
Strategic
Environmental
Assessment
Environmental
Report for the
2012/13 AONB
Management Plan
Review

**Malvern Hills
AONB
Partnership**

Craggatak Consulting
13 November 2013



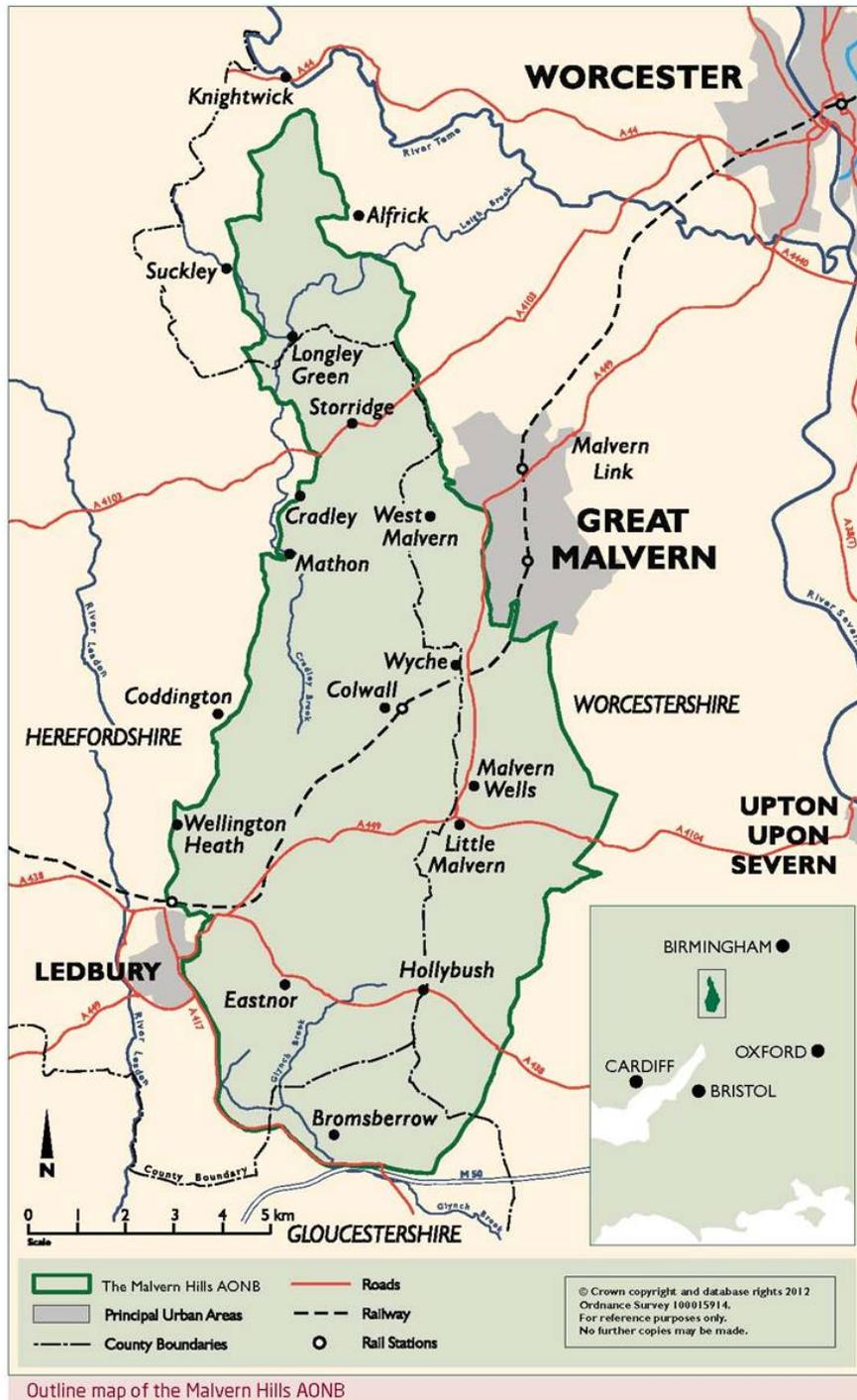
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Acknowledgements

Craggatak Consulting prepared this report in conjunction with the staff from the Malvern Hills Area of Outstanding Natural Beauty Unit.



1. Background

- 1.1. This Environmental Report has been prepared as part of the Strategic Environmental Assessment (SEA) of the Malvern Hills Area of Outstanding Natural Beauty (AONB) Management Plan Review. The statutory consultation bodies (Natural England, English Heritage and the Environment Agency) must agree the scope and level of detail to be contained in the Environmental Report. The SEA Scoping Report went out for consultation in February 2013 and was approved by the environmental bodies in March 2013 (no comments were received from the Environment Agency and this was taken as an approval).

Strategic Environmental Assessment

- 1.2. Strategic Environmental Assessment is a statutory requirement¹ to ensure that land-use plans and programmes that are likely to have significant effects on the environment are the subject of a strategic assessment of options and alternative courses of action during plan preparation in order to avoid or mitigate any adverse effects. The approach for carrying out the SEA of the AONB Management Plan Review is based on current best practice and the following guidance:

- HMSO, *A Practical Guide to the SEA Directive*, Office of the Deputy Prime Minister, Scottish Executive, Welsh Assembly Government, Department of the Environment for Northern Ireland, September 2005.
- Natural Scotland, *Strategic Environmental Assessment Toolkit*. Scottish Executive. September 2006.
- The Areas of Outstanding Natural Beauty in Wales Guidance on the Review of Management Plans, Countryside Council for Wales, 2008
- Richard Partington et al, *Guidance to English AONB Partnerships and Boards on Strategic Environmental Assessment (SEA) of AONB Management Plans*, Natural England, January 2008

- 1.3. There are five stages to a Strategic Environmental Assessment:

Stage A: Scoping and consultation with Environmental Bodies

Stage B: Assessment of plan content and analysis of alternatives

Stage C: Preparation of an Environmental Report

Stage D: Consultation with the public and consideration of the SEA findings by the decision maker; and

Stage E: Monitoring the performance of the plan against the SEA findings.

- 1.4. This report supports Stages B and C. The SEA Scoping Report consultation responses have been considered and used to inform relevant sections of the SEA Environmental Report (this document).

Purpose of the Environment Report

¹ Directive 2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment”. Transposed into law by Statutory Instrument 2004 No. 1633 The Environmental Assessment of Plans and Programmes Regulations 2004 (the “SEA Regulations”), <http://www.opsi.gov.uk/SI/si2004/sch1>

- 1.5. This Environmental Report sets out the findings of the Strategic Environmental Assessment and Sustainability Appraisal for the Malvern Hills AONB Management Plan review. Its primary purpose is to identify, describe and evaluate any significant environmental effects arising from implementing the management plan, or any reasonable alternatives. Any significant beneficial effects are to be highlighted, as well as recording any residual negative effects once mitigating measures are taken into account.
- 1.6. This assessment follows the requirements of the European Directive 2001/42/EC² and the Environmental Assessment of Plans and Programmes Regulations 2004³. The methodology used follows the guidance set out in paragraph 1.2.

Malvern Hills AONB

- 1.7. Designation of the Malvern Hills AONB was in 1959. It covers 105 square kilometres and includes parts of Herefordshire, Worcestershire and Gloucestershire. The special quality of the Malvern Hills AONB lies in the contrasts. The distinctive, narrow, north-south ridge, a mountain range in miniature, thrusts unexpectedly from the pastoral farmland patchwork of the Severn Vale. The highest point is Worcestershire Beacon (425m) and walkers along the ridge crest enjoy views as far as Wales and the Cotswolds. The geological variety, and centuries of traditional farming have given the AONB great ecological value. Herb-rich, unimproved pastures and native woodland support a wealth of habitats, species and wildlife. In addition, it is a historical landscape, the ridge is crowned by three ancient hill forts, the most famous being the ditches and ramparts of British Camp.
- 1.8. This is an area of pastoral farming, dominated by stock-rearing, plus fruit growing, mixed crops and forestry. Large areas are grazed as ancient commons. The AONB has a population of approximately 13,000 and some settlements have experienced considerable growth in their retired population and in workers commuting to Birmingham and Worcester. The towns of Great Malvern and Ledbury fringe the AONB. The rural economy includes light manufacturing and prestige office development together with the important conference and tourism sector. Tourists have flocked here to 'take the waters' since the early 1800s and Great Malvern's formal paths and rides give the nearby slopes the air of a Victorian pleasure garden. The ridge and hillside paths and the commons are traditional 'day trip' country. The Worcestershire Way footpath and Geopark Way are important recreation resources in the AONB.

Management Plan review

- 1.9. Section 82 of the Countryside and Rights of Way (CROW) Act 2000 establishes the primary purpose of AONB designation as the conservation and enhancement of natural beauty. Section 85 of the CROW Act places a duty on all public bodies to 'have regard' to the 'purpose of conserving and enhancing the natural beauty of the area of outstanding natural beauty'. Under Section 89, the 'relevant local authorities' must prepare and publish a Management Plan for each AONB. The Management Plan is a statutory document and presents an agreed agenda for the AONB, setting out objectives and policies for the local authorities, statutory agencies

² European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment", known as the Strategic Environmental Assessment or SEA Directive.

³ Under the Environmental Assessment of Plans and Programmes (Wales) Regulations (the SEA Regulations, Welsh Statutory Instrument 2004, No 1656 (W.170)).

and people who live and work in the area. The plan does not dictate actions within the designated area and does not control agriculture, business or economic development activities but seeks to manage change positively.

- 1.10. There are five relevant local authorities for the Malvern Hills AONB. They are Forest of Dean District Council, Gloucestershire County Council, Herefordshire Council, Malvern Hills District Council and Worcestershire County Council. These councils have established a joint advisory committee under the Local Government Act 1972, section 102 (4) to manage their obligations for the AONB. Representatives of the local authorities and a variety of public, private and voluntary sector bodies make up the Joint Advisory Committee. To guide this committee there is a small Staff Unit which itself is responsible to a Steering Group made up of officers from the local authorities, Defra and the Malvern Hills Conservators. The Joint Advisory Committee, Steering Group and the AONB Unit come together as the Malvern Hills AONB Partnership.
- 1.11. The CRoW Act requires a formal review of an AONB Management Plan at intervals of not more than five years. The Partnership is now preparing the 2014-2019 Management Plan. Following consultation with local communities, public bodies and agencies with an interest in the area, the Management Plan will present the special qualities and features of the AONB and determine what actions are required to ensure their conservation and enhancement.
- 1.12. The plan sets out a framework that gives guidance and direction towards achieving the long term Vision for the Malvern Hills AONB.

The Vision for the Malvern Hills Area of Outstanding Natural Beauty

The Partnership wishes to enhance the benefits the AONB provides for society. A series of statements linked to the chapters in each section express this vision. The Partnership developed and agreed these statements after listening to the many people who care about this very special place.

- 1.13. A cascade of aims, objectives and policies underpins the Management Plan. Twelve topics are grouped under three inter-related themes:
 1. The natural and cultural environment
 - Landscape
 - Biodiversity
 - Geodiversity
 - Historic environment
 - Farming and forestry
 2. Community life
 - Living and working
 - Built development
 - Tourism
 - Transport
 3. Enjoying and understanding
 - Recreation and access
 - Information and interpretation
 - Volunteering
- 1.14. The Management Plan contains 14 objectives and 76 policies across these themes. The full list of objectives and policies is contained in the SEA Assessment Matrix.

Relationship to other policies, plans and programmes

1.15. A key element in the SEA process is to review relevant international, national, regional and local policy guidance, plans and strategies, in order to:

- Ensure the Management Plan proposals and the SEA are consistent with and comply with the requirements of relevant plans and policies, especially where they refer to environmental priorities;
- Identify environmental objectives, key targets and indicators that should be reflected in the SEA;
- Provide evidence for the SEA rationale.

The selection criteria were:

- International documents having the status of an EU plan, policy or programme
- National documents having the status of a national strategy or a White Paper outlining intended policy
- Regional and local documents having the status of strategy or policy
- Other documents not having a statutory status but policy documents published by the statutory bodies

Appendix 1 presents a list of the documents reviewed. Full reference details and a brief assessment of each document are in the SEA Scoping Report.

Legislation, Conventions and national advice

1.16. Area of Outstanding Natural Beauty is a statutory landscape designation. The National Parks and Access to the Countryside Act 1949, as modified by the Countryside and Rights of Way Act 2000, provides the primary legislation for the designation of Areas of Outstanding Natural Beauty. From the Acts, a particular set of objectives are developed for AONBs⁴:

- the primary purpose of AONB designation will be to conserve natural beauty;
- in pursuing the primary objective of designation, account should be taken of the need to safeguard agriculture, forestry, other rural industries and of the economic and social needs of local communities;
- recreation will not be an objective of designation but AONBs should be used to meet the demands for recreation as far as this is consistent with the conservation of natural beauty and the needs of agriculture, forestry and other users.

1.17. The European Landscape Convention was ratified by the UK in November 2006 and became binding on the 1 March 2007. The Convention aims to ensure the proper protection, management and planning of landscapes across Europe and aims to bring all countries up to the standard of the best.

1.18. In 2012, Defra and Natural England gave advice to AONB Partnerships and Relevant Authorities on management plan reviews in the form of a note. The note highlights four themes that may require some policy response. They are:

⁴ Countryside Agency (2006), Guidance for the review of AONB Management Plans, CA221, Cheltenham, August 2006

1. **Natural Environment White Paper (NEWP)** – Many objectives of NEWP have direct relevance for Protected Landscapes. The Defra Biodiversity 2020 Delivery Plan also encourages large-scale initiatives in AONBs and has the milestone: AONB partnerships to integrate Biodiversity 2020 and ecosystem targets into all AONB Management Plan Reviews by March 2014.
2. **Climate change mitigation** – There is a need to assess the opportunities and threats to protected landscapes, given the progress made in renewable energy production and the development of adaptation measures.
3. **Setting of Protected Landscapes** – There is a greater imperative to consider the effect of development in the setting of protected landscapes.
4. **Historic Environment** – Cultural features, particularly those of historic interest, can profoundly influence our perception of natural beauty. For this reason, it is appropriate for AONB Management Plans to include policies and provisions supporting conservation of the historic environment.

Local Authorities

- 1.19. The Malvern Hills AONB falls within five local authority areas. They are Forest of Dean District Council, Gloucestershire County Council, Herefordshire Council, Malvern Hills District Council and Worcestershire County Council. These councils are the local planning authorities and the ‘relevant authorities’ under the CRow Act in respect of AONB Management Plans. Relevant councils are required to produce a development plan to guide spatial change and growth within their area. These plans are either ‘Structure Plans/Local Plans’, ‘Unitary Development Plans’ or ‘Local Development Plans’. Each has policies that respect the purposes of AONB designation but they also have wider social and economic duties.

Government Agencies

- 1.20. There is a range of Government Agencies whose actions impact upon the AONB. Their strategies set high-level policy and generally cover the whole of the country. Any mention of a particular site, such as the Malvern Hills AONB, within these policies indicates the high national importance of the topic. The Government has just published a policy statement on the future of England’s woodlands⁵ that may have an impact on the area’s landscape. Just over 10% of the area is protected for wildlife and/or geology as a Site of Special Scientific Interest (SSSI) with Natural England monitoring the management carried out. English Heritage has an interest in the scheduled ancient monuments and many other heritage assets in the area.

2. Environmental and sustainability baseline information

Key local environmental trends

- 1.21. The SEA Directive requires detailed baseline information to be gathered as part of the assessment process. Information must be gathered on “relevant aspects of the current state of

⁵ www.defra.gov.uk/rural/forestry/panel-response/

the environment and the likely evolution thereof without implementation of the plan” and the “environmental characteristics of the areas likely to be significantly affected” (Annex I (b) & (c)).

- 1.22. The baseline data is also required to highlight “any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC (Birds Directive) and 92/43/EEC (Habitats Directive)” (Annex I (c)).
- 1.23. To assess future trends there is a need to establish a baseline. The AONB team maintains a State of the AONB Report that presents an assessment of the area’s condition and the forces for change. For developing this SEA Report, we use the State of the AONB Reports, Natural England’s State of the Environment (West Midlands) Report, Natural England’s Malvern Hills National Character Area Profile and the evidence-base attached to the preparation of the local authority Local Development Plans. The key issues associated with the environmental trends within the Malvern Hills AONB and the likely outcomes if no action is taken are shown in **Appendix 2**.
- 1.24. Baseline information was collected in line with the Schedule 2 of the SEA Regulations. During the SEA Scoping exercise, 70 key indicators found in the base-line table were grouped under 12 SEA topics identified as being of particular relevance to the environmental assessment. The 12 topics are:
 1. Biodiversity
 2. Population
 3. Human Health
 4. Water
 5. Soil
 6. Air
 7. Climate Factors
 8. Material Assets
 9. Cultural Heritage
 10. Landscape
 11. Communities
 12. Economy

The indicators are presented in **Appendix 3**.

Relevant environmental problems

- 1.25. The State of the AONB Report assesses the current condition of the area’s special features. For the SEA Assessment, 12 SEA Environmental Objectives were developed. They were chosen to represent the local environmental and sustainability issues and are written to test whether the Management Plan policies (or their absence) create adverse impacts on the special qualities of the Malvern Hills AONB. The key local environmental and sustainability indicators, complete with the associated issues, are shown in **Appendix 4**.

3. Environmental Assessment / Sustainability Appraisal

Methodology

3.1. Step 1 is to consider the Management Plan draft text and test the compatibility of its objectives and policies. The intent is to identify potential tensions or sensitivities where two or more objectives interact. The findings are shown in a **Compatibility Matrix** and summarised in a chart.

3.2. Each relationship is plotted as:

3	= strong positive
2	= positive
+/-1	= mixed or uncertain
Blank or 0	= minimal interaction
-2	= negative

3.3. Weighted scores are assigned to each item to allow comparisons to be made. The scores are a percentage of the total score available for each item. This means that an objective with one policy can be measured against an objective with five policies. By default, an objective with a large policy cascade is bound to gain a higher score than an objective with only one policy. A similar approach has been adopted when considering the achievement of the SEA Objectives, a percentage of the total score possible has been used to create an index for each SEA Objective. The results are shown as charts.

3.4. Step 2 is to check each objective against the full range of SEA Objectives, as identified in the SEA Scoping Report. The intent is to measure the significance of the effect in terms of:

- Beneficial or adverse effects;
- Magnitude of the effects;
- Reversible or irreversible effects.

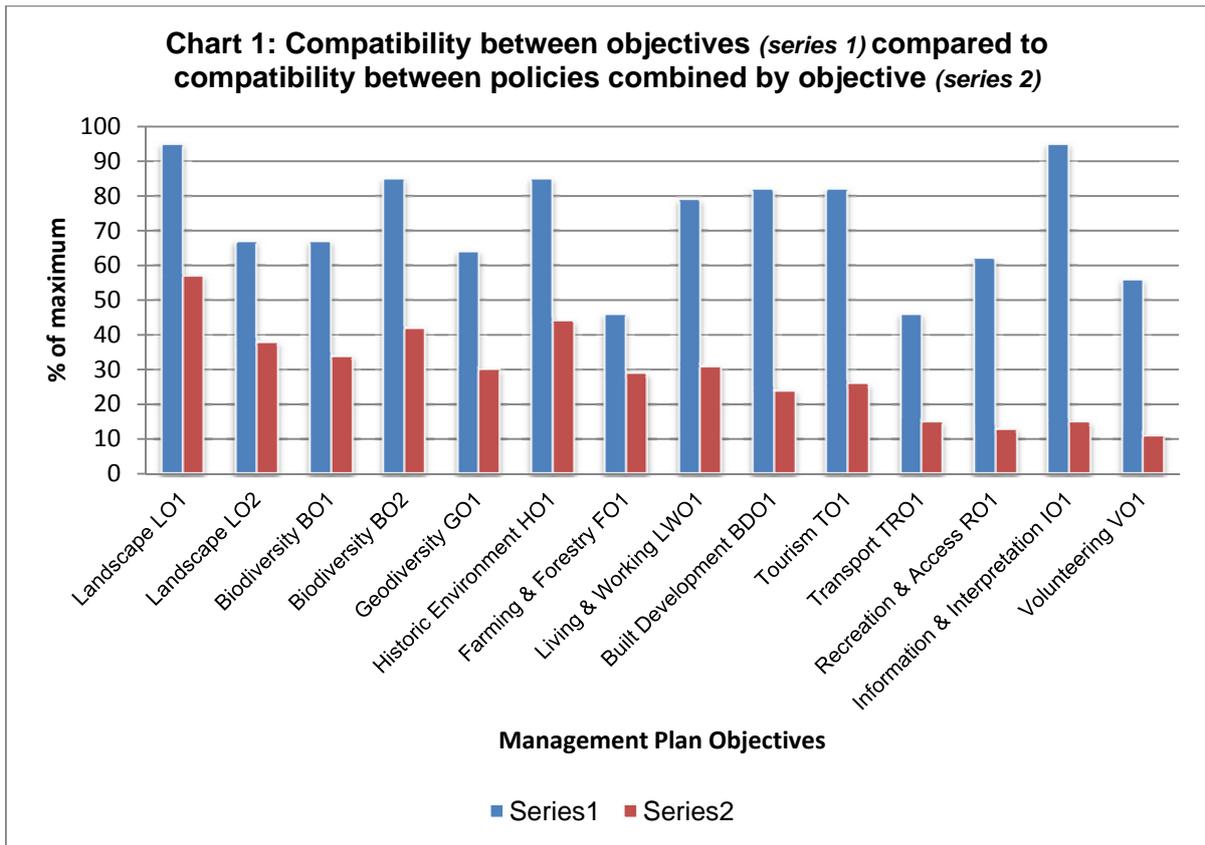
The findings are presented as a **Consistency Matrix** for each objective area and summary tables and charts present the combined effects of the objectives and their policies. Each relationship is plotted using the same discipline as for the Compatibility Matrix. The proposed management objectives of the management plan are then assessed against the SEA Environmental and Sustainability Objectives by combining the consistency indices of their respective objective areas and again expressing the total as a percentage of the total possible score.

3.5. Step 3 is to consider **Alternative Solutions** to the issues identified during the management planning process. As no alternative solutions are recorded for the Malvern Hills AONB Management Plan review, a '**do-nothing**' comparison is made. The purpose is to show that the chosen pathway is the most sound in terms of the environment and wider sustainability. This analysis is informed by the trends identified in the SEA Scoping Report (as shown in Appendix 2).

3.6. Finally, **Conclusions** are drawn and presented.

Compatibility between Management Plan objectives and policies

3.7. The proposed Objectives and Policies of the management plan were cross-checked against each other in a Compatibility Matrix to see whether there were any potential tensions or sensitivities arising where two or more policies interact. This analysis is summarised in Charts 1 and 2. The data set for the Objectives is in **Appendix 5**. The tables for the Policies are too large to present in this report. The AONB Team has the Excel data sheets on file.



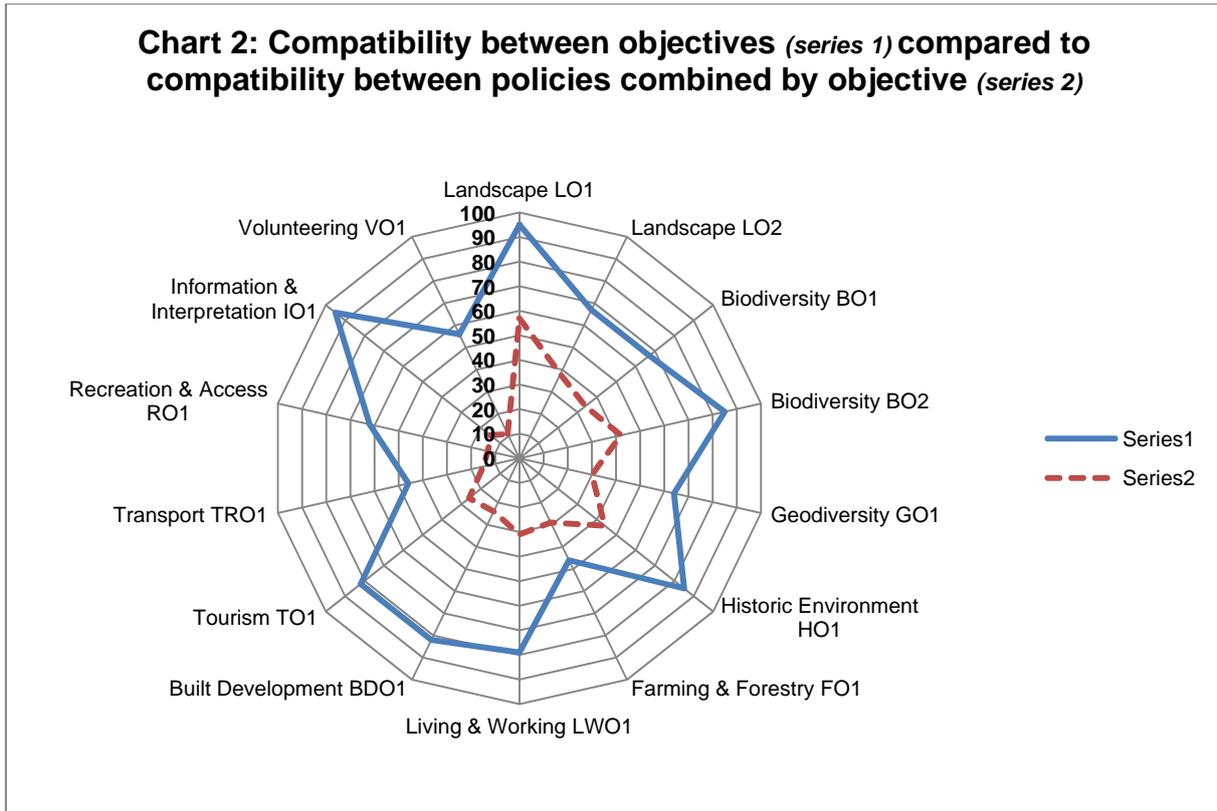


Chart 1 and 2 Data values

Series 1: average = 72, median = 73, 1st quartile = 62, 3rd quartile = 85, inter-quartile range = 23

Series 2: average = 29, median = 29.5, 1st quartile = 15, 3rd quartile = 38, inter-quartile range = 23

3.8. **Commentary:** There are significant differences between the findings for the Objectives and those for the Policies. The Objectives show few tensions or sensitivities between them. Their average score was 72 out of 100. The Policies only achieved an average score of 29 out of 100 but the distribution of Policy scores matched those of their respective Objectives. This is shown clearly in Chart 2. The Policies received a lower score because they have a narrow focus. They are drafted to achieve specific actions and only a few seek to address cross-cutting issues. However, there are no negative or zero scores. As there is compatibility between all the topic areas, there is no need to consider measures to reduce any tensions or sensitivities.

3.9. The greatest compatibility is found for LO1 & 2 (Landscape), BO1 & 2 (Biodiversity), HO1 (Historic environment) and IO1 (Information and interpretation). This reflects the AONB designation with its focus on conserving and enhancing the natural beauty and promoting its enjoyment and appreciation by the public.

3.10. The three Objectives below the first quartile (@ 62) are FO1 (Farming and forestry), TRO1 (Transport) and VO1 (Volunteering). This reflects their very specific nature within the management plan. Six combined Policy groups scored below average (@ 29), BDO1 (Built development, TO1 (Tourism), TRO1 (Transport), RO1 (Recreation and access), IO1 (Information and interpretation) and VO1 (Volunteering). Again, this reflects their very specific nature within the management plan.

Consistency with SEA Objectives

3.11. The proposed Objectives and Policies of the management plan were cross-checked against the SEA Environmental and Sustainability Objectives in a series of Consistency Matrices. This was to see whether there were any significant beneficial or adverse effects and to gage the magnitude of that effect. Where appropriate, consideration was also given as to whether the effect was reversible. This analysis is summarised in Charts 3 and 4 (prepared from the summary Table in **Appendix 6**). The analysis for each policy area is shown in **Appendix 7**.

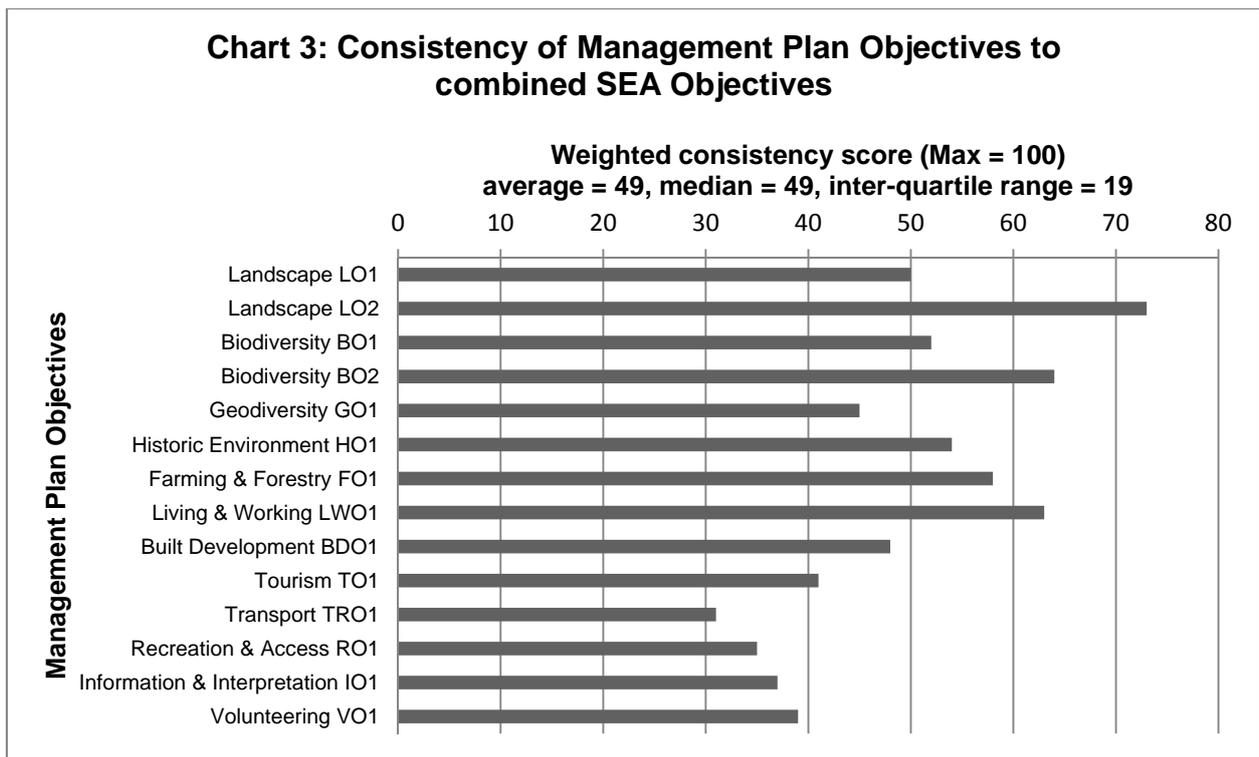


Chart 3 Data values

Average = 49, median = 49, 1st quartile = 39, 3rd quartile = 58, inter-quartile range = 19

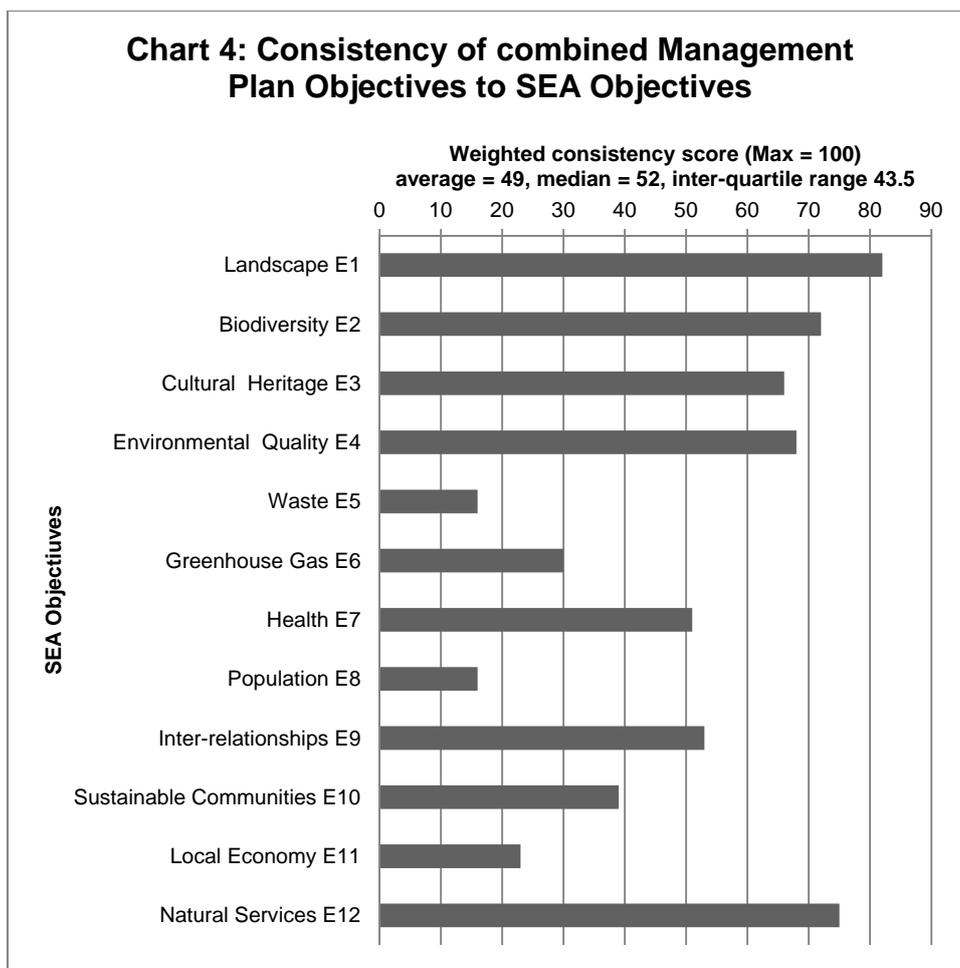


Chart 4 Data values

Average = 49, median = 52, 1st quartile = 26.5, 3rd quartile = 70, inter-quartile range = 43.5

- 3.12. **Commentary:** There are no negative or zero impact scores. All the management plan effects are beneficial in respect of the SEA Objectives, with no adverse effects. As discussed below, some Objectives have a greater positive effect than others. All the policies were judged to be sustainable though two of the Sustainability Objectives did receive below average scores. There is no need to consider measures to increase the beneficial effects.
- 3.13. The topic areas most consistent with the SEA Objectives are LO2 (Landscape - climate change), BO2 (Biodiversity - natural services), LWO1 (Living and working) and FO1 (Farming and forestry). All are above the third quartile (58). This reflects the management plan’s focus on the purposes of AONB designation and the delivery of natural services.
- 3.14. The least consistent are TRO1 (Transport), RO1 (Recreation and access) and IO1 (Information and interpretation); they lie below the first quartile (39). These are narrowly focused topic areas and so a lower score is to be expected. IO1 (Information and interpretation) is one of the most compatible Objectives (IO1 is above the upper quartile) and so its effects will be modified by interaction with other Objectives.

- 3.15. The SEA Environmental Objective E1 (landscape) and SEA Sustainability Objective E12 (delivery of environmental services) score the highest for consistency. They are closely followed by those Environmental Objectives concerned with biodiversity, cultural heritage and environmental quality. This reflects the high priority these topics have within the AONB.
- 3.16. Three SEA Environmental Objectives fell below the first quartile (26.5), E5 (minimise waste), E8 (no adverse effects on population) and E11 (local embedded economy). These subjects are very specific and do not cascade through a range of policies. The sustainability topics all receive positive treatment within the management plan but their subject areas are generally narrowly defined. E6 (greenhouse gas) and E10 (sustainability of communities) fail to reach the second quartile (52). They each relate to topics that are not under the direct control of the AONB.

Review of alternative policies

- 3.17. To meet with the requirements of the SEA Directive, the assessment needs to consider alternative options to determine whether the chosen pathway is the most sound in terms of the environment and wider sustainability. No alternative options have been recorded as a part of the management planning process.
- 3.18. Where no alternatives are identified during the management plan preparation, the effect of the proposed policies should be compared with the 'do-nothing' situation informed by the trends identified in the SEA Scoping Report (as shown in Appendix 2). The task is to establish the environmental and sustainability benefits of the proposed policies over the 'do-nothing' situation. This comparison is set out in **Appendix 8** where each trend is assessed.
- 3.19. **Commentary:** The proposed policies consistently give greater environmental and sustainability benefits than the 'do-nothing' situation, with the possible exception of the sustainable development trends, where the proposed policies are only marginally better than a 'do-nothing' situation. The opportunities possible through innovation are not developed through the current Objectives despite the area having an innovative industrial base close by.

SEA / SA Assessment

- 3.20. The proposed themes and policies are compatible. There are no tensions or sensitivities arising from where two or more policies interact.
- 3.21. The proposed policy cascade has a beneficial, and in parts a significantly beneficial, effect on the SEA Environmental and Sustainability Objectives. This is particularly true in respect of the topics traditionally the concern of an AONB, such as landscape, biodiversity and heritage. The delivery of natural services is also particularly strong. Though wider sustainability issues are addressed, the plan is less forthright in the development of policies associated with climate change and the green agenda.
- 3.22. There are no adverse effects on the SEA Environmental and Sustainability Objectives. Therefore, no mitigating actions are recommended.
- 3.23. The policies are robust and, if applied, will deliver a sustainable programme for the management of the Malvern Hills AONB.

- 3.24. There is nothing in the management plan that will undermine the special qualities of the AONB. There is no conflict with policies in one part of the plan with those in another. Implementation of the proposed Management Plan will have significant environmental and sustainability benefits for the Malvern Hills AONB.

4. Monitoring

Monitoring of significant environmental effects

- 4.1. The SEA Regulations require monitoring measures for all the significant effects, both positive and negative, identified in the assessment. The SA/SEA of the draft management plan has identified no significant adverse effects that are likely to arise from the implementation of management plan. Some significant positive effects are likely to arise from the implementation of the plan. The assessment has also identified some areas of uncertainty over the significance of some of the predicted effects and monitoring has therefore been considered to cover these effects as well.
- 4.2. There are likely to be several benefits in monitoring any environmental effects arising from the implementation of the management plan, including:
- Identifying when action should be taken to reduce or offset any potential environmental effects of the plan;
 - Enhancing understanding of how the environment is changing in the Malvern Hills AONB;
 - Tracking whether the plan has had any unforeseen environmental effects; and
 - Providing baseline data for future SEAs.

The monitoring requirements of the SEA Regulations can be incorporated into the State of the AONB Report, which is already produced.

Monitoring Measures

- 4.3. The SEA Scoping Report identified 69 indicators to monitor the environmental effects of implementing the Management Plan. The Report also stated that only 23 of these indicators were certain. It would need actions by partners to deliver the remaining 46 indicators. After consultation with the Environmental Bodies, the list was increased to 70 and the additional indicator (*The favourable conservation status of European protected species*) is certain. Having reviewed the assessment of the draft Management Plan, the list has been refined with 55 indicators proposed, of which 28 are certain. The revised monitoring measures for the significant environmental effects and uncertainties identified for the management plan are described **Appendix 9**.

Data limitations

- 4.4. The Strategic Environmental Assessment uses a combination of quantitative information from a number of sources (e.g. National Statistics and commissioned studies) and qualitative assessment using considered judgement. The qualitative approach is robust, given the

strategic nature of the Management Plan. Detailed quantitative information relating to the effects of the plan is likely only to be available at a later stage.

- 4.5. Monitoring data are often subject to changes in methodology or reporting that may prevent the establishment of trend data from a known baseline date. Trend data and targets are the significant data gaps and these affect certain topics; in particular, effective and up-to-date reporting on pollution emission trends and aspects of air, soil (including contaminated land) and water quality are lacking. Consequently, the effects of diffuse pollution and other environmental impacts, such as recreation damage, are often difficult to ascertain. Funding cuts due to the recession may create additional burdens in terms of environmental monitoring and exacerbate this problem. The statutory agencies are seeking to address this issue with the development of a protected landscapes monitoring framework.

5. Technical review

- 5.1. The prime purpose of the SEA process is to review the potential impacts of the Management Plan on the key environmental aspects of the Malvern Hills AONB. But there is also a requirement to monitor the implementation of the Management Plan and its impact on the environment over time. The baseline indicators (Appendix 3) were selected with this in mind. They are expected to be a part of the State of the AONB reporting.

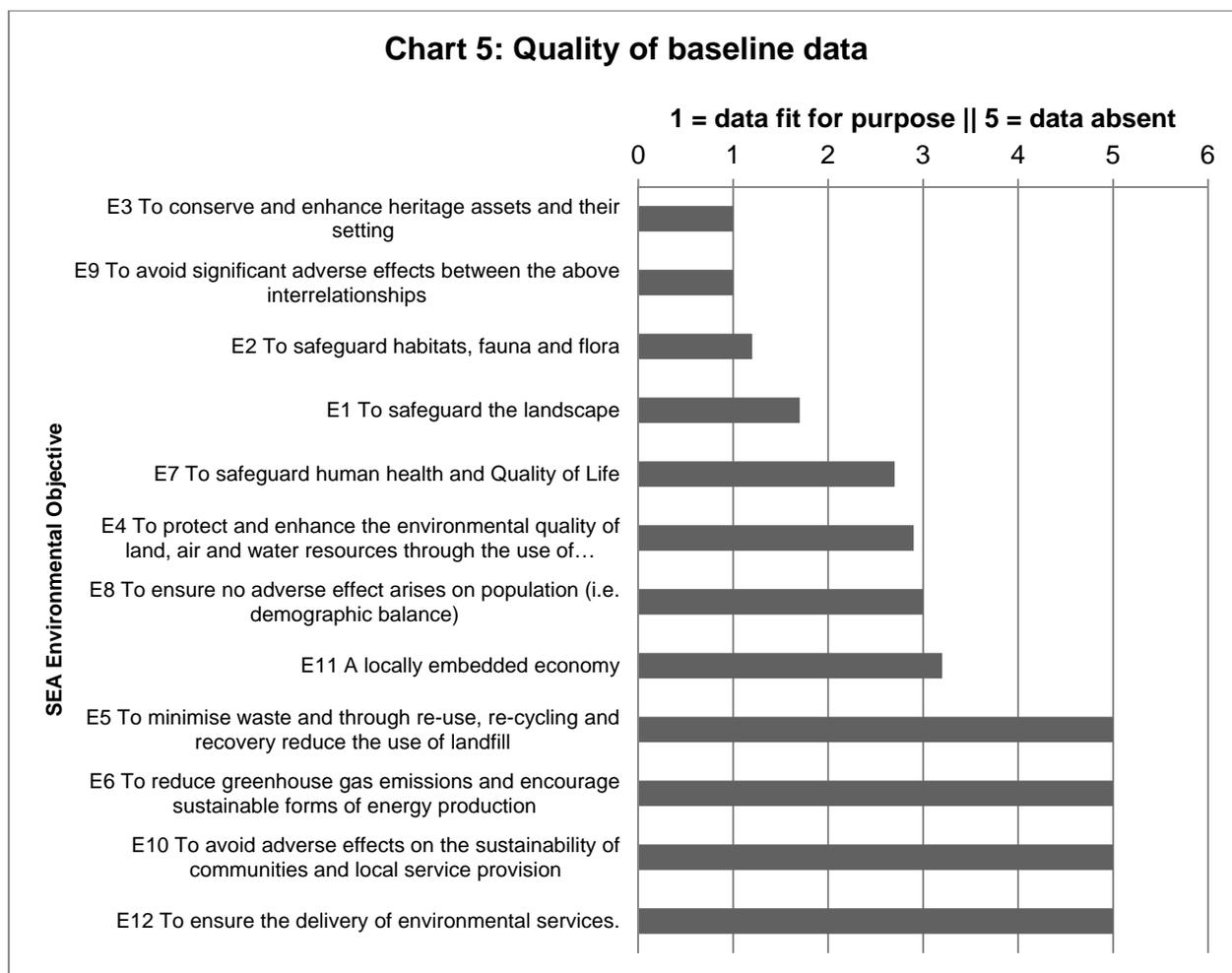
Quality of existing baseline data

- 5.2. A five-point quality scale has been used to assess the quality of the 55 SEA indicators. The analysis identifies where required data is weak or absent, so providing a framework for future data collection.

Indicator 5-point quality scale			<i>Comment</i>
1	Fit for purpose		
2	Adequate	Some minor improvements desirable	
3	Indicative only		Not considered accurate
4	Inadequate		Little relevance to the AONB
5	Absent		No available data

The full assessment of each indicator against the 12 SEA / SA Objectives is shown in **Appendix 10**.

- 5.3. **Commentary:** Of the 55 SEA indicators, 49% are shown as either 'fit for purpose' (26 indicators) or 'adequate' (1 indicator); whereas 27% (15 indicators) are not reported.
- 5.4. Chart 5 shows the assessment of each of the 12 SEA / SA Objectives. As each SEA Objective has a different range of indicators, the average score per Objective was plotted.



- 5.5. Four of the 12 SEA Objectives have adequate monitoring data. These are E3 (cultural heritage), E9 (avoid adverse relationships), E2 (biodiversity) and E1 (landscape). This reflects the purpose of AONB designation.
- 5.6. Four of the SEA Objectives have inadequate monitoring data. These are E5 (waste), E6 (greenhouse gases), E10 (sustainability of communities) and E12 (natural service delivery). E12 represents a new approach to the management and monitoring of the environment and so it is to be expected that there will be a lack of data. The other areas all reflect a weakness in addressing sustainability issues in the management plan, partly because the more obvious initiatives are outside the remit of the AONB. The data is available but it is not collected in a way that allows the AONB to be disaggregated. Partners may be able to address this issue.

Scope for new research

- 5.7. One area of work requires further study. That relates to definition and measurement of the benefits received from natural services in the AONB. There will be opportunities to build upon regional and national initiatives.

Conclusion

- 5.8. The Management Plan is developed through three themes. A cascade of objectives and policies is grouped under these themes. The proposed objectives and policies are compatible. There are no tensions or sensitivities arising from where two or more policies interact.
- 5.9. The proposed themes, objectives and policy cascade have a beneficial, and in parts, a significantly beneficial, effect on the SEA Environmental and Sustainability Objectives. The majority of the themes score highly against the consistency with the SEA Objectives.
- 5.10. When analysed in combination, the policies show the greatest consistency with the SEA Objective to conserve and enhance natural beauty, which is to be expected as this is the purpose of AONB designation; and the objective to ensure the delivery of environmental services, indicating that this principle is embedded in the management plan. Those policies that relate to the natural environment reflect the importance given to the area's habitats.
- 5.11. The sustainability topics all receive positive treatment within the management plan but their subject areas are generally narrowly defined and their scores therefore appear low.
- 5.12. There are no adverse effects on the SEA Environmental and Sustainability Objectives and so no mitigating actions are recommended. The proposed policies give greater environmental and wider sustainability benefits than the alternative approach considered.
- 5.13. The overall assessment of the current baseline data is that it is adequate but poorly presented. Material is available in the State of the AONB Report but the indicators are lost within the general text. The weakness is in the lack of data on 'green agenda' and community issues. Very little information about local people and their well-being is presented. The traditional concerns of an AONB are covered well (landscape character, biodiversity and heritage).

In conclusion: There is nothing in the management plan that will undermine the special qualities of the AONB. Implementation of the proposed Management Plan will have significant environmental and sustainability benefits for the Malvern Hills AONB.

6. Response to environmental bodies comments

Introduction

6.1. Responses were received from Natural England and English Heritage. These are set out in Appendix 11. No response was received from the Environment Agency. Therefore, we can assume that the Agency is content with the Environmental Report.

Actions following consultation

6.2. The Malvern Hills AONB Partnership noted that Natural England is content with the approach and findings of the Environmental Report. English Heritage made two suggestions to amend the report. Both amendments were adopted. They are:

- The addition of a new environmental future trend in Appendix 2 (with additional analysis completed in Appendix 8).
- The simplification of SEA Objective 3 to better issues described.

These amendments are summarised in Table 1:

Table 1: Amendments adopted	
Appendix 2: Outline of future trends in the Malvern Hills AONB	
Forces for Change	Outcomes without mitigating actions
Cultural Heritage (Historic Environment)	The historic environment is a varied resource including archaeological monuments, historic buildings and designed landscapes, which make a significant contribution to the character of the AONB. The available support funding through agri-environment schemes, heritage agencies and local authorities has been reducing and changes in approaches to planning may lead to a loss of historic character and less well-cared heritage assets leading to higher numbers being “at risk”. A strategic approach will be required to target limited resources and seek new sources to conserve and enhance the historic environment.
Appendix 4: SEA Objectives and Key Local Environmental and Sustainability Issues	
Original	Revised
To conserve and enhance the historic environment, heritage assets and their setting	To conserve and enhance heritage assets and their setting

6.3. Following the consultation, one objective was amended; two policies were added; and sixteen policies were amended. These are set out in Table 2 below.

Table 2: Log of changes to policy cascade		
Reference	Old text	New text
GP4	Promote greater understanding of the geological value of the AONB and the need for its protection and management.	Promote greater understanding of the geological value of the AONB, its links with the historic environment and the need for its protection and management.
HP1	Manage the historic and cultural environment	Conserve and enhance the historic and

	of the AONB in accordance with key documents such as Historic Landscape Characterisations, Conservation Area Appraisals and English Heritage guidance.	cultural environment of the AONB in accordance with key documents such as Historic Landscape Characterisations, Conservation Area Appraisals and English Heritage advice and guidance.
HP2	Identify and record the locally important heritage assets of the AONB, e.g. through the preparation of Local Lists.	Identify and improve the evidence base of locally important heritage assets of the AONB in order to understand better the significance and condition of the historic environment, which will underpin future policy.
HP3	Prepare and review appropriate management documents for heritage assets to guide future management.	Prepare and review appropriate management documents for key heritage assets to improve future conservation and enhancement of the historic environment.
HP5	New policy	Encourage the sustainable use of historic buildings, particularly those identified as being at risk.
FP4	New policy following policies in section slip by 1 number	Promote targeted native woodland creation in appropriate locations.
LWP2	Support community initiatives that promote appropriate renewable energy schemes, energy efficiency, recycling and community transport.	Support community initiatives that promote the management of key habitats, appropriate renewable energy schemes, energy efficiency, recycling and community transport.
LWP3	Seek new and inventive solutions to the retention of local shops and provision of viable local services through, for example, the integration of local service delivery.	Seek new, inventive and sensitive solutions to the retention of local shops and provision of viable local services through, for example, through the integration of local service delivery and through the delivery of universal high-speed broadband.
BDP1	Development in the AONB and its setting should be in accordance with approved local design and capacity studies, including the AONB Building Design Guide.	Development in the AONB and its setting should be in accordance with approved local design and capacity studies, including the AONB Guidance on Building Design.
BDP3	Lighting schemes, particularly in the rural areas of the AONB, should be kept to a minimum and in accordance with good practice in to minimising light pollution.	Lighting schemes, particularly in the rural areas of the AONB, should be kept to a minimum and only installed where absolutely necessary. All lighting should accord with good practice in to minimising light pollution.
BDP7	There should be a presumption against the development of polytunnels in the AONB or in locations that significantly affect its setting. Where there is an essential need for such developments and no other suitable location is available outside the AONB, a whole farm approach should be taken to ensure an acceptable location, design, and scale.	Farm-scale polytunnels for commercial use would not normally be an accepted form of development in the AONB. Where there is an essential need for such developments and no other suitable location is available outside the AONB, a whole farm approach should be taken to ensure an acceptable location, design, and scale.
TRO1	To reduce the impact of the private car and to promote a sustainable approach to transport management.	To reduce the impact of the private car whilst promoting a more sustainable approach to accessibility management.
TRP2	Restore and maintain tranquillity in the AONB through protection and traffic mitigation measures.	Restore and maintain tranquillity in the AONB through protection and traffic mitigation and reduction measures.
TRP4	Promote the coordinated planning of integrated	Promote the coordinated planning of

	bus and rail travel to and within the AONB.	integrated passenger transport to, from and within the AONB.
TRP5	Introduce and maintain measures to reduce car movements during big events and at peak times.	Introduce and maintain measures to reduce car movements in the AONB, particularly during major events and at peak times.
TRP7	Develop, support and promote sustainable transport options to meet local transport needs.	Develop and promote sustainable transport options to meet local accessibility requirements.
RP1	Pursue appropriate opportunities to spread recreational use to those areas which can sustain it and which will benefit from it.	Pursue appropriate opportunities to spread recreational use to those areas which can sustain it and which will benefit from it, ensuring the provision of suitable infrastructure.
IP7	Develop a Malvern area education resource in conjunction with local schools.	Develop a Malverns area education resource in conjunction with local schools and/or other interested parties.
VP1	Support effective voluntary activity that helps deliver the AONB Management Plan.	Support effective voluntary activity, in all its shape and forms, that helps deliver the AONB Management Plan.

6.4. The new policy cascade was the subject of a re-assessment to see if there were any changes required to the findings and conclusion. The revised policy cascade secured a marginally reduced score for compatibility and an improved score for consistency. However, as the scores were so close to the original findings, it was decided that there was nothing to be gained from a second consultation. A summary of the findings is set out in Table 3 below; the full data set is on file.

Table 3: Summary of re-assessment findings						
			Average	Median	Q-tile range	Comments
Compatibility						
Chart 1	Objectives	Original findings	72	73	23	No change
		Revised findings	72	73	23	
Chart 1	Policies	Original findings	29	29.5	23	A marginal fall in compatibility
		Revised findings	29	29	23	
Consistency						
Chart 3	Combined SEA objectives	Original findings	49	49	19	A marginal improvement in consistency
		Revised findings	49	49	18	
Chart 4	Combined Plan objectives	Original findings	49	52	43.5	A marginal improvement in consistency
		Revised findings	49.5	51.5	42.5	
Baseline data						

Chart 5	Quality of baseline data	No change
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Appendices

Appendix1: List of relevant plans and policies

INTERNATIONAL

Ramsar Convention on Wetlands of International importance, especially waterfowl habitat (1971)
Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979) (came into force on 1 June 1982)
Bonn Convention on Conservation of Migratory Species (1979)
Rio Declaration of Environment and Development 1992
The Convention on Biological Diversity (The Rio Convention) (Adopted June 1992, entered into force December 1993)
Kyoto Protocol to the United Nations Framework Convention on Climate Change (Adopted December 1997, entered into force February 2005)
The World Summit on Sustainable Development, Johannesburg (2002), Commitments arising from the Johannesburg Summit
Copenhagen Accord United Nations Climate Change Conference (2009)

EUROPEAN

The Birds Directive (Directive on Conservation of Wild Birds) (79/409/EEC) (Adopted 1979)
The Convention for the Protection of the Architectural Heritage of Europe (Granada Convention) Council of Europe (121) 1985
European Convention on the Protection of the Archaeological Heritage (revised 1985)
Nitrates Directive (91/676/EEC) (1991)
The Habitats Directive (Directive on the Conservation of Natural Habitats and Wild Fauna and Flora) (Directive 92/43/EC) (1992)
The Landfill Directive (99/31/EC) (1999)
The Water Framework Directive (2000/60/EC) (2000)
The Strategic Environmental Assessment (SEA) Directive (2001/42/EC) (2001)
The Environmental Noise Directive (2002/49/EC) (2002)
The Public Access to Environmental Information Directive (2003/4/EC) (2003)
Aarhus Convention (1998, ratified February 2005)
The Landscape Convention (entered into force 1st March 2004, ratified by UK in November 2006)
Renewed EU Sustainable Development Strategy (June 2006)
The Waste Framework Directive (2008/98/EEC) (2008)
Our life insurance, our natural capital: an EU biodiversity strategy to 2020, European Commission (2011)

NATIONAL

Legislation

Ancient Monuments and Archaeological Areas Act 1979
The Wildlife and Countryside Act 1981 (as amended)
Planning (Listed Buildings and Conservation Areas) Act 1990 (as amended)
Countryside and Rights of Way (CROW) Act 2000
Sustainable Energy Act 2003
Secure and Sustainable Buildings Act 2004
Traffic Management Act 2004
Natural Environment & Rural Communities Act 2006
Climate Change Act 2008
Localism Act 2011
The Conservation (Natural Habitats) Regulations 1994 (Habitats Regulation) as amended in 1997 and in 2000 (in England only)
Rights of Way Circular (1/09) Guidance for Local Authorities (Defra 2009)
Agricultural Waste Regulations Defra (2006)
National Policy Statements for Energy Infrastructure (DECC 2011)
National Planning Policy Framework (CLG 2012)

Policies, Strategies and Plans

Securing the Future – UK Government Sustainable Development Strategy (Defra 2005)
Sustainable Farming and Food Strategy: Forward Look (Defra 2006)
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland Defra (2007)
Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment (English Heritage 2008)
The Rural Development Programme 2007-2013 (Defra amended 2009)
Safeguarding our Soils - A Strategy for England (Defra 2009)
Code for Sustainable Homes (CLG 2009)
State of the natural environment in the West Midlands NE137 (Natural England 2009)
Green Infrastructure Guidance (Natural England 2009)
Traditional orchards: a summary Natural England Technical Information Note TIN012 (Natural England 2010)
Mainstreaming sustainable development – The Government's vision and what this means in practice (Defra 2011)
Biodiversity 2020: A strategy for England's wildlife and ecosystem services (Defra 2011)
Government Review of Waste Policy in England 2011 (Defra 2011)
Water for Life, the Water White Paper (Defra 2011)
Creating Growth, Cutting Carbon – Making Sustainable Local Transport Happen (DfT 2011)
The Carbon Plan (DECC 2011)
Strategic Framework for Tourism in England 2010 – 2020 (Visit England 2011)
National Character Area Profile:103 Malvern Hills (NE361) (Natural England 2012)
The National Heritage Protection Plan (2011 – 2015) (English Heritage 2012)
UK Forestry Standard (Forestry Commission 2011)
UK Bioenergy Strategy (DECC 2012)
Annual Energy Statement (DECC 2012)
Creating a sporting habit for life, A new youth sport strategy (DCMS 2012)
'The Natural Choice', the Natural Environment White Paper (Defra 2012)
Healthy lives, healthy people: Improving outcomes and supporting transparency (DH 2012)
Government Forestry and Woodlands Policy Statement - Forestry Commission (Defra 2013)

REGIONAL

West Midlands Biodiversity Partnership, Enhancing Biodiversity Across the West Midlands, 2008
West Midlands Regional Spatial Strategy Phase Three Revision Interim Policy Statements and Policy Recommendations West Midlands Regional Assembly March 2010
West Midlands Regional Assembly Transport Delivery Plan 2007
West Midlands Climate Change Action Plan (West Midlands Regional Assembly 2007)
Growing our future: West Midlands Regional Forestry Framework (Forestry Commission 2004)
West Midlands Regional Forestry Framework GROWING OUR FUTURE 2007-2010 Delivery Plan (Forestry Commission 2007)
Water for people and the environment Water Resources Strategy & Regional Action Plan for Midlands region (Environment Agency 2009)
Putting the historic environment to work A strategy for the West Midlands 2010-2015 The West Midlands Historic Environment Forum (English Heritage) 2010
Water for life and livelihoods: River Basin Management Plan Severn River Basin District (Environment Agency 2009)
Severn Trent Water Resources Management Plan (Severn Trent Water Company June 2010)
West Midlands Health and Well-Being Strategy West Midlands Regional Health Partnership Published January 2008
The Joint Municipal Waste Management Strategy for Herefordshire and Worcestershire 2004 – 2034 First review 2011

LOCAL

GLOUCESTERSHIRE COUNTY COUNCIL

Adopted 2nd Review Gloucestershire Structure Plan (1991 - 2011) Gloucestershire County Council 2007
Deposit Draft 3rd Alteration Gloucestershire Structure Plan (2001 - 2016) Gloucestershire County Council 2005
A County wide Air Quality Strategy for Gloucestershire Councils in Gloucestershire November 2004
Gloucestershire Draft Local Transport Plan 3 2011 – 2026 Gloucestershire County Council 2010

Rights of Way and Countryside Access Improvement Plan 2011 - 2026 Gloucestershire County Council
The Gloucestershire Integrated Economic Strategy 2009-2015 Gloucestershire County Council

HEREFORDSHIRE COUNCIL

Unitary Development Plan Hereford Council adopted on 23 March 2007 saved 2010
Herefordshire Sustainable Community Strategy 2010 - 2011 A Short Guide to the Plan for the Long Term Future of Herefordshire (The Herefordshire Partnership 2010)
Enterprising County: Economic Development Strategy for Herefordshire 2011-2016 (Herefordshire Council November 2011)
2020 Vision Herefordshire's Climate Change Strategy (Herefordshire Partnership June 2006)
Herefordshire Local Transport Plan 2 2006/7- 2010/11 (Herefordshire Council rolled forward 2011)
A Tourism Strategy for Herefordshire 2010 – 2015 (Herefordshire Council September 2010)

WORCESTERSHIRE COUNTY COUNCIL

Worcestershire County Structure Plan 1996 - 2011 Worcestershire County Council adopted 2001 (saved 2007)
Waste Core Strategy Local Plan 2012-2027 Worcestershire County Council adopted 2012
Worcestershire Minerals Local Plan Worcestershire County Council saved 2007
Partnership Towards Excellence - Sustainable Community Strategy for Worcestershire 2008-2013 the Worcestershire Partnership Worcestershire County Council 2008
Draft Sustainable Community Strategy for Worcestershire 2011 - 2021. Worcestershire Partnership (September 2010)
Worcestershire County Economic Assessment 2010/11. Worcestershire County Council, January 2011
Worcestershire Local Transport Plan 3 The Worcestershire Transport Strategy (2011-2026) Worcestershire County Council 2011
Worcestershire Countryside Access and Informal Recreation Strategy 2009 – 2019 Worcestershire Partnership's Cultural Theme Group 2009
A Rights of Way Improvement Plan for Worcestershire 2007-2017 Worcestershire County Council 2007
Planning for infrastructure in Worcestershire, Worcestershire Infrastructure Strategy Consultation Draft January 2013

FOREST OF DEAN COUNCIL

Local Development Plan Forest Of Dean Council adopted 2012
Draft Economic Development Strategy 2010-2012 Forest of Dean District Council November 2009
Sowing the Seeds for Tourism Growth in The Forest Of Dean District– 2010 to 2012 Forest of Dean District Council 2010

MALVERN HILLS DISTRICT COUNCIL

Local Plan Malvern Hills District Council 2006 (saved 2009)
South Worcestershire Development Plan Proposed Submission Document January 2013

Appendix 2: Outline of future trends in the Malvern Hills AONB

Forces for Change	Outcomes without mitigating actions
Setting	<p>The setting of an AONB is the surroundings in which the area is experienced. If the quality of the setting declines, then the appreciation and enjoyment of the AONB diminishes. Construction of a distant but high structure; development or change generating movement, noise, odour, vibration or dust over a wide area; or a new understanding of the relationship between neighbouring landscape assets may all extend what might previously have been understood to comprise the setting.</p> <p>Views are one element of setting, being associated with the visual experience. Views are particularly important to the AONB because of the juxtaposition of high and low ground and the fact that recreational users value them. Without management, views within, from and to the AONB may be lost or degraded. Some views will be more important than others. Planned development in South Worcestershire is likely to have an impact on views from the hills.</p>
Green infrastructure	<p>Green Infrastructure is a strategically planned and delivered network comprising the broadest range of high quality green spaces and other environmental features. Without a strategic approach, ecological services and quality of life benefits will be lost and new developments will lead to higher levels of pressure on the AONB because of the lack of alternative green space provision.</p>
Scale of management	<p>Borders are not natural; they are a creation by people. Environmental assets follow nature's design. The management of large-scale landscape and habitat issues will fail without cross-boundary cooperation and meaningful working partnerships.</p>
Biodiversity	<p>Outside of key land holdings wildlife sites will remain small and relatively isolated, wildlife corridors and connection may be lost. A decline in habitat condition could arise from a range of factors, including inappropriate grazing regimes, agricultural intensification, inappropriate development, and high levels of phosphates and nitrates from both point and diffuse sources.</p>
Cultural Heritage (Historic Environment)	<p>The historic environment is a varied resource including archaeological monuments, historic buildings and designed landscapes, which make a significant contribution to the character of the AONB. The available support funding through agri-environment schemes, heritage agencies and local authorities has been reducing and changes in approaches to planning may lead to a loss of historic character and less well-cared heritage assets leading to higher numbers being "at risk". A strategic approach will be required to target limited resources and seek new sources to conserve and enhance the historic environment.</p>
Agriculture	<p>Agriculture is the dominant land use within the AONB, occupying around 80% of the area. There will continue to be potentially conflicting approaches to land management driven on the one hand by production imperatives and on the other by conservation imperatives. As commodity prices rise the amount of land managed with conservation in mind may decline.</p>
Woodland Management	<p>Woodland covers 20% of the AONB, but many of the woodlands are small and difficult to manage. In some areas, woodland cover is fragmented. Forest trees may succumb to tree diseases without appropriate management. (Even with good management this may occur).</p>
Development	<p>There are plans for significant development in South Worcestershire (in and around Malvern and the City of Worcester). This will add to traffic movements and recreational use of the Malvern Hills. Development out from existing settlements within the AONB may lead to some loss of tranquillity / remoteness.</p>
Green Energy	<p>Innovative green solutions (such as photovoltaic tiles) may lead to an erosion of vernacular design features that add to the special qualities of the AONB. Without careful design and siting, even small-scale energy infrastructure in the wider countryside can have a visual impact.</p>
Environmental Quality	<p>Habitats and water quality may deteriorate because increased traffic and housing/employment development in the area will increase emissions of oxides of nitrogen and sulphur, as well as carbon monoxide, carbon dioxide and ozone. These impacts are not</p>

	likely to be great.
Climate Change	Outcomes are unknown, as limited data exist for the Malvern Hills AONB. It is likely that temperatures in the region will continue to increase and rainfall will fall in summer and increase in winter. There may be more extreme weather events, such as storms and floods. Warmer winters and fewer frosts may extend the growing season of some species but conversely may affect the ability of some plants to produce fruits, particularly commercial grown top fruits e.g. apples. The incidence and severity of tree diseases may increase.

Appendix 3: Key indicators and data sources

SEA Topic	Key Indicator ⁶	Source
Biodiversity	<p>% of SSSIs in favourable condition</p> <p>The area of priority BAP habitats and the % that are managed under agri-environment schemes</p> <p><i>The condition of broad BAP habitats in SSSIs</i></p> <p><i>The favourable conservation status of European protected species</i></p> <p>The area of deciduous woodland plus the area of Forestry Commission estate</p> <p>The area managed under Environmental Stewardship</p> <p>The average annual values of current Environmental Stewardship agreements</p>	<p>Natural England</p> <p>Forestry Commission</p> <p>Local Authorities</p> <p>Defra</p> <p>BAP Partnership</p>
Population	<p>Socio-economic profiles</p> <p><i>Increase in rural skills</i></p> <p><i>Percentage change in population</i></p> <p><i>Resident population within the AONB</i></p> <p><i>Levels of deprivation</i></p> <p><i>Crime levels</i></p> <p><i>Crime perception</i></p>	<p>Census</p> <p>Defra</p> <p>British Crime Survey</p> <p>Indices of Deprivation</p> <p>Local Authorities</p>
Human Health	<p><i>Health inequality data</i></p> <p><i>Standard Mortality Ratios</i></p> <p><i>Disability data</i></p> <p>Distribution of open space</p> <p>The area of land that is actually accessible under CROW, plus land with existing access rights that pre-determine CROW Access</p> <p>Length of existing public rights of way</p> <p>The amount of open and linear access brought about by agri-environment agreements</p>	<p>Indices of Deprivation</p> <p>Local Authorities</p> <p>Natural England</p>
Water	<p>Water resource features</p> <p>% rivers and lakes achieving good ecological status environment data</p> <p><i>Pollution incidents (by source)</i></p> <p><i>Capacity of water treatment works</i></p> <p><i>Water availability</i></p> <p><i>Water abstraction data</i></p> <p><i>Water use</i></p> <p><i>Flood risk</i></p>	<p>Environment Agency</p> <p>Natural England</p>
Soil	<p><i>Previously developed land and vacant / derelict building availability</i></p> <p><i>Spatial location of agricultural land (and classification)</i></p> <p>Number and condition of Local Geological Sites</p>	<p>Environment Agency</p> <p>Defra</p> <p>Natural England</p>
Air	<p><i>AQMAs, their objectives and whether they are being met.</i></p> <p><i>Emissions of air pollutants by source.</i></p> <p><i>Headline air quality indicator (future trends in air quality)</i></p>	<p>Local Authorities</p> <p>Environment Agency</p>

⁶Indicators marked in bold are certain; indicators in italics are not certain. They require a partner to agree to present the material in a form suitable for the AONB.

Climate Factors	<p><i>Greenhouse gas emissions (M tonnes carbon equivalent)</i> <i>Greenhouse gas emissions by source.</i></p>	<p>Local Authorities Environment Agency</p>
Material Assets	<p><i>Spatial location of mineral reserves</i> <i>Energy Consumption</i> <i>Take up of energy efficiency measures</i> <i>Renewable energy generation</i> <i>Incidents of fly tipping</i> <i>Total waste arisings</i> <i>Recycling rates</i></p> <p>The uptake of selected ES options that contribute towards the protection of natural resources The area covered by the England Woodland Grant Scheme (WGS), plus the area of ancient woodland in WGS</p>	<p>Local Authorities Waste disposal authorities and waste planning authorities. Environment Agency Natural England Forestry Commission</p>
Cultural Heritage	<p>The number of listed buildings, scheduled monuments, registered parks & gardens, and registered battlefields Heritage at Risk – both statistics eg % of heritage assets ‘at risk, plus GIS datasets under licence</p> <p><i>Number of conservation areas and % of the AONB covered by designation</i> <i>% of conservation areas in the AONB with an up-to-date character appraisal</i> <i>Improvements in the condition of historic and archaeological sites and features</i></p>	<p>English Heritage Local Authorities</p>
Landscape	<p>Local Landscape Character Assessments Extent, condition and change in characteristic landscape features. Fixed point photography <i>Light pollution maps</i> Tranquillity index The uptake of selected ES options that contribute towards the good condition of landscape elements and/or landscape character</p>	<p>Local Authority, AONB Natural England</p>
Communities	<p><i>Access to key services</i> <i>Distribution of current housing stock – by tenure and type including affordable housing</i> <i>Quality of housing (decent homes standard)</i> <i>Vacant housing and second homes.</i> <i>Level of motor vehicle traffic</i> <i>Percentage of journeys made by foot or cycle</i> <i>Average distance and travel times by journey type.</i> <i>Congestion levels</i></p>	<p>Indices of Deprivation Local authorities Regional Housing Studies Regional Transport Plans Census 2011</p>
Economy	<p>Agricultural Survey statistics Tourism statistics, including % employed in tourism and the number of tourism businesses in the protected landscape and within 5 miles. <i>Employment rate</i> <i>No of jobs by sector</i> <i>Total visitor spend</i></p>	<p>Defra Annual Business Enquiry Local Authorities</p>

Appendix 4: SEA Objectives and Key Local Environmental and Sustainability Issues

	Objectives	Issues / Criteria
E1	To safeguard the landscape	Conserving and enhancing: landscape features contributing to the special qualities; landscape character and local distinctiveness; tranquillity and remoteness; dark night skies; and the setting of settlements
E2	To safeguard habitats, fauna and flora	Conserving and enhancing: habitat condition; diversity; extent; interconnectivity; adaptation to climate change; Conserving and enhancing: populations of key species; the habitat requirements of key species; their adaptation to climate change
E3	To conserve and enhance heritage assets and their setting	The historic environment covers a wide range of heritage assets including areas, buildings, features and landscapes with statutory protection, together with those parts of the historic environment that are locally valued and important, and also the historic character of the landscape and townscape. Strengthening: Local character and distinctiveness; maintaining local vernacular styles Conserving: heritage assets and their setting Promoting: High quality design and heritage-led regeneration Community engagement: In valuing and enjoying culturally important features and areas
E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	Conserving and enhancing: geodiversity Reducing: soil compaction; erosion; leaching of nutrients and organic matter. Increasing soil organic matter and carbon storage Protect air: by reducing pollution sources within and outside the AONB. Conserving and enhancing: surface and groundwater quality/quantity; maintaining natural river geomorphologies. Reducing flooding (e.g. retaining water in upper catchments; increasing water retention by habitats and soils; maintain floodplains as natural washlands)
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	Conserving the environment: reusing or re-cycling materials saves resources, including energy, materials, and landfill space
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	Promote climate change mitigation measures: reduced output of greenhouse gases; energy saving; carbon storage and sequestration; appropriate renewable energy sources
E7	To safeguard human health and Quality of Life	Improving quality of life; providing for countryside recreation
E8	To ensure no adverse effect arises on population (i.e. demographic balance)	Maintaining a mixed community with a diverse age structure
E9	To avoid significant adverse effects between the above interrelationships	Promoting the importance of environmental services
Sustainability Objectives relevant to an AONB Management Plan		
E10	To avoid adverse effects on the sustainability of communities and local	Avoiding loss of local jobs and local services

	service provision	
E11	A locally embedded economy	Promoting economic activity that adds value to local products and helps support the conservation of the AONB's special qualities Promoting a career in land-based and traditional building skills; encouraging apprenticeships and training
E12	To ensure the delivery of environmental services.	Promoting the importance of environmental services

Appendix 5: Objective Compatibility Matrix

Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction															
Objective	LO1	LO2	BO1	BO2	GO1	HO1	FO1	LWO1	BDO1	TO1	TRO1	RO1	IO1	VO1	Max=39
LO1 - Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.		2	3	3	3	3	3	3	3	3	2	3	3	3	37
LO2 - Implement appropriate adaptation and mitigation measures to address climate change.	2		3	3	3	3	1	3	0	2	1	1	3	1	26
BO1 Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	3	3		3	2	2	1	3	2	1	0	0	3	3	26
BO2 Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.	3	3	3		3	3	2	2	3	3	2	2	3	1	33
GO1 - Protect important geological and geomorphological sites and landforms.	3	3	2	3		1	0	3	3	0	0	1	3	3	25
HO1 - Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	3	3	2	3	1		1	3	3	3	2	3	3	3	33
FO1 - Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of the AONB are managed.	3	1	1	2	0	1		2	3	3	0	0	2	0	18
LWO1 - Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	3	3	3	2	3	3	2		3	3	1	1	3	1	31
BDO1 - The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the	3	0	2	3	3	3	3	3		3	3	3	3	0	32

AONB, and in decision-making on planning applications for development.															
TO1 - To ensure the AONB is widely recognised and valued as a sustainable visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	3	2	1	3	0	3	3	3	3		3	3	3	2	32
TRO1 - To reduce the impact of the private car whilst promoting a more sustainable approach to accessibility management.	2	1	0	2	0	2	0	1	3	3		2	2	0	18
RO1 - The development and management of recreation in the AONB should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	3	1	0	2	1	3	0	1	3	3	2		3	2	24
IO1 - That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	3	3	3	3	3	3	2	3	3	3	2	3		3	37
VO1 - To increase significantly public support, commitment and participation in conserving and enhancing the AONB through volunteering	3	1	3	1	3	3	0	1	0	2	0	2	3		22
	Landscape LO1	Landscape LO2	Biodiversity BO1	Biodiversity BO2	Geodiversity GO1	Historic Environment HO1	Farming & Forestry FO1	Living & Working LWO1	Built Development BDO1	Tourism TO1	Transport TRO1	Recreation & Access RO1	Information & Interpretation IO1	Volunteering VO1	394

Appendix 6: Weighted Consistency Scores

Weighted Consistency Scores																
SEA Objectives	Management Plan Objectives														Total Consistency score by SEA Objective (Max = 1400)	% of maximum
	Landscape LO1	Landscape LO2	Biodiversity BO1	Biodiversity BO2	Geodiversity GO1	Historic Environment HO1	Farming & Forestry FO1	Living & Working LWO1	Built Development BDO1	Tourism TO1	Transport TRO1	Recreation & Access RO1	Information & Interpretation IO1	Volunteering VO1		
E1 To safeguard the landscape	100	92	100	100	100	100	92	60	97	48	52	67	63	73	1144	82
E2 To safeguard habitats, fauna and flora	100	92	100	100	100	93	88	40	58	38	17	52	50	73	1001	72
E3 To conserve and enhance heritage assets and their setting	94	83	20	75	67	100	63	53	70	48	52	67	63	73	928	66
E4 To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	83	100	100	100	100	80	79	60	39	43	0	48	46	73	951	68
E5 To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	0	33	7	0	0	7	17	47	27	33	13	0	25	20	229	16
E6 To reduce greenhouse gas emissions and encourage sustainable forms of energy production	0	100	53	33	0	7	42	53	27	33	36	0	25	7	416	30
E7 To safeguard human health and Quality of Life	33	75	60	100	0	53	63	93	39	33	67	48	21	27	712	51
E8 To ensure no adverse effect arises on population (i.e. demographic balance)	0	33	7	0	0	7	21	67	24	5	21	14	0	27	226	16
E9 To avoid significant adverse effects between the above interrelationships	83	67	60	100	73	87	29	60	52	33	13	33	25	33	748	53
E10 To avoid adverse effects on the sustainability of communities and local service provision	0	100	7	58	0	20	46	100	48	62	29	29	29	13	541	39
E11 A locally embedded economy	11	0	7	0	0	13	54	87	33	71	17	5	25	0	323	23
E12 To ensure the delivery of environmental services.	100	100	100	100	100	80	96	33	64	48	50	62	67	53	1053	75
Total consistency score by Plan Objective (Max = 1200)	604	875	621	766	540	647	690	753	578	495	367	425	439	472		
% of maximum	50	73	52	64	45	54	58	63	48	41	31	35	37	39		

Appendix 7: Consistency Matrix

Consistency Matrix for Landscape														
OBJECTIVE		POLICY												
LO1	Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.	LP1	Manage the landscape of the AONB in accordance with key documents such as the AONB Landscape Strategy, Landscape Character Assessments and Historic Landscape Characterisations											
		LP2	Restore distinctive landscapes and landscape features that have been significantly degraded.											
		LP3	Identify and promote opportunities for positive landscape change to landowners, managers, government and all those with an influence over land.											
		LP4	Promote greater awareness and appreciation of the landscape character of the AONB among residents and visitors, providing opportunities for them to be involved in identifying and conserving locally distinctive features, views and landscapes.											
		LP5	Undertake surveys and research to better understand and monitor the condition, and rate of change, of landscape character.											
Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction														
SEA Objectives		LO1	LP1	LP2	LP3	LP4	LP5	#	#	#	#	#	Consistency Score	% of maximum
E1	To safeguard the landscape	3	3	3	3	3	3						18	100
E2	To safeguard habitats, fauna and flora	3	3	3	3	3	3						18	100
E3	To conserve and enhance the historic environment, heritage assets and their setting	3	3	3	2	3	3						17	94
E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	3	3	2	2	2	3						15	83
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	0	0	0	0	0	0						0	0
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	0	0	0	0	0	0						0	0
E7	To safeguard human health and Quality of	2	1	0	0	2	1						6	33

	Life													
E8	To ensure no adverse effect arises on population (i.e. demographic balance)	0	0	0	0	0	0						0	0
E9	To avoid significant adverse effects between the above interrelationships	2	3	1	3	3	3						15	83
E10	To avoid adverse effects on the sustainability of communities and local service provision	0	0	0	0	0	0						0	0
E11	A locally embedded economy	0	0	0	1	1	0						2	11
E12	To ensure the delivery of environmental services.	3	3	3	3	3	3						18	100
Consistency Score		19	19	15	17	20	19						109 ⁷	50

Consistency Matrix for Landscape

OBJECTIVE		POLICY												
LO2	Implement appropriate adaptation and mitigation measures to address climate change.	LP6	Ensure that climate change adaptation and mitigation proposals are consistent with the special qualities of the AONB and minimise any adverse effects on the area.											
		LP7	Identify and support appropriate climate change mitigation works, such as new habitat creation, within and adjacent to the AONB.											
		LP8	Increase understanding and awareness of possible landscape effects of, and responses to, climate change.											

Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction

SEA Objectives		LO2	LP6	LP7	LP8	#	#	#	#	#	#	#	Consistency Score	% of maximum
E1	To safeguard the landscape	3	3	2	3								11	92
E2	To safeguard habitats, fauna and flora	2	3	3	3								11	92
E3	To conserve and enhance the historic environment, heritage assets and their setting	2	2	3	3								10	83
E4	To protect and enhance the environmental quality of land, air	3	3	3	3								12	100

⁷ Max = 12 (no of SEA Objectives) x 3 (highest score available) x number of objectives/policies

	and water resources through the use of sustainable practices													
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	2	1	0	1								4	33
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	3	3	3	3								12	100
E7	To safeguard human health and Quality of Life	2	2	2	3								9	75
E8	To ensure no adverse effect arises on population (i.e. demographic balance)	1	1	1	1								4	33
E9	To avoid significant adverse effects between the above interrelationships	1	3	1	3								8	67
E10	To avoid adverse effects on the sustainability of communities and local service provision	3	3	3	3								12	100
E11	A locally embedded economy	0	0	0	0								0	0
E12	To ensure the delivery of environmental services.	3	3	3	3								12	100
Consistency Score		25	27	24	29								105	73

Consistency Matrix for Biodiversity

OBJECTIVE		POLICY	
BO1	Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	BP1	Conserve, enhance and expand key habitats and populations of key species in line with local biodiversity priorities and the England Biodiversity Strategy 2020.
		BP2	Restore the condition of degraded habitats in line with local and national biodiversity priorities.
		BP3	Enhance the wildlife value of the countryside and achieve greater buffering and connectivity between key habitats within the AONB and between the AONB and the countryside beyond.
		BP4	In exercising development control decisions, secure developer contributions to enhance the natural environment.

Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction

SEA Objectives		BO1	BP1	BP2	BP3	BP4	#	#	#	#	#	#	Consistency Score	% of maximum
E1	To safeguard the landscape	3	3	3	3	3							15	100
E2	To safeguard habitats, fauna and flora	3	3	3	3	3							15	100
E3	To conserve and enhance the historic environment, heritage assets and their setting	0	1	0	0	2							3	20
E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	3	3	3	3	3							15	100
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	0	0	0	0	1							1	7
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	2	2	2	1	1							8	53
E7	To safeguard human health and Quality of Life	2	2	2	2	1							9	60
E8	To ensure no adverse effect arises on population (i.e. demographic balance)	0	0	0	0	1							1	7
E9	To avoid significant adverse effects between the above interrelationships	1	3	3	1	1							9	60
E10	To avoid adverse effects on the sustainability of communities and local service provision	0	0	0	0	1							1	7
E11	A locally embedded economy	0	0	0	0	1							1	7
E12	To ensure the delivery of environmental	3	3	3	3	3							15	100

	services.													
Consistency Score		17	20	19	16	21							93	52
Consistency Matrix for Biodiversity														
OBJECTIVE		POLICY												
BO2	Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.	BP5	Undertake survey and research to provide decision-makers with accurate and appropriate data.											
		BP6	Improve knowledge and understanding of the AONB's biodiversity, to enable evaluation of the effectiveness of policies and actions.											
		BP7	Safeguard biodiversity from potential damaging impacts arising from development or other activities.											
Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction														
SEA Objectives		BO2	BP5	BP6	BP7	#	Consistency Score	% of maximum						
E1	To safeguard the landscape	3	3	3	3								12	100
E2	To safeguard habitats, fauna and flora	3	3	3	3								12	100
E3	To conserve and enhance the historic environment, heritage assets and their setting	3	3	2	1								9	75
E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	3	3	3	3								12	100
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	0	0	0	0								0	0
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	2	0	0	2								4	33
E7	To safeguard human health and Quality of Life	3	3	3	3								12	100
E8	To ensure no adverse effect arises on population (i.e. demographic balance)	0	0	0	0								0	0

E9	To avoid significant adverse effects between the above interrelationships	3	3	3	3								12	100
E10	To avoid adverse effects on the sustainability of communities and local service provision	2	2	2	1								7	58
E11	A locally embedded economy	0	0	0	0								0	0
E12	To ensure the delivery of environmental services.	3	3	3	3								12	100
Consistency Score		25	23	22	22								92	64

Consistency Matrix for Geodiversity

OBJECTIVE		POLICY												
GO1	Protect important geological and geomorphological sites and landforms.	GP1	Conserve the geodiversity resource in line with Geodiversity Action Plans.											
		GP2	Secure best practice in geodiversity management within and adjacent to designated sites.											
		GP3	Undertake survey, research and monitoring to secure complete information on the state of the AONB's geodiversity resource, including recording temporary exposures before reburial.											
		GP4	Promote greater understanding of the geological value of the AONB and the need for its protection and management.											

Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction

SEA Objectives		GO1	GP1	GP2	GP3	GP4	#	#	#	#	#	#	Consistency Score	% of maximum
E1	To safeguard the landscape	3	3	3	3	3							15	100
E2	To safeguard habitats, fauna and flora	3	3	3	3	3							15	100
E3	To conserve and enhance the historic environment, heritage assets and their setting	2	2	2	3	1							10	67
E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	3	3	3	3	3							15	100
E5	To minimise waste and through re-use, re-cycling and	0	0	0	0	0							0	0

	recovery reduce the use of landfill													
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	0	0	0	0	0							0	0
E7	To safeguard human health and Quality of Life	0	0	0	0	0							0	0
E8	To ensure no adverse effect arises on population (i.e. demographic balance)	0	0	0	0	0							0	0
E9	To avoid significant adverse effects between the above interrelationships	0	2	3	3	3							11	73
E10	To avoid adverse effects on the sustainability of communities and local service provision	0	0	0	0	0							0	0
E11	A locally embedded economy	0	0	0	0	0							0	0
E12	To ensure the delivery of environmental services.	3	3	3	3	3							15	100
Consistency Score		14	16	17	18	16							81	45

Consistency Matrix for Historic Environment

OBJECTIVE		POLICY				
HO1	Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	HP1	Manage the historic and cultural environment of the AONB in accordance with key documents such as Historic Landscape Characterisations, Conservation Area Appraisals and English Heritage guidance.			
		HP2	Identify and record the locally important heritage assets of the AONB, e.g. through the preparation of Local Lists.			
		HP3	Prepare and review appropriate management documents for heritage assets to guide future management.			
		HP4	Promote greater public understanding of, and engagement with, the historic environment of the AONB.			

Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction

SEA Objectives		HO1	HP1	HP2	HP3	HP4	#	#	#	#	#	#	Consistency Score	% of maximum
E1	To safeguard the landscape	3	3	3	3	3							15	100
E2	To safeguard habitats, fauna and	2	3	2	3	3							13	93

	flora													
E3	To conserve and enhance the historic environment, heritage assets and their setting	3	3	3	3	3							15	100
E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	3	3	0	3	3							12	80
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	0	0	0	1	0							1	7
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	0	0	0	1	0							1	7
E7	To safeguard human health and Quality of Life	2	2	2	2	0							8	53
E8	To ensure no adverse effect arises on population (i.e. demographic balance)	0	1	0	0	0							1	7
E9	To avoid significant adverse effects between the above interrelationships	2	3	2	3	3							13	87
E10	To avoid adverse effects on the sustainability of communities and local service provision	0	2	0	1	0							3	20
E11	A locally embedded economy	0	0	0	2	0							2	13
E12	To ensure the delivery of environmental services.	3	3	0	3	3							12	80
Consistency Score		18	23	12	25	18							96	53
Consistency Matrix for Farming and Forestry														
OBJECTIVE			POLICY											
FO1	Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of	FP1	Encourage the take-up of grant options and management practices that benefit the distinctive natural and historic environment of the AONB.											
		FP2	Bring woodlands, orchards and other characteristic habitats into favourable conservation condition through management regimes that provide an economic											

the AONB are managed.		return; for example, through the production of timber, wood fuel and other sustainable uses.
	FP3	Ensure that all new woodland planting in the AONB is largely of native species; no more than 20% being non-native species.
	FP4	Support appropriate measures to monitor and control pests, diseases and invasive non-native plant and animal species that damage biodiversity resources.
	FP5	Promote local and seasonal produce and support the development of local services and markets.
	FP6	Identify and promote good agricultural practices that encourage: <ul style="list-style-type: none"> • sustainable utilisation of soil, minimising erosion • effective water catchment management • avoidance of direct pollution and measures to reduce diffuse pollution • farm waste minimisation and recycling
	FP7	Maintain and develop the skills required to manage the landscape and its special qualities.

Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction

SEA Objectives		FO1	FP1	FP2	FP3	FP4	FP5	FP6	FP7	#	#	#	Consistency Score	% of maximum
E1	To safeguard the landscape	3	3	3	3	3	2	2	3				22	92
E2	To safeguard habitats, fauna and flora	3	3	3	3	3	0	3	3				21	88
E3	To conserve and enhance the historic environment, heritage assets and their setting	3	3	3	1	0	2	0	3				15	63
E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	3	3	3	0	3	1	3	3				19	79
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	0	0	1	0	0	0	3	0				4	17
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	0	1	3	3	0	0	3	0				10	42
E7	To safeguard human health and Quality of Life	2	1	3	0	3	1	3	2				15	63

E8	To ensure no adverse effect arises on population (i.e. demographic balance)	0	0	0	0	0	0	3	2				5	21
E9	To avoid significant adverse effects between the above interrelationships	0	3	0	0	0	0	3	1				7	29
E10	To avoid adverse effects on the sustainability of communities and local service provision	0	0	2	0	0	3	3	3				11	46
E11	A locally embedded economy	3	1	3	0	0	3	0	3				13	54
E12	To ensure the delivery of environmental services.	3	3	3	2	3	3	3	3				23	96
Consistency Score		20	21	27	12	15	15	29	26				165	57

Consistency Matrix for Living and Working

OBJECTIVE		POLICY												
LWO1	Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	LWP1	Support the production of community-led plans, strategies and statements (such as Neighbourhood Development Plans) that satisfy the requirements of Section 85 of the CRoW Act 2000, and encourage and maintain the vitality and diversity of rural community life.											
		LWP2	Support community initiatives that promote appropriate renewable energy schemes, energy efficiency, recycling and community transport.											
		LWP3	Seek new and inventive solutions to the retention of local shops and provision of viable local services through, for example, the integration of local service delivery.											
		LWP4	Support the provision of a variety of housing that is appropriate to the character of the area and meets local community needs.											

Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction

SEA Objectives		LWO1	LWP1	LWP2	LWP3	LWP4	#	#	#	#	#	#	Consistency Score	% of maximum
E1	To safeguard the landscape	3	3	0	0	3							9	60
E2	To safeguard habitats, fauna and flora	3	3	0	0	0							6	40
E3	To conserve and enhance the historic environment, heritage assets and their setting	3	3	0	0	2							8	53
E4	To protect and enhance the environmental	3	3	3	0	0							9	60

	quality of land, air and water resources through the use of sustainable practices													
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	3	1	3	0	0							7	47
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	3	1	3	0	1							8	53
E7	To safeguard human health and Quality of Life	3	3	3	2	3							14	93
E8	To ensure no adverse effect arises on population (i.e. demographic balance)	3	3	0	1	3							10	67
E9	To avoid significant adverse effects between the above interrelationships	2	3	1	1	2							9	60
E10	To avoid adverse effects on the sustainability of communities and local service provision	3	3	3	3	3							15	100
E11	A locally embedded economy	3	3	2	3	2							13	87
E12	To ensure the delivery of environmental services.	2	2	1	0	0							5	33
Consistency Score		34	31	19	10	19							113	63

Consistency Matrix for Built Development

OBJECTIVE		POLICY			
BDO1	The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the AONB, and in decision-making on planning applications for development.	BDP1	Development in the AONB and its setting should be in accordance with approved local design and capacity studies, including the AONB Building Design Guide.		
		BDP2	Development proposals should be informed by the need to protect or enhance key views to and from the AONB. The AONB guidance on identifying and grading views and viewpoints should be used in relevant cases.		
		BDP3	Lighting schemes, particularly in the rural areas of the AONB, should be kept to a minimum and in accordance with good practice in to minimising light pollution.		
		BDP4	There should be a presumption against the loss of traditional orchards to development, or changes to other uses.		
		BDP5	Equestrian development should proceed in accordance with best practice guidelines, including the AONB guidance on keeping horses in the landscape.		

		BDP6	Appropriate scale renewable energy schemes should be encouraged where these support the management of core elements of the AONB landscape and/or where they do not negatively affect the distinctive attributes or special qualities of the AONB.
		BDP7	There should be a presumption against the development of polytunnels in the AONB or in locations that significantly affect its setting. Where there is an essential need for such developments and no other suitable location is available outside the AONB, a whole farm approach should be taken to ensure an acceptable location, design, and scale.
		BDP8	Support the recycling, re-use and limited extraction of small quantities of locally distinctive building materials, such as Malvern stone, where this is needed to help retain local distinctiveness in the built environment.
		BDP9	Maintain and promote a programme of guidance on key planning and design issues appropriate to the AONB, aimed at planning authorities, developers and other interested parties, that takes account of the special distinctiveness of the area.
		BDP10	Monitor the cumulative impact of small-scale development within the AONB and use data to inform the development or revision of relevant policy.

Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction

SEA Objectives		BD01	BDP1	BDP2	BDP3	BDP4	BDP5	BDP6	BDP7	BDP8	BDP9	BDP10	Consistency Score	% of maximum
E1	To safeguard the landscape	3	3	3	3	3	3	3	3	2	3	3	32	97
E2	To safeguard habitats, fauna and flora	3	3	0	2	3	0	3	0	-1	3	3	19	58
E3	To conserve and enhance the historic environment, heritage assets and their setting	3	3	0	2	3	0	3	3	0	3	3	23	70
E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	3	3	0	0	0	2	1	0	0	3	1	13	39
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	3	3	0	0	0	0	0	0	3	0	0	9	27
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	3	1	0	2	0	0	3	0	0	0	0	9	27
E7	To safeguard human health and Quality of Life	3	3	2	1	0	0	1	0	0	1	2	13	39

E8	To ensure no adverse effect arises on population (i.e. demographic balance)	3	3	0	0	0	0	0	0	0	1	1	8	24
E9	To avoid significant adverse effects between the above interrelationships	3	3	0	0	0	3	2	0	0	3	3	17	52
E10	To avoid adverse effects on the sustainability of communities and local service provision	3	2	0	1	1	0	3	3	0	2	1	16	48
E11	A locally embedded economy	3	1	0	0	0	1	1	3	1	1	0	11	33
E12	To ensure the delivery of environmental services.	3	0	2	2	3	2	2	1	2	3	1	21	64
Consistency Score		36	28	7	13	13	11	22	13	7	23	18	191	48

Consistency Matrix for Tourism

OBJECTIVE		POLICY						
TO1	To ensure the AONB is widely recognised and valued as a sustainable visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	TP1	Stimulate and support sustainable tourism practices in the AONB					
		TP2	Promote the AONB and adjoining areas as a sustainable destination in its own right.					
		TP3	Provide a quality public realm with good access and accessibility to facilities and features that attract tourists.					
		TP4	Ensure that the tourism sector recognises the benefits of conserving and enhancing the special qualities of the AONB and reflects this in policy and practice.					
		TP5	Develop more collaborative and joined-up working between public, private and voluntary sector tourism organisations across the AONB, enabling greater overall efficiency and use of resources.					
		TP6	Work in partnership to develop the Malverns as an area for showcasing new tourism technologies.					

Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction

SEA Objectives		TO1	TP1	TP2	TP3	TP4	TP5	TP6	#	#	#	#	Consistency Score	% of maximum
E1	To safeguard the landscape	3	1	0	2	3	1	0					10	48
E2	To safeguard habitats, fauna and flora	3	1	0	0	3	1	0					8	38
E3	To conserve and enhance the historic environment, heritage assets and their setting	3	1	0	2	3	1	0					10	48

E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	2	3	0	0	3	1	0					9	43
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	0	2	0	0	3	2	0					7	33
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	2	2	0	0	1	2	0					7	33
E7	To safeguard human health and Quality of Life	1	1	0	1	2	2	0					7	33
E8	To ensure no adverse effect arises on population (i.e. demographic balance)	0	0	0	0	0	1	0					1	5
E9	To avoid significant adverse effects between the above interrelationships	1	2	1	0	3	0	0					7	33
E10	To avoid adverse effects on the sustainability of communities and local service provision	3	3	0	3	1	3	0					13	62
E11	A locally embedded economy	3	3	3	3	1	0	2					15	71
E12	To ensure the delivery of environmental services.	2	2	1	1	3	1	0					10	48
Consistency Score		23	21	5	12	26	15	2					104	41

Consistency Matrix for Transport

OBJECTIVE		POLICY	
TRO1	To reduce the impact of the private car and to promote a sustainable approach to transport management.	TRP1	Highway management and design should be in accordance with the AONB Guidance on Highway Design.
		TRP2	Restore and maintain tranquillity in the AONB through protection and traffic mitigation measures.
		TRP3	Encourage the reuse and refurbishment of appropriate highway furniture and fittings to strengthen the special character of the AONB.
		TRP4	Promote the coordinated planning of integrated bus and rail travel to and within the AONB.
		TRP5	Introduce and maintain measures to reduce car movements during big events

			and at peak times.											
			TRP6	Develop dedicated routes for walkers, cyclists and horse riders within the AONB and between the AONB and surrounding areas.										
			TRP7	Develop, support and promote sustainable transport options to meet local transport needs.										
Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction														
SEA Objectives		TRO1	TRP1	TRP2	TRP3	TRP4	TRP5	TRP6	TRP7	#	#	#	Consistency Score	% of maximum
E1	To safeguard the landscape	2	3	3	3	0	2	1	0				14	52
E2	To safeguard habitats, fauna and flora	0	3	2	0	0	0	-1	0				4	17
E3	To conserve and enhance the historic environment, heritage assets and their setting	3	3	3	3	0	2	0	0				14	52
E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	0	0	0	0	0	0	0	0				0	0
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	0	0	0	3	0	0	0	0				3	13
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	2	2	0	0	2	2	0	1				9	36
E7	To safeguard human health and Quality of Life	2	2	3	0	1	2	3	3				16	67
E8	To ensure no adverse effect arises on population (i.e. demographic balance)	1	1	0	0	0	0	2	1				5	21
E9	To avoid significant adverse effects between the above interrelationships	0	2	1	0	0	0	0	0				3	13
E10	To avoid adverse effects on the sustainability of communities and	1	1	1	0	2	0	0	2				7	29

	local service provision													
E11	A locally embedded economy	0	0	0	0	1	1	0	2				4	17
E12	To ensure the delivery of environmental services.	2	2	3	1	0	2	2	0				12	50
Consistency Score		13	19	16	10	6	11	7	9				91	32

Consistency Matrix for Recreation and Access

OBJECTIVE		POLICY												
RO1	The development and management of recreation in the AONB should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	RP1	Pursue appropriate opportunities to spread recreational use to those areas which can sustain it and which will benefit from it.											
		RP2	Increase the range of organised activities through which people can learn about the AONB.											
		RP3	Ensure a consistent approach to the development and delivery of access through Rights of Way management and Improvement Plans											
		RP4	Ensure that the rights of way network and associated infrastructure (signs, gates, etc) do not detract unnecessarily from the special qualities of the landscape.											
		RP5	Promote a simple and clear message to recreational users about access rights and responsibilities											
		RP6	Establish a strategy and programme of action to realise the health benefits of the Malvern Hills AONB with the National Health Foundation Trusts and local surgeries.											

Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction

SEA Objectives		RO1	RP1	RP2	RP3	RP4	RP5	RP6	#	#	#	#	Consistency Score	% of maximum
E1	To safeguard the landscape	3	3	1	1	3	3	0					14	67
E2	To safeguard habitats, fauna and flora	3	3	1	1	0	3	0					11	52
E3	To conserve and enhance the historic environment, heritage assets and their setting	3	3	1	1	3	3	0					14	67
E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	3	3	0	1	0	3	0					10	48
E5	To minimise waste and through re-use, re-cycling and recovery reduce the	0	0	0	0	0	0	0					0	0

	use of landfill													
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	0	0	0	0	0	0	0	0				0	0
E7	To safeguard human health and Quality of Life	3	1	2	1	0	0	3					10	48
E8	To ensure no adverse effect arises on population (i.e. demographic balance)	0	0	0	0	0	0	3					3	14
E9	To avoid significant adverse effects between the above interrelationships	2	2	0	2	0	1	0					7	33
E10	To avoid adverse effects on the sustainability of communities and local service provision	1	3	0	0	0	2	0					6	29
E11	A locally embedded economy	1	0	0	0	0	0	0					1	5
E12	To ensure the delivery of environmental services.	3	3	1	2	0	1	3					13	62
Consistency Score		22	21	6	9	6	16	9					89	35

Consistency Matrix for Information and Interpretation

OBJECTIVE		POLICY	
IO1	That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	IP1	Develop a co-ordinated approach to information, interpretation and marketing activity to promote the special qualities of the Malvern Hills area and appropriate behaviour within it.
		IP2	Form partnerships with the technology and science sectors to develop innovative ways of accessing and using information.
		IP3	Promote and provide clear and simple information on alternative transport modes to the private car for accessing the countryside
		IP4	Promote products and services that support the special qualities of the Malvern Hills
		IP5	Raise awareness of 'being in the Malvern Hills' as a special place to encourage sustainable activity
		IP6	Enhance local distinctiveness through the maintenance and restoration of appropriate signs and through sign removal where appropriate.
		IP7	Develop a Malvern area education resource in conjunction with local schools.

Interaction: 3 = strong positive ; 2 = positive; +/-1 = mixed or uncertain; -2 = negative; 0 = minimal interaction

SEA Objectives		IO1	IP1	IP2	IP3	IP4	IP5	IP6	IP7	#	#	#	Consistency Score	% of maximum
E1	To safeguard the landscape	3	3	0	1	2	2	3	1				15	63
E2	To safeguard habitats, fauna and flora	3	3	0	1	2	2	0	1				12	50
E3	To conserve and enhance the historic environment, heritage assets and their setting	3	3	0	1	2	2	3	1				15	63
E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	3	3	0	1	1	3	0	0				11	46
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	0	3	0	0	0	0	3	0				6	25
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	0	3	0	3	0	0	0	0				6	25
E7	To safeguard human health and Quality of Life	0	3	0	2	0	0	0	0				5	21
E8	To ensure no adverse effect arises on population (i.e. demographic balance)	0	0	0	0	0	0	0	0				0	0
E9	To avoid significant adverse effects between the above interrelationships	2	3	0	0	0	1	0	0				6	25
E10	To avoid adverse effects on the sustainability of communities and local service provision	0	2	0	3	0	2	0	0				7	29
E11	A locally embedded economy	0	0	1	2	3	0	0	0				6	25
E12	To ensure the delivery of environmental	3	3	1	2	3	1	1	2				16	67

	balance)													
E9	To avoid significant adverse effects between the above interrelationships	2	2	0	0	1							5	33
E10	To avoid adverse effects on the sustainability of communities and local service provision	0	0	0	0	2							2	13
E11	A locally embedded economy	0	0	0	0	0							0	0
E12	To ensure the delivery of environmental services.	3	3	0	2	0							8	53
Consistency Score		19	21	4	14	13							71	39

Appendix 8: Review of alternative policies

Table 1: Setting trends			
Setting	<p>The setting of an AONB is the surroundings in which the area is experienced. If the quality of the setting declines, then the appreciation and enjoyment of the AONB diminishes. Construction of a distant but high structure; development or change generating movement, noise, odour, vibration or dust over a wide area; or a new understanding of the relationship between neighbouring landscape assets may all extend what might previously have been understood to comprise the setting.</p> <p>Views are one element of setting, being associated with the visual experience. Views are particularly important to the AONB because of the juxtaposition of high and low ground and the fact that recreational users value them. Without management, views within, from and to the AONB may be lost or degraded. Some views will be more important than others. Planned development in South Worcestershire is likely to have an impact on views from the hills.</p>		
Management Plan Topics	Management Plan Objectives	Benefits of the proposed policies	Do nothing situation
Landscape	LO1 Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.	Seeks to raise awareness of importance of setting. Advocates use of detailed policies to manage change.	Without management, views within, from and to the AONB may be lost or degraded.
	LO2 Implement appropriate adaptation and mitigation measures to address climate change.		
Biodiversity	BO1 Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	Neutral	Neutral
	BO2 Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.		
Geodiversity	GO1 Protect important geological and geomorphological sites and landforms.	Neutral	Neutral
Historic environment	HO1 Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	Seeks to raise awareness of importance of setting. Advocates use of detailed policies to manage change.	Without management, views within, from and to the AONB may be lost or degraded.
Farming and forestry	FO1 Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of the AONB are managed.	Seeks support for farming and forestry to sensitively manage the landscape. Encourages take up of environmental grant options that benefit the	Without management, views within, from and to the AONB may be lost or degraded.

		distinctive natural and historic environment of the AONB.	
Living and working	LWO1 Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	Supports the production of community-led plans, strategies and statements that conserve and enhance the AONB.	Policies may be adopted that do not take account of the designation and its setting.
Built development	BDO1 The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the AONB, and in decision-making on planning applications for development.	Calls for all development in the AONB to be informed by the need to protect or enhance key views to and from the AONB. Particular controls proposed for lighting and renewable energy. Cumulative development will be monitored.	Policies may be adopted that do not take account of the designation and its setting. Cumulative changes may go unnoticed.
Tourism	TO1 To ensure the AONB is widely recognised and valued as a sustainable visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	Calls for the tourism sector to recognise the benefits of conserving and enhancing the special qualities of the AONB and reflect this in policy and practice.	Strategies and proposals may be adopted that do not take account of the designation and its setting.
Transport	TRO1 To reduce the impact of the private car and to promote a sustainable approach to transport management.	Calls for highway management and design to be in accordance with the AONB Guidance on Highway Design. Seeks to restore and maintain tranquillity in the AONB through protection and traffic mitigation measures.	Without management, views within, from and to the AONB may be lost or degraded.
Recreation and access	RO1 The development and management of recreation in the AONB should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	Spreading recreational use to those areas which can sustain it will enhance the	Limited

		setting.	
Information and interpretation	IO1 That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	Neutral	Neutral
Volunteering	VO1 To increase significantly public support, commitment and participation in conserving and enhancing the AONB through volunteering.	Neutral	Neutral

The proposed policies give greater environmental and sustainability benefits than the 'do-nothing situation.

Table 2: Green infrastructure trends

Green infrastructure	Green Infrastructure is a strategically planned and delivered network comprising the broadest range of high quality green spaces and other environmental features. Without a strategic approach, ecological services and quality of life benefits will be lost and new developments will lead to higher levels of pressure on the AONB because of the lack of alternative green space provision.		
Management Plan Topics	Management Plan Objectives	Benefits of the proposed policies	Do nothing situation
Landscape	LO1 Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.	Calls for the strategic management and restoration of the landscape. Monitoring will ensure good decision making.	Natural services and quality of life benefits will be lost.
	LO2 Implement appropriate adaptation and mitigation measures to address climate change.		
Biodiversity	BO1 Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	Green infrastructure will develop. The plan seeks to achieve greater buffering and connectivity between key habitats within the AONB and between the AONB and the countryside beyond. It will safeguard biodiversity from potential damaging impacts arising from development or other activities.	The green infrastructure resource will degrade and become fragmented.
	BO2 Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.		
Geodiversity	GO1 Protect important geological and geomorphological sites and landforms.	The use of Geodiversity Actions Plans may help to develop green infrastructure.	Natural services and quality of life benefits will be lost.

Historic environment	HO1 Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	Uncertain	Neutral
Farming and forestry	FO1 Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of the AONB are managed.	Calls for woodlands, orchards and other characteristic habitats to be brought into favourable conservation. This will benefit the development of green infrastructure.	Natural services and quality of life benefits will be lost.
Living and working	LWO1 Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	The use of community plans and strategies may help to develop green infrastructure.	Natural services and quality of life benefits will be lost.
Built development	BDO1 The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the AONB, and in decision-making on planning applications for development.	The call for development in the AONB and its setting to be in accordance with approved local design and capacity studies will support green infrastructure.	Natural services and quality of life benefits will be lost and new developments will lead to higher levels of pressure on the AONB because of the lack of alternative green space provision.
Tourism	TO1 To ensure the AONB is widely recognised and valued as a sustainable visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	The call for greater collaboration and support for sustainable development can help green infrastructure initiatives.	Natural services will be lost and new developments will lead to higher levels of pressure on the AONB because of the lack of alternative green space provision.
Transport	TRO1 To reduce the impact of the private car and to promote a sustainable approach to transport management.	Limited, but the development of dedicated routes for walkers, cyclists and horse riders within the AONB and between the AONB and surrounding areas will increase the green infrastructure network.	Limited
Recreation and	RO1 The development and management of recreation in the AONB	Proposals to develop a	Natural services will be lost and new

access	should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	programme of action to realise the health benefits of the Malvern Hills AONB and to ensure a consistent approach to the development and delivery of access will enhance green infrastructure.	developments will lead to higher levels of pressure on the AONB because of the lack of alternative green space provision.
Information and interpretation	IO1 That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	Neutral	Neutral
Volunteering	VO1 To increase significantly public support, commitment and participation in conserving and enhancing the AONB through volunteering.	Supporting management actions and condition monitoring will provide better management of green infrastructure.	Natural services will be lost

The proposed policies give greater environmental and sustainability benefits than the 'do-nothing situation.

Table 3: Scale of management trends

Scale of management	Borders are not natural; they are a creation by people. Environmental assets follow nature's design. The management of large-scale landscape and habitat issues will fail without cross-boundary cooperation and meaningful working partnerships.		
Management Plan Topics	Management Plan Objectives	Benefits of the proposed policies	Do nothing situation
Landscape	LO1 Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.	Seeks to identify and support appropriate climate change mitigation works within and adjacent to the AONB. Acknowledges that cross-border working is essential.	The management of large-scale landscape and habitat issues will fail without cross-boundary cooperation and meaningful working partnerships.
	LO2 Implement appropriate adaptation and mitigation measures to address climate change.		
Biodiversity	BO1 Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	Seeks to achieve greater buffering and connectivity between key habitats within the AONB and between the AONB and the countryside beyond.	The management of large-scale landscape and habitat issues will fail without cross-boundary cooperation and meaningful working partnerships.
	BO2 Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.		

Geodiversity	GO1 Protect important geological and geomorphological sites and landforms.	Calls for best practice in geodiversity management within and adjacent to designated sites.	The management of large-scale landscape and habitat issues will fail without cross-boundary cooperation and meaningful working partnerships
Historic environment	HO1 Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	Neutral	The management of large-scale landscape will fail without cross-boundary cooperation and meaningful working partnerships
Farming and forestry	FO1 Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of the AONB are managed.	Limited but action to promote effective water catchment management, avoid direct and reduce diffuse pollution will support large-scale landscape management.	Opportunities may be lost to manage river catchments.
Living and working	LWO1 Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	Limited but support for community wide strategies may support large-scale landscape management.	Neutral.
Built development	BDO1 The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the AONB, and in decision-making on planning applications for development.	The programme of guidance on key planning and design issues appropriate to the AONB will support large-scale landscape planning.	Opportunities may be lost to guide and co-ordinate actions.
Tourism	TO1 To ensure the AONB is widely recognised and valued as a sustainable visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	The call to develop more collaborative and joined-up working across the AONB will help deal with some cross-border issues.	Opportunities may be lost to guide and co-ordinate actions.
Transport	TRO1 To reduce the impact of the private car and to promote a sustainable approach to transport management.	Neutral	Neutral
Recreation and access	RO1 The development and management of recreation in the AONB should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	Neutral	Neutral

Information and interpretation	IO1 That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	Neutral	Neutral
Volunteering	VO1 To increase significantly public support, commitment and participation in conserving and enhancing the AONB through volunteering.	Exploring the potential to develop and support a coordinated volunteer network for the whole of the AONB will address some cross boundary issues.	Opportunities may be lost to guide and co-ordinate actions.

The proposed policies give greater environmental and sustainability benefits than the 'do-nothing situation.

Table 4: Biodiversity trends

Biodiversity	Outside of key land holdings wildlife sites will remain small and relatively isolated, wildlife corridors and connection may be lost. A decline in habitat condition could arise from a range of factors, including inappropriate grazing regimes, agricultural intensification, inappropriate development, and high levels of phosphates and nitrates from both point and diffuse sources.		
Management Plan Topics	Management Plan Objectives	Benefits of the proposed policies	Do nothing situation
Landscape	LO1 Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.	Identifying and promoting opportunities for positive landscape change to landowners, managers, government and all those with an influence over land can help maintain habitat range and quality. Supporting climate change mitigation works can create new habitats.	A decline in habitat condition and range and loss of funding opportunities.
	LO2 Implement appropriate adaptation and mitigation measures to address climate change.		
Biodiversity	BO1 Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	Restoring the condition of degraded habitats in line with local and national biodiversity priorities will help maintain habitat range and quality. Securing developer contributions to enhance the natural	A significant decline in habitat condition and range and loss of funding opportunities.
	BO2 Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.		

		environment can generate significant resources for biodiversity management. Safeguarding biodiversity from any damaging impacts arising from development or other activities will protect the resource.	
Geodiversity	GO1 Protect important geological and geomorphological sites and landforms.	Securing best practice in geodiversity management within and adjacent to designated sites will help maintain corridors.	A decline in habitat condition and range.
Historic environment	HO1 Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	Preparing and reviewing management documents for heritage assets may identify opportunities to enhance biodiversity.	Opportunities may be lost to enhance ecological networks.
Farming and forestry	FO1 Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of the AONB are managed.	Promoting good agricultural practices and supporting measures to monitor and control pests, diseases and invasive non-native plant and animal species will enhance biodiversity resources.	Opportunities may be lost to enhance ecological networks leading to a decline in habitat condition and range.
Living and working	LWO1 Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	Neutral	Neutral
Built development	BDO1 The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the AONB, and in decision-	Monitoring the cumulative impact of small-scale development within the AONB to inform the	Inappropriate development may harm biodiversity.

	making on planning applications for development.	development or revision of relevant policies may enhance biodiversity.	
Tourism	TO1 To ensure the AONB is widely recognised and valued as a sustainable visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	Ensuring that the tourism sector recognises the benefits of conserving and enhancing the special qualities of the AONB may provide some opportunities to create or connect new habitats.	Opportunities may be lost to enhance ecological networks.
Transport	TRO1 To reduce the impact of the private car and to promote a sustainable approach to transport management.	Restoring and maintaining tranquillity in the AONB can benefit biodiversity.	Continuing disturbance to wildlife.
Recreation and access	RO1 The development and management of recreation in the AONB should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	Spreading recreational use to those areas which can sustain will benefit biodiversity.	Possible disturbance to wildlife by traffic.
Information and interpretation	IO1 That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	Developing a co-ordinated approach to information, interpretation and marketing activity to promote the special qualities of the Malvern Hills area and appropriate behaviour within it will support biodiversity and habitat management.	Opportunities may be lost to enhance ecological networks.
Volunteering	VO1 To increase significantly public support, commitment and participation in conserving and enhancing the AONB through volunteering.	Delivering practical action and condition monitoring will enhance biodiversity management.	Opportunities will be lost to enhance ecological networks.

The proposed policies give greater environmental and sustainability benefits than the 'do-nothing situation.

Table 5: Historic Environment Trends

Cultural Heritage	The historic environment is a varied resource including archaeological monuments, historic buildings and designed landscapes, which make a significant contribution to the character
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	of the AONB. The available support funding through agri-environment schemes, heritage agencies and local authorities has been reducing and changes in approaches to planning may lead to a loss of historic character and less well-cared heritage assets leading to higher numbers being “at risk”. A strategic approach will be required to target limited resources and seek new sources to conserve and enhance the historic environment.		
Management Plan Topics	Management Plan Objectives	Benefits of the proposed policies	Do nothing situation
Landscape	LO1 Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.	Identifying and promoting opportunities for positive landscape change to landowners, managers, government and all those with an influence over land can help conserve and enhance distinctive historic environment landscape elements. Appropriate adaptation to climate change recognises the sensitivity of some landscape elements to change and promotes understanding of heritage assets and the exploration of options prior to implementation.	Loss of distinctive historic environment landscape elements (e.g. historic field boundaries, traditional farm buildings, and other heritage assets) through inappropriate change and adaptation.
	LO2 Implement appropriate adaptation and mitigation measures to address climate change.		
Biodiversity	BO1 Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	Promotes understanding and opportunities of the natural environment that can be incorporated into appropriate management of the historic environment. Can add value to heritage assets by identifying multiple benefits from good management.	Loss of opportunities for collaborative working with historic environment objectives.
	BO2 Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.		

Geodiversity	GO1 Protect important geological and geomorphological sites and landforms.	Protecting important sites will help maintain heritage assets such as quarries. Preservation of these features can contribute to the understanding of human interaction with the landscape, particularly in land use and vernacular building styles.	Loss of heritage assets such as quarries and a loss of opportunities to gain understanding of influence of the geological resource on the historic environment.
Historic Environment	HO1 Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	Opportunities sought for funding appropriate management of heritage assets leading to improved conservation and enhancements.	A significant decline in the historic environment through the loss of funding opportunities, poor management and understanding.
Farming and forestry	FO1 Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of the AONB are managed.	Promoting good land use management that helps encourage the conservation and enhancement of heritage assets.	Opportunities to conserve heritage assets are lost and management of assets is not maintained leading to loss through neglect and change.
Living and working	LWO1 Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	Opportunities sought to promote sustainable economic growth that enhances the character of the AONB can promote the sympathetic use of historic farm buildings and revitalise traditional crafts and skills.	A loss of opportunities to safeguard traditional skills and sympathetic re-use of historic buildings.
Built development	BDO1 The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the AONB, and in decision-making on planning applications for development.	Promotes understanding of the historic character of the AONB and leads to better design that is respectful of the character of the AONB.	Lack of guidance and advice leading to a loss of historic character through ill-informed and inappropriate development.
Tourism	TO1 To ensure the AONB is widely recognised and valued as a sustainable	The promotion of sustainable	Loss of opportunities to guide appropriate use of

	visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	tourism can contribute to the maintenance and enhancement of heritage assets and the spreading of recreational use.	the historic environment through tourism and the benefits to the local economy
Transport	TRO1 To reduce the impact of the private car and to promote a sustainable approach to transport management.	Neutral	Neutral
Recreation and access	RO1 The development and management of recreation in the AONB should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	The careful management of recreation in the AONB can alleviate problems of high visitor use that often result in erosion or other damage to heritage assets	Continued damage to heritage assets through high use of certain monuments.
Information and interpretation	IO1 That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	Provides opportunities for the promotion of the special historic character of the AONB and an understanding of its heritage assets.	A loss of opportunities to promote understanding and valuing of the historic environment of the AONB.
Volunteering	VO1 To increase significantly public support, commitment and participation in conserving and enhancing the AONB through volunteering.	Active promotion of volunteering provides opportunities for engagement with the historic environment that leads to greater understanding and improved management.	Loss of opportunities to promote a greater awareness of the historic environment and contribute to its enhanced management.

The proposed policies give greater environmental and sustainability benefits than the 'do-nothing situation.

Table 6: Agriculture trends

Agriculture	Agriculture is the dominant land use within the AONB, occupying around 80% of the area. There will continue to be potentially conflicting approaches to land management driven on the one hand by production imperatives and on the other by conservation imperatives. As commodity prices rise, the amount of land managed with conservation in mind may decline.		
Management Plan Topics	Management Plan Objectives	Benefits of the proposed policies	Do nothing situation

Landscape	LO1 Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.	Promoting opportunities for positive landscape change to landowners and managers may conserve the special landscape characteristics of the area.	Opportunities may be lost to benefit from the expertise of land managers.
	LO2 Implement appropriate adaptation and mitigation measures to address climate change.		
Biodiversity	BO1 Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	The calls to collect and present data to help monitor the effects of actions on biodiversity may influence land management decisions.	Opportunities may be lost to benefit from the expertise of land managers. But there may be the emergence of new habitats as land uses change / decline.
	BO2 Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.		
Geodiversity	GO1 Protect important geological and geomorphological sites and landforms.	Neutral	Neutral
Historic environment	HO1 Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	Recording locally important heritage assets may modify management actions to the benefit of conservation.	Cultural assets will be lost.
Farming and forestry	FO1 Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of the AONB are managed.	Addresses the issues directly and presents a range of positive solutions.	The value of the agricultural resource will be slowly eroded.
Living and working	LWO1 Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	May offer support for farm diversification activities that help the farm unit remain profitable.	A more rapid move towards pure profit goals rather than a mix with conservation.
Built development	BDO1 The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the AONB, and in decision-making on planning applications for development.	Policies acknowledge the changes faced by agriculture. Monitoring the cumulative impact of small-scale development improve policies.	Similar outcome but with the loss of some traditional practices. The impact of small-scale developments will steadily increase.
Tourism	TO1 To ensure the AONB is widely recognised and valued as a sustainable visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	Neutral	Neutral

Transport	TRO1 To reduce the impact of the private car and to promote a sustainable approach to transport management.	Neutral	Neutral
Recreation and access	RO1 The development and management of recreation in the AONB should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	Promoting a simple and clear message to recreational users about access rights and responsibilities will help farmers manage their land.	Some disturbance to livestock and crop damage.
Information and interpretation	IO1 That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	Promoting products and services that support the special qualities of the Malvern Hills can generate income for agricultural businesses.	Some loss of business opportunities.
Volunteering	VO1 To increase significantly public support, commitment and participation in conserving and enhancing the AONB through volunteering.	Neutral	Neutral

The proposed policies give greater environmental and sustainability benefits than the 'do-nothing situation.

Table 7: Woodland management trends

Woodland Management	Woodland covers 20% of the AONB, but many of the woodlands are small and difficult to manage. In some areas, woodland cover is fragmented. Forest trees may succumb to tree diseases without appropriate management. (Even with good management this may occur).		
Management Plan Topics	Management Plan Objectives	Benefits of the proposed policies	Do nothing situation
Landscape	LO1 Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.	Advocates management in line with landscape characterisation studies.	Neutral
	LO2 Implement appropriate adaptation and mitigation measures to address climate change.		
Biodiversity	BO1 Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	Conserving key habitats and populations of key species will encourage good woodland management.	The value of the woodland resource will be slowly eroded.
	BO2 Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.		
Geodiversity	GO1 Protect important geological and geomorphological sites and landforms.	Neutral	Neutral

Historic environment	HO1 Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	Neutral	Neutral
Farming and forestry	FO1 Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of the AONB are managed.	Will bring woodlands favourable conservation condition through management regimes that provide an economic return and controlling pests and diseases.	The value of the woodland resource will be slowly eroded. Damage caused by pest and diseases may grow.
Living and working	LWO1 Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	Neutral	Neutral
Built development	BDO1 The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the AONB, and in decision-making on planning applications for development.	Neutral	Neutral
Tourism	TO1 To ensure the AONB is widely recognised and valued as a sustainable visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	Neutral	Neutral
Transport	TRO1 To reduce the impact of the private car and to promote a sustainable approach to transport management.	Neutral	Neutral
Recreation and access	RO1 The development and management of recreation in the AONB should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	Neutral	Neutral
Information and interpretation	IO1 That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	Promoting products and services that support the special qualities of the Malvern Hills may increase income.	Neutral
Volunteering	VO1 To increase significantly public support, commitment and participation in conserving and enhancing the AONB through volunteering.	Neutral	Neutral

The proposed policies give greater environmental and sustainability benefits than the 'do-nothing situation.

Table 8: Development trends

Development	There are plans for significant development in South Worcestershire (in and around Malvern and the City of Worcester). This will add to traffic movements and recreational use of the Malvern Hills. Development out from existing settlements within the AONB may lead to some loss of tranquillity / remoteness.		
Management Plan Topics	Management Plan Objectives	Benefits of the proposed policies	Do nothing situation
Landscape	LO1 Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.	Managing the landscape of the AONB in accordance with the AONB Landscape Strategy Landscape Character Assessments and Historic Landscape Characterisations will moderate the impact of development.	There will be a steady decline in landscape quality through small-scale incremental development.
	LO2 Implement appropriate adaptation and mitigation measures to address climate change.		
Biodiversity	BO1 Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	Safeguarding biodiversity from potential damaging impacts arising from development will maintain the resource and securing developer contributions to enhance the natural environment will generate funds.	A limited effect but the possibility of a steady decline in biodiversity quality through small-scale incremental development and a lost opportunity to secure new funding.
	BO2 Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.		
Geodiversity	GO1 Protect important geological and geomorphological sites and landforms.	Neutral	Neutral
Historic environment	HO1 Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	A contribution to sustainable development by providing guidance, data and support to professionals in the fields of historic landscape character. Identifying and recording the	A limited effect but the possibility of the loss of important features.

		locally important heritage assets will give protection from development.	
Farming and forestry	FO1 Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of the AONB are managed.	Neutral	A limited effect but the possibility of greater conflict with recreational users.
Living and working	LWO1 Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	Supporting the provision of a variety of housing that is appropriate to the character of the area and meets local community needs will support community cohesion.	Settlements may expand and lose their cohesion and character. There may be an opportunity to introduce / support viable local facilities.
Built development	BDO1 The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the AONB, and in decision-making on planning applications for development.	A contribution to sustainable development by providing guidance, data and support to planning professionals. Monitoring the cumulative impact of small-scale development will improve policies.	A steady decline in local character and a loss of tranquillity.
Tourism	TO1 To ensure the AONB is widely recognised and valued as a sustainable visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	Neutral	Neutral
Transport	TRO1 To reduce the impact of the private car and to promote a sustainable approach to transport management.	Following the AONB Guidance on Highway Design Restore will maintain landscape character and maintain tranquillity in the AONB. Promoting the coordinated planning of integrated bus and rail travel will reduce car impacts.	A rapid decline in local character and a loss of tranquillity.
Recreation and	RO1 The development and	A contribution to	A steady decline in local

access	management of recreation in the AONB should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	sustainable recreation by spreading recreational use to those areas which can sustain it and which will benefit from it. Promoting a simple and clear message to recreational users about access rights and responsibilities will minimise conflicts.	character and a loss of tranquillity. An increase in conflicts with land managers.
Information and interpretation	IO1 That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	Providing clear and simple information on alternative transport modes to the private car for accessing the countryside will reduce impacts on the landscape.	A steady decline in local character and a loss of tranquillity.
Volunteering	VO1 To increase significantly public support, commitment and participation in conserving and enhancing the AONB through volunteering.	Neutral	Neutral

The proposed policies give greater environmental and sustainability benefits than the 'do-nothing situation.

Table 9: Green energy trends

Green Energy	Innovative green solutions (such as photovoltaic tiles) may lead to an erosion of vernacular design features that add to the special qualities of the AONB. Without careful design and siting, even small-scale energy infrastructure in the wider countryside can have a visual impact.		
Management Plan Topics	Management Plan Objectives	Benefits of the proposed policies	Do nothing situation
Landscape	LO1 Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.	Ensuring that climate change adaptation and mitigation proposals are consistent with the special qualities of the AONB will minimise any adverse effects on the area.	There will be a gradual decline in landscape quality.
	LO2 Implement appropriate adaptation and mitigation measures to address climate change.		
Biodiversity	BO1 Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	Neutral	Neutral

	BO2 Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.		
Geodiversity	GO1 Protect important geological and geomorphological sites and landforms.	Neutral	Neutral
Historic environment	HO1 Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	Vernacular styles will be maintained by managing the historic and cultural environment in accordance with Historic Landscape Characterisations, Conservation Area Appraisals and English Heritage guidance.	There will be a gradual loss of vernacular features.
Farming and forestry	FO1 Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of the AONB are managed.	Neutral	Neutral
Living and working	LWO1 Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	Will support community initiatives that promote appropriate renewable energy schemes and energy efficiency while conserving and enhancing the distinctive character of the area.	There will be a gradual loss of vernacular features.
Built development	BDO1 The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the AONB, and in decision-making on planning applications for development.	Appropriate scale renewable energy schemes will be encouraged where these support the management of core elements of the AONB landscape and/or where they do not negatively affect the distinctive attributes or special qualities of the AONB.	There will be a gradual loss of vernacular features.

Tourism	TO1 To ensure the AONB is widely recognised and valued as a sustainable visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	Neutral	Neutral
Transport	TRO1 To reduce the impact of the private car and to promote a sustainable approach to transport management.	Neutral	Innovation may reduce the environmental impact of the internal combustion engine.
Recreation and access	RO1 The development and management of recreation in the AONB should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	Neutral	Neutral
Information and interpretation	IO1 That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	Neutral	Neutral
Volunteering	VO1 To increase significantly public support, commitment and participation in conserving and enhancing the AONB through volunteering.	Neutral	Neutral

The proposed policies give greater environmental and sustainability benefits than the 'do-nothing situation though the opportunities possible through innovation will not be explored.

Table 10: Environmental quality trends

Environmental Quality	Habitats and water quality may deteriorate because increased traffic and housing/employment development in the area will increase emissions of oxides of nitrogen and sulphur, as well as carbon monoxide, carbon dioxide and ozone. These impacts are not likely to be great.		
Management Plan Topics	Management Plan Objectives	Benefits of the proposed policies	Do nothing situation
Landscape	LO1 Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.	Undertaking surveys and research to better understand and monitor the condition, and rate of change, of landscape character will aid policy development.	There will be a gradual decline in landscape quality.
	LO2 Implement appropriate adaptation and mitigation measures to address climate change.		
Biodiversity	BO1 Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	Undertaking survey and research will provide decision-makers with accurate and appropriate data.	There will be a gradual decline in biodiversity quality and the loss of irreplaceable habitats and species.
	BO2 Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.		
Geodiversity	GO1 Protect important geological and	Neutral	Neutral

	geomorphological sites and landforms.		
Historic environment	HO1 Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	Neutral	Neutral
Farming and forestry	FO1 Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of the AONB are managed.	Promoting good agricultural practices may help address the issues by, for example, encouraging the sustainable utilisation of soil, minimising erosion, ensuring effective water catchment management and reducing diffuse pollution.	There will be a gradual decline in water and soil quality.
Living and working	LWO1 Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	Neutral	Neutral
Built development	BDO1 The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the AONB, and in decision-making on planning applications for development.	Neutral	Likely to be a steady rise in greenhouse gasses but renewable energy technologies may be introduced.
Tourism	TO1 To ensure the AONB is widely recognised and valued as a sustainable visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	Neutral	Neutral
Transport	TRO1 To reduce the impact of the private car and to promote a sustainable approach to transport management.	Neutral	Increasing use of private car will increase CO ₂ emissions.
Recreation and access	RO1 The development and management of recreation in the AONB should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	Neutral	Increasing use of private car will increase CO ₂ emissions.
Information and interpretation	IO1 That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	Raising awareness of 'being in the Malvern Hills' as a special place will encourage sustainable	Some lost opportunities for action.

		activity and may improve environmental quality.	
Volunteering	VO1 To increase significantly public support, commitment and participation in conserving and enhancing the AONB through volunteering.	Neutral	Neutral
The proposed policies give greater environmental and sustainability benefits than the 'do-nothing situation though the opportunities possible through innovation will not be explored.			

Table 11: Climate change trends

Climate Change	Outcomes are unknown, as limited data exist for the Malvern Hills AONB. It is likely that temperatures in the region will continue to increase and rainfall will fall in summer and increase in winter. There may be more extreme weather events, such as storms and floods. Warmer winters and fewer frosts may extend the growing season of some species but conversely may affect the ability of some plants to produce fruits, particularly commercial grown top fruits e.g. apples. The incidence and severity of tree diseases may increase.		
Management Plan Topics	Management Plan Objectives	Benefits of the proposed policies	Do nothing situation
Landscape	LO1 Conserve and enhance the distinctive landscape elements and features of the AONB, particularly those that are most sensitive or have little capacity for change.	Ensuring that climate change adaptation and mitigation proposals are consistent with the special qualities of the AONB will minimise any adverse effects on the area.	There will be a gradual decline in landscape quality.
	LO2 Implement appropriate adaptation and mitigation measures to address climate change.		
Biodiversity	BO1 Establish and maintain coherent and resilient ecological networks across the AONB and beyond.	Achieving greater buffering and connectivity between key habitats within the AONB and between the AONB and the countryside beyond will help wildlife to adapt to climate change.	Slow but profound changes over time. Increase in exotic species.
	BO2 Ensure that the benefits and services provided by the natural environment are understood and accurately valued by decision-makers at all levels.		
Geodiversity	GO1 Protect important geological and geomorphological sites and landforms.	Neutral	There will be a gradual decline in geodiversity quality.
Historic environment	HO1 Conserve and enhance the historic environment and cultural heritage of the AONB through appropriate funding, management and awareness raising.	Limited but reviewing management documents for heritage assets will allow strategies to be	Unknown effects, there may be damage to the fabric of buildings.

		developed.	
Farming and forestry	FO1 Ensure that sustainable farming and forestry remain the primary means by which the distinctive landscapes of the AONB are managed.	Limited but there will be a response to pests and diseases caused by climate change. There will be slow but profound changes over time.	Slow but profound changes over time.
Living and working	LWO1 Enable vibrant communities to grow sustainably by stimulating economic prosperity while conserving and enhancing the distinctive character of the area.	Limited but supporting community initiatives that promote appropriate renewable energy schemes, energy efficiency and recycling may reduce impacts.	The area already has one of the highest community carbon footprints in the country. There will be slow but profound changes over time.
Built development	BDO1 The distinctive character and natural beauty of the AONB will be fully reflected in the development and implementation of consistent statutory land use planning policy and guidance across the AONB, and in decision-making on planning applications for development.	Limited but renewable energy schemes will be supported where they do not negatively affect the distinctive attributes or special qualities of the AONB.	Likely to be a steady rise in greenhouse gasses but renewable energy technologies may be introduced.
Tourism	TO1 To ensure the AONB is widely recognised and valued as a sustainable visitor destination, where local communities benefit, businesses prosper and the environment is well managed.	Neutral	Neutral
Transport	TRO1 To reduce the impact of the private car and to promote a sustainable approach to transport management.	Moves to develop, support and promote sustainable transport options to meet local transport needs will reduce greenhouse gases.	Likely to be a steady rise in greenhouse gasses but renewable energy technologies may be introduced.
Recreation and access	RO1 The development and management of recreation in the AONB should respect the character of the area whilst meeting the needs of visitors for quiet informal recreation.	Neutral	Neutral

Information and interpretation	IO1 That residents and visitors value the special qualities of the AONB and understand the need to invest in their management.	Developing a Malvern area education resource in conjunction with local schools gives an opportunity to change community behaviours.	Opportunity to explain the climate change issues will be lost.
Volunteering	VO1 To increase significantly public support, commitment and participation in conserving and enhancing the AONB through volunteering.	Neutral	Neutral
The proposed policies give greater environmental and sustainability benefits than the 'do-nothing situation.			

Appendix 9: Revised SEA /SA indicators

SEA Topic	Key Indicator ⁸
Biodiversity	<p>% of SSSIs in favourable condition</p> <p>The area of priority BAP habitats and the % that are managed under agri-environment schemes</p> <p><i>The condition of broad BAP habitats in SSSIs</i></p> <p>The favourable conservation status of European protected species</p> <p>The area of deciduous woodland plus the area of Forestry Commission estate</p> <p>The area managed under Environmental Stewardship</p> <p>The average annual values of current Environmental Stewardship agreements</p>
Population	<p>Socio-economic profiles</p> <p><i>Increase in rural skills</i></p> <p><i>Percentage change in population</i></p> <p><i>Resident population within the AONB</i></p>
Human Health	<p><i>Health inequality data</i></p> <p><i>Disability data</i></p> <p>Distribution of open space</p> <p>The area of land that is actually accessible under CROW, plus land with existing access rights that pre-determine CROW Access</p> <p>Length of existing public rights of way</p> <p>The amount of open and linear access brought about by agri- environment agreements</p>
Water	<p>Water resource features</p> <p>% rivers and lakes achieving good ecological status environment data</p> <p><i>Pollution incidents (by source)</i></p> <p><i>Flood risk</i></p>
Soil	<p><i>Spatial location of agricultural land (and classification)</i></p> <p>Number and condition of Local Geological Sites</p>
Air	<p><i>AQMAs, their objectives and whether they are being met.</i></p> <p><i>Emissions of air pollutants by source.</i></p> <p><i>Headline air quality indicator (future trends in air quality)</i></p>
Climate Factors	<p><i>Greenhouse gas emissions (M tonnes carbon equivalent)</i></p> <p><i>Greenhouse gas emissions by source.</i></p>
Material Assets	<p><i>Spatial location of mineral reserves</i></p> <p><i>Energy Consumption</i></p> <p><i>Take up of energy efficiency measures</i></p> <p><i>Renewable energy generation</i></p> <p><i>Incidents of fly tipping</i></p> <p><i>Recycling rates</i></p> <p>The uptake of selected ES options that contribute towards the protection of natural resources</p> <p>The area covered by the England Woodland Grant Scheme (WGS), plus the area of ancient woodland in WGS</p>

⁸Indicators marked in bold are certain; indicators in italics are not certain. They require a partner to agree to present the material in a form suitable for the AONB.

<p>Cultural Heritage</p>	<p>The number of listed buildings, scheduled monuments, registered parks & gardens, and registered battlefields Heritage at Risk – both statistics eg % of heritage assets ‘at risk, plus GIS datasets under licence Number of conservation areas and % of the AONB covered by designation % of conservation areas in the AONB with an up-to-date character appraisal Improvements in the condition of historic and archaeological sites and features</p>
<p>Landscape</p>	<p>Local Landscape Character Assessments Extent, condition and change in characteristic landscape features. Fixed point photography <i>Light pollution maps</i> Tranquillity index The uptake of selected ES options that contribute towards the good condition of landscape elements and/or landscape character</p>
<p>Communities</p>	<p><i>Access to key services</i> <i>Distribution of current housing stock – by tenure and type including affordable housing</i></p>
<p>Economy</p>	<p>Agricultural Survey statistics Tourism statistics, including % employed in tourism and the number of tourism businesses in the protected landscape and within 5 miles. <i>Employment rate</i> <i>No of jobs by sector</i> <i>Total visitor spend</i></p>

Appendix 10: SEA Objectives and links to State of the AONB Reporting

		Indicator 5-point quality scale		
Score				Comment
1		Fit for purpose		
2		Adequate		Some minor improvements desirable
3		Indicative only		Not considered accurate
4		Inadequate		Little relevance to the AONB
5		Absent		No available data
Objectives	SEA Indicators	Quality	Comment	
Environmental Objectives				
E1	To safeguard the landscape	Local Landscape Character Assessments	1	
		Extent, condition and change in characteristic landscape features.	1	
		Fixed point photography	1	
		Light pollution maps	5	Linked to national initiatives. Discussed but not reported
		Tranquillity index	2	Regularly reported but data set needs refreshing. May require national input.
		The uptake of selected ES options that contribute towards the good condition of landscape elements and/or landscape character	1	National Framework Data
		The area covered by the England Woodland Grant Scheme (WGS), plus the area of ancient woodland in WGS	1	National Framework Data
E2	To safeguard habitats, fauna and flora	% of SSSIs in favourable condition	1	National Framework Data
		The area of priority BAP habitats and the % that are managed under agri-environment schemes	1	National Framework Data
		The condition of broad BAP habitats in SSSIs	3	Dependent upon the use of new Biodiversity Action Reporting System
		The favourable conservation status of European protected species	1	National Framework Data

		The area of deciduous woodland plus the area of Forestry Commission estate	1	National Framework Data
		The area managed under Environmental Stewardship	1	National Framework Data
		The average annual values of current Environmental Stewardship agreements	1	National Framework Data
E3	To conserve and enhance heritage assets and their setting	The number of listed buildings, scheduled monuments, registered parks & gardens, and registered battlefields	1	National Framework Data
		Heritage at Risk – both statistics eg % of heritage assets ‘at risk, plus GIS datasets under licence	1	National Framework Data
		Number of conservation areas and % of the AONB covered by designation	1	
		% of conservation areas in the AONB with an up-to-date character appraisal	1	
		Improvements in the condition of historic and archaeological sites and features	1	National Framework Data
E4	To protect and enhance the environmental quality of land, air and water resources through the use of sustainable practices	Water resource features	5	But likely that the data is collected
		% rivers and lakes achieving good ecological status environment data	1	National Framework Data
		Pollution incidents (by source)	5	But likely that the data is collected
		Flood risk	3	But likely that the data is collected
		Spatial location of agricultural land (and classification)	3	But likely that the data is collected
		Number and condition of Local Geological Sites	1	National Framework Data
		AQMAs, their objectives and whether they are being met.	3	Data is available for a wider area than the AONB, held by third party
		Emissions of air pollutants by source.	3	Data is available for a wider area than the AONB, held by third party
		Headline air quality indicator (future trends in	3	Data is available for a wider area than the AONB, held by

		air quality)		third party
		Energy Consumption	3	Data is available for a wider area than the AONB, held by third party
		Take up of energy efficiency measures	3	Data is available for a wider area than the AONB, held by third party
		Renewable energy generation	3	Data is available for a wider area than the AONB, held by third party
		The uptake of selected ES options that contribute towards the protection of natural resources	1	National Framework Data
		Spatial location of mineral reserves	3	No data presented, will be held by a third party.
E5	To minimise waste and through re-use, re-cycling and recovery reduce the use of landfill	Recycling rates	5	Data is available for a wider area than the AONB, held by third party
E6	To reduce greenhouse gas emissions and encourage sustainable forms of energy production	Greenhouse gas emissions (M tonnes carbon equivalent)	5	Data is available for a wider area than the AONB, held by third party
		Greenhouse gas emissions by source.	5	Data is available for a wider area than the AONB, held by third party
E7	To safeguard human health and Quality of Life	Health inequality data	5	No data presented, will be held by a third party.
		Disability data	5	No data presented, will be held by a third party.
		Distribution of open space	1	National Framework Data
		The area of land that is actually accessible under CROW, plus land with existing access rights that pre-determine CROW Access	1	National Framework Data
		Length of existing public rights of way	1	National Framework Data
		The amount of open and linear access brought about by agri- environment agreements	1	National Framework Data
		<i>Incidents of fly tipping</i>	5	No data presented, will be held by a third party.
E8	To ensure no adverse effect	Socio-economic profiles	1	National Framework Data

	arises on population (i.e. demographic balance)	Increase in rural skills	5	May not be available
		Percentage change in population	3	But likely that the data is collected
		Resident population within the AONB	3	But likely that the data is collected
E9	To avoid significant adverse effects between the above interrelationships	Monitor State of the AONB Data	1	Trend data is available for landscape, biodiversity, geology, historic assets, tranquillity and enjoyment
Sustainability Objectives relevant to an AONB Management Plan				
E10	To avoid adverse effects on the sustainability of communities and local service provision	Access to key services	5	No data presented, will be held by a third party.
		Distribution of current housing stock – by tenure and type including affordable housing	5	No data presented, will be held by a third party.
E11	A locally embedded economy	Agricultural Survey statistics	1	National Framework Data
		Tourism statistics, including % employed in tourism and the number of tourism businesses in the protected landscape and within 5 miles.	1	
		Employment rate	5	No data presented, will be held by a third party.
		No of jobs by sector	5	No data presented, will be held by a third party.
		Total visitor spend	4	Data is available for a wider area than the AONB, held by third party
E12	To ensure the delivery of environmental services.	(None given)	5	No data series available as yet. The development of the National Character Area Profile 103 can shape a data set.

Appendix 11: Response from the environmental bodies

Natural England (*file reference 97177*)

Strategic Environmental Assessment for the 2012/13 AONB Management Plan Review

Thank you for your consultation on the above, which was received by me on 09 September 2013.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

The Environmental Assessment of Plans and Programmes Regulations 2004

Natural England has reviewed the Strategic Environmental Assessment of the Malvern Hills AONB Management Plan Review and is satisfied that the report is appropriate. We are pleased to note that our previous recommendations (our ref 79188) have been taken into account. We have no further comments to make at this time.

English Heritage (*1st November 2013*)

Malvern Hills AONB Management Plan Review SEA Environmental Report 2014 – 2019

Thank you for opportunity to comment on the draft management plan for the Malvern Hills AONB and the accompanying Strategic Environmental Assessment (SEA) Environmental Report. I apologise for the delay in sending these comments regarding the SEA.

The comments in this letter are a review of the SEA Environmental Report in relation to comments made at the scoping stage.

Relevant Policies, Plans, Programmes and Sustainability Objectives

English Heritage welcomes the inclusion of the legislation, strategies and plans at a European, national, regional and local level outlined in our letter on the scoping report.

Baseline

English Heritage welcomes the inclusion of robust SEA indicators in appendix 9, which can be monitored to provide information on trend and outcome. In our letter regarding the scoping report, we highlighted the wide range of heritage assets that the historic environment encompasses and the need to draw on, and develop ways of monitoring, data sets that include this wide range. We are therefore pleased to see that one of the indicators is “Improvements in the condition of historic and archaeological sites and features”. We feel that this provides the opportunity to develop on the work already done by the Malvern Hills AONB and its partners to create data sets (e.g. Grade II listed buildings, historic farmsteads) that can provide a more AONB targeted understanding of the condition and trend in that condition for its historic environment (including undesignated heritage assets).

As stated in our scoping report letter, it may be possible for the AONB to consider developing an analysis of undesignated heritage assets at risk as currently being piloted by Worcestershire County Council (contact: Adam Mindykowski).

Key Local Environmental Trends

In our letter of the 25th March 2013 we identified the need for additional consideration on future trends and implications for the historic environment resource of the AONB. Currently, the report has no historic environment trend identified in appendix 2 of the report. Although many of the other factors such as agriculture and development can have a significant impact on the historic environment resource, we feel that trend in the historic environment could be strengthened in this section of the report. One trend to highlight in the report in relation to the historic environment could be the changes that are occurring in the agri-environment schemes. The potential reduction in options for the historic environment may leave heritage assets vulnerable to decline in their condition or indeed loss through agricultural intensification if commodity prices rise. Another area of potential change is in relation to the planning sector where there is a general trend to relaxing controls on planning and therefore there is potential for unsympathetic development on historic farmsteads sites that will lead to a loss of character. To assist with the finalisation of the report, we have attached a suggested historic environment trend statement and also wording for appendix 8 to accompany this additional trend.

SEA Objectives

English Heritage welcomes the simplification of the historic environment objective to that recommended in our letter for the scoping report. We also welcome the inclusion of a definition that is in line with the national planning policy framework definitions and the decision-making criteria that are recommended in our guidance document on SEA.

We recommend only one change to this part of the report, which is to change “Conserving: heritage assets and their setting” to “Conserve and Enhance: heritage assets and their setting”, which then reflects the wording in the objective.

Environment Agency

No response received therefore we can assume that the Agency is content with the Environmental Report.