSI	Blanket and raised bogs
White clawed crayfish	Listed in WCA found in Roman Wall Loughs and surrounding burns	Loughs, rivers and streams



8.3 Summary of designated sites in Hadrian's Wall WHS

INTERNATIONAL

RAMSAR SITE	INTEREST
The Upper Solway Flats and Marshes (C)	Intertidal flats and marshes - waders and wildfowl
Irthing Mires (C and N)	Mires – raised, blanket and valley
Northumbria Coast (N)	Coastal - purple sandpiper, turnstone

SPECIAL PROTECTION AREAS	INTEREST
Upper Solway Flats and Marshes (C)	Intertidal flats and marshes - waders and wildfowl
Northumbria Coast (N)	Coastal - purple sandpiper, turnstone

SPECIAL AREAS OF CONSERVATION	INTEREST
Drigg Coast (C)	Coastal heathlands, intertidal and dunes
River Eden (C)	Riverine habitats, fish species and otter
Solway Firth (C)	Dune grasslands and coastal shingle vegetation
Solway Mosses (C)	Active raised bogs
Border Mires, Kielder - Butterburn (N)	Blanket bog
Roman Wall Loughs (N)	Mesotrophic loughs

NATIONAL

NATIONAL NATURE RESERVES	HABITAT	GRID REF
Drumburgh Moss (C)	Lowland peatlands	NY257 585
Finglandrigg Woods (C)	Woodland, valley mire, heath	NY277 569
South Solway Mosses (C)	Lowland raised bogs	NY216 602 NY186 595 NY238 601
Greenlee Lough (N)	Lough	NY767 697
Muckle Moss (N)	Valley mire	NY 799 668

SITES OF SPECIAL SCIENTIFIC INTEREST	HABITAT	GRID REF
Bowness Common (C)	Lowland raised mire	NY 205 601
Drigg Coast (C)	Coastal, particularly dunes	SD 070 955
Drumburgh Moss (C)	Lowland raised mire	NY 255 585
Glasson Moss (C)	Lowland raised mire	NY 238 603
Maryport Harbour (C)	Grassland	NY 029 363
River Derwent and Tributaries (C)	River	NY 235 083
River Eden and Tributaries (C)	River	NY 490 302
Salta Moss (C)	Raised/valley mire	NY 086 454

Appendix 4.2

Scaleby Moss (C)	Raised mire	NY 430 635
Siddick Pond (C)	Pond	NY 002 304
Silloth Dunes and Mawbray Bank (C)	Sand dunes	NY 105 525
Spadeadam Mires (C)	Blanket mire complex	NY 598 717
St Bees Head (C)	Cliff face, grassland and shore	NX 945 133
Upper Solway Flats and Marshes (C)	Estuarine complex	NY 160 610
White Moss, Crosbymoore (C)	Lowland raised mire	NY 462 606
Allolee to Walltown (N)	Whin Sill grasslands	NY 686 669
Brunton Bank (N)	Geological	NY 928 698
Irthing Gorge (C and N)	Upland gorge woodland	NY 635 685
Muckle Moss (N)	Valley mire	NY 799 668
Roman Wall Escarpments (N)	Geological	NY 715 667
Roman Wall Loughs (N)	Mesotrophic loughs	NY 775 693
Tipalt Burn (N)	Geological	NY 659 661
Fallowfield Mine (N)	Geological	935 675
Settlingstones Mine (N)	Geological	NY850 688
Wou, The (N)	Valley mire	NY 675 697

LOCAL

SITES OF NATURE CONSERVATION INTEREST	HABITAT	GRID REF
Allonby (C)	Ponds and scrub	NY 079 421
Bank End (C)	Wet meadow	NY 052 384
Blackbank Wood and Meadow (C)	Ancient semi-natural woodland	NY 613 660
Bowness-on-Solway Churchyard (C)	Churchyard	NY 225 627
Bowness-on-Solway Nature Reserve (C)	Disused gravel workings	NY 207 616
Carling Gill Meadow and Verge (C)	Unimproved wet grassland	NY 583 634
Castlebank Wood (C)	Ancient woodland	NY 525 630
Coombe Craggs (C)	Riverside woodland	NY 591 651
Copt Hill Meadow (C)	Fen-meadow	NY 331 584
Cowgate (C)	Marshy grassland	NY 097 473
Disused campsite near Houghton (C)	Grassland, scrub and woodland	NY 414 587
Harrow's Beck Wood (C)	Riverside woodland	NY 620 667
Hazel Gill (C)	Grassland, scrub and woodland	NY 008 308
Heugh Wood (C)	Ancient semi-natural woodland	NY 537 653
Highberrys Beck (C)	Marshy grassland	NY 467 634
House Wood (C)	Semi-natural woodland	NY 510 630
Jubilee Pond (C)	Pond	NY 554 619



Maryport and Allonby Coast (C)	Dune grassland	NY 055 390
Miltonrigg Wood (C)	Ancient semi-natural woodland	NY 561 615
Naworth Castle Woods (C)	Ancient woodland	NY 570 638
Rockcliffe Moss (C)	Lowland peat moss	NY 374 625
Rosetrees Moss (C)	Lowland peat moss	NY 344 661
Sea Brows (C)	Neutral grassland	NY 042 380
Walton Wood (C)	Ancient semi-natural woodland	NY 553 652
Baron House Bog (N)	Peatland	NY 643 664
Bell Crag Flow (N)	Border Mire	NY 769 724
Black Law (N)	Bog	NY 819 738
Cawfields Crag (N)	Woodland and grassland	NY 720 668
Fourstones and Park Shield Quarries (N)	Grassland and geological	NY 885 687
Gap (N)	Open water	NY 643 664
Hanging Shield Rigg (N)	Valley mire	NY 691 675
Harlow Hill Quarry (N)	Geological	NZ 077 687
Lemington Gut (N)	Open water	NZ 188 644
Milestone House Quarry (N)	Geological	NY 721 661
River North Tyne - Wark to Chollerford (N)	River	NY 897 742
Scroggs, The (Keepersfield Quarry) (N)	Grassland	NY 892 726
Shawfield (N)	Scrub	NY 627 648
Standingstone Rigg (N)	Bog	NY 810 732
Swallow Crag and Caw Burn (N)	Running water and grassland	NY 744 687
Throckley Dene (N)	Woodland	NZ 164 667
Walltown Quarry and Crag (N)	Grassland and geological	NY 675 661
Whittle Dene Reservoirs (N)	Reservoirs	NZ 068 685
Whinnetley Moss (N)	Bog	NY 817 665
Winshields Crag (N)	Whin Sill cliffs	NY 720 668

LOCAL NATURE RESERVES**LOCATION****GRID REF.**

Kingmoor Sidings (C)	Urban fringe	NY 386 575
Heddon Common (N)	Rural	NZ 128 667
Walbottle Brickworks (N)	Urban	NZ 170 658
Sugley Dene (N)	Urban	NZ 190 653
Denton Dene (N)	Urban	NZ 196 648

Key: C = Cumbria N = Northumberland

8.4 List of Regionally Important Geological and Geomorphological Sites (RIGS).

All of the currently designated RIGS sites in Hadrian's Wall WHS lie in Cumbria. There are so far no RIGS sites designated in the WHS in Northumberland or the Tyne and Wear area.

REGIONALLY IMPORTANT GEOLOGICAL AND GEOMORPHOLOGICAL SITES	HABITAT	GRID REF
Seascale Beach	Triassic rocks	NY034 012
Silver Tarn, Nethertown	Kettle hole and hydrosere	NX997 069
The Knoll, Netherton	Fluvioglacial deposits	NX987 074
St Bees Beach	Fluvioglacial deposits	NX97 11
Birkham's Quarry, St Bees Head	St Bees Sandstone	NX956 174
Tom Hurd Rock, Whitehaven	Coal Measures	NX965 187
Bransty Cliffs, Whitehaven	Coal Measures	NX978 185
Cunning Point, Lowca	Coal Measures	NX978 228
Maryport foreshore	St Bees Sandstone	NY03 37
Swarth Hill, Allonby	Drumlin and raised beach	NY069 403
Mawbray Banks	Active sand dunes	NY067 418
Beckfoot	Submerged forest	NY085 484
Glasson Point	Drumlin	NY260 609
Rockcliffe shore, Carlisle	Kirklington Sandstone	NY35 61
Arthuret Howes, Longtown	Esker	NY38 67
Wetheral woods, Carlisle	St Bees Sandstone	NY47 54
Hetherburn, Hethersgill	Permo-Carboniferous contact	NY487 670
Gelt Woods, Brampton	Gorge in St Bees Sandstone	NY52 58
Ashycleugh, Bewcastle	Carboniferous rocks	NY57 76
Forest Head Quarry	Great Limestone	NY58 57
Wall Bowers, Gilsland	Carboniferous limestones	NY59 65
Irthing Gorge, Gilsland	Carboniferous rocks	NY64 68



8.5 Summary of legislation for protection of natural heritage

NATIONAL AND INTERNATIONAL DESIGNATIONS Site of Special Scientific Interest (SSSIs)

SSSIs are designated under the Wildlife and Countryside Act 1981, and are the principal statutory designation for sites of nature conservation or earth science importance. Protection is implemented through legislative and planning policy mechanisms, and appropriate management is achieved through management agreements. Sites that receive any of the following national or international designations must also be notified as SSSIs.

Ramsar Sites

Ramsar Sites are wetlands of international importance especially as waterfowl habitat, and are designated under the 1971 Convention on Wetlands of International Importance. As a matter of government policy, Ramsar Sites receive the same protection as SPAs and SACs.

Special Protection Areas (SPAs)

SPAs are classified under the Birds Directive to provide protection to populations of wild birds of European importance. Protection of SPAs in the United Kingdom is provided through the *Habitats Regulations* 1994.

Special Areas of Conservation (SACs)

SACs are classified under the Habitats Directive to provide protection to a range of habitats and species of European importance. The Directive is implemented in the United Kingdom through the *Habitats Regulations* 1994. Sites that have gone forward for designation are called candidate SACs until they have been accepted by the European Commission, but these receive exactly the same protection under the *Habitats Regulations* as designated sites.

Local Nature Conservation Designations

These are mostly non-statutory, but are recognised in development plans, Planning Policy Guidance and related documents such as Biodiversity Action Plans, Local Agenda 21 Plans and Nature Conservation Strategies, and include the following:

- Sites of Nature Conservation Interest/Importance (SNCI), also called County Wildlife Sites (CWS)
- Wildlife Corridors
- Non-Statutory Nature Reserves
- Regionally Important Geological Sites (RIGS)
- Local Nature Reserves, which are designated by Local Authorities under the National Parks and Access to the Countryside Act, 1949.

9. Bibliography

- Batten, L.A., Bibby, C.J., Clement, P., Elliott, G.D., Porter, R.F. (1990) *Red Data Birds in Britain*. Nature Conservancy Council and RSPB.
- Cumbria Biodiversity Partnership (2000) - *The Cumbria Biodiversity Action Plan - Consultation Draft*.
- English Nature (1997) *Natural Area Profile: Solway Basin*. EN, Kendal
- English Nature (undated) *Natural Area Profile: Border Uplands*. EN, Stocksfield
- English Nature web site - www.english-nature.org. United Kingdom
- English Nature (undated) *Research Report No. 317*.
- Lawrence, D. J. D., Arkley, S. L. B., Everest, J. D., Clarke, S. M., Millward, D., Hyslop, E. K., Thompson, G. L. and Young, B. 2007. *Northumberland geodiversity Audit and Action Plan*. British Geological Survey Commissioned Report, CR/07/037N.
- Newcastle City Council (2000) *Your Wildlife - The Newcastle Biodiversity Action Plan*. Consultation Draft.
- North Tyneside Council (2000) *Species Action Plans - Draft Plan*.
- Northumberland Biodiversity Steering Group (2000) *Working for Wildlife - The Northumberland Biodiversity Action Plan*.
- Pickett, E., Young, B., Lawrence, D., Clarke, S., Everest, J., Thompson, P. and Young, R. 2006. *Ancient Frontiers – the geology and landscape of the Hadrian's Wall area*. Keyworth, Nottingham: British Geological Survey.
- Swan, G.A. (1993) *Flora of Northumberland*. Natural History Society of Northumbria, Newcastle.
- UK Biodiversity Steering Group (1995) *Biodiversity: the UK Steering Group Report. Volume 1: Meeting the Rio Challenge*. HMSO, London
- UK Biodiversity Steering Group (1995) *Biodiversity: the UK Steering Group Report. Volume 2: Action Plans*. HMSO, London
- UK Biodiversity Steering Group (1998) *Tranche 2 Action Plans: Volume II - Terrestrial and Freshwater Habitats*. English Nature, Peterborough.
- UK Biodiversity Steering Group (1999) *Tranche 2 Action Plans: Volume V - Maritime Species and Habitats*. English Nature, Peterborough.
- UK Biodiversity Steering Group (2000) *Index to the Steering Group Report and Tranche 2 Action Plans*. English Nature, Peterborough.
- Young, B. 2000. *Hadrian's Wall World Heritage Site Management Plan: Geology and landscape features of the Hadrian's Wall Corridor*. British Geological Survey Technical Report WA/00/48R

Appendix 5.1

SUMMARY REVIEW OF 2002-2007 MANAGEMENT PLAN

POLICIES / ACTIONS	CURRENT STATUS	2008-14 PLAN REFERENCE
Policy 1: The boundaries of the WHS and its setting should be kept under review to ensure that its Outstanding Universal Significance is adequately protected		
The definition of the WHS as only the scheduled ancient monument should be reconsidered and proposals for an alternative basis should be formulated before the next revision of the Management Plan (HWCUC)	Achieved	Policies 2a & 2b
The inclusion of adjacent and functionally connected sites within the WHS should be considered and consulted upon (HWCUC)	Achieved	Policies 2c & 2d
Any changes to the boundaries of the WHS and its setting should be defined and notified to the World Heritage Committee (HWCUC)	Outstanding	Policies 2e & 2f
English Heritage should consider with the Tyne and Wear County Archaeologist the most appropriate method of protecting the buried remains of the WHS in Tyneside (EH/LOCAL AUTHORITIES)	Outstanding	Policies 4a – 4f
The revision of the scheduling of the WHS should be completed for Hadrian's Wall in Tyneside and other satellite sites within the setting (EH)	Outstanding	Policies 3a, 3g & 3h
GIS should be used when developed for the WHS to assess the current boundaries of the setting (HWCUC)	Outstanding	Policy 9a - Action 1.
Policy 2: The WHS should be taken into account in the preparation and implementation of all planning, regulatory and policy documents which might affect it		
Regional Government Offices should include reference to the significance and values of the WHS in Regional Planning Guidance (GOVERNMENT OFFICES-NE/NW)	Achieved / Ongoing	Not specified
Local Authorities should include adequate policies to protect the values and significance of the World Heritage Site when Local Plans are revised (LOCAL AUTHORITIES)	Established / Ongoing	Policies 3c & 3d
Planning authorities should not permit development that would be detrimental to the WHS (LOCAL AUTHORITIES)	Established / Ongoing	Policies 3b & 3c
Planning authorities should give consideration to the effect that development proposals within the setting of the WHS might have on the Site and its setting (LOCAL AUTHORITIES)	Established / Ongoing	Policy 3f
Planning authorities should generally require formal environmental impact assessment for any proposed development which might have a significant effect on the WHS or its setting. They should also require developers to provide an archaeological evaluation if the effect of a proposal is uncertain (LOCAL AUTHORITIES)	Established / Ongoing	Policy 3e



POLICIES / ACTIONS	CURRENT STATUS	2008-14 PLAN REFERENCE
Policy 3: All site managers should continue to assess their sites for potential risks and maintain appropriate plans to counter these		
Discussions with Emergency Planners, Ministry of Defence, Civil Aviation Authority and the emergency services should be undertaken to consider the need for plans for dealing with disasters that could potentially affect the WHS and its setting (HWCU/ LOCAL AUTHORITIES)	Outstanding	Policy 6c
Site Managers should maintain counter-disaster plans for their sites, including museums, and review these as necessary at appropriate intervals (SITE MANAGERS/MUSEUM CURATORS)	Established / Ongoing	Policy 6d
Museum Curators and Site Managers should work together and exchange information on security measures and risk preparedness (SITE MANAGERS/MUSEUM CURATORS)	Established / Ongoing	Policy 6d
The site manager at Birdoswald should draw up an action plan to counter erosion and landslip within the estate and oversee its implementation (CUMBRIA COUNTY COUNCIL)	In process	Not specified
Cumbria County Council should complete its Coastal Statement to assess loss of parts of the WHS through coastal erosion on the Cumbrian coast, and develop mitigation proposals with relevant partner organisations (CUMBRIA COUNTY COUNCIL/ EH/SRI)	In process	Not specified
English Heritage should monitor the effects of fluvial erosion on the site of the Roman bridge at Corbridge and the civil settlement at Chesters and develop mitigation proposals as required with the landowners (EH)	Corbridge complete – Chesters outstanding	Not specified
Policy 4: The conservation of the landscape of the WHS should be guided by an overall conservation framework which should be developed to assist in the management of change in the landscape		
A conservation framework should be developed for the best management of the historic and natural environment and landscape setting of the WHS (HWCU/EH/ LOCAL AUTHORITIES /COUNTRYSIDE AGENCY/ NNPA/ENGLISH NATURE)	Outstanding	Policies 1c & 8d
A pilot project for the development of a conservation framework should be developed within the Northumberland National Park (NNPA)	Not taken forward	Not specified
Within the conservation framework, policies should be developed for beneficial change to the setting of the WHS, thus allowing sustainable economic growth (HWCU/SITE MANAGERS/LANDOWNERS/RURAL DEV. SERVICE)	Not taken forward	Policy 1c
Historic Landscape Characterisation Surveys should be completed for Cumbria and undertaken in Northumberland in order to inform and meet the objectives of the conservation framework, research framework and local interpretative plans (CUMBRIA COUNTY COUNCIL/ LDNPA/ NORTHUMBERLAND COUNTY COUNCIL/NNPA)	Achieved	N/A
Every opportunity should be taken to emphasise the linear character of Hadrian's Wall in urban areas, for example by clearing and marking its line (LOCAL AUTHORITIES)	Not completed	Policies 4b & 9a
All agencies should identify ways in which farm incomes can be augmented through sustainable use of the WHS (ALL AGENCIES)	Ongoing	Policies 8a & 12j
Agri-environmental schemes should be developed and implemented, tailored to the needs of the WHS, its setting and its inhabitants (HWCU/ RURAL DEV. SERVICE)	Ongoing	Policies 7f & 8a

Appendix 5.1

POLICIES / ACTIONS	CURRENT STATUS	2008-14 PLAN REFERENCE
Forestry proposals which enhance the character of the WHS or its setting should be encouraged but consideration should be given to maintaining the open aspect of the landscape where this is the dominant character (FORESTRY COMMISSION)	Ongoing	Policy 8c
Policy 5: Landowners, managers of sites managed for conservation and public access, and relevant agencies should develop appropriate work programmes for the management and conservation of individual sites		
Site managers should develop and maintain appropriate conservation or management plans for their sites (SITE MANAGERS)	Ongoing	Policies 1d, 7d, 7g & 7f
Site managers should include appropriate archaeological investigation and recording in all schemes for conservation or other works to any element of the WHS (SITE MANAGERS)	Established	Policy 7g
Proposals for conservation of natural features should be integrated with those for conservation of the landscape and archaeological sites (EH/ENGLISH NATURE)	Established / Ongoing	Policy 1c
Proposals contained in the Bio-diversity Action Plan for the WHS should be implemented, provided they do not adversely affect the significance of the WHS and its setting (ALL NATURAL AGENCIES)	Ongoing	Policy 1c
Conservation of archaeological elements should not compromise natural values of the WHS and its setting (EH/ LOCAL AUTHORITIES /NATURAL AGENCIES)	Established / Ongoing	Policy 1c
Tree cover on protected archaeological sites should be felled when appropriate and not replaced (LANDOWNERS/FORESTRY COMMISSION)	Established / Ongoing	Policy 8c
Funding schemes such as agri-environmental schemes and Management Agreements should be promoted, targeted and concluded as appropriate with individual landowners to assist with conservation of the historic and natural environment of the WHS and its setting (EH/Defra)	Established / Ongoing	Policy 8a
Earthworks suffering from erosion and potentially at risk should be identified and the causes of damage defined (HWCU/EH)	Established / Ongoing	Policy 7c
Where necessary remedial action should be taken to repair earthworks and arrangements for future proactive management established (EH/ RURAL DEV. SERVICE)	Established / Ongoing	Policy 7c
Guidance should be developed and published on the proactive management of earthworks (HWCU)	Completed	Policy 7h
Areas of the WHS under plough should be evaluated to see if damage is occurring (EH)	In process	Policy 8b
Where damage to archaeological deposits is being caused by arable cultivation, a solution should be found by negotiation if possible and confirmed by means of a management agreement if appropriate. If no negotiated solution is possible, other means such as excavation or revocation of Class Consent should be considered (EH)	In process	Policy 8b
The conservation of the castle at Bewcastle should be carried out and appropriate arrangements made for its future maintenance (EH)	Completed	N/A
Consolidation of the exposed masonry remains of Great Chesters Fort together with the lengths of Hadrian's Wall between the fort and Walltown should be carried out and appropriate arrangements made for their future maintenance (EH/NNPA)	In process	Not specified



POLICIES / ACTIONS	CURRENT STATUS	2008-14 PLAN REFERENCE
Site managers should develop regular and appropriate programmes for the maintenance and repair of masonry that has already been conserved (SITE MANAGERS)	Established / Ongoing	Policy 7a
English Heritage should manage its own sites as exemplars, appropriate to its status as the lead body for the historic environment and to the World Heritage status of the Site. (EH)	Established / Ongoing	Not specified
In order to facilitate maintenance, EH should develop with site managers' proposals for term SMCs for specified types of maintenance work (EH)	Established / Ongoing	Policy 7f
The results of research into the use of lime mortars for repairs and the nature of building should be promulgated (EH)	Due for publication	N/A
Policy 6: The WHS should be used to assist the sustainable economic growth and post foot and mouth disease recovery of the local economy, provided that there are no adverse impacts on the integrity and Outstanding Universal Value of the Site and its setting.		
Plans should be developed immediately to co-ordinate action for the sustainable use of the WHS to ensure the recovery of the local economy after the impact of foot and mouth disease (HWTP/ALL AGENCIES)	Complete	N/A
Sustainable and diversified agriculture should be encouraged (Defra/ LANDOWNERS/LOCAL AUTHORITIES)	Established / Ongoing	Policies 8a, 8b & 12j
Hadrian's Wall as an 'icon' should be used to promote the economy of northern England (HWTP/NORTHUMBRIA TOURIST BOARD/ CUMBRIA TOURIST BOARD/REGIONAL DEVELOPMENT AGENCIES/ LOCAL AUTHORITIES)	Established / Ongoing	Policy 14a
Targeted tourism marketing campaigns should be developed that bring added value from tourism to the area. (HWTP/NORTHUMBRIA TOURIST BOARD /CUMBRIA TOURIST BOARD/ LOCAL AUTHORITIES)	Established / Ongoing	Policy 14a
Opportunities for building stronger links between urban and rural tourism businesses should be developed. (HWTP/ NORTHUMBRIA TOURIST BOARD/CUMBRIA TOURIST BOARD)	Initiated	Not specified
Wall-wide schemes for the development of skills and employment should be developed (HWTP/ LOCAL AUTHORITIES)	Initiated	Policy 12g
Development of wet weather attractions within the WHS should be encouraged (HWTP/SITE MANAGERS)	Initiated	Policies 11a & 12d
Mechanisms such as 'Visitor Payback' to direct maximum return from visitor spend into conservation of the WHS and enhancement of visitor facilities should be identified and implemented (HWTP/SITE MANAGERS/LOCAL AUTHORITIES)	Not taken forward	Policy 12d
Policy 7: Links between the WHS and the local communities around it should be improved		
Communications between agencies involved with the WHS and local communities should be maintained and improved (HWCU / HWTP)	Established / Ongoing	Policies 13b & 14a
Appropriate arts and cultural initiatives should be developed with local communities, including initiatives such as Marking the Wall (HWTP)	Established / Ongoing	Policy 11f

Appendix 5.1

POLICIES / ACTIONS	CURRENT STATUS	2008-14 PLAN REFERENCE
Museums within the WHS should build and maintain links with their local communities to encourage a sense of local identity with their collections (MUSEUM CURATORS)	Established / Ongoing	Not specified
Site Managers should consult on plans for their sites with local communities and encourage local involvement (SITE MANAGERS)	Established / Ongoing	Not specified
Links between the WHS and its setting and local services and businesses should be strengthened (HWTP)	Established / Ongoing	Policies 12a, 12c & 12h
The local supply chain should be strengthened, particularly for the tourism industry (HWTP / SITE MANAGERS)	Established / Ongoing	Policies 12c & 12h
Policy 8: Sustainable access to and within the WHS and its setting should be improved		
The Transport Strategy should be used as a framework for the development of sustainable transport policies acceptable to the local communities and other stakeholders (HWCU/HWTP/HIGHWAY AUTHORITIES/LOCAL AUTHORITIES /NNPA).	Initiated	Policy 10l
Provision of improved cycle facilities and access to the WHS and its setting should be developed (HIGHWAY AUTHORITIES/HWTP/RAIL SERVICE OPERATORS/SITE MANAGERS/SUSTRANS)	Established / Ongoing	Policy 10i
Provision of public transport to and within the WHS should be developed and improved (HIGHWAY AUTHORITIES/HWTP)	Established / Ongoing	Policies 10a, 10b & 10d
Long-term funding for the operation of the Hadrian's Wall Bus service AD 122 should be secured (HW BUS PARTNERSHIP)	Not achieved	Policies 10a & 10l
The National Trail should be completed on target as soon as foot and mouth disease restrictions are lifted. Thereafter it should be maintained, managed and promoted as a means of sustainable access and enjoyment of the WHS (COUNTRYSIDE AGENCY/HIGHWAY AUTHORITIES/NNPA/HWCU/HWTP)	Completed / Ongoing	Policies 10e & 10f
Sufficient resources should be made available for the sustainable maintenance and management of the Rights of Way network (HIGHWAY AUTHORITIES)	Established / Ongoing	Policies 10g & 10h
Access for All should be developed as a policy for all sites (SITE MANAGERS)	Established / Ongoing	Policy 10m
Policy 9: Visitor facilities and interpretation of the WHS should be developed at all levels to meet visitor expectations as a means of improving the enjoyment and understanding of visitors and local people and their appreciation of the universal significance and status of the WHS and its setting.		
The quality of visitor provision within the WHS and its setting should be continuously monitored, reviewed and improved to a standard commensurate with the universal significance of the Site (HWTP/SITE MANAGERS/LOCAL PARTNERSHIPS)	Established / Ongoing	Policies 11a, 11c & 11d
The Northumberland National Park Authority and the Youth Hostels Association should draw-up plans for redevelopment of both the Visitor Centre and the youth hostel at Once Brewed and implement these, subject to the necessary approvals (NNPA/YOUTH HOSTELS ASSOCIATION)	Ongoing	Appendix 6.1
Northumberland County Council and the Youth Hostels Association should explore funding opportunities for development of Rudchester Farm and the Roman fort as combined interpretation and accommodation facilities for walkers and other visitors (NORTHUMBERLAND COUNTY COUNCIL/ YOUTH HOSTELS ASSOCIATION)	Not taken forward	Not specified



POLICIES / ACTIONS	CURRENT STATUS	2008-14 PLAN REFERENCE
English Heritage, The National Trust and Northumberland National Park Authority should seek to develop co-ordinated management arrangements at Housesteads, appropriate to the site's special values. (EH/NATIONAL TRUST/NNPA)	Initiated	Appendix 6.1
English Heritage should review the design of its guardianship panels to suit the special status and significance of the WHS and its setting (EH)	Completed	N/A
Interpretation and information should be accessible to all, informative and enjoyable up-to-date, and based on the best available research, and cover all aspects of the WHS and its setting including the natural heritage and land use (HWTP/SITE MANAGERS)	Established / Ongoing	Policies 11a & 11f
Interpretation should clarify for visitors the position of each site within the total scheme of Hadrian's Wall and the location of other sites to underline the linear nature of the Wall (HWTP/SITE MANAGERS)	Established / Ongoing	Policies 11a, 11b & 11f
Information and orientation displays should be displayed at all gateway sites to encourage awareness of the whole of the World Heritage Site, the links between the individual sites and local services and amenities.	Established / Ongoing	Policies 11a, 11b & 11f
The unifying identity for the WHS should be developed through marketing and through its use in interpretative material (and greater use made of the WHS emblem) (HWTP / HWCUC)	Established / Ongoing	Policy 1a
The 1996 Interpretative Strategy should be reviewed and updated and communicated to all (HWTP/HWCUC)	Initiated	Policies 11a & 11f
Local Interpretative Plans should be developed for all sectors of the WHS (HWTP/HWCUC/LOCAL PARTNERSHIPS)	Only partially initiated	Not specified
Local partnerships should implement Local Interpretative Plans once developed (LOCAL PARTNERSHIPS)	Not taken forward	Not specified
Interpretation should be continually monitored and evaluated at existing sites and improved as appropriate (SITE MANAGERS)	Established / Ongoing	Policies 11a & 11f
Interpretative panels on free sites should be maintained and repaired, renewed and replaced as necessary (SITE MANAGERS)	Established / Ongoing	Policy 11f
The brown signing within the WHS and its setting should be reviewed and revised as necessary (HWTP/HIGHWAY AUTHORITIES)	Not completed	Policy 10k
All techniques of interpretation should be developed and utilised within the Site, particularly audiovisual methods, Information Communication Technology (ICT) and virtual reality (HWTP/SITE MANAGERS/MUSEUM CURATORS)	Initiated	Policies 11a & 11f
Interpretative events and re-enactments as well as appropriate arts initiatives should be developed and implemented to enhance the enjoyment and understanding of all visitors to the WHS (HWTP/SITE MANAGERS)	Established / Ongoing	Policy 11f
All reconstruction should follow the English Heritage guidelines on reconstruction and be founded on the best possible research; <i>in situ</i> reconstruction should not be carried out on a purely speculative basis or if it damages significant archaeological deposits (EH/SITE MANAGERS)	Established / Ongoing	Policy 11i
<p>Policy 10: Museum authorities within the WHS should consider opportunities for co-operation to improve access to their collections</p>		
Museums should secure funding where needed to complete the cataloguing of their collections (MUSEUM AUTHORITIES/NEMLAC)	Established / Ongoing	Not specified

Appendix 5.1

POLICIES / ACTIONS	CURRENT STATUS	2008-14 PLAN REFERENCE
Options for establishing a link between their catalogues to enhance access to all collections from the WHS should be explored and implemented if practical and affordable (MUSEUM CURATORS)	Not taken forward	Not specified
Museums should build up links with local communities and schools (MUSEUM CURATORS)	Established / Ongoing	Not specified
Museum authorities within the WHS should consider the case for re-establishing the Museums Liaison Committee to develop co-operative initiatives (MUSEUM CURATORS)	Established / Ongoing	Policy 1g
Policy 11: The educational use of the WHS and its setting should be maximised on the principles of Life Long Learning		
The WHS and its setting should be used within all subject areas of the National Curriculum and aspects of Life Long Learning (HWTP/EDUCATION OFFICERS/LOCAL AUTHORITIES)	Established / Ongoing	Policy 15b
The Hadrian's Wall Education Directory should be maintained and updated (HWTP/EDUCATION OFFICERS)	Updated not maintained	Not specified
All educational material should contain reference to the significance of the WHS and the need for its conservation and sustainable use (HWTP/ EDUCATION OFFICERS)	Established / Ongoing	Policy 15e
Collaborative schemes between sites and museums to provide electronic educational access to the WHS should be developed (EDUCATION OFFICERS)	Established / Ongoing	Policy 15a
The Hadrian's Wall Educational Forum should be used to develop and exchange best practice (EDUCATION OFFICERS)	Established / Ongoing	Policy 15a
The varied educational facilities, including residential centres, across the WHS should complement each other to add value to the overall educational potential of the WHS (HWTP/ EDUCATION OFFICERS)	Established / Ongoing	Policy 15a
Policy 12: The Management Plan should be implemented through the co-ordinated actions of all stakeholders and at the most local level appropriate for each policy		
The Hadrian's Wall WHS Management Plan Committee should oversee the implementation of the Management Plan 2001 – 2007 (MPC/HWCU)	Achieved	Not specified
Hadrian's Wall WHS Management Plan Committee should consider the development of wider consultative arrangements (MPC/HWCU/ HWTP)	Initiated	Policies 1e, 1f & 1g
The Management Plan should be disseminated as effectively and as widely as possible (MPC/HWCU)	Achieved	Policies 1f & 1g
The Hadrian's Wall Co-ordination Unit should act as champion of the Plan, co-ordinate its implementation, and service the WHS Management Plan Committee (HWCU)	Transferred to HWHL	Policies 1d & 1e
The HWTP should continue its role in the promotion and development of sustainable tourism, arts and community initiatives and should undertake responsibility for the implementation of the Enrichment and Enterprise scheme (HWTP)	Transferred to HWHL	Not specified
Development of area based implementation of the Management Plan should be trialled through a pilot study in the NNP (NNPA)	Not taken forward	N/A
Recurrent expenditure should be funded as far as possible from the resources of those bodies responsible for implementing specific policies (ALL AGENCIES)	Established / Ongoing	Not specified



POLICIES / ACTIONS	CURRENT STATUS	2008-14 PLAN REFERENCE
A framework should be developed for funding applications to the Heritage Lottery Fund and other bodies and to identify sources of alternative funding, particularly where applicants would not be eligible for HLF funding (HWTP)	Initiated	Policy 11b
A suite of monitoring measures should be agreed and drawn up, and assessed on a regular basis (MPC/HWCU)	Initiated	Policy 1g
An action plan for implementation of the Management Plan with SMART objectives should be agreed annually at the summer meeting of the Management Plan Committee over the period of the Plan (HWCU/MPC)	Not taken forward	Policy 1g
The Management Plan should be reviewed, revised as needed, consulted upon and endorsed by the Management Plan Committee by the end of the period of the current Plan in 2007 (HWCU/MPC)	Completed & carried forward	Policy 1e
Policy 13: Every effort should be made to improve understanding of how the WHS was created, has developed and is now used		
An academic research framework should be developed for the WHS and its setting to identify areas for future archaeological research, priorities and resources (HWCU)	Completed	Policy 9f
The programme of qualitative and quantitative visitor research should be developed (HWTP)	Established / Ongoing	Policy 12i
Research programmes should be developed on non-archaeological aspects of the use and significance of the WHS (HWTP/HWCU)	Initiated	Policy 9f
A Geographical Information System (GIS) should be developed for the overall management of the WHS and implementation of the Management Plan (ALL AGENCIES)	Not taken forward	Policy 1d
Digital mapping of all aerial photography of the WHS should be prepared (EH)	Initiated	Policy 9a

Appendix 6.1

SUMMARY OF CURRENT PROPOSALS FOR INVESTMENT AT SITES ON HADRIAN'S WALL

- The Great North Museum project will create a major new facility in Newcastle opening in 2009, bringing together collections from four existing museums – the Hancock, the Museum of Antiquities, the Shefton Museum and the Hatton Gallery. The Hadrian's Wall gallery will be one of the highlights of the new museum and will feature a scale model of Hadrian's Wall along with interpretation based on real people identified through some of the inscriptions. The new gallery aims to act as a gateway to Hadrian's Wall and *Hadrian's Wall Country* for residents of, and visitors to, Newcastle.
- Elsewhere in Tyne and Wear, at Arbeia, a concept has been developed to improve visitor facilities and to create new display areas that will provide opportunities to present the rich collections obtained from excavations over the last ten years. At Segedunum there is a need to update and re-invigorate the displays and develop the role of Segedunum in the wider regeneration of Wallsend.
- The Vindolanda Trust, with support from HWHL, developed significant new proposals, for the execution of which the Heritage Lottery Fund (HLF) has awarded £4 million. These include:
 - interpreting the writing tablets that are currently located at the British Museum
 - improving interpretation and display of other exhibits at Vindolanda
 - improving research facilities for the ongoing programme of excavation
 - improving facilities for the large number of local and international volunteers who participate in this programme each year.

A linked programme of investment is proposed for the Roman Army Museum, providing a complementary, family-focused experience.

- The National Trust and English Heritage, with HWHL and HLF support, are working together to improve visitors' experience of Housesteads, where currently the standards fall well below those expected from a site of such iconic status. The two organisations are developing a joint approach to providing integrated management and new facilities. This agreement should be finalised and the proposals implemented in the Plan period.
- At Chesters, work on the Clayton collection has just been completed, but there remains a need to explore investment opportunities to ensure more effective presentation of the site. There is also potential at Corbridge to improve access and to widen the appeal of the facility, subject to local plans. This could be explored during the Plan period.

- Northumberland National Park Authority (NNPA), with HWHL and HLF support, is working up proposals for the development of a new discovery centre that would celebrate the significance of protected landscapes and promote enjoyment and sustainable management of their special qualities. The proposed location for this development is Once Brewed. This development would complement other facilities along the Wall by focusing on the landscape setting of the WHS.
- Facilities at Birdoswald are among the best currently available along the central section of the WHS, but need enhancement and re-invigoration.
- Heritage has an important role to play in acting as a catalyst in the regeneration and future development of Carlisle, as indicated in Issue 12. Tullie House Museum could form an important gateway to the WHS for visitors arriving from the west, and opportunities to link interpretation should be explored. Proposals for Tullie House recommend the development of the site, to upgrade interpretation, facilities and the education offer.
- At Maryport, HWHL and the Senhouse Museum Trust are developing ambitious proposals that will create a new visitor facility to present and interpret the collections alongside an ongoing programme of archaeological research. New displays will tell the story of the Roman occupation of the area in the context of the wider frontier and indeed of the empire. The project has the potential to make a significant contribution to regenerating the west coast of Cumbria and improving its link with the rest of the WHS.
- Romans in Ravenglass is a partnership led by HWHL to facilitate improvements in all areas. Projects include interpretation and conservation of the Roman bathhouse, geophysical survey on the *vicus* (carried out by the community under expert supervision financed through English Heritage), a new all-purpose website, a visitor information and signage strategy, and proposals for a 'port to fort' visitor centre.

Outside these established visitor sites, scope for investment in interpretation at Rudchester in Northumberland was identified in earlier WHS Management Plans and followed up by site feasibility studies. Small scale interpretation has been developed and there is potential for further small-scale investment. The possibility of some small-scale investment based on the milefortlets in the Solway Coast AONB area could also be explored.



Appendix 6.2

HADRIAN'S WALL WHS CONTINUING LEARNING STRATEGY

1. Introduction

The Continuing Learning Strategy has been developed by the Hadrian's Wall Education Forum (HWEF) and HWHL in partnership in order to promote, enhance and facilitate a strategic approach to education provision across and beyond Hadrian's Wall WHS.

It links to Policy 15a of the 2008-14 Hadrian's Wall Management Plan. This strategy aims to suggest a framework and action plan through which this policy can be implemented and developed. The overall theme for the strategy over the next ten years is to:

aspire to encourage the development, provision and enhancement of the learning opportunities offered by HW WHS to inspire interest and engagement for all.

2. Background

The HWEF was set up in 1999 with the aim of providing a meeting place for those working to develop and deliver education at sites along the Wall. The membership includes the education practitioners at each site whether site staff or freelance workers and also representatives of other groups who support education along the Wall such as the YHA. The membership therefore includes Tyne and Wear Museums, University of Newcastle, English Heritage, The Vindolanda Trust, Northumberland National Park, Tynedale Museums, The National Trust, Birdoswald Roman Fort, Tullie House, and Senhouse Roman Museum representing the sites.

The aim is to build up partnership, discuss current issues affecting education on the Wall, share knowledge and best practice and to work to create an educational identity for the Wall through events and resources focusing on the Wall as well as activities at the individual sites.

There are numerous organisations and individual sites that have interests in the development, provision and enhancement of learning opportunities with respect to the WHS. The aim of this strategy is not to impose a single learning strategy or approach on members of the HWEF, but to further develop the individual work of organisations, partnership working and Wall-wide collaboration.

The development, provision and enhancement of learning opportunities are specialised tasks, and each site delivers its work in close collaboration through the Hadrian's Wall Education Forum (HWEF). The HWEF defines education in the broadest possible terms and sees it as covering all aspects of formal, informal and lifelong learning. Education is not seen as the preserve of those following formal curricula but as the right of all members of society, regardless of age, ability, or individual social, intellectual, cultural or economic background.

This strategy has identified a number of key issues, that, given adequate investment in time, resource and training, and further

collaboration, will give the visitor to Hadrian's Wall WHS a more powerful, holistic, and world-class learning experience.

3. Aims/vision

This strategy aims to develop, facilitate, provide, enhance and achieve:

- Hadrian's Wall WHS as a focus for quality formal and informal learning opportunities
- joined-up and equally supportive learning, marketing, interpretation and site management across the WHS
- visitors enjoying the WHS (physically and virtually) and inspired to learn more
- local communities in and beyond the WHS developing a deeper sense of pride and ownership for the Wall and its landscape (fostered) by learning from it
- new research into and understanding of the significance of the WHS (and its landscape throughout time) communicated effectively through learning initiatives, ensuring that locals, and visitors from the United Kingdom and worldwide are experiencing wider enjoyment and understanding of the Wall.

To deliver this Strategy HWHL and the HWEF will work closely together to encourage all partner organisations to contribute their vision in their education/learning work.

This strategy, once agreed, will require a specific action plan to enable successful embedding of the outcomes across the whole WHS with a focus on very specific Wall-wide issues.

4. Issues, outcomes and actions

4.1 Coordinate and consolidate ISSUE

The coordination of existing and new initiatives to raise awareness of Hadrian's Wall WHS to a wider and greater audience.

OUTCOME

Better communication leads to improved understanding of resources, staffing and audiences etc, across and beyond the WHS.

ACTION

- HWHL and HWEF work closely together to seek funding to deliver coordinated education programmes.
- Sustained development and delivery.
- Appointment of a Wall-wide Learning Coordinator.
- Gap-finding and filling across the WHS.
- Carry out an audit of existing resources and sharing of best practice.
- Create a national and international education network.

4.2 Review and renew

ISSUE

The provision of a strategic, responsive and comprehensive quality education service.

OUTCOME

All learners (groups and individuals) receive the maximum offer across the WHS.

ACTION

- Continue to undertake or instigate research and evaluation into current learning provision and access to Hadrian's Wall WHS.
- HWHL to develop and finance a coordinated education programme reflecting needs and requirements of individual partners.
- Develop new opportunities.
- Consult with both current and potential audiences.
- Review future of directory. Is a practical guide better?
- Set up learning trails: time trails, change over time, geology/industry, WHS site management, ecology trail, art and design, science.
- Create a better educational web presence – national promotion of education, visit info (hazard IDs, facilities, FAQs).
- Make facilities available to groups: after-school clubs, adult classes.
- Provide pre- and post-visit support: downloads, maps, flyovers, geological data, recent discoveries, learning trails, accommodation for residential visits?
- Create travelling displays for children/families, with common characters.
- Provide assistance for local schools in delivery of curriculum: QCA schemes of work.
- *Roamin' Romans* outreach workshops run by different sites at quiet times of year. Objects, activities, lesson plans, photos in costume (run by freelancers to promote visits to sites).
- Provide teacher and staff training.

4.3 People and place

ISSUE

Coordinating the effective and enhanced use of staff and facilities for quality WHS education.

OUTCOME

Staff, facilities and resources support new opportunities through coordinated planning, development and promotion.

ACTION

- In conjunction and partnership develop and work with qualified and experienced people to undertake effective delivery of programmes.
- Provide additional training for learning/education staff.
- Evaluate and share evaluation of coordinated approach to monitor progress and to inform its future development and that of individual sites and organisations.
- Include World Heritage in general and Hadrian's Wall WHS in particular in some way on all courses: formal, academic and vocational and training.
- Keep up to date with continuing development on landscape and environmental studies, archaeology, geography, history, sustainable tourism.
- Resources, facilities and staff expertise to be effectively shared and access encouraged to educational facilities for current non-users.
- Coordination with and celebration of research at Durham and Newcastle Universities.
- Creation of a worldwide study and training centre.

4.4 Integrate and involve

ISSUE

Involving the local communities to foster and develop a sense of pride in place, ownership and empowerment of the WHS.

OUTCOME

The communities, working closely with schools and Further Education establishments, develop projects to encourage involvement and access.

ACTION

- Encourage greater involvement of communities, commercial enterprise and non-commercial education resource providers to develop learning resources.
- Develop a chain of Wall-wide 'ambassador schools', encouraged to develop projects drawing in families and the wider community.
- Work with extended school coordinators to get a better presence in the community.
- Link schools to universities and museums.
- Provide a key to social and economic development.

4.5 Challenge and change

ISSUE

Develop, challenge, celebrate and record the wider 21st century public understanding of Hadrian's Wall WHS and develop (beyond current boundaries) the public understanding of protected landscapes and conservation.

OUTCOME

Through existing and new mechanisms Hadrian's Wall WHS education is presented to the public in a dynamic and exciting way, thus developing new understanding, a sense of pride and ownership, and continued protection of their natural and cultural heritage.

ACTION

- Promote awareness of the wider educational potential of the WHS.
- Work in the context of UNESCO's World Heritage education.
- Work with the policies of Hadrian's Wall WHS Management Plan.
- Create a Visitor Forum.
- Use a Communication bulletin, 'wall board', vox pops?

4.6 Excellence and enjoyment

ISSUE

Getting the wide range of Hadrian's Wall WHS messages across effectively and accessibly so that people enjoy the WHS.

OUTCOME

All visitors and the local community learn about the history and significance of Hadrian's Wall WHS and are inspired by it.

ACTION

- HWHL to provide a lead role in the promotion and delivery of key messages linked to the interpretation plan.
- HWEF to advise on and support coordinated approaches.
- Carry out staff training (from FOH, learning, education, curatorial, and freelance educators) to promote key messages, recent finds, conservation etc.
- Lifelong learning: train members of the community as volunteer guides/short courses to develop knowledge and



skills/ traditional skills/ vocational skills.

- Give a coherent identity to guided walks and trails.
- Support and promote learning programmes that build on the success of *Pax Britannica* and *Touching the Wall* (2008-9)

4.7 Wall and world

ISSUE

Enhanced national and international cooperation leads to learning initiatives developed across the WHS becoming a model of best practice locally, nationally and internationally.

OUTCOME

The role of Hadrian's Wall WHS education in a national and global context is understood and celebrated.

ACTION

- Work closely with education providers, advisers and other educational professionals at the local regional, national and international level.
- Develop links with other World Heritage Sites (eg with the German *Limes* through video conferencing?).
- Run World Heritage education workshops.
- Develop a young people's fanzine.
- Set up a regional youth forum.
- Create a sustainable futures network linked to UNESCO, schools abroad.
- Encourage experimental archaeology projects.

5. Future responsibility

This strategy has been jointly agreed by the HWEF and HWHL. The strategy will be reviewed annually or when significant internal or external circumstances warrant.

Background papers held by:

Maggie Birchall – Hadrian's Wall Education Forum Chair.
Learning Officer – Segedunum Roman Fort, Baths and Museum, Tyne and Wear Museums

Adam Goldwater - Learning Officer, Research and Communication, Tyne and Wear Museums

Appendix 7.1

LONG TERM AIMS AND MEDIUM TERM OBJECTIVES FOR THE WHS

LONG TERM AIMS (30 YEARS)

<p>Identifying and protecting the World Heritage Site</p>	<ul style="list-style-type: none"> ● To preserve the World Heritage Site and its Buffer Zone for future generations through appropriate policies and adequate protective measures.
<p>Conserving the World Heritage Site</p>	<ul style="list-style-type: none"> ● To improve awareness and understanding of the archaeological, historical and other values which make the World Heritage Site so special and of the significance of its inscription as a World Heritage Site. ● To identify and promote change beneficial to the World Heritage Site and its Buffer Zone. ● To maintain and reinforce the special character of the Wall's landscape, including its beauty and its natural heritage. ● To ensure that all parts of the World Heritage Site are regularly monitored as well as adequately and appropriately conserved. ● To define and enhance the line of the Wall through the urban areas and in appropriate ways in rural areas. ● To take advantage of available opportunities to free the most sensitive sites from modern development, or planting.
<p>Presenting, enjoying and transmitting understanding of the World Heritage Site</p>	<ul style="list-style-type: none"> ● To provide visitors with an overall experience of the World Heritage Site worthy of its special values and significance. ● To retain the vitality of the landscape, both urban and rural, within the WHS and its Buffer Zone. ● To ensure that the World Heritage Site and its Buffer Zone create sustainable economic benefits through tourism and other means, without compromising its Outstanding Universal Value. ● To achieve sustainable access for all to and within the Hadrian's Wall World Heritage Site and its Buffer Zone without compromising its Outstanding Universal Value. ● To ensure that information of the highest quality and accuracy on the Site is accessible to all those using the Site for recreational and educational purposes.
<p>Managing the World Heritage Site</p>	<ul style="list-style-type: none"> ● To develop partnership and consensus among all those involved within the World Heritage Site and its Buffer Zone, whether public bodies or individuals. ● To strengthen links between the World Heritage Site and local communities to foster their appreciation of the Site and its cultural benefits. ● To ensure adequate and sustainable financial and human resources to achieve the Vision for the Site. ● To develop appropriate management to achieve the right balance between the values of the World Heritage Site and those of its Buffer Zone.



MEDIUM TERM OBJECTIVES (5 YEARS)

<p>Managing the World Heritage Site</p>	<ul style="list-style-type: none"> ● To develop integrated and fully informed management of Hadrian's Wall WHS as part of Frontiers of the Roman Empire, successfully communicating UNESCO's universal values.
<p>Identifying and protecting the World Heritage Site</p>	<ul style="list-style-type: none"> ● To establish and maintain boundaries of the WHS that comprehensively encompass all elements of the Roman frontier that reflect the Site's Outstanding Universal Value and its authenticity and integrity. ● To secure protection of the OUV, fabric, integrity and authenticity of the WHS through appropriate legislative provision. ● To maintain the effective protection and management of remains of the Roman frontier in urban environments. ● To protect the archaeological remains of the WHS and Buffer Zone from damage caused by inappropriate metal detecting.
<p>Conserving the World Heritage Site</p>	<ul style="list-style-type: none"> ● To pre-empt where possible the effects of disasters and emergencies on the WHS and to safeguard it by responding to these events. ● To manage the archaeological remains across the WHS and Buffer Zone in a way that ensures their continued enjoyment by future generations. ● To achieve a sustainable balance whereby the integrity of the WHS can be conserved while accommodating current and future land uses. ● To enhance and develop a continuous, jointly coordinated, publicly accessible programme of research designed to inform academic and public understanding of the WHS its management and its interpretation.
<p>Presenting, enjoying and transmitting understanding of the World Heritage Site</p>	<ul style="list-style-type: none"> ● To develop a fully integrated range of sustainable options for transport and other forms of access to and along the WHS. ● To establish an internationally acknowledged reputation for a range of first-class attractions offering diversified, integrated interpretation that is accessible, relevant and challenging to a wide range of audiences ● To ensure that the WHS is a major, high quality contributor to the local and regional economy. ● To offer communities in, neighboring and associated with the WHS opportunities to be engaged with the WHS, and develop the contribution that the Site can make to community life. ● To establish the WHS as a destination that is firmly on the agenda of the domestic and overseas visitor, with a visit to at least one of its major attractions included in a trip to <i>Hadrian's Wall Country</i>. ● To ensure that the WHS is acknowledged nationally and internationally as a focus for high quality, challenging, innovative and enjoyable learning, and for the communication of new research and understanding of the Site through learning initiatives.

Appendix 7.2

SUMMARY OF ISSUES, POLICIES AND ACTIONS

Management of the WHS

ISSUE	POLICY	ACTIONS
Issue 1: Management of the WHS		
Objective 1: Integrated and fully informed management of Hadrian's Wall WHS as part of Frontiers of the Roman Empire, successfully communicating UNESCO's universal values.	Policy 1a: Raise awareness about World Heritage, in line with UNESCO guidelines.	<ol style="list-style-type: none"> 1. The Hadrian's Wall Management Plan Committee (MPC) and Hadrian's Wall Heritage Limited (HWHL) will champion the aspirations, aims and objectives of UNESCO's World Heritage Committee; 2. Site and museum managers and educators will aim to engage the public in the issues of World Heritage, and the management of Hadrian's Wall as part of the Frontiers of the Roman Empire WHS; 3. The design agreed for use of the World Heritage emblem on Hadrian's Wall should be used throughout the WHS, as part of the strategy to raise awareness of World Heritage.
	Policy 1b: Individual parts of the Frontiers of the Roman Empire WHS will be managed in a sustainable framework of interdisciplinary cooperation to achieve common standards of identification, recording, research, protection, conservation, management, presentation, promotion and understanding of the Roman frontier, above and below ground.	<ol style="list-style-type: none"> 1. Develop and maintain appropriate international links through the Bratislava Group and the Frontiers of the Roman Empire Intergovernmental Body (see Part 3); 2. Work with international partners to develop a set of management principles on the identification, recording, research, protection, conservation, management, presentation, promotion, understanding and contribution to sustainable development of the Roman frontier; and guidelines for potential new members on the process, mechanisms and standards needed for inclusion in the Frontiers of the Roman Empire WHS; 3. Those responsible for managing Hadrian's Wall and the Antonine Wall will develop a close working relationship on all aspects of WHS management.
	Policy 1c: An overall conservation framework which includes the cultural and natural heritage should be developed for the differing values within the WHS and Buffer Zone.	<ol style="list-style-type: none"> 1. Audit the values of the Site, their current condition and consider the resources the various organisations can bring to the conservation management of the Site and Buffer Zone; 2. Develop an agreed conservation management framework to prioritise agreed values and identify conflicts, using guidance such as English Heritage's Conservation Principles and the Getty Conservation Institute's Heritage Values in Site Management - Four Case Studies.



ISSUE	POLICY	ACTIONS
	<p>Policy 1d: HWHL will strive to be proactive in coordinating continuing research and data analysis as a basis for improved management of the WHS.</p>	<ol style="list-style-type: none"> 1. Prepare a full audit, mapping and tabulation of ownership in the WHS and Buffer Zone; 2. Conduct a full baseline condition assessment of the standing masonry monuments and earthworks of the WHS; 3. Improve mapping of the WHS, including developing and using a uniform Geographic Information System (GIS); 4. Enhance information about the WHS, its management, and the Frontiers of the Roman Empire available on the Internet : e.g. explore the possibility of using the <i>Hadrian's Wall Country</i> website and improved mapping to offer layered mapping facilities; 5. Develop further specialist reports for the next Management Plan: e.g. geological Sites of Special Scientific Interest (SSSIs); population density and distribution in the WHS and Buffer Zone; a statement of principles governing archaeological work; the WHS Research Framework; 6. Undertake regular research into usage of and participation in the WHS.
	<p>Policy 1e: Preparation of future Management Plans should be resourced to allow continuous development and review during the next Plan period.</p>	<ol style="list-style-type: none"> 1. The Management Plan Steering Group should continue to meet throughout the Plan period, to collect and analyse material for the next update; 2. The necessary centralised project coordination and management function currently provided by HWHL will be appropriately resourced, with appropriate contributions from partner organisations; 3. Partner organisations should be encouraged to contribute to the process of continuing development and review through the MPC.
	<p>Policy 1f: At all meetings the MPC should aim to be as representative of all stakeholders as possible, with stakeholders accepting responsibility for and ownership of the Plan.</p>	<ol style="list-style-type: none"> 1. Encourage partner organisations to incorporate Hadrian's Wall Management Plan policies and objectives into their own corporate plans; 2. Undertake research into MPC members' views on barriers to effective participation in management of the WHS and act to reduce these; 3. Strongly encourage members of the MPC to participate as often and as actively as possible, and keep all possible methods of participation under review.



Identification and protection

ISSUE	POLICY	ACTIONS
<p>Issue 2: The boundaries of the WHS and its Buffer Zone</p>	<p>Policy 2a: The existing boundary of the WHS should be clarified by supplying definitive maps to the World Heritage Centre.</p>	<ol style="list-style-type: none"> 1. Produce a definitive set of maps of scheduled areas which form the WHS; 2. Seek agreement of other partners in FREWHS to this clarification of the boundary; 3. Confirm clarification of the current boundaries of the WHS with the UNESCO World Heritage Centre as part of the follow-up to the Retrospective Inventory.
<p>Objective 2: To establish and maintain boundaries of the WHS that comprehensively encompass all elements of the Roman frontier that reflect the Site's Outstanding Universal Value, authenticity and integrity.</p>	<p>Policy 2b: The definition of the Hadrian's Wall part of FREWHS should be reviewed in the light of the approach to defining boundaries as set out in the FRE Summary Nomination.</p>	<ol style="list-style-type: none"> 1. Produce a clear statement of discrepancies between the present boundaries of the Hadrian's Wall WHS and the policy set out in the Frontiers of the Roman Summary Nomination document.
<p>Objective 2: To establish and maintain boundaries of the WHS that comprehensively encompass all elements of the Roman frontier that reflect the Site's Outstanding Universal Value, authenticity and integrity.</p>	<p>Policy 2c: The boundaries of Hadrian's Wall WHS should be extended to include functionally connected sites and the entire length of the linear elements.</p>	<ol style="list-style-type: none"> 1. Carry out a review the boundaries of the WHS, coordinated by the HWHL Management Plan Coordinator and in cooperation with partner organizations and landowners in the WHS;
<p>Objective 2: To establish and maintain boundaries of the WHS that comprehensively encompass all elements of the Roman frontier that reflect the Site's Outstanding Universal Value, authenticity and integrity.</p>	<p>Policy 2d: Any areas proposed for extending the boundaries of the World Heritage Site will meet the test of authenticity and integrity and must have adequate legal protection and management arrangements. They must also be consistent with the Outstanding Universal Value of the World Heritage Site as accepted by the World Heritage Committee.</p>	<ol style="list-style-type: none"> 2. Identify implications of the review with respect to submission of proposed boundary changes nomination to the World Heritage Committee;
<p>Objective 2: To establish and maintain boundaries of the WHS that comprehensively encompass all elements of the Roman frontier that reflect the Site's Outstanding Universal Value, authenticity and integrity.</p>	<p>Policy 2e: Changes to the boundaries that would require full re-nomination will not be considered for notification to the World Heritage Committee.</p>	<ol style="list-style-type: none"> 3. Obtain the approval of other partners in Frontiers of the Roman Empire WHS to any proposed submission to the World Heritage Committee;
<p>Objective 2: To establish and maintain boundaries of the WHS that comprehensively encompass all elements of the Roman frontier that reflect the Site's Outstanding Universal Value, authenticity and integrity.</p>	<p>Policy 2f: Changes in the boundaries resulting from the revision of the scheduling under the English Heritage Monuments Protection Programme will be notified to the Committee.</p>	<ol style="list-style-type: none"> 4. Identify and action any implications arising from the boundary and nomination review.
<p>Objective 2: To establish and maintain boundaries of the WHS that comprehensively encompass all elements of the Roman frontier that reflect the Site's Outstanding Universal Value, authenticity and integrity.</p>	<p>Policy 2g: The boundaries of the Buffer Zone agreed for the 2002-7 Management Plan will remain unchanged for the period of this Management Plan.</p>	

ISSUE	POLICY	ACTIONS
<p>Issue 3: Legislative protection for the WHS</p>		
<p>Objective 3: To secure protection of the WHS's OUV, fabric, integrity and authenticity through appropriate legislative provision.</p>	<p>Policy 3a: The MPC will be alert to policy changes coming into force during the period of the Management Plan which have a bearing on the WHS.</p>	<p>1. Alert stakeholders to the implications of policy changes relevant to the management of the WHS and the protection of its OUV;</p>
	<p>Policy 3b: Local Authorities and English Heritage should be adequately resourced to continue the same high standards of protection through Heritage Asset Consent as currently applied to the granting of Scheduled Monument Consent.</p>	<p>2. Set up a mechanism for monitoring and reporting on the impact of Heritage Asset Consent on protection standards and on the consistency of policies with regard to protecting the Outstanding Universal Values of the WHS.</p>
	<p>Policy 3c: Under the proposed reform of heritage protection, local planning authorities should be encouraged to adopt and apply standards that are both uniform, and consistent with the OUV of the WHS when granting Heritage Asset Consent.</p>	
	<p>Policy 3d: Local Authorities will carry forward the proposals of the 3-Level Framework above into new LDFs.</p>	<p>1. Set up a mechanism through which local planning authorities share, monitor and review information, policies and actions relating to development proposals and the protection of the Outstanding Universal Value of the WHS with HWHL and the MPC.</p>
	<p>Policy 3e: Local Authorities will require formal environmental impact assessment for significant developments affecting Hadrian's Wall WHS and its Buffer Zone.</p>	
	<p>Policy 3f: Local Authorities should assess developments outside the Buffer Zone for their impact on the OUV. They should consult with appropriate expert advisors and where necessary require applicants to commission further information to allow this assessment. Development adversely affecting the OUV will not be permitted.</p>	
	<p>Policy 3g: Legislative protection, either under the current regime or the new Heritage Protection Review system should be reviewed where new discoveries are made.</p>	<p>1. Set up mechanism for regular review of areas protected by scheduling and for the scheduling of newly discovered sites.</p>
	<p>Policy 3h: Existing anomalies in the legislative protection of sites in the WHS should be reviewed and brought into line and taking into account the level of threat to them.</p>	
	<p>Policy 3i: Managers of all assets in the WHS will consider the OUV of the archaeological remains of Hadrian's Wall when managing other assets under other consent regimes in The WHS and its Buffer Zone.</p>	<p>1. Set up a mechanism through which to monitor and review management practices and issues where assets are managed under multiple consent regimes.</p>



ISSUE	POLICY	ACTIONS
<p>Issue 4: Protection of the archaeological remains in urban areas</p> <p>Objective 4: To maintain effective protection and management of remains of the Roman frontier in urban environments.</p>	<p>Policy 4a: Local authorities should seek to protect or enhance non-scheduled elements that contribute to the OUV of the WHS.</p> <p>Policy 4b: Local planning authorities should not permit new development on currently open land on the line of the Wall.</p> <p>Policy 4c: Townscape features that help people interpret and appreciate the Wall where it is not visible, such as street patterns, should be protected.</p> <p>Policy 4d: Local Authority decisions about the excavation, recording and possible reburial of sites on the Wall, and conservation and publication of finds should be informed by PPG 16, the Planning Policy Statement that will replace it, and the Hadrian's Wall Research Framework.</p> <p>Policy 4e: Local Authorities should, as part of the planning process, require from a developer interpretation of both exposed and reburied remains excavated as a result of development.</p> <p>Policy 4f: Local Authorities will protect or enhance other, non-scheduled elements in their areas that relate to Hadrian's Wall WHS.</p>	<p>1. Set up a mechanism through which Local Authorities share, monitor and review information, policies and actions relating to the protection and management of the remains of the Roman frontier in urban areas with the Planning Interest Group of the Management Plan Committee.</p>
<p>Issue 5: Metal detecting</p> <p>Objective 5: To protect the archaeological remains of the WHS and Buffer Zone from damage caused by of inappropriate metal detecting.</p>	<p>Policy 5a: Metal detecting within the WHS and on other sites within the Buffer Zone will only be supported where it is in concordance with EH's guidelines, as part of a properly organised research project.</p>	<p>1. Partner organisations along the Wall will seek to develop and implement strategies to discourage inappropriate and prevent illegal metal detecting within the WHS and Buffer Zone, through cooperation with regional police forces;</p> <p>2. Where illegal metal detecting is discovered, the relevant authorities will be urged to devote appropriate resources to investigate possible criminal offences committed, and prosecute offenders if appropriate.</p>

Conservation and research

ISSUE	POLICY	ACTIONS
<p>Issue 6: Risk preparedness and disaster management</p>		
<p>Objective 6: To pre-empt where possible the effects of disasters and emergencies on the WHS and to effectively safeguard it in responding to these events.</p>	<p>Policy 6a: The Hadrian’s Wall Research Framework should be used to prioritise archaeological fieldwork to mitigate threats to archaeological remains if <i>in situ</i> preservation of such areas at risk is not possible.</p>	<ol style="list-style-type: none"> 1. Develop and implement plans to record the archaeology where protection is not possible, and to publish the results fully; 2. Implement measures to conserve vulnerable sites where possible.
	<p>Policy 6b: The WHS will be managed to pre-empt the effects of climate change to prevent deterioration of its OUV.</p>	<ol style="list-style-type: none"> 1. Identify, prioritise and regularly review sites or areas potentially at risk; 2. Monitor potentially harmful changes in flora, fauna, or the landscape.
	<p>Policy 6c: Emergency planners and aviation managers should be aware of the WHS and emergency services should take it into account in their planned response to an incident.</p>	<ol style="list-style-type: none"> 1. Establish appropriate mechanisms of liaison with Local Authority emergency planning teams, aviation managers and emergency services.; maintain contact with them, and carry out an annual review of provisions; 2. Develop strategies to reduce, if not eliminate, the need to close sites during outbreaks of contagious livestock diseases.
	<p>Policy 6d: Mitigation of risk to sites and museum collections should be put in place.</p>	<ol style="list-style-type: none"> 1. Keep appropriate, up to date emergency plans in place at all sites and museums;
	<p>Policy 6e: Managers in the World Heritage Site should aim to reduce carbon emissions by the implementation of energy efficient measures to reduce the rate of climate change.</p>	<ol style="list-style-type: none"> 2. Develop cooperation between sites for the management of emergencies; 3. Regularly check security systems on sites and in museums, and update where necessary; 4. Ensure that collections are adequately recorded, with backup records off site.
	<p>Policy 6f: Managers in the World Heritage Site should aim to reduce carbon emissions by the implementation of energy efficient measures to reduce the rate of climate change.</p>	<ol style="list-style-type: none"> 1. Produce and promote guidelines on sustainability principles for visitor facilities; 2. Audit all existing facilities against appropriate guidelines, and develop action plans to improve sustainability and energy efficiency; 3. Monitor progress in implementing measures to improve sustainability and energy efficiency.



ISSUE	POLICY	ACTIONS
<p>Issue 7: Conservation of the archaeological monuments and sites</p>		
<p>Objective 7: To manage the archaeological remains across the WHS and Buffer Zone in a way that ensures their continued enjoyment by future generations.</p>	<p>Policy 7a: There should be regular monitoring and maintenance of exposed masonry by all organisations and individuals responsible for its care.</p>	<ol style="list-style-type: none"> 1. Survey the condition of exposed masonry not covered by the EH Asset Management Plan; 2. Coordinate action and resources to conserve and repair exposed sections of masonry.
	<p>Policy 7b: Preventative and active conservation measures for the Clayton Wall should be improved.</p>	<ol style="list-style-type: none"> 1. Implement measures to discourage visitors from climbing and walking on the Clayton Wall; 2. Investigate and implement measures to waterproof and increase stability of the Clayton Wall.
	<p>Policy 7c: Archaeological earthworks must be protected from damage by erosion.</p>	<ol style="list-style-type: none"> 1. Implement and monitor management regimes on archaeological earthwork sites that are prone to erosion.
	<p>Policy 7d: All areas of the WHS on the Heritage at Risk Register should be removed, or reduced in risk on the register, by the end of the life of this Plan.</p>	<ol style="list-style-type: none"> 1. Improve the condition of all areas on the Heritage at Risk Register.
	<p>Policy 7e: The activities of burrowing animals in the WHS will be managed where it impacts on significant archaeological remains.</p>	<ol style="list-style-type: none"> 1. Farming bodies, English Heritage and Natural England should develop a joint strategy for managing burrowing animals which impact on significant archaeological remains in the WHS and Buffer Zone.
	<p>Policy 7f: The use of generic consents and Heritage Partnership Agreements (HPAs) should be further developed for the conservation of the OUV of the WHS.</p>	<ol style="list-style-type: none"> 1. Develop further generic consents as appropriate; 2. Develop, post Heritage Bill, Heritage Partnership Agreements.
	<p>Policy 7g: Conservation and repair work carried out in the WHS should adhere to best practice and appropriate current research.</p>	<ol style="list-style-type: none"> 1. Use appropriate research and guidelines in carrying out any conservation and repair work.
	<p>Policy 7h: The work of the Raphael Project should be reviewed.</p>	<ol style="list-style-type: none"> 1. Review and reassess the methodologies proposed in the Raphael Project manual, and the work undertaken within the project period; 2. Continue with and review the results of the Trail Management day schools on managing paths in archaeologically sensitive areas; 3. Publish results of the reviews.
	<p>Policy 7i: The condition of archaeological remains in the WHS should be surveyed and monitored on a regular basis.</p>	<ol style="list-style-type: none"> 1. Repeat the condition survey of the archaeology of the WHS under grassland and forestry carried out during the Raphael Project; 2. Develop a methodology for survey of Scheduled Monuments at Risk in the WHS, and carry out surveys every five years.

ISSUE	POLICY	ACTIONS
<p>Issue 8: Rural land management</p>		
<p>Objective 8: To achieve a sustainable balance whereby the integrity of the WHS can be conserved while accommodating current and future land uses.</p>	<p>Policy 8a: Greater use of Higher Level Stewardship schemes which prioritise the historic environment should be promoted across the WHS.</p>	<ol style="list-style-type: none"> 1. Encourage farmers and landowners to enter into the Higher Level Stewardship schemes to benefit the conservation and sustainability of the WHS; 2. Encourage Natural England to prioritise projects within the WHS for support through the Scheme; 3. Work towards a goal of having all agricultural land in the WHS managed under Stewardship Agreements.
	<p>Policy 8b: The effect of agriculture on vulnerable sites throughout the WHS and its Buffer Zone should be monitored and assessed, to maintain a satisfactory balance between conservation and agricultural viability.</p>	<ol style="list-style-type: none"> 1. Establish a mechanism for monitoring sites identified as at potential risk from ploughing and apply appropriate solutions in cooperation with farmers; 2. Prioritise support for sites identified as at medium or high risk on the Heritage at Risk register; 3. Encourage farmers to enter Stewardship and Section 17 agreements to manage their stock in a sympathetic manner that avoids damage to structures and prevents erosion; 4. Where earthworks are damaged by farm stock, identify proactive solutions to prevent erosion, enable rapid responses when damage occurs, and provide sustainable grazing.
	<p>Policy 8c: Management of forestry and woodlands within the WHS and its Buffer Zone should take the OUV of the Site into account.</p>	<ol style="list-style-type: none"> 1. Identify trees at risk from being blown over which could as a result damage archaeological remains, and negotiate their removal; 2. Identify trees whose root growth is likely to result in damage to archaeological remains and negotiate their removal; 3. Encourage the removal of intrusive conifer blocks and the planting of broadleaved native species where appropriate.
	<p>Policy 8d: A strategy should be developed for the management and protection of the rural landscape in so much as it impacts on the OUV of the WHS.</p>	<ol style="list-style-type: none"> 1. Create and implement management plans for each SSSI which take into account the needs of both the historic and natural environments; 2. Identify and implement the necessary processes to develop a wider landscape strategy appropriate for the WHS; 3. Carry out fixed point photographic monitoring of key views.



ISSUE

POLICY

ACTIONS

Issue 9: Research

Objective 9: To enhance and develop a continuous, jointly co-ordinated, publicly accessible programme of research designed to inform academic and public understanding of the WHS its management and its interpretation.

Policy 9a: A programme of on-going survey, fieldwork and analytical research will be developed to take forward projects and priorities identified in the Research Framework.

Policy 9b: Organisations with responsibilities and commitments to develop and implement research along Hadrian's Wall will work in partnership and co-ordinate their activities wherever possible.

Policy 9c: Wherever possible, non-invasive methods of archaeological investigation should be used in preference to excavation.

Policy 9d: Archaeological excavation will be undertaken under guidance from the Archaeological Research Framework.

Policy 9e: Archaeological excavation will only take place where there is adequate provision for post-excavation, publication and the conservation of finds.

Policy 9f: A wider Research Framework should be developed to help understand and manage the WHS, and maintain its OUV. It should incorporate the use of the landscape by visitors and local people and the impact of this use on its natural, historic and modern elements.

Policy 9g: Wherever possible opportunities will be sought to engage local people and visitors in the research process.

Policy 9h: The results of all research will be publicly accessible.

1. Develop and implement a GIS programme for the WHS that is informed by and builds on existing GIS operated by stakeholders;

2. Co-ordinate action to maximise the knowledge yield from sites being damaged by erosion;

3. Carry out strategic excavations of a range of site-types;

4. Identify the precise course of the Wall and the boundaries of its installations in the West using all appropriate techniques, including a complete set of geophysical surveys for the principal Wall and Stanegate sites;

5. Make resources available for aerial reconnaissance whenever the conditions are suitable.

1. Set up a forum to provide liaison for research activity throughout the WHS;

2. Develop a co-ordinated approach to seeking funding for an on-going Wall-wide programme of fieldwork and analytical research.

1. Develop a broad, integrated Research Framework for the WHS.

1. Create opportunities to involve local people and visitors in the research process;

2. Communicate the results of research in accessible, informative and imaginative ways.

ISSUE	POLICY	ACTIONS
Presenting, enjoying and transmitting		
Issue 10: Sustainable physical access	<p>Policy 10a: The <i>Hadrian's Wall Country</i> Bus service should be developed and enhanced to the greater benefit of visitors and communities within the WHS and to increase passenger numbers and the viability of the service.</p> <p>Policy 10b: Site managers should consider offering incentives to visitors who travel to their sites using public transport exclusively.</p> <p>Policy 10c: Accessibility for coach services should be improved where this can be done without detriment to the OUV of the Site.</p> <p>Policy 10d: The greater use of rail services should be promoted as a means of improving access to the WHS.</p> <p>Policy 10e: The Hadrian's Wall National Trail should be proactively managed primarily as a grass sward surface to protect the archaeology underfoot and the setting of the WHS.</p>	<ol style="list-style-type: none"> 1. Increase frequency of the service, and explore joint ticketing and other incentives to increase bus usage; 2. Explore the provision of new buses in the lifetime of the Plan, using this as an opportunity to introduce more environmentally fuel-efficient vehicles; 3. Continue to monitor and review the performance of the <i>Hadrian's Wall Country</i> Bus service and the needs and experience of visitors and local communities using it; 4. Develop better integration between the <i>Hadrian's Wall Country</i> Bus service and other modes of transport. <ol style="list-style-type: none"> 1. Continue to consider options to improve coach access; 2. Maintain and improve liaison with coach operators to better understand their access and scheduling requirements. <ol style="list-style-type: none"> 1. Continue to work with rail service operators to promote the WHS; 2. Continue to work with rail service operators to provide better integration of services with other modes of transport. <ol style="list-style-type: none"> 1. Continue to monitor and manage the National Trail through a dedicated and adequately resourced staff team, including lengthsman; 2. Explore further with EH the use and expansion of generic scheduled monument consent for works on the Trail and its conversion to a Heritage Partnership Agreement under the new Heritage Protection legislation; 3. Encourage Rights of Way Authorities to invest greater time and resources in the National Trail; 4. Continue to research, implement and monitor the use of techniques and materials for the maintenance of the grass sward on the Trail; 5. Promote local permissive footpath diversion agreements with landowners to help to manage the grass sward and to provide alternative routes.



ISSUE	POLICY	ACTIONS
	<p>Policy 10f: Promote the Hadrian's Wall National Trail in such a way that protects the archaeology underfoot and the setting of the WHS.</p>	<ol style="list-style-type: none"> 1. Promote use of the Trail in the summer through the passport scheme; 2. Keep the Essential Companion booklet updated and available; 3. Develop for alternative itineraries and destinations for the winter period, to take pressure off the National Trail and the WHS; 4. Update and promote the code of respect for the WHS Every Footstep Counts, among visitors and tourism operators; 5. Develop and promote a code of practice for large parties of walkers in cooperation with other organisations such as NNPA.
	<p>Policy 10g: Options should be developed to broaden choices for walkers and to improve the quality of their experience.</p>	<ol style="list-style-type: none"> 1. Improve the rights of way network within the WHS and its Buffer Zone and develop and maintain a network of circular walking routes of varying length and ability;
	<p>Policy 10h: The Rights of Way authorities should invest adequate resources and prioritise works to maintain the network within the WHS and Buffer Zone, and link them to their setting.</p>	<ol style="list-style-type: none"> 2. Encourage Rights of Way Authorities to invest greater time and resources in the network linking with the National Trail; 3. Promote the development of the North West Coastal Trail and provide appropriate interpretive and promotional material linked to the National Trail.
	<p>Policy 10i: Measures should be implemented to promote use of the Hadrian's Cycleway and to improve the experience of cyclists using it.</p>	<ol style="list-style-type: none"> 1. Develop and upgrade the cycleway along the Cumbrian coast to enable access throughout the WHS; 2. Clarify and confirm responsibilities and the provision of resources for the ongoing maintenance of the cycleway; 3. Improve and upgrade signage along the Cycleway and signage linking it to other routes and other modes of transport; 4. Improve the provision of facilities for cyclists throughout the route and elsewhere within the WHS.
	<p>Policy 10j: A review of recommendations for the management of private car usage in the 1999 Transport Strategy should be undertaken with the protection of the OUV of the Site and Buffer Zone as a central principle.</p>	<ol style="list-style-type: none"> 1. Review car parking charging policies, provision and usage across the WHS and make recommendations for improvements, including the potential provision of park and ride facilities; 2. Commission research to monitor road traffic volumes speeds and usage; 3. Establish a Military Road Action Group to identify options and make recommendations to improve safety along the B6318.

ISSUE	POLICY	ACTIONS
	Policy 10k: Create an integrated strategy for signage for the WHS.	1. Review current signage provision and make recommendations for improvement.
	Policy 10l: Partners will work together with HWHL to provide a strategic approach to sustainable transport provision to and within the WHS and to ensure that adequate resources are provided to develop and maintain sustainable transport options.	1. Actively develop and promote sustainable transport options including cycling and walking hubs and use of public transport for access to and within the WHS; 2. Invest in existing and new attractions that encourage sustainable modes of transport and limit growth of car-based travel, where possible; 3. Promote Hadrian's Wall WHS as a green tourism destination.
	Policy 10m: Access to the WHS should be as widely inclusive as possible, without compromising its OUV.	1. All those involved in management of access will examine what can be done to improve access within the WHS for all disabled visitors; 2. DDA compliance will be regularly reviewed by site and museum managers.

Issue 11: Developing the visitor experience and understanding of the World Heritage Site and Buffer Zone

Objective 11: To establish an internationally acknowledged reputation for a range of first-class attractions offering diversified, integrated interpretation that is accessible, relevant and challenging to a wide range of audiences.

Policy 11 a: Investment in first-class interpretation and visitor facilities that maximise understanding and appreciation of the WHS should continue at sites in the WHS and its Buffer Zone.

1. Develop a coordinated programme for investment in first-class attractions and facilities at the sites, based on proposals in Appendix 6.1 and other appropriate opportunities;

Policy 11b: Investment proposals should be the result of coordination between partner organizations along the Wall, and should contribute to an approach that sees Hadrian's Wall as a linked destination;

2. Aim to provide better wet-weather attractions, family-friendly visitor facilities, catering, toilets and facilities for walkers and cyclists at the main WHS attractions and sites;

Policy 11c: Investment proposals must preserve the OUV of Hadrian's Wall;

3. Coordinate a programme of WHS-wide research to monitor levels of visitor satisfaction;

Policy 11d: All WHS museums should meet national museum accreditation standards and aspire to exceed these standards.

4. Encourage all WHS attractions to participate in the national Visitor Attraction Quality Assurance Service (VAQAS) scheme and the Welcome suite of schemes operated by VisitBritain.

Policy 11e: Investment at hinterland and complementary sites should be explored where resources permit.

Policy 11f: Interpretation of the WHS and its Buffer Zone must be coordinated, based on accurate and up-to date information, explain the meaning and significance of the places being visited, be thought-provoking, and engender greater enjoyment of and care for the heritage by the visitor.

1. Develop an overall Hadrian's Wall WHS interpretation framework;



ISSUE	POLICY	ACTIONS
	<p>Policy 11g: The WHS should demonstrate best practice in public engagement leading to an appreciation of the significance and values of the WHS and its Buffer Zone.</p> <p>Policy 11h: Interventive fieldwork for interpretation reasons alone will not be supported.</p> <p>Policy 11i: Any proposals for physical reconstruction will only be supported where they follow English Heritage's 2001 Policy statement on reconstruction and 2006 Conservation Principles[1], and take into account the UNESCO decision on reconstruction in the Frontiers of the Roman Empire WHS[2], and the OUV of the Site.</p> <p>Policy 11j: Use of virtual reconstruction in line with the OUV of Hadrian's Wall should be researched.</p>	<p>2. Develop and deliver a coordinated programme of maintenance of interpretation panels, especially in urban areas;</p> <p>3. Explore opportunities to engage visitors and local people more positively in the management of the Site and its landscape;</p> <p>4. Review the service provided by the Hadrian's Wall information line and the <i>Hadrian's Wall Country</i> website in the light of changing visitor information needs and provision in the regions and develop as appropriate;</p> <p>5. Encourage provision of site-based tours by trained staff and volunteers where no other service is provided; training will include awareness of WHS issues and values;</p> <p>6. Support and develop interpretative events and re-enactments, local cultural and heritage events and arts-based interpretation that contribute to WHS values.</p> <p>1. Investigate the use of appropriate, well researched and stimulating virtual reconstruction on Hadrian's Wall, as part of an integrated strategy for interpretation.</p>

Issue 12: Sustainable development and economic regeneration

Objective 12: To ensure that the WHS is a major, high quality contributor to the local and regional economy.

Policy 12a: The WHS should be used to assist in the sustainable economic development of the local area, while maintaining and promoting the OUV of the Site.

1. Establish cooperative working between organizations within the WHS, and regional, sub regional, other local organizations with responsibilities for supporting economic development;

2. Improve awareness of the special qualities of the WHS among businesses, business advisors, local communities and other stakeholders through a programme of roadshows, workshops, seminars, training, familiarisation visits and appropriate networking activity.

Policy 12b: Provision of visitor infrastructure and facilities should be of the highest possible quality to meet the needs of visitors and to respect WHS values.

1. Assess all new development proposals seeking public support against their ability to meet agreed guiding principles;

ISSUE	POLICY	ACTIONS
	Policy 12c: Organisations involved in the WHS should source quality local products to both support local producers and to promote local produce to visitors.	<p>2. Develop and support proposals to provide wet weather facilities which extend the tourism season without impacting adversely on the National Trail;</p> <p>3. Encourage businesses to participate in national accreditation schemes;</p> <p>4. Develop the <i>Hadrian's Wall Country</i> Local Produce Scheme; encourage retailers, accommodation providers and attractions to use and promote local suppliers.</p>
	Policy 12d: Wall-wide coordinated schemes which can add value to visits to the WHS by increasing length of visitor stay or the number of sites visited should be developed.	<p>1. Investigate the potential for joint incentive schemes between private and public sector stakeholders that meet visitor aspirations , bring operational benefits and add value to WHS visits.</p>
	Policy 12e: Initiatives which encourage more environmentally sustainable provision of visitor facilities and services should be developed and supported.	<p>1. Encourage all involved in the visitor economy of HW WHS to review and adapt their activities as far as possible to embrace environmentally responsible business practices, encourage sustainable visits to the WHS and explore opportunities for visitor payback schemes.</p>
	Policy 12f: Businesses should be supported to exploit the opportunities presented by new and emerging information technologies.	<p>1. Develop appropriate networks, support and training to ensure communities and businesses linked to the WHS benefit from new developments in IT.</p>
	Policy 12g: More individuals and businesses across the WHS should participate in training, to sustain and increase the level of skills.	<p>1. Establish mechanisms to provide more effective coordination between agencies responsible for the delivery of training and skills.</p>
	Policy 12h: Economic development opportunities presented by the WHS should be more fully exploited in the local and regional economy.	<p>1. Fully develop opportunities identified to develop Tyneside and Carlisle as gateways to the WHS;</p> <p>2. Promote economic development opportunities associated with the WHS in market towns and smaller settlements throughout the WHS;</p> <p>3. Develop and exploit greater linkages with other attractions and destinations across the regions.</p>
	Policy 12i: A fuller understanding of tourism markets and economic development as it relates to the WHS should be developed and maintained.	<p>1. Regularly update gap analysis and market intelligence to identify opportunities for appropriate development. Communicate findings to stakeholders, and monitor business investment and developments.</p>



ISSUE	POLICY	ACTIONS
	<p>Policy 12j: The contribution of traditional land based industries to the local economy of the WHS and its Buffer Zone should be recognised and opportunities sought for land managers to maximize the benefits from their association with the WHS.</p>	<ol style="list-style-type: none"> 1. Identify mechanisms for closer engagement between land management industries and relevant support agencies; 2. Actively promote business development opportunities to land managers and seek to identify appropriate measures of support to assist them to exploit these opportunities; 3. Support development proposals in rural areas which do not adversely impact on the WHS and its landscape setting.

Issue 13: Engaging with communities

<p>Objective 13: To offer communities in, neighbouring and associated with the WHS opportunities to be engaged with the WHS, and to develop the contribution the Site can make to community life.</p>	<p>Policy 13a: Opportunities for greater participation in and engagement with the WHS by local individuals and communities should be developed and exploited.</p> <p>Policy 13b: WHS managers should follow a programme of proactive engagement to establish a better understanding of local community groups and interests.</p>	<ol style="list-style-type: none"> 1. Create links with community development agencies along the WHS and facilitate collaborative working that engages local communities more actively in the WHS; 2. Develop a programme to raise awareness of the special qualities of the WHS among communities through local groups, talks, workshops, visits and appropriate networking events; 3. Support and develop WHS wide community based arts and cultural activities that are relevant to the WHS, reflect WHS values, and contribute to the interpretation framework; 4. Investigate potential for an archaeological heritage programme (both Roman and non Roman) involving local communities in events, workshops and fieldwork, provided these are justified in research terms, properly resourced and organised (see Issue 9); 5. Work with volunteers and local agencies to develop circular walks that connect settlements with the WHS and National Trail and improve existing circular walks; 6. Continue to develop mechanisms for regular communication between local communities and WHS management.
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Issue 14: Marketing the WHS

<p>Objective 14: To establish the WHS as a destination that is firmly on the agenda of the domestic and overseas visitor, with a visit to at least one of its major attractions included in a trip to <i>Hadrian's Wall Country</i>.</p>	<p>Policy 14a: Continued and coordinated marketing and communication should be used to increase the value of tourism at and around the WHS, provided that there are no adverse impacts on the integrity and OUV of the WHS.</p>	<ol style="list-style-type: none"> 1. Develop targeted marketing and communications campaigns through partnership building on previous work, and designed to attract new and existing audiences for the benefit of all stakeholders within the WHS corridor; 2. Develop and maintain an improved understanding of market intelligence and of emerging techniques and technologies associated with audience engagement;
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ISSUE	POLICY	ACTIONS
		<ul style="list-style-type: none"> 3. Share the results of market intelligence and economic impact research between stakeholders; 4. Encourage positive editorial coverage locally, nationally and internationally; 5. Continue to develop relationships with travel trade and tour operators ensuring access to potential visitors through specialised distribution channels; 6. Continue investment in the central Hadrian's Wall website; 7. Deliver a continued and coordinated programme of WHS wide communications that includes a robust database of stakeholders, the Frontier newsletter of the WHS and appropriate events.

Issue 15: Education

Objective 15: To ensure that the WHS is acknowledged nationally and internationally as a focus for high quality, challenging, innovative and enjoyable learning and for the communication of new research and understanding of the Site through learning initiatives.

Policy 15a: Opportunities to work in collaboration to develop learning provision should be identified and exploited within the Hadrian's Wall WHS and with other World Heritage Sites nationally and internationally.

Policy 15b: The work undertaken to date to widen the learning offer provided by the WHS should be built upon and expanded.

Policy 15c: Understanding of the learning aspirations and requirements of all learning audiences should be improved and the potential of the WHS as a learning resource should be more proactively promoted.

- 1. Develop the work of HWEF to maintain and update the Learning Strategy and to coordinate the implementation of its actions;
 - 2. Define and adequately resource a central co-ordinating function for learning activities;
 - 3. Prepare an annual programme of learning activities across the World Heritage Site;
 - 4. Develop and implement a programme of engagement with other World Heritage Sites' education and learning staff.
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- 1. Research and identify opportunities for the expansion of subject areas, facilities and learning media;
 - 2. Identify and adopt best practice in the provision of diversified learning provision from elsewhere.
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- 1. Provide a co-ordinated service to formal learning organizations that is appropriate to their needs;
 - 2. Establish and maintain a better understanding of the aspirations and requirements of non-traditional learning audiences within the WHS corridor and beyond;
 - 3. Develop and implement an awareness raising programme to improve understanding of the WHS as a learning resource within non-traditional audiences.



ISSUE	POLICY	ACTIONS
	<p>Policy 15d: The opportunities offered by new technologies and by learners' changing preferences for accessing learning should be explored and exploited.</p> <p>Policy 15e: Understanding of the philosophy of UNESCO World Heritage should be promoted.</p>	<ol style="list-style-type: none"> 1. Identify and adopt best practice in the use of new technologies for learning; 2. Monitor developments in new technologies as they might potentially apply to learning provision; 3. Incorporate the concept of World Heritage and its universal human values, and the reasons for Hadrian's Wall's inscription into learning provided by the WHS.