

**ENVIRONMENTAL REPORT**  
**FOR THE ISLES OF SCILLY AONB MANAGEMENT PLAN**  
**CONSULTATION**

**JUNE 2009**

**(STRATEGIC ENVIRONMENTAL ASSESSMENT)**

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## **1. Environmental assessment and the Isles of Scilly AONB Management Plan**

### **1.1 Process of Environmental Assessment**

- 1.1.1 This Environmental Report (the Report) identifies, describes and evaluates the predicted likely effects on the environment of the AONB Management Plan and presents recommendations for ways in which to improve the environmental performance of implementing the Management Plan. The Report has been produced to support the consultation on the Management Plan and the process of producing the Report has followed that prescribed in the SEA Directive<sup>1</sup>, SEA Regulations<sup>2</sup>, CLG Guidance<sup>3</sup> and Natural England Guidance<sup>4</sup>.
- 1.1.2 The Management Plan provides guidance to supplement policies 1a and 2a<sup>5</sup> of the Isles of Scilly Local Plan and a structure to inform and guide the management of activities that are both within and outside the remit of the planning system. As such, the Management Plan is neither a mandatory strategy that must be implemented nor does it provide a set of regulations for any licensing regime. This, together with the primary purpose of the AONB designation, which is to conserve and enhance natural beauty, implies a very narrow scope for environmental assessment.

### **1.2 Isles of Scilly AONB Management Plan**

- 1.2.1 Areas of Outstanding Natural Beauty (AONB) were designated under the National Parks and Access to the Countryside Act 1949. Subsequently the Countryside and Rights of Way (CROW) Act 2000 amended the context for AONBs, strengthening the designation and, through Section 89 of Part IV of the Act, requires local authorities to produce and regularly review an AONB Management Plan.
- 1.2.2 The Isles of Scilly AONB Management Plan provides a co-ordinated approach to the management of the Isles of Scilly AONB. It provides guidance to all the organisations and individuals that have a role in protecting and enhancing the Isles of Scilly Area of Outstanding Natural Beauty.
- 1.2.3 In pursuing the primary purpose of designation, however, account should also be taken of the needs of agriculture, forestry, rural industry and of the social and economic needs of rural communities. Recreation is not an objective of designation, but the demand for recreation should be met in so far as this is

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<sup>1</sup> European Directive 2001/42 on the assessment of effects of certain plans and programmes on the environment – the ‘SEA Directive’

<sup>2</sup> The Environmental Assessment of Plans and Programmes Regulations 2004, Statutory Instrument 2004 No. 1633

<sup>3</sup> Sustainability Appraisals of Regional Spatial Strategies and Local Development Documents, ODPM November 2005

<sup>4</sup> Guidance to English AONB Partnerships and Boards on Strategic Environmental Assessment (SEA) of AONB Management Plans, Natural England, July 2007

<sup>5</sup> IOS Local Plan 2005 Policies 1a and 2a require protection and enhancement of the landscape and make specific reference to the AONB

consistent with the conservation of natural beauty and the needs of agriculture, forestry and other uses.

- 1.2.4 Preparation of the revised Management Plan is being co-ordinated by the Isles of Scilly Council AONB Joint Advisory Committee and led by the Isles of Scilly AONB team. The Strategic Environmental Assessment (SEA) has been conducted by an independent consultant working closely with the AONB team

### 1.3 Scope of the Environmental Report

- 1.3.1 In order that an appropriate context and scope could be established for environmental assessment, the Council of the Isles of Scilly produced a Scoping Report comprising:

- the baseline of environmental conditions in the Plan area (see Section 1.4 of this Environmental Report);
- a review of other plans with a bearing on the Management Plan (see Appendix 1 of this Environmental Report);
- a list of key issues; and
- a framework for assessment (see Table 1 and Section 1.4).

- 1.3.2 The scope set out in the Scoping Report used Schedule 2(6) of the SEA Regulations<sup>2</sup> as the starting point and was further defined on the basis of consideration of the purpose of the AONB Management Plan. It is noted that environmental assessment is primarily concerned with likely 'significant' impacts and this is a key purpose of the process of producing and consulting on the Scoping Report.

- 1.3.3 Natural England, the Environment Agency and English Heritage<sup>6</sup> were invited to comment on the scope of SEA in January 2009 and the responses have been taken into consideration in the production of this Environmental Report. Whilst full details of the responses are provided in Appendix 3, the key points arising include:

- greater emphasis needed with respect to waste management
- greater clarity with respect to the specific impacts of climate change, particularly drought and saline intrusion
- ensuring that the Environmental Report clearly sets out the process of environmental assessment such that the key issues and reasoning are easy to follow
- the need to finalise the details of the SEA Framework
- greater awareness of monuments and buildings at risk and the respective registers for historic buildings, monuments and archaeology

- 1.3.4 The Consultation Bodies have also identified useful information that has informed the baseline and have advised on the availability of other relevant plans and

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<sup>6</sup> The SEA Consultation Bodies defined by Regulation 4 of the SEA Regulations

documents including the consultation version of the Isles of Scilly Marine Special Area of Conservation Management Plan and the Scilly Waste Project.

- 1.3.5 The most important way in which consultation responses have been incorporated into the SEA is through the revision of the SEA Framework. Table 1, below, sets out the environmental objectives, the environmental or ‘SEA’ objectives that have been established through the scoping exercise. It is these objectives against which the Management Plan is being assessed. Originally derived from the list of issues in the SEA Directive, amendments have been made to take into account the comments of the Consultation Bodies. Full details of the comments of the consultation bodies are included as Appendix 3.

**Table 1. SEA Objectives**

<b>SEA Objective 1:</b> Protect and enhance the landscape
<b>SEA Objective 2:</b> Protect and enhance biodiversity habitats and species
<b>SEA Objective 3:</b> Support socio economic interests
<b>SEA Objective 4:</b> Safeguard and enhance human health
<b>SEA Objective 5:</b> Improvement of inshore water quality and sustainable use of water resources
<b>SEA Objective 6:</b> Address air pollution and the causes of climate change
<b>SEA Objective 7:</b> Plan for the adaptation and mitigation of the consequences of climate change
<b>SEA Objective 8:</b> Maintain and enhance cultural heritage, including architectural and archaeological heritage
<b>SEA Objective 9:</b> Promote the sustainable production and use of resources

#### 1.4 Key issues

- 1.4.1 The preceding sections provide an overview of how the context and scope for the environmental assessment of the review of the Management Plan has been established. This has been through a description of the environmental baseline (see Table 1), a consideration of other plans (full details Appendix 1); and, subsequently, the identification of key issues.

- 1.4.2 Key issues have been further defined through testing the broad aims of the plan against each other for internal compatibility (full details Appendix 2) and testing the broad aims against the SEA Objectives (full details Appendix 2). This Initial assessment has confirmed that there is little conflict or likelihood of adverse impacts since the scope and context of the review of the AONB Management Plan is essentially concerned with protecting and enhancing the landscape. The focus for environmental assessment has, consequently, become the identification of the means whereby benefits can be maximised across all objectives.
- 1.4.3 Issues have been identified that are important, but not necessarily significant in the context of the scope of the Management Plan. An example is that whilst air quality can be considered a key element that contributes to the quality of the landscape, the ability of the Plan to influence this is limited. In such instances, it may be appropriate to simply state how the Plan can play a supporting role to other plans and programmes for which that subject is a core issue.
- 1.4.4 The following set of tables, beginning over the page, provides a summary of key issues that have been identified through environmental assessment. These are set out against the SEA objectives such that the reasoning for making predictions (Section 2) can be clearly and easily followed.
- 1.4.5 A key issue to be addressed is how the Management Plan can influence the achievement of a balance between improving access for recreation with protection of the component parts of the landscape. With respect to biodiversity, it is noted that a Habitats Regulations Assessment<sup>7</sup> is being carried out as a separate exercise, but one that will inform this environmental assessment.

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<sup>7</sup> a Habitats Regulations Assessment is required to determine the nature of likely impacts on the Special Protection Area and the Special Area of Conservation

<p><b>SEA Objective 1</b></p> <p>Protect and enhance the landscape</p>	<p><b>Baseline</b></p> <p>Natural Beauty is not just the look of the landscape but includes geology, plants, habitats and the rich history of human settlement over the centuries. The Isles of Scilly has a unique interdependence of habitats, heritage, farming, tranquility and ambience that contribute to the landscape.</p> <p>The most sensitive areas lie on the coast and envelop the smaller islands while the less sensitive areas form the interior of the five larger islands. On St Mary's Hugh Town is bordered by areas of very high sensitivity on the coast and to the north east in both cultural and ecological terms and high to the east in cultural terms only.</p> <p>The interdependence of landscape, biodiversity and economy are particularly apparent in farming practices where crops are protected from strong Atlantic winds by enclosing small fields with stone walls, locally called hedges, and green vegetative hedges, known locally as fences. These hedges are a particularly characteristic feature of Scilly's farmed landscape and most vegetative hedges are protected under the Hedgerow Regulations. The management of these hedges though essential is an extra call on farmer's time. Managed boundaries also prevent soil erosion and provide a habitat for wildlife, contributing to biodiversity and potentially to farm economies by attracting 'birders'. It is possible that some field boundaries date back to the late Neolithic or early Bronze Age period (4000 years ago) and so have historic as well as landscape value.</p> <p>The Landscape Character Study reports the key issues for the landscape of the Isles of Scilly as being the decline in traditional management and neglect; insensitive development, particularly reuse of old buildings; tourism and recreation; and coastal erosion. Landscape character assessment can be used alongside biodiversity information to inform the enhancement of habitats and emphasises the importance of hedge banks to the landscape</p>
<p><u>Key issues</u></p> <ul style="list-style-type: none"> <li>• avoid inappropriate development, particularly in the more sensitive coastal areas</li> <li>• minimise impact on tranquility</li> <li>• manage coastal erosion</li> <li>• balance nature conservation objectives with landscape objectives</li> <li>• link farming/fishing and landscape management/improvement</li> <li>• link tourism and landscape management/improvement</li> <li>• stimulate and co-ordinate socio-economic actions that also enhance habitats, improve water management, prevent pollution, reduce the need to travel, consolidate and develop knowledge and skills that will help adapt to the adverse impacts of climate change</li> <li>• link sustainable design with the objectives of landscape/heritage</li> </ul>	

<p><b>SEA Objective 2</b></p> <p>Protect and enhance biodiversity habitats and species</p>	<p><b>Baseline</b></p> <p>Of the 79 non-urban landscape description units 69 have very high ratings for ecology<sup>8</sup>. All 26 nationally important Sites of Special Scientific Interest (SSSIs), which cover 35% of the land mass, meet the Public Service Agreement target for the habitat to be in 'favourable' or 'unfavourable recovering' status.</p> <p>26850.95 hectares of the sea area surrounding the Isles of Scilly is designated as a Special Area of Conservation (SAC). The habitat of importance comprises marine areas and sea inlets (75%); mud flats, sand flats and lagoons (including saltwork basins) (20%); and shingle, sea cliffs and islets (5%). The species of importance are bottlenose dolphins (<i>tursiops truncates</i>), harbour porpoise (<i>phocoena phocoena</i>), grey seal (<i>halichoerus grypus</i>), and shore dock (<i>rumex rupistris</i>).</p> <p>The Special Protection Area (SPA) and Ramsar (401.64 ha) supports a breeding seabird assemblage of European importance. The isolated nature of the islands and rocks, together with their low levels of disturbance and predation, makes them particularly suitable for nesting seabirds such as Storm Petrel <i>Hydrobates pelagicus</i> and Lesser Black-backed Gull <i>Larus fuscus</i>. It should be noted that the SPA boundary only encompasses those areas used for nesting. The vast majority of the feeding areas used by the seabirds are marine waters outside the SPA.</p> <p>At present a significant area of the Islands' heathland is suffering encroachment from bracken, gorse and scrub vegetation due to the lack of grazing in recent decades. This overgrowth is reducing biodiversity as native plants and animals of high conservation value are pushed out. The Wildlife Trust continues to manage maritime heathlands by increasing the variety of the plant structure of the heathlands and heathland plants in areas where bracken and scrub have been managed (390 ha of precious lowland maritime heathland) and has improved 22ha of reed and rush wetland, 6ha of sand dune, 6ha of unimproved grassland, 1ha of woodland and 7 ponds of high wildlife value.</p> <p>Activities which affect biodiversity include built development, agriculture, pollution, water management, climate change, sea level rise/coastal erosion and recreation/leisure. The unique quality of the environment is an asset attracting thousands of visitors every year. Whilst the income can support the management of habitats, this adds to the recreational pressure. Agriculture has had a profound influence on habitats and the landscape. The small fields and wealth of wild flowers and birdlife they support suggest a stable and environmentally sustainable industry.</p>
<p><u>Key issues</u></p> <ul style="list-style-type: none"> <li>• avoiding harm to the SPA, SAC and Ramsar</li> <li>• sustainable sources of income to support conservation in the long term</li> <li>• balancing access for recreation, research and tourism with conservation</li> <li>• managing coastal erosion</li> <li>• supporting sustainably managed agriculture</li> <li>• influencing and linking to Wildlife Trust Plans</li> </ul>	

<sup>8</sup> The Cornwall and Isles of Scilly Landscape Character Study 2005-07

<p><b>SEA Objective 3</b></p> <p>Support socio economic interests</p>	<p><b>Baseline</b></p> <p>The population of all the islands is stable but aging as, basic education is good, young people leave for the mainland in pursuit of further education, jobs and homes and elderly people retire to the islands<sup>9</sup>.</p> <p>Whilst a high proportion of the population is economically active at 74% compared with 47% on the mainland, jobs are characterised by being part time with low and seasonal wages. The decline of traditional industries combined with some services and local businesses, particularly shops, not being viable all year round has led to a combination of a high cost of living and deprivation<sup>10</sup>. Fuel poverty is also a concern with over 40% of properties without central heating compared with 8.5% on the mainland.</p> <p>The Islands' quays are of critical importance in maintaining sustainable communities on each of the five inhabited islands. There are a total of 12 usable quays, several of which are of historic interest. Good ferry and air links are currently essential to maintaining the standard of living.</p> <p>The Islands' economy was traditionally based on the sea, fishing, pilotage and at one time a substantial ship building industry, with flower farming gaining prominence in the mid 19<sup>th</sup> Century. Farming plays a diminished but significant role in the economics of the Islands. The role of the 'picking' and 'tying' seasons are important to provide winter season work to complement the tourist season. The Islands' farming community currently consists of approximately 20-30 active farms. Traditional industries continue in small ways, including the transformation of pilotage into the popular pilot gig racing activity, although the economy is principally based on tourism.</p> <p>The Annual Monitoring Report identifies that the carrying capacity of the islands is limited by infrastructure, particularly in relation to sewage disposal, waste management and supplying sufficient drinking water. Noise pollution is of growing concern with complaints being generated in relation to by aircraft noise, motor cross bikes and water sports such as water skiing.</p>
<p><b>Key issues</b></p> <ul style="list-style-type: none"> <li>• balancing access and conservation</li> <li>• maintaining and improving the standard of living by increasing the level of self sufficiency</li> <li>• stimulate and co-ordinate socio-economic actions that also enhance habitats, improve water management, prevent pollution, reduce the need to travel, consolidate and develop knowledge and skills that will help adapt to the adverse impacts of climate change and contribute to renewable energy production</li> <li>• address fuel poverty</li> <li>• defining sustainable farming/fishing structure and practices</li> </ul>	

<sup>9</sup> Annual Monitoring Report 2007-08 (AMR)

<sup>10</sup> Cornwall and Isles of Scilly Landscape Character Assessment 2005-07

<p><b>SEA Objective 4</b></p> <p>Safeguard and enhance human health</p>	<p><b>Baseline</b></p> <p>With low car ownership and a high level of bike ownership Islanders enjoy a cheap and healthy means of transport and good access to open space. The Isles of Scilly are, therefore, well positioned to facilitate healthy lifestyles. PPG17 emphasises the importance of recreation and diet, a key priority of the Isles of Scilly Children and Young People’s Plan 2008 to 2011 and the Council of the Isles of Scilly Community Strategy 2005-2020. The Cornwall and Isles of Scilly Primary Care Trust draft Strategic Plan 2009 seeks to help children achieve a healthy weight, but also recognises the importance of improving mental health and well being in the wider community and supports the right of people nearing the end of their life to be cared for in their home. A key aim is to reduce the gap between people with the best health and those with the poorest health, and help people to live longer.</p> <p>The cost of living is high in the Isles Of Scilly and average income low. With a decline in farming in recent years it can be a key objective of the Management Plan to help support the production of more sustainable, healthy food within a more market-based approach, promote sustainable management of soils, protect the water environment, including through encouraging sustainable use of water and good watercourse management.</p> <p>The Mental Health Foundation published their report on mental health, resilience and inequalities<sup>11</sup>, which found that in the UK high level of inequality is a major factor influencing mental health and, therefore, health in general. Whilst the Isles of Scilly is possibly perhaps better than other parts of the UK the Management Plan can play a role by encouraging and supporting healthy lifestyles; identifying and supporting land based and marine recreational activities that further the objectives of the AONB; linking recreation, health and education; and the provision of services. Other issues that affect health are noise and light pollution.</p>
<p><u>Key issues</u></p> <ul style="list-style-type: none"> <li>• support improved accessibility to open space and services by cycling and walking</li> <li>• support the provision of locally sourced produce</li> <li>• link agriculture, education and healthy eating with protection and enhancement of the landscape</li> <li>• support land based and marine recreational activities that further the objectives of the AONB</li> <li>• minimise the impact of noise and light on tranquility</li> </ul>	

<sup>11</sup> Prepared by the World Health Organisation – March 2009

<p><b>SEA Objective 5</b></p> <p>Improvement of inshore water quality and sustainable use of water resources</p>	<p><b>Baseline</b></p> <p>Water based habitats are an integral part of the landscape of the Isles of Scilly and include ponds, reedbeds, saline lagoons, seagrass, standing open water and wet woodland and tide-swept channels. Maritime cliffs and slopes are also affected by the action of water. The Islands' clear waters support a unique mixture of marine flora and fauna, a wealth of colourful life from anemones, soft coral, sea fans, fin and shellfish to eel grass beds, kelp and thong weed forests. The resident population of Atlantic Grey Seals can frequently be seen as can visiting pods of porpoises and dolphins and occasionally exotic species such as sunfish.</p> <p>Water quality is generally very high and the maintenance of this position is important to the protection of habitats and the landscape since the Islands' waters support a unique mixture of marine flora and fauna, a wealth of colourful life from anemones, soft coral, sea fans, fin and shellfish to eel grass beds, kelp and thong weed forests.</p> <p>Concern exists over pollution threats to the water supply from the chemicals from agricultural fields and drains. Eelworm pesticides, for example, affect marine life when they run off into the sea and in the long term contaminate borehole supply when used in water table collection areas. Also, septic tank seepage may contaminate borehole water supplies. Water sports can contribute to marine pollution, although this is not likely to be significant.</p> <p>Water availability is a key element in farming and Farm and Horticultural Development Grants have supported farmers in drilling of boreholes. These grants are no longer in operation and despite the availability of land and specialist knowledge, those interested in vegetable growing cannot seriously contemplate such a venture until the issue of water supply is addressed. St Agnes' water supply was the subject of an Objective One funded investigative project seeking a sustainable and affordable option for the island's community. The Environment Agency advises that there is potential for contamination by the Moorwell landfill site, but it is not likely that the AONB Management Plan would affect or be affected by this.</p> <p>The Shoreline Management Plan is being updated, but the principle concern will remain that sea level rise needs to be accommodated in planning policies.</p>
<p><u>Key issues</u></p> <ul style="list-style-type: none"> <li>• integrating sustainable water management in all activities</li> <li>• influencing and linking to the Shoreline Management Plan</li> </ul>	

<p><b>SEA Objective 6</b></p> <p>Address air pollution and the causes of climate change</p>	<p><b>Baseline</b></p> <p>The three main contributors to air pollution in the Isles of Scilly are cars, the airport and the incinerator. None of these individually or in combination has a significantly adverse impact on air quality and there are no Air Quality Management Areas. The mild oceanic climate and clean air is apparent in the particularly rich and diverse lichen community, with some 665 species having been recorded since 1970.</p> <p>In a global sense emissions from these and other activities contribute to climate change and the Management Plan can seek to encourage and support opportunities for community based projects designed to address this, particularly by increasing energy efficiency and the capacity for the generation of renewable energy. The importance of protecting lichens is also a strong incentive to minimise air pollution.</p> <p>More specifically, the Climate Change Act 2008 requires a proactive approach to reducing CO<sub>2</sub> emissions.</p>
	<p><u>Key issues</u></p> <ul style="list-style-type: none"> <li>• support measures to increase walking and cycling</li> <li>• improve energy efficiency through measures to address heating, waste management, water management and food miles</li> <li>• renewable energy capacity</li> <li>• link with regional and local energy and climate change strategies</li> </ul>

<p><b>SEA Objective 7</b></p> <p>Plan for the adaptation and mitigation of the consequences of climate change</p>	<p><b>Baseline</b></p> <p>Climate is a key factor in shaping landscape and character since it influences which plants can colonise successfully and how individual buildings and whole settlements are organised to accommodate a more comfortable life. Climate, geology and the influence of the sea have combined to leave a legacy of generally poor agricultural land. The relatively warm winters compared to the mainland have, however, been used to an advantage in the flower industry.</p> <p>The Stern report states that on current trends average global temperatures will rise 2 to 3°C within the next 50 years or so and th at sea level may rise by up to 1m in the next 100 years. The South West based Centre for Climate Change Impact Forecasting anticipates in 2050 that Cornwall can expect a milder winter, but more stormy winter, with the growing seasons 5-20 days longer and drier, and with more droughty summers. Ecosystems will be vulnerable to extreme temperatures, drought, saline intrusion and coastal erosion.</p>
	<p><u>Key issues</u></p> <ul style="list-style-type: none"> <li>• support adaptation of farming practices and output</li> <li>• support the provision of locally sourced produce and services</li> <li>• managing coastal erosion</li> <li>• protect and help the adaptation of habitats</li> <li>• water management</li> <li>• inform and link to the Climate Change Strategy</li> </ul>

<p><b>SEA Objective 8</b></p> <p>Maintain and enhance cultural heritage, including architectural and archaeological heritage</p>	<p><b>Baseline</b></p> <p>The condition of archaeology, Scheduled Monuments, Conservation Areas and Listed Buildings within the AONB is affected by a number of factors including land-use, vegetation, burrowing animals and climate change (including sea level rise). The Isles of Scilly has the highest concentration of scheduled monuments in the UK and, in addition, there is a substantial amount of undesignated archaeological resource and could be said to be more at risk by uninformed development or land management. The Scheduled Monuments at Risk survey has identified a number of these monuments as being at high risk of damage or destruction within the short term if no action is taken.</p> <p>Many wrecks lie in the surrounding sea (approx. 700-1000) together with evidence of the drowned landscape of prehistoric Scilly with the submerged remains of boundary walls and other structures. The coast also supports all the infrastructure requirements of a maritime community from quays, jetties, moorings and winter boat parks to recreational facilities and their associated buildings and accoutrements.</p> <p>The Isles of Scilly Design Guide developed jointly between IoS Council and EH provides advice and guidance on works to historic buildings and sets out a clear framework for acceptable development in the historic environment.</p> <p>Heritage is a valuable tool for education and tourism and balancing access and the income this generates with conservation requires careful management.</p>
<p><u>Key issues</u></p> <ul style="list-style-type: none"> <li>• managing coastal erosion</li> <li>• influencing and linking to design guidance and Conservation Area Appraisals</li> <li>• balancing accessibility with historic environment objectives</li> <li>• linking tourism and the historic environment to help secure funds for improvements</li> </ul>	

<p><b>SEA Objective 9</b></p> <p>sustainable production and use of resources</p>	<p><b>Baseline</b></p> <p>The sustainable production and use of resources requires informed choices at every stage in the life cycle of a product and service. In the life cycle, the management of waste is most closely linked to the experience of being in an AONB, given the potential negative impact of litter and landfill. This is a key area where the AONB Team has had a substantial influence through working closely with ReZolve Kernow on the Scilly Waste that aims to reduce the impacts of waste on the islands. Scilly Waste aims to work with the whole community to increase waste minimisation, recycling and composting opportunities through encouragement, information dissemination and practical solutions.</p> <p>The latest figures <a href="http://www.wastedataflow.org">www.wastedataflow.org</a> indicate high per capita waste production with regular household waste generation being roughly a tonne per house, compared to the top ten in the UK of less than 350kg per household. Of the 3,135 tonnes of municipal solid waste produced per annum, 81% is incinerated and 14.12% recycled (9.69% dry, 4.43% composted). This is the lowest level of recycling in the UK, but reflects the unique position of the Isles of Scilly with its distance from markets for recyclate and seasonal nature of waste. One aim of the Scilly Waste project is to actively promote sustainable tourism on the Islands and includes practical guidance on how to reduce waste through: reusable shopping bags, recycling glass, composting, using real nappies and reducing junk mail. No waste is landfilled on the Isles of Scilly with glass and builders rubble reused; steel and aluminium sent to the mainland for recycling along with white goods, batteries and electrical goods. Home composting is common and food waste is composted in an in vessel anaerobic digester. Vegetable oil is being collected from hotels and restaurants with a view to providing fuel in the future.</p> <p>Given the unique circumstances of the Isles of Scilly, waste management is generally in accordance with the Waste Management Plan for the UK which advocates implementation of the waste hierarchy and proximity principle, whereby waste is dealt with as close to its source as possible and follows a sequential test of reuse, recycling, reclaiming energy and landfill. Whilst making substantial improvements would be outside the remit of the AONB Management Plan, the integration of measures to improve waste management.</p> <p>Other ways in which to improve resource management include increasing the production of local food and linking traditional skills with habitat and woodland management.</p> <p>Increasing the capacity for renewable energy is a major issue. Whilst it would appear that large scale wind energy is unlikely, there is interest in trialing and developing wave-generated energy technology. The AONB management Plan can make a strong statement about the type of technologies that might be appropriate.</p>
<p><u>Key issues</u></p> <ul style="list-style-type: none"> <li>• local food and improving service provision</li> <li>• linking to the Waste Management Plan</li> <li>• waste hierarchy (reduce, reuse, recycle)</li> <li>• proximity principle</li> <li>• renewable energy</li> </ul>	

## 1.5 Assessment Methodology

- 1.5.1 The preceding section sets out the SEA objectives together with the corresponding baseline. Environmental assessment has involved considering the broad aims, policies and actions of the current AONB Management Plan against these nine SEA objectives in turn.
- 1.5.2 Assessment is undertaken by considering the aim, policy or action in the context of the key issues for each SEA objective and recording the likely impacts in a matrix. The full matrices for each are available on request and these identify every potential impact, regardless of magnitude. The matrices are, therefore, long and repetitive and, since this assessment is concerned with likely significant impacts, it is not considered helpful to include these in this Environmental Report. The findings of this assessment have been further analysed and the outcome is presented in Table 2. In this way, the Environmental Report can provide a focused consideration of the key issues arising and make comprehensive and robust recommendations with respect to how the Management Plan can be improved in terms of its environmental performance.

## 2. Predicted impacts on the environment

### 2.1 Predicted impacts

- 2.1.1 Assessment has established that the AONB Management Plan would deliver strong sustainability benefits. The key benefits would be protection and enhancement of the landscape, heritage and biodiversity; and further developing the links between the economy, community and the AONB designation.
- 2.1.2 Table 2, below, sets out the issues that have emerged for each section of the current AONB Management Plan and makes suggestions with respect to how the Plan can be improved to maximise environmental benefits.
- 2.1.3 No likely significant impacts have been identified. Whilst environmental assessment should only be concerned with these, it is considered that the incorporation of the suggested improvement could have a combined significant positive impact on the landscape.
- 2.1.4 The only issue where concern exists with respect to potential adverse impacts is how the Plan accommodates the need to protect the Special Protection Area, the Special Area of Conservation and Ramsar. It is considered, however, that incorporation of the measures recommended in Table 2 is likely to avoid any impact that would affect the integrity of these sensitive designations.

**Table 2. Issues and how they have been addressed in the draft consultation AONB Management Plan**

(red highlight indicates critical issues)

Subject	Issues	How addressed in the consultation draft Management Plan	Lead partner
Nature conservation	Providing a stronger steer regarding tackling climate change in terms of the protection and adaptation of habitats. This could include a better understanding of hydrogeology and of the suitability of different habitats to hotter, drier summers and warmer, wetter winters.	To be completed prior to publication of the draft MP.	
	Developing an overarching, but biodiversity specific policy with respect to how the Plan will not support proposals that are likely to have an adverse impact on the integrity of the SPA/Ramsar/SAC.	See HRA for further information.	
	Define terms such as 'sustainable land stewardship' more clearly in the context of the AONB and linking this to the activities of the Wildlife Trust.		
	Support measures to improve water management that will mitigate the severity of drought and the impact of pollution. This may include rainwater harvesting, greywater recycling and sustainable drainage.		
	Prioritise actions where sustainable sources of income exist to support conservation in the long term.		
	Inform the Shoreline Management Plan with respect to taking nature conservation into account when managing coastal erosion.		

	Improve understanding and availability of information to support farming practices that further biodiversity objectives.		
	Linking interpretation, information, tourism and biodiversity. This could include foraging holidays, an ecologically designed camp site and community based projects. A key issue would be reducing access to sensitive habitats and improving access to more robust habitats.		
<u>Architecture and heritage</u>	Consolidate the heritage elements of the Isles of Scilly Design Guide and link to Conservation Area Appraisals.		
	Inform the preparation of the Local Development Framework with respect to the landscape value of the historic environment.		
	Support a reduction in access to sensitive locations and improving access to more robust locations.		
	Clearer definition of terms such as 'well managed and robust' archaeological and heritage sites.		
	Developing a more proactive approach to ensure that addressing the consequences of climate change is compatible with heritage interests including the incorporation of measures such as renewable energy, passive heating and cooling, green roofs, SUDS, rain water harvesting and grey water systems.		
	Inform the Shoreline Management Plan with respect to priorities.		
	Link heritage with business opportunities and education. This could link with agricultural holdings.		

	Develop the link between understanding, education and skills with tourism and the economy.		
<u>The Marine and Coastal Environment</u>	Influencing and linking to the Shoreline Management Plan by identifying and providing information on the key features, habitats, buildings and other elements that are integral to the landscape of the Isles of Scilly.		
	Define terms such as 'sustainable use' of the marine and coastal environment. This could include biodiversity, water management, waste/resource management and climate change.		
	Define the term 'sustainable fisheries'. This could include biodiversity, water management, waste/resource management and climate change.		
	Provide a clearer indication that recreational pursuits, the Shoreline Management Plan and development of quays for access would be controlled in a manner that would not harm the integrity of the SPA/Ramsar or SAC.		
	Support the Energy Strategy in developing a proactive approach to ensure the most compatible renewable energy options.		

	<p>An integrated marine environment management plan (MC15) could include consideration of:</p> <ul style="list-style-type: none"> <li>• benefits to biodiversity including SPA and SAC will be protected;</li> <li>• how farming and fishing can link to employment and traditional skills</li> <li>• farming, fishing and tourism that does not harm biodiversity</li> <li>• linking recreation with health and tourism</li> <li>• adaptation to climate change</li> </ul>		
<u>Agriculture</u>	<p>A proactive approach to link maintenance and/or renovation of farm buildings with socially and economically beneficial activities such as tourism and education</p>		
	<p>Stimulate and co-ordinate sustainable farming structure and practices that:</p> <ul style="list-style-type: none"> <li>• maintain and enhance important landscape features</li> <li>• enhance and protect habitats and species</li> <li>• improve water management</li> <li>• move waste management up the waste hierarchy and deal with waste as close to the source as possible</li> <li>• prevent pollution</li> <li>• reduce food miles</li> <li>• consolidate/develop knowledge/skills that will help adapt to climate change</li> <li>• contributes to renewable energy production</li> </ul>		
	<p>Stimulate and co-ordinate sustainable fishing structure and practices that</p> <ul style="list-style-type: none"> <li>• prevent pollution</li> <li>• maintain sustainable stocks of fish</li> </ul>		

	<p>Ensure that projects designed to restore and maintain heathland habitats through co-ordinated local grazing schemes are compatible with the objectives of Natura 2000 designations.</p>		
	<p>Develop an approach to farming that links healthy eating and lifestyles with reduce impact on the environment through the provision of locally grown food and produce. This could involve the development and marketing of an Isles of Scilly brand and incorporate green gyms, composting, organic farming, research into the produce best suited to the climate (taking climate change into consideration) education and agroforestry.</p>		
	<p>Clarify and promote the importance of farm building conversions that are sympathetic to heritage interests, contribute to the character of the landscape and incorporate sustainable design, including water management, renewable energy capacity, and passive heating and cooling.</p>		
<p><u>Recreation and Access</u></p>	<p>Support improved accessibility to open space and services by cycling and walking, but seek a balance between improved access for recreation, education and tourism with impacts on habitats and buildings/monuments at risk. A clear statement required with respect to Natura 2000 sites. Recognise that improved access may stimulate interest in conservation and can be linked to sustainable tourism, generating a source of income for management that enhances the habitat and heritage.</p>		

	Support land based and marine recreational activities that further the objectives of the AONB		
	Support measures to minimise the level and impact of noise and light on tranquility		
	Improve the links between understanding, education, skills, tourism and the economy through recreation opportunities.		
<u>Communities</u>	<p>Make a substantial contribution to improving the self sufficiency of communities within the context of the AONB objectives. This could include:</p> <ul style="list-style-type: none"> <li>• more efficient use of water</li> <li>• rainwater harvesting</li> <li>• greater production and consumption of local produce</li> <li>• consolidate service provision</li> <li>• improved energy efficiency (fuel poverty)</li> <li>• greater capacity for community owned renewable energy</li> </ul>		
	Support improved accessibility to open space and services by cycling and walking		
	Link agriculture, education and healthy eating with protection and enhancement of the landscape		
	Help inform the Shoreline Management Plan with respect to priorities for protecting communities	Not within the scope?	
	Identify how the annual forum and/or advisory and implementation groups will encourage community involvement in the management of the AONB and address all the SEA Objectives.		

<u>Tourism, business, development and regeneration</u>	<p>The dissemination of understanding and skills with respect to the balance between the opportunities and benefits of improved access to heritage sites, archaeological sites and habitats with potential adverse impacts.</p>		
	<p>Inform decisions with respect to appropriate and inappropriate development, particularly in the more sensitive coastal areas.</p>		
	<p>Linking tourism to the consolidation of services needed by communities all year round.</p>		
	<p>Link tourism interest in outdoor activities to improved health of visitors and residents.</p>		
	<p>Inform design guidance with respect to heritage interests and priorities.</p>		
	<p>Identify a programme to assess the logistics and costs associated with improving the availability and, consequently, use of traditional building materials.</p>		
	<p>Consider whether support for the retention of affordable housing and measures which resist the further loss of accommodation to second home ownership is relevant to the scope of the Management Plan.</p>		
	<p>Clearer definition of the term 'careful consideration' with respect to renewable energy. This could include:</p> <ul style="list-style-type: none"> <li>• biodiversity</li> <li>• social and economic benefits where these would also consolidate AONB objectives</li> <li>• water management</li> <li>• reducing emissions</li> <li>• heritage</li> <li>• landscape</li> <li>• efficient use of natural resources</li> </ul>		

	<p>Clearer definition of green tourism to include consideration of:</p> <ul style="list-style-type: none"> <li>• how to maximise benefits to biodiversity and how the SPA and SAC will receive appropriate protection</li> <li>• social and economic benefits of linking tourism with the provision of year round services for residents and education in traditional skills</li> <li>• health benefits of recreation</li> <li>• local produce</li> <li>• water management</li> <li>• minimising emissions</li> <li>• adaptation to climate change</li> <li>• avoiding harm to the most sensitive landscapes</li> <li>• preservation of natural resources</li> <li>• identifying and supporting land based and marine recreational activities that further the objectives of the AONB</li> </ul>		
	Develop a protocol guiding the provision of planning advice to the Council from the AONB JAC that incorporates all SEA objectives, including climate change		
<u>Transport</u>	The Plan can support the use of the least polluting modes of transport.		
<u>Communication and interpretation</u>	Emphasise the link between education, tourism, the economy, the community and the AONB objectives.		
	A more proactive approach with respect to addressing the climate change agenda		
	Identify and protect tranquil areas		

<p><u>Over arching issues</u></p>	<p>Climate change affects and is affected by everything. Sustainability and climate change are effectively the same agenda. Whilst climate change must, therefore, be incorporated into each section of the revised Plan, it is also an overarching subject of such importance that it may be best addressed through a new section on the subject. The issues this could cover include:</p> <ul style="list-style-type: none"><li>• energy efficiency</li><li>• production of renewable energy</li><li>• energy security</li><li>• fuel poverty</li><li>• water management</li><li>• local produce</li><li>• year round service provision</li><li>• health and well being</li><li>• access to services by walking and cycling</li><li>• Shoreline Management Plan</li><li>• habitat protection and adaptation</li><li>• waste management</li><li>• influencing and linking to other plans that have these issues as core objectives</li><li>• retrofitting properties, including heritage properties</li><li>• linking information, education, training and socio-economic interests</li></ul>		
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	<p>Energy use is central to all activities in the AONB and its production by renewable sources can improve efficiency and security of supply. Equally, the impact of the different technologies varies with respect to the environment. Some, such as wind power are potentially significantly adverse. Others, such as biomass or waste to energy are beneficial in some respects and potentially adverse in other. The AONB Management Plan can set out the key principles that can be taken into account in the Energy Strategy. A more proactive approach to this subject can ensure the most compatible renewable energy options are developed.</p>		
	<p>Efficient management of resources is central to the protection of the landscape. Litter and landfill can have a significant adverse impact on the landscape. The AONB Management Plan can set out the key principles that can be taken into account in the Waste Strategy. A more proactive approach to this subject can ensure the most compatible waste management options are developed. The AONB Management Plan can also promote good practice by requiring reduction in production of waste, reuse of materials and recycling.</p>		

	<p>The Management Plan uses numerous terms such as 'well managed' and 'appropriately managed'. Whilst the meaning is often obvious, it may be more effective in communicating the objectives of the Plan if clearer definitions are included for:</p> <ul style="list-style-type: none"> <li>• well managed</li> <li>• appropriately managed</li> <li>• sustainable farming</li> <li>• sustainable fishing</li> <li>• sustainable transport</li> <li>• sustainable tourism</li> <li>• sustainable waste management</li> <li>• low environmental impact</li> <li>• high environmental performance</li> </ul>		
	<p>The Management Plan uses data from various sources in establishing which issues to address and how to address them, as well as informing those responsible for or interested in landscape issues in their widest sense. Future revisions could maximise the performance of the Plan in environmental terms if priority areas for improving data, its availability and its use in analysis/predicting are identified.</p>	<p>This is partly achieved through the identification of monitoring for the purpose of meeting the requirements of the SEA Directive. See section 2 of this Environmental Report</p>	

### Style and format

2.1.5 Whilst the environmental assessment of the Plan is primarily concerned with identifying environmental impacts and ensuring they are addressed, a supplementary concern is the format and style of the Plan since it is the format and style that is a key matter when considering how well issues can be addressed.

2.1.6 Where the Plan emphasises and qualifies the manner in which a broad aim would be pursued it may be a more effective approach to simplify the broad aims and to set out overarching criteria that would apply in all circumstances. An example is Broad Aim RD2 which supports the retention of traditional employment sectors and provides examples of what traditional employment might be. The list could not be considered exhaustive, however, and it also

- stipulates that these should be 'low environmental impact'. The Plan may be clearer, yet more effective and flexible if these issues were decoupled and repetition removed.
- 2.1.7 Some aims, policies and actions are aspirational and others are set within clear targets. Whilst the plan is likely to be more effective if a preference is given to actions which are realistic, backed up by resources and finance, there is also a role for aspirational targets, but it should be clear that these are such.
- 2.1.8 It is recognised that the landscape is the product of a complex interaction of numerous interests and that issues that may at first seem tenuous can have an integrated role in determining the nature of the landscape. Issues that have no clear bearing on the landscape should not, however, be included within the AONB Management Plan. An example that has been identified through assessment is Policy RD4 which seeks to ensure sufficient affordable housing is provided and that second homes do not proliferate. The relationship between this policy and the AONB objectives is not clear and it may be appropriate to remove this and/or other references to issues outside the remit of the Plan.
- 2.2 Monitoring
- 2.2.1 A proposed schedule of monitoring is set out over the page. It provides a list of potential indicators for each SEA objective, potential sources of data and in the final Environmental Report will identify appropriate frequency for collating data. It is anticipated that partner organisations and other government bodies would provide data in a suitable format and the AONB Unit would collate a report, linking the indicators to the performance of the Policies and Actions of the Management Plan.

**Table 3.** potential indicators for monitoring

<b>SEA Objective</b>	<b>Indicator</b>	<b>Current</b>	<b>Target</b>
<b>SEA Objective 1</b> Protect and enhance the landscape	<ul style="list-style-type: none"> <li>a. noise complaints outside urban areas to Environmental Health</li> <li>b. dark skies mapping</li> <li>c. length of hedge in management</li> <li>d. proportion of woodland cover under woodland grant scheme and HLS</li> </ul> <p>also see 7 and 3</p>	<ul style="list-style-type: none"> <li>a. not known</li> <li>b. not known</li> <li>c. not known</li> <li>d. not known</li> </ul>	<ul style="list-style-type: none"> <li>a. no target</li> <li>b. increase</li> <li>c. increase</li> <li>d. increase</li> </ul>
<b>SEA Objective 2</b> Protect and enhance biodiversity habitats and species	<ul style="list-style-type: none"> <li>a. % SSSI in favourable or recovering condition</li> <li>b. named/proxy species</li> <li>c. SAC indicator</li> <li>d. SPA/Ramsar indicator</li> </ul>	<ul style="list-style-type: none"> <li>a. more than 95% SSSIs in favourable or recovering condition</li> <li>b. species data required</li> <li>c. SAC data for indicator</li> <li>d. SPA/Ramsar data for indicator</li> </ul>	<ul style="list-style-type: none"> <li>a. maintain or increase</li> <li>b. maintain or increase the population of an identified species</li> <li>c. to be identified from SAC management plan</li> <li>d. to be identified</li> </ul>
<b>SEA Objective 3</b> Support socio economic interests	<ul style="list-style-type: none"> <li>a. proportion of households in fuel poverty</li> <li>b. proportion of land managed under all agri-environment schemes</li> <li>c. proportion of food sold on the Isles of Scilly grown on the Isles of Scilly</li> </ul>	<ul style="list-style-type: none"> <li>a. 40%</li> <li>b. unknown</li> <li>c. unknown</li> </ul>	<ul style="list-style-type: none"> <li>a. reduce</li> <li>b. increase</li> <li>c. increase</li> </ul>
<b>SEA Objective 4</b> Safeguard and enhance human health	<ul style="list-style-type: none"> <li>a. % permissive footpaths that are easy to use</li> </ul>		
<b>SEA Objective 5</b> Water management	<ul style="list-style-type: none"> <li>a. number of rain water harvesting schemes implemented</li> <li>b. number of grey water systems implemented</li> <li>c. number of sustainable drainage projects implemented</li> </ul>		

<p><b>SEA Objective 6</b></p> <p>Address air pollution and the causes of climate change</p>	<p>a. the length of cycle and footpaths b. number of community based projects designed to address the causes of climate change</p>	<p>a. not known b. not known</p>	<p>a. increase b. increase</p>
<p><b>SEA Objective 7</b></p> <p>Address the consequences of climate change</p>	<p>a. area of sensitive landscapes threatened by coastal erosion b. area of SSSIs threatened by coastal erosion c. heritage sites threatened by coastal erosion d. habitats at risk from drought e. habitats at risk from saline pollution</p>		
<p><b>SEA Objective 8</b></p> <p>Maintain and enhance cultural heritage, including architectural and archaeological heritage</p>	<p>a. proportion of Scheduled Ancient Monuments at risk b. number of heritage properties restored</p> <p><a href="http://www.english-heritage.org.uk/upload/pdf/smr-sw-acc-web-final.pdf">http://www.english-heritage.org.uk/upload/pdf/smr-sw-acc-web-final.pdf</a></p> <p>also see 7</p>	<p>a. not known b. not known</p>	<p>a. reduce the number at high risk b. no target</p>
<p><b>SEA Objective 9</b></p> <p>sustainable production and use of resources</p>	<p>a. waste per household (tonnes) b. volume of oil recycled from hotels and restaurants</p> <p><a href="http://www.wastedataflow.org">www.wastedataflow.org</a></p>	<p>a. approximately 1 tonne b. not known</p>	<p>c. reduce d. increase</p>

### 3. Next Steps

3.1.1 Comments and information are invited with respect to the findings of the Environmental Report. At the end of the consultation period for the Isles of Scilly AONB Management Plan, a statement will be added to the Environmental Report to identify how any significant environmental issues raised have been into account.