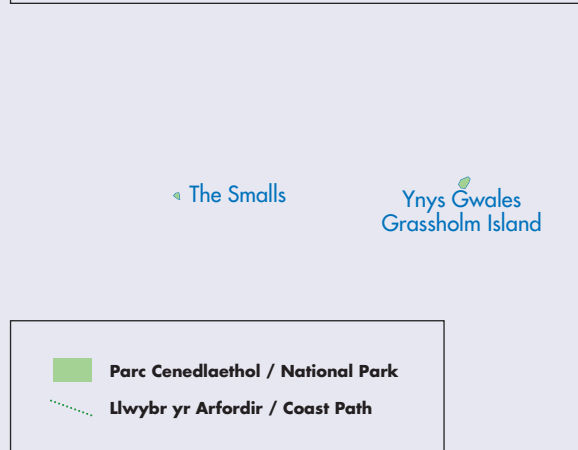


National Park Management Plan 2009-2013



Pembrokeshire Coast National Park Authority



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Background

The National Park was designated in 1952, and has the following purposes:

- **to conserve and enhance the natural beauty, wildlife and cultural heritage of the National Park**
- **to promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public**

If there's a conflict between the purposes which can't be reconciled, conservation interests have greater weight¹.

Pembrokeshire Coast National Park Authority

The body charged with delivering the purposes is the Pembrokeshire Coast National Park Authority ("the NPA"). The NPA also has a duty to foster social and economic wellbeing of National Park communities in its pursuit of the purposes.

Employees of the NPA have a wide range of roles and work to a body of Members. The Members currently consist of 12 councillors of Pembrokeshire County Council and of 6 individuals appointed by the Welsh Assembly Government.

About two-thirds of the NPA's funding comes from the Welsh Assembly Government and from a levy on Pembrokeshire County Council. Most of the remainder comes from locally-generated income and from other grants.

More information on the NPA, including its corporate plan, Welsh language policy, and service and environmental standards, can be found at www.pembrokeshirecoast.org.uk.

The role of the Management Plan and of partner organisations

The NPA cannot achieve National Park purposes on its own, and other organisations have a duty in law² to have regard to the

purposes in their own operations. **The Management Plan is a way of coordinating effort: it is a plan for achieving National Park purposes, not just a plan for the NPA.**

While we (the NPA) are responsible for producing the Management Plan, many other people have been involved in its preparation and will be essential to its delivery.

The policies detailed in this Management Plan are offered as operational objectives for the many organisations and individuals whose actions may influence the National Park.

The Local Development Plan for the National Park

Development planning plays a key role in maintaining the character of the National Park, in helping people to enjoy the Park, and in fostering the social and economic wellbeing of National Park communities in the NPA's pursuit of National Park purposes.

The NPA is responsible for development policy and for determining the outcome of planning applications in the National Park.

Existing planning policies are contained in the Joint Unitary Development Plan for Pembrokeshire. The Joint Unitary Development Plan is being replaced by two local development plans, one for the National Park area (for which the NPA is the lead) and one covering the rest of Pembrokeshire (for which the lead is Pembrokeshire County Council).

The Management Plan indicates policy directions for the Local Development Plan for the National Park area. The Management Plan was developed alongside an early stage (the Preferred Strategy) of the Local Development Plan.

Stay in touch

We intend to carry out interim reviews of the Management Plan before the next full review in 2013 and welcome your comments.

¹ The Sandford Principle

² Environment Act 1995, Section 62(ii)

Background

"It is such a beautiful place that evokes such a great emotion in me."

Residents and Visitor Survey

Coast Path, Abereiddi



**Parc Cenedlaethol
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National Park**

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Acknowledgements

We'd like to thank all the organisations and individuals who have contributed to the Management Plan. A Stakeholder Group debated various issues and provided comments and advice from an early stage.

The Group consists of:

Cadw	Pembrokeshire Association of Local Councils
Campaign for the Protection of Rural Wales	Pembrokeshire Business Initiative
Countryside Council for Wales	Pembrokeshire Association of Voluntary Services
Country Land and Business Association	Pembrokeshire Coastal Forum
Department for the Economy and Transport	Pembrokeshire County Council
Dwr Cymru Welsh Water	Pembrokeshire Local Health Board
Dyfed Archaeological Trust	Pembrokeshire Rural Housing Enabler
Environment Agency Wales	Pembrokeshire Local Action Network for Enterprise and Development (PLANED)
Farmers Union of Wales	Pembrokeshire Housing Association Ltd
Friends of Pembrokeshire National Park	Sustainable Agriculture Network (PLANED representative)
Home Builders Federation	The National Trust
National Farmers Union Cymru	West Wales ECO Centre
One Voice Wales	

1 Your landscape, your views

1.1 National Parks - Britain's breathing spaces

- 1.1.1 There are around 120,000 protected areas worldwide, which together cover more than 12% of the Earth's land surface³.
- 1.1.2 The UK's National Parks were created in order to protect areas of scenic beauty, their wildlife and their cultural importance for everyone's enjoyment and wider benefit. Although parts of them are wild and remote, they all have long histories of human occupation.
- 1.1.3 There are nine National Parks in England, three in Wales and two in Scotland. Two further National Parks are currently proposed: the South Downs in England and the Mourne in Northern Ireland.
- 1.1.4 In England, National Parks cover about 8% of the land area. In Scotland, they cover about 7% of the land area. **Wales' three national parks - Snowdonia National Park, Brecon Beacons National Park and Pembrokeshire Coast National Park - cover about 20% of Wales' land area.**
- 1.1.5 The UK's National Parks complement another protected landscape designation, that of Area of Outstanding Natural Beauty. **There are five Areas of Outstanding Natural Beauty lying wholly or partly within Wales**, covering a further 4% of the land area. These are the Anglesey, Clwydian Range, Gower, Llyn, and the Wye Valley Areas of Outstanding Natural Beauty.
- 1.1.6 National Parks and Areas of Outstanding Natural Beauty include many other protected sites and features within their boundaries, for example Special Areas of Conservation and Scheduled Ancient Monuments.

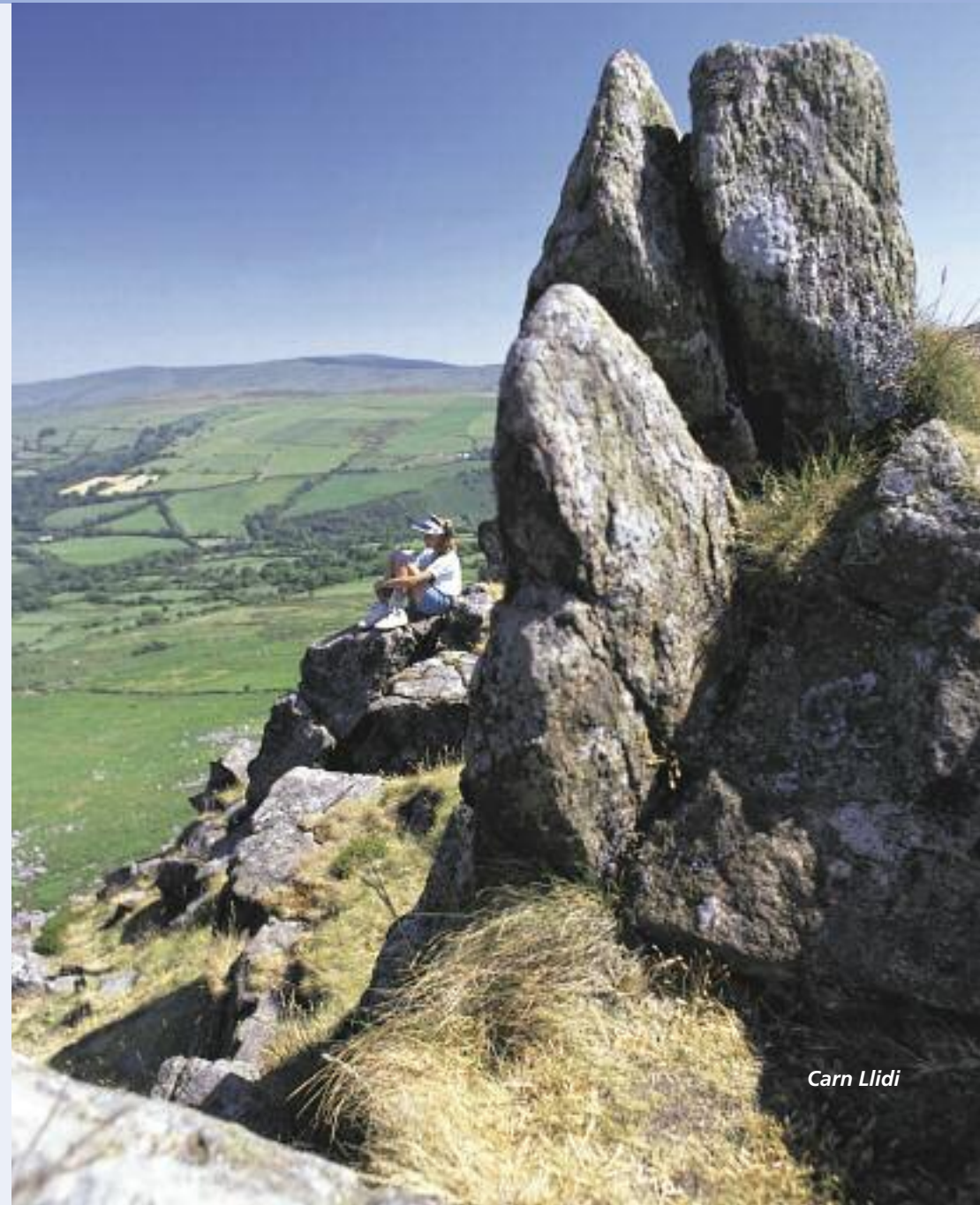


Map 1a: National Parks of England and Wales

Your landscape, your views

1.2 Great to look at...

- 1.2.1 Pembrokeshire Coast National Park is the only UK National Park designated primarily for its coastline. It's the only UK National Park with offshore islands and the sea has always been a major influence on the area's land use, culture, wildlife and economy. **The National Park covers an area of 612km² and is one of the most densely populated of the UK's national parks, with around 23,000 people living in some 50 community council areas.** At its widest it is about 16km wide; at its narrowest it is about 200m. Most of the National Park is in private ownership.
- 1.2.2 The seaward boundary of the National Park is the mean low water mark, and the intertidal zone is probably where the Park is most spectacular and changeable. The Park is also at its wildest here, in the sense that natural processes are largely unhindered and there are usually few reminders of human presence. From the coastal slopes inland, the agricultural landscape is a unifying theme. However the National Park is also very diverse.
- 1.2.3 In the north, the rocks of Carn Llidi, Pen Beri and Garn Fawr, and the extensive tracts of moorland on Carningli and Mynydd Preseli, give an exposed and mountainous feel to a landscape slashed by the wooded valleys of the Gwaun and Nevern. There are associations with Stonehenge and strong connections with Celtic folklore and the legends of the Mabinogion, which describe Pembrokeshire as "Gwlad hud a lledrith" - the land of magic and enchantment.
- 1.2.4 In the west, the National Park is dominated by the broad sweep of St Brides Bay, bounded at its northern end by Ramsey Island and at its southern end by Skomer.
- 1.2.5 The southern coast is another contrast, with the limestone plateau and cliffs of the Castlemartin peninsula, the steep-



Carn Llidi

Your landscape, your views



Deep-water soloing (strictly for experienced climbers with local knowledge!)

sided wooded valleys inland from Amroth, the Bosherton Lakes (which are, like much of the coastal strip, in the care of the National Trust) and the tourist resorts of Tenby and Saundersfoot.

- 1.2.6 Between the western and southern areas of the National Park lies the Milford Haven Waterway, where the wooded reaches of the Daugleddau Estuary and Carew and Cresswell Rivers feed into one of the finest natural deep water harbours in the world.
- 1.2.7 The Pembrokeshire Coast Path National Trail is essential to many people's experience of the coastal features for which the National Park was designated. **The NPA manages the 300km National Trail as a public right of way, in close partnership with landowners.** Most of the National Trail corridor is in private ownership, with some significant areas in the care of The National Trust.
- 1.3 ... even better to play in**
 - 1.3.1 National Park purposes refer to 'promoting opportunities for understanding and enjoying the special qualities of the area by the public'. The special qualities are the attributes of the National Park which, individually or in combination, give the Park its particular character and which can evoke 'out of the ordinary' experiences and emotions in those who live here or visit.
 - 1.3.2 In 2007, we asked residents and visitors what they consider to be the special qualities of the National Park, as the first stage in the preparation of the Management Plan and the Local Development Plan for the National Park⁴. The results reinforced the findings from a survey for the previous Management Plan in 1998. Special qualities were also identified as part of Landscape Character Assessment commissioned by the NPA in 2006⁵.

4 Residents and Visitors survey for the Management Plan and Local Development Plan, Pembrokeshire Coast National Park Authority, 2007

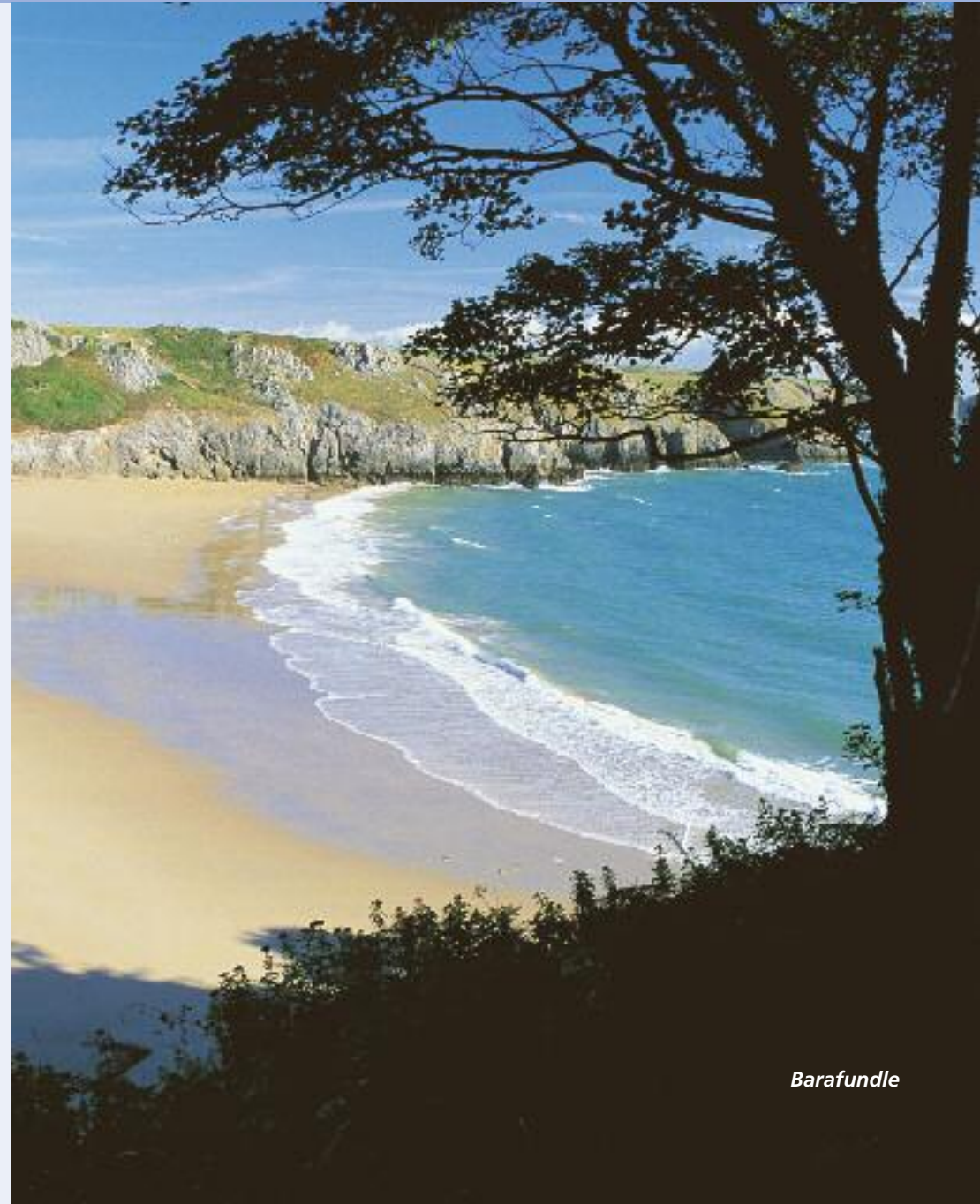
Your landscape, your views

- 1.3.3 Respondents referred to the blend of different types of countryside, the spectacular appearance and diversity of coastal scenery, and the bonding of the landscape with angry or glittering seas. The National Park's relative freedom from noise and light pollution is considered to be a scarce and at-risk commodity in a cluttered world.
- 1.3.4 It's not only individual qualities that make the National Park special. There is also their variety and the endless combinations in which they occur - at different times of year, in different weather, and within a relatively small area - to give rise to an ever-changing range of landscapes and experiences. The special qualities are often easily and freely accessible, and vary with people's moods or the weather. As one person put it:

"The blend of sea, beautiful landscapes, rivers, cliffs and stunning views make this a unique environment in Britain. Add to these factors the friendliness of the locals, the astonishingly good quality of food based on wonderful local produce, provides an experience rarely found elsewhere. Coast, countryside, culture!"

- 1.3.5 People often expressed the National Park's special qualities as emotions and feelings. Visitors referred to wildness, remoteness, spaciousness, timelessness, the slow pace of life and 'the relaxability factor'. The National Park was found to be welcoming, unpretentious - and even edible, since local produce was highly praised. People commented in particular on solitude and the impression of limitless space. A sense of tradition, community, peace and the past were also prominent in residents' responses. Reference was made to the 'spirituality of a beautiful landscape steeped in a rich cultural past', to inner peace, and to being at one with nature.

5 Available from www.pembrokeshirecoast.org.uk. The Assessment drew on a variety of sources (including the 2007 residents and visitors survey), to identify special qualities of the National Park. They can be summarised as: the diversity of landscape; coastal scenery and islands; remoteness, tranquillity, remoteness and wildness; wildlife; access; distinctive settlement character; the archaeology and the historic environment; cultural heritage, and the diversity of geology.



Your landscape, your views



Bug Hunt, Castell Henllys



Grey Seal



Tenby

- 1.3.6 People appreciate the quality of natural light and the un-manicured appearance of the National Park. People enjoy fresh air and clean, clear water and appreciate freedom from too many rules. One respondent liked 'That I have a right to be there'; another enjoyed the fact that there is a surprise around every corner. Another, who has been visiting since 1976, said that it is 'the only place in the world where we return'.
- 1.3.7 Visitors and residents like the opportunities for getting close to abundant wildlife, and for observing changes in wildlife and habitats throughout the year. Particular habitat types, specific sites and landscape features were mentioned, including moorland, commons and heathland, estuaries, foreshore, rivers, hedges, woods, dunes and the islands. Specific mention was made of coastal flowers and animals including seabirds, seals and porpoises, and the National Park is seen as a place where children can learn through experience and exploration.
- 1.3.8 People appreciate the small, vibrant, living and working settlements in the National Park. Particular mention was made of small farms and the feeling of cultural heritage which they bring. The role of development control, in keeping development within villages and reasonably faithful to the vernacular style, was recognised, as was its wider role in retaining the National Park's unique landscape and heritage.
- 1.3.9 Visitors commented that the range of architectural styles gives a distinctive feel to the Park in its own right. One respondent illustrated the range of building types found in the National Park with reference to Pentre Ifan burial chamber on the one hand and Tenby's new lifeboat station on the other. Features such as traditional barns and stone

Your landscape, your views

walls were mentioned, as was the importance of buildings being compatible with their surroundings. People value gardens, monuments, churches and spiritual places, and make strong links between contemporary buildings and the historic environment. Residents referred to an ever-present feeling of the Park's long history of settlement, the continuation of culture and traditions.

- 1.3.10 Visitors appreciate the small scale, the relative peacefulness and the friendliness of settlements, mentioning St Davids and Newport in particular. The variety of attractions and the range of independent outlets for local produce were welcomed. Some visitors noted that tourism and commercialisation have not managed to spoil the character and attractiveness of the National Park, and one person specifically recorded their pleasure at the National Park not being directly accessible by motorway.
- 1.3.11 All of the special qualities people listed are sources of enjoyment, so people also value access to them. Residents particularly value the beaches and coastal access afforded by the Pembrokeshire Coast Path National Trail; residents also appreciate access to the open countryside and quiet roads. Specific sites and recreational opportunities were mentioned: for example Caerfai, Pengelli, Poppit Sands and Monkstone; the surf, the wind and the islands; sailing, boat trips and horse-riding. The coastal/walkers' buses were frequently praised, and the information available on linear and circular walks is well received. Residents and visitors commented on the rugged and unspoilt coastline and the well-maintained National Trail and link paths.
- 1.3.12 Visitors appreciate the warmth with which they are received, and also commented on the ease with which solitude can be found. A number of people visit in the shoulder season or in winter because there are fewer people around.

- 1.3.13 In no particular order, these are some of things that make the National Park special to people:

"...the sheer wildness everywhere I went. You felt very free when you were in the Park."

"Freedom - the sky, sea, countryside, wonderful, wildlife, wild flowers."

"Contrasting landscapes: mountains, valleys, farmland, seascapes."

"It is such a beautiful place that evokes such a great emotion in me."

"...wild and beautiful coast."

"Peace. The silence has a magical quality all too rare these days."

"Peace, beauty, clean air, exhilaration of the wind and waves..."

"...wonderful range of architectural styles - very distinctive local feel to it."

"...fantastic, almost tropical beaches in the South, wild pebble beaches in the North."

"The timeless beauty of the Park. We have been coming to the Park now for over 13 years and now are showing our children the beauty and spectacular coastline that has inspired us over the years."

"One particularly unique aspect is the lack of light pollution of the night sky. It is wonderful to get such a clear view of the 'greatest show on earth'."

"Beauty, wilderness, my family, all my roots."

"The seascape and the landscape have their distinctive beauty and bonding in Pembrokeshire."

Your landscape, your views



Coast Path, Solva



Pentre Ifan



Surfing

"Fabulous range of birds and butterflies and wild flowers."

"A friendly reception...the vitality of the people of Pembrokeshire."

"Coastal path - brilliant for leisure, exercise and scenery."

"The absolute fantastic feel of the place from when I was a kid and we camped near Monkstone - to now when I have brought my family back - only it's better even than through the rose-tinted specs of childhood."

"The sheer beauty of the coastline. Having walked the entire length of the coastal path walk in all kinds of weather, I believe there is nothing more beautiful."

"Scope for outdoor activities."

"...the many miles of scenic inland walks."

"My favourite is the coastal path. I enjoy the views of sea and the coastline and the chance to see seals and seabirds."

"It's fab. I like surfing, I also like climbing, it's good for both."

"Opportunities for all - young/old, abled/disabled, poor/rich to enjoy the Park."

"Feeling of welcome."

"Wildlife, flora, fauna, natural rock formations and views from the cliffs. The uniqueness of the rock pool and pool life for children."

"...great diversity of geology."

"...the clean, clear water."

"The historic churches and spiritual places (monuments etc)."

Your landscape, your views

"A beautiful and peaceful area, rich in heritage."

"Friendly welcome. Unpretentious."

"The prehistoric memorials - they are magic."

"The coastal areas are my favourite places, their natural beauty, peacefulness, remoteness and closeness to wildlife are what make them special to me."

"Such beauty raises an emotion in me that no other place in the world can."

- 1.3.14 People also commented on some of the challenges facing the National Park and the people who live here. Some of these, again in no particular order, are listed below.

"Maintaining the particular character of the National Park as a distinct area within the British Isles."

"...overcrowding/use - people come to visit to enjoy peaceful natural beauty - too many people could destroy this."

"Global warming, coastal erosion and pollution."

"Keeping dogs on lead and cleaning up after your dog, no littering."

"Reduction in the quality and quantity of wilder, remoter places of solitude. Army firing range still precludes walking all the coast on the coastal path."

"...pollution by 'cast off' waste and other thoughtless trash that ends up on the beach, especially Freshwater West."

"Threats from the downturn in farming - loss of management for the land and habitats."

"Expanding camp sites may overburden water/sewerage systems."

"Blue flag areas & dog free areas on beach:- the rules are blatantly flouted...Not much fun if you choose a beach on the basis of it being clean & dog free!"

"Endeavouring to get the balance between visitor and tourist for enjoyment of the County, while seeing the economic benefits they bring are not at the expense of the vulnerable and less able and the native culture of the county and the character of Coastal Pembrokeshire."

"Keeping alive the Welsh aspect of the Park is a challenge, especially in the South."

"Dilution - people coming in do still embrace the culture, but it would be good to have incentives."

"High house prices and empty holiday homes."

"The importance of retaining local services (post office, doctor, shops) for use by local residents all year, not just for visitors."

"...managing conflicting interests of Park users - those who want peace and quiet and those who want a more active holiday."

"...or The conflict between the need of local population to have affordable housing and facilities to stay local (employment opportunities all year, shops, leisure facilities for young people)."

"Not everyone values nature, or natural environments - the challenge is - the Park competes with the population's desire to access retail areas. People have come to expect shops, outlets wherever they go."

"As elsewhere in the UK, local people shouldn't be priced out of their homes. Pembrokeshire housing is vastly inflated, where do locals live? The Park wouldn't be the

Your landscape, your views

same without local residents working and living in their communities.”

“Build on the aspects which are special to the Park. Its unspoilt character, lack of too much traffic, its combination of wilderness and 'softness'!”

“Can the Park (and National Parks in general) be a model of sustainable development, conservation and tourism? Can you control development to protect the Park? Can you maintain the support of its residents?”

“We do not like the prospect of a holiday village being allowed in the Pembrokeshire National Park... It is setting a dangerous and far reaching precedent.”

1.3.15 People also suggested solutions to the problems:

“Encouraging your children to respect the places they visit.”

“...encouraging static and visiting population to 'tread gently on the planet'.”

“Simple attractions to attract genuine family visits etc. Keep away from big commercial venues... Roads get clogged. More discerning visitors will keep away, place will then 'dumb down' instead of 'enlighten'.”

“Ensure that the current tranquillity of the area is not degraded when attractions are introduced - no noisy sports - jet skis, motor boats etc.”

“Encourage farming to maintain the pastoral infrastructure, keeping profitability.”

“Reservations and initiatives to increase fish and shellfish stocks should be a high priority.”

“Raising awareness of nature and its importance on our very existence.”

“Directing benefits both to conservation and to encourage the livelihood of local people and the marketing of local food, crafts and produce.”

“Providing access for diversity of groups.”

“Solar energy could be used and I have only seen 1 wind turbine.”

“Tourists are attracted by the Park's special qualities but could overwhelm the area. Promotion of tourism other than in July/August is vital - the Park is lovely but there are fewer places to stay/eat etc at other times.”

“Encouraging local shopping. Promote organic foods. Discouraging multinational retailers and encouraging local food suppliers to sell to cafes, hotels etc.”

“Getting children from the cities to take an interest in the Parks by getting them involved in the development.”

“...there cannot be divisions, all is interdependent. We need 'joined up' thinking.”

“Very much a plus are the Rangers - always helpful, friendly and receptive, but still the perception appears to be that 'the Park' are 'them' and an elected body which comes in and 'tells us'. I would like to think that our money is used efficiently and plans drawn up after consultation and using local expertise - often I hear 'we could have told them that'.”

“...our legacy to future generations. Once gone it can never be replaced. Ensure that today's school children are made fully aware of the value of this wonderful part of the planet.”

Your landscape, your views

- 1.3.16 A number of people listed as a special quality the feeling that the physical special qualities they had listed were, in principle, safeguarded into the future by protected landscape designation. In other words, peace of mind in regard to the National Park's future can be a special quality in its own right.

1.4 Responses to consultation on a draft Management Plan

- 1.4.1 **The NPA consulted on a draft Management Plan in early 2008, alongside a draft strategy for development planning policy for the National Park area.** Points or proposals of particular significance to emerge on the Management Plan included, in no particular order:
- a range of views regarding the capacity of the National Park for further development
 - a need to highlight the role that the Park can play as part of a network of protected areas
 - the vibrancy and vitality of communities should be given greater recognition
 - there should be more attention given to a 'living' Park, and to the issues relating to demographic balance and outmigration
 - the marine environment should be accorded more attention
 - the degree of emphasis placed on National Park purposes should be revisited (some respondents felt that too much weight was given to Park purposes; others, too little)
 - of the management aims, those relating to landscape should have primacy
 - a number of points concerning landscape

quality/functionality and tranquillity

- a perceived lack of balance in the arguments relating to tourism
- a perceived lack of recognition of the disbenefits of military activity
- various comments on the clarity and wording of objectives, and on monitoring of them
- various suggestions for improving clarity and format
- indication of potential obstacles to NPA operations and Management Plan delivery

- 1.4.2 Many comments on the draft Management Plan related directly to, or had implications for, the forthcoming Local Development Plan for the National Park. These comments covered topics such as housing, major development, marine aggregates, transport, sustainable design, energy, major development, retail and waste. Comments have been taken into account in both plans where appropriate.

1.4.3 **People's comments throughout plan preparation have given a clear steer for management of the National Park:**

- **It should be a place where people enjoy a high quality of life, in terms of the best possible health and wellbeing, fulfilling employment, a rewarding recreational and cultural life, and access to a beautiful and ecologically healthy environment**
- **It should be a place where natural and cultural resources - and waste - are managed with future generations in mind, and where ecological systems are protected**
- **It should be a place which is a source of enjoyment, learning and inspiration for all**

2 Assessing the State of the Park

A unique combination of natural and cultural resources and social capital underpins the National Park.

Safeguarding and enhancing these assets is part and parcel of achieving National Park purposes.

But what do we want to achieve? And how will we know if progress is being made?

2.1 The National Park in 2035...

■ Development continues to respect local character, the special qualities and capacity of the internationally-important National Park landscape. This means that the National Park's population will not be able to increase significantly. The limited opportunities for development are wherever possible made available for development that contributes most to sustaining local communities. Development in the National Park is low-impact, low-energy and affordable, and there is now a distinctive but subtle vernacular building style that combines the best of the old with the best of the new. The National Park designation and purposes are strongly valued locally, as having helped safeguard vital assets and communities to thrive in the face of global change. Towns, villages and their communities are diverse and distinctive, and the Welsh language thrives all round the Park.



■ The nation recognises and rewards the National Park's farmers and other land managers for the full value of the wide range of services they contribute to the nation's quality of life. We have a National Park rich in wildlife and recreational opportunities producing high quality food that we buy in the knowledge that the local economy and surrounding countryside benefit. A land holding's role is no longer seen as purely one of food production. The viability of smaller family holdings, related businesses and communities in the National Park is much improved.

Assessing the State of the Park

2.1 The National Park in 2035...

■ Much National Park wildlife was experiencing severe declines at the start of the 21st century, but, with some sad exceptions, major revision of agricultural policy has helped biodiversity on the way to recovery. However, in common with the rest of the UK, the National Park's wildlife populations - and people - are attempting to adapt to the changing climate. For example, the rise in sea-level and increased number of storm events are altering the softer and low-lying parts of our coastline, agriculture and tourism have sought to adapt to new weather patterns, and water resources must be carefully managed. The decisions that were taken on fisheries have borne fruit and the marine harvest from the seas around the National Park is, for the moment, sustainable. For although, with careful management, and better protection, the UK is now a model for sustainable fisheries management worldwide, the sea is being profoundly influenced by the effects of climate change.



■ The National Park is internationally recognised as a model of sustainable living. Sustainable design is inherent in all new buildings and community renewable energy generation schemes are popular. The Park has migrated to an economy of low net carbon emission by increasing energy efficiency and conservation, and by minimising waste – gifts of self-reliance given the global energy tensions still very much in evidence in the mid 21st century.



■ The public transport network to and within in the National Park is convenient, low-impact and affordable, giving everyone access to high quality local goods and services, and linking the distinctive communities of the Park and Pembrokeshire. Significantly improved rail links and services, and improved shipping links mean that Pembrokeshire

is easily and cleanly accessible, for passengers and freight. While the polluting effect of the car has been reduced, through technology and cleaner fuelling, overall traffic volumes, and the effects of these, are still concerns. However, economic reliance on the car has decreased as our economy focuses more on businesses based on local strengths - such as outdoor recreation, sustainably-produced food and certain e-services - and relies less on oil.



■ Building on these strengths, Pembrokeshire Coast National Park benefits from being an unbeatable year-round visitor destination and an inspiring and socially-inclusive place to live, work and play. The National Park majors on its strengths: low impact marine and coastal recreation, access to wildlife-rich countryside, and peace and quiet.

Assessing the State of the Park

Whitesands Bay



2.2 Assessing the state of the National Park

- 2.2.1 Monitoring is necessary to establish the current state of the National Park and to assess whether the policies identified in the Management Plan are individually effective and collectively sufficient to achieve National Park purposes.
- 2.2.2 We identify three levels of assessment:
 - i. Status monitoring directly measures progress on National Park purposes. This is the most important type of monitoring as it tracks the overall outcome of influences on the National Park. However it is often slow to identify change and may not, on its own, tell us why things are changing.
 - ii. Monitoring and surveillance help to identify existing and future causes of change. These issues and opportunities give rise to the policies found in each section of this Management Plan.
 - iii. Operational monitoring relates to project management and policy compliance. This occurs at the level of individual organisations and is not included in the Management Plan.
- 2.2.3 If there is confidence that the main factors affecting achievement of the aims have been identified, and that the suggested management approaches address these factors, then there can be a degree of confidence that partners' combined efforts are contributing towards the desired outcomes. Whether effort is enough to actually achieve the outcome may only become apparent over time however, since the National Park is a dynamic place and may be influenced by factors that are beyond partners' direct control, and/or which originate outside the National Park boundary.

Assessing the State of the Park

2.2.4 So 'success' is not always a fixed quantity and will often depend on how people feel or what they perceive. For this reason we have, in this version of the Management Plan, avoided using quantitative targets to try and define a desired state of the National Park. Outcome measures are nevertheless used to assess the direction and rate of travel towards 'the National Park in 2035' described at the start of this section. These measures are given throughout the Plan in the 'evidence' subsections.

2.2.5 Improvements in the condition of the National Park are ill-won if pressure just becomes displaced onto people, natural resources or protected sites elsewhere. The Wales ecological footprint project, led by the World Wide Fund for Nature Cymru, calculates that if everyone in the world were to live the lifestyle of the average Welsh resident, three Planet Earths would be required. **There is an increasingly apparent contradiction between fossil-fuelled economic growth and one-planet welfare.**

2.3 Sustainability Appraisal and Strategic Environmental Assessment

2.3.1 European Directive 2001/42/EC and UK legislation require the Management Plan to be assessed for its effects on the environment and on people. The processes involved are usually referred to as 'Sustainability Appraisal' and 'Strategic Environmental Assessment' and they may be combined.

2.3.2 The Management Plan was assessed through a combined process. The NPA consulted on the scope of the appraisal in 2007⁶, and a full draft Sustainability Appraisal⁷ was consulted on alongside the draft Management Plan, in 2008. (See also section 3.4.)

2.4 Habitats Regulations Assessment

2.4.1 Habitats Regulations Assessment of plans and programmes, including spatial and development plans, is a requirement of the Habitats Directive (92/43/EEC) as set out in the amended Habitats Regulations (2007)⁸. Assessment looks specifically at whether a plan is likely to have significant negative effects on European conservation sites (i.e. Special Areas of Conservation or Special Protection Areas), either alone or in combination with other plans and programmes.

2.4.2 The first phase of assessment is a screening process, to determine whether adverse effects are likely. If they are deemed likely, a full assessment ('Appropriate Assessment') of the plan or programme, including review of mitigation measures, is required. Sustainability Appraisal of the Management Plan included Habitats Regulations Assessment screening; however, acting on advice from the Countryside Council for Wales, the NPA commissioned a separate Screening Report⁹. This was prepared by the environmental consultancy Enfusion, in consultation with the Countryside Council for Wales, on behalf of the NPA.

2.4.3 The Screening Report concluded that the Management Plan would not result in significant negative effects on European conservation sites, and that the Plan could therefore be adopted without further reference to the Habitats Regulations.

⁶ Pembrokeshire Coast National Park Authority (2007) Pembrokeshire Coast National Park Management Plan: Sustainability Appraisal incorporating Strategic Environmental Assessment and Habitats Regulations Assessment. Scoping Report - Revisions post Consultation

⁷ Pembrokeshire Coast National Park Authority (2008) Pembrokeshire Coast National Park Management Plan (2008-2012): Sustainability Appraisal incorporating Strategic Environmental Assessment

⁸ Draft guidance on Habitats Regulations Assessment was issued for consultation by the Welsh Assembly Government in 2006 in an annex to Draft Revised Technical Advice Note 5 (Nature Conservation and Planning)

⁹ Pembrokeshire Coast National Park Authority (2008) National Park Management Plan Habitats Regulations Assessment Screening Report

3 Quality of Life

“Peace. The silence has a magical quality all too rare these days.”
Residents and Visitor Survey



Family group on coast path

The National Park Authority’s duty to foster socio-economic wellbeing applies in the pursuit of National Park purposes. Nevertheless, the pursuit of National Park purposes brings extensive social and economic benefits in and of itself, and makes a significant contribution to local and national goals.

Pembrokeshire County Council and Pembrokeshire Local Health Board, operating within the context of government policy, provide strategic social, economic, health and wellbeing roles in the National Park. Goals are expressed through the Pembrokeshire Haven area spatial plan, the Community Plan for Pembrokeshire and the Health, Social Care and Wellbeing Strategy.

3.1 Delivering Welsh Assembly Government goals

3.1.1 The measures to achieve National Park purposes outlined in this Management Plan also contribute to the Welsh Assembly Government’s national agenda (some examples are given at the end of this section). A Welsh Assembly Government policy statement¹⁰ recognises the benefits of Wales’ National Parks, and sets out medium and longer term expectations of them. The Welsh Assembly Government’s more immediate targets for Wales’ three National Park Authorities are set out in an annual grant letter. (Aims and strategic policies detailed in this Management Plan will be treated as ‘objectives’ for the purposes of Section 4(3)(b)(ii) of the proposed Local Government (Wales) Measure, once the Measure has been formally enacted.)

10 Policy Statement for the National Parks and National Park Authorities in Wales - “Working together for Wales”, Welsh Assembly Government, March 2007

Quality of Life

*“Feeling of welcome.”
Residents and Visitor Survey*

3.1.2 A 2006 study¹¹ estimated the direct economic contributions made by the environmental quality of Wales’ three national parks: it generates £205m of Gross Domestic Product, £177m income and supports nearly 12,000 jobs. But while the monetary contribution is significant, it’s only part of the story: **there are untold indirect and non-financial benefits from national parks for individuals and for society, for example as resources for outdoor recreation, relaxation, and learning.**

3.1.3 The NPA is committed to minimising the negative impacts on the environment which may arise from its operations. The NPA currently holds Level 4 accreditation of the Green Dragon environmental management system and is committed to helping the Welsh Assembly Government in its target for Wales of 3% year-on-year carbon reduction from 2011. A key reference point for the Management Plan is the Environment Strategy for Wales¹², which sets out desired outcomes for a broad range of policy areas; a number of specific cross-references to the Strategy are made in this Plan.

3.2 A National Park for Everyone?

3.2.1 The NPA recognises that National Parks have a unique and important role as a resource for the people of Wales, the United Kingdom and beyond. The Welsh Assembly Government’s policy statement for the Welsh National Parks makes it clear that **the National Park should be enjoyed and cherished by a full cross-section of society.**

3.2.2 We and our partner organisations work to dismantle the barriers which can exclude people from enjoying the National Park and/or from accessing the services that the NPA or its partners have to offer. An audit of the three Welsh National Parks was carried out to help identify those

barriers. The audit identified key components of social exclusion as poverty, unemployment, reduced access to services, poor health or disability, and psychological barriers to participation. The audit also identified particular features of rural social exclusion:

- it may be less visible and more dispersed than urban social exclusion
- it will manifest itself in different ways, for example through low pay and widespread use of unwaged family labour, or through problems of accessibility, including, for example, transport poverty
- psychological barriers may be compounded by distance from services and lack of access

3.2.3 The audit illustrated the range of fronts on which the NPA and its partners must continue to work to make sure that the many benefits of the National Park are accessible to all. Exclusion is an issue which is considered in all areas of the NPA’s work, but it has particular relevance to development planning policy, to recreation management and promotion, and to transport¹³. While many of the National Park’s special qualities are free to enjoy and explore - and new bus services and easy-access paths have been developed, for example - affordability and other issues remain. Many people, whether residents or visitors, do not see the opportunities as being for them.

3.2.4 Encouraging a broad range of people to take up the opportunities is highly important for the NPA and its partners - while respecting people’s interests and priorities of course. It’s not always easy to assess the overall success of promotion and improved access in introducing a diverse range of people to the National Park, but individual results can be dramatic.

¹¹ The National Trust, 2006, ‘Valuing our Environment – Economic Impact of the National Parks of Wales’

¹² <http://adjudicationpanelwales.com/topics/environmentcountryside/epq/envstratforwales/?lang=en>, retrieved 12/11/08.

¹³ Specific responses to exclusion are given in the NPA’s Social Inclusion Strategy

Quality of Life

“Coastal path - brilliant for leisure, exercise and scenery.”
Residents and Visitor Survey

3.3 The State of Health and Wellbeing in Pembrokeshire

3.3.1 Pembrokeshire Local Health Board and Pembrokeshire County Council share a statutory responsibility to produce a Health, Social Care and Wellbeing Strategy¹⁴ for the county.

3.3.2 The Strategy is founded on an evidence-based Needs Assessment¹⁴, which identifies the health, social care and wellbeing requirements of Pembrokeshire residents and highlights areas of underprovision. The Assessment is based on an appraisal of demography and factors such as unemployment, deprivation, income, education, skills and training, housing, the level of services currently provided, specific health issues and needs, and issues of environmental quality.

3.3.3 The policies identified in this Management Plan can make significant socio-economic contributions in their own right. The Needs Assessment and the Health, Social Care and Wellbeing Strategy set out a comprehensive social and economic context for the Management Plan, and - together with the spatial plan objectives for the Pembrokeshire Haven area, the Community Plan for Pembrokeshire, and the Management Plan itself - provide a strategic framework within which the NPA and its partners can add value.

3.4 Community vitality

3.4.1 The Management Plan and the Preferred Strategy for the Local Development Plan have been tested for their effects on the environment, society and the economy¹⁵.

3.4.2 Aspects examined included population, human health, education and skills, economy, transport, social fabric, material assets, water, soil, air quality, climatic factors, biodiversity, cultural heritage and landscape. Particular issues to emerge from the process include:

- climate change
- tourism, recreation and associated impacts
- landscape capacity
- dependence on private cars
- energy security and landscape
- pressures on the marine environment
- housing affordability
- the percentage of second and holiday homes
- the quality of employment opportunities

3.4.3 Local Development Plan policies and the NPA's work programme can have direct impacts on some key policy areas relating to the above, especially housing, environment, access and outdoor recreation - for which the NPA has key responsibilities.

3.4.4 The NPA is aware however that tensions may exist. For instance the development constraints implied by limited landscape capacity, when coupled with the National Park's popularity as a place to live and visit, can make it hard for local people to find accommodation which is affordable to buy or rent. The credit boom which exacerbated this situation is now unwinding, and house price deflation may still have some way to go, but local wages are likely to remain static. Development planning policy can however help to narrow the affordability gap: the NPA will, for example:

- ensure that new developments include a significant contribution of affordable housing
- work in partnership to unlock land for affordable housing

¹⁴ Health Challenge Pembrokeshire The Health, Social Care and Wellbeing Strategy 1st April 2008 – 31st March 2011 and the Needs Assessment are available from: <http://www.pembrokeshire.gov.uk>

¹⁵ Pembrokeshire Coast National Park Authority (2008) Pembrokeshire Coast National Park Management Plan (2009-2013): Sustainability Appraisal incorporating Strategic Environmental Assessment

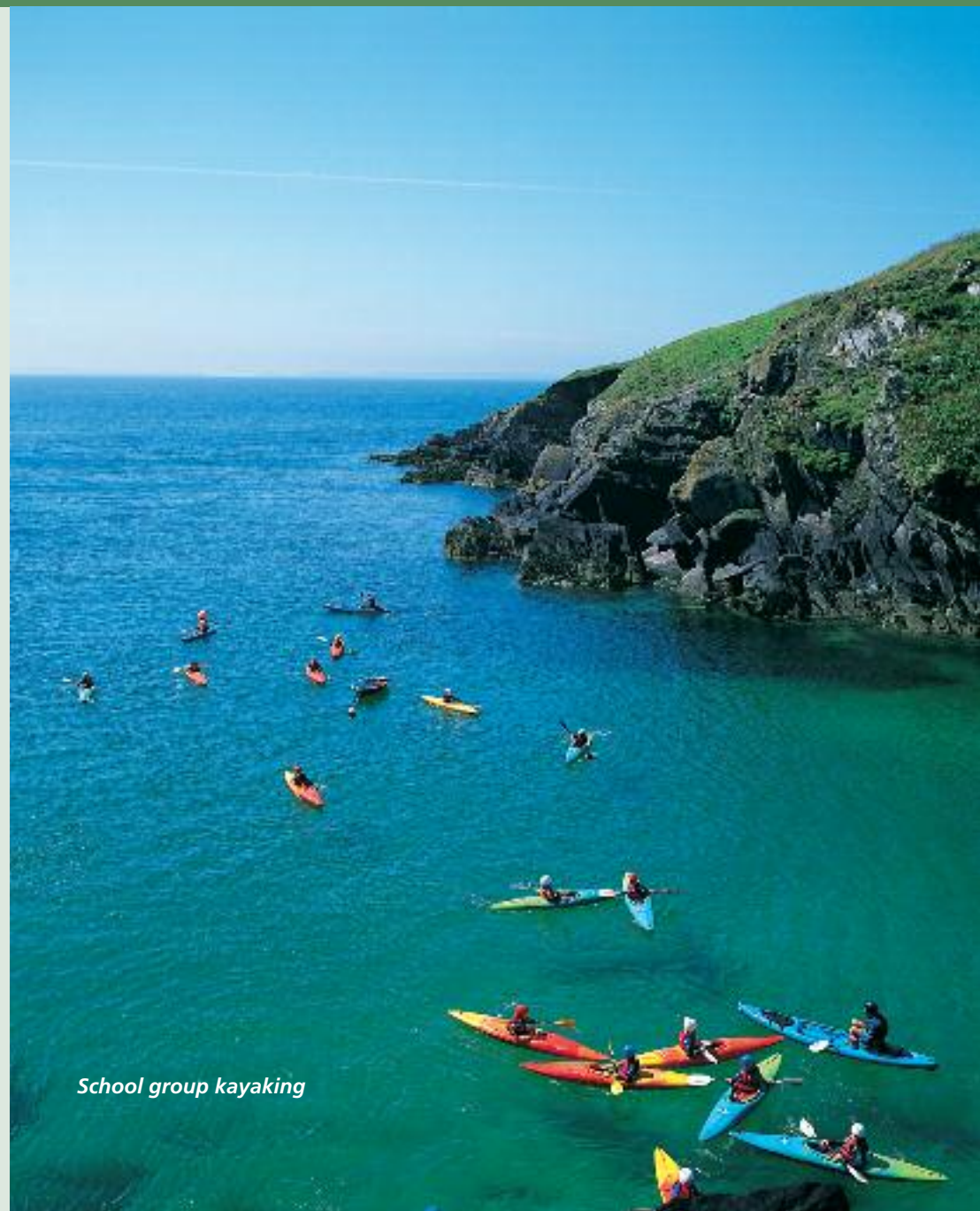
Quality of Life

“Freedom - the sky, sea, countryside, wonderful, wildlife, wild flowers.”

Residents and Visitor Survey

- seek exemptions on Capital Gains Tax for those landowners who release appropriate land for affordable housing and urge a review of the Right to Buy Scheme to allow its suspension in areas of housing pressure in Wales
- forcefully advocate through appropriate channels a change to planning legislation to require a change of use to become a second home
- seek an increase in money allocated to the government equity loan schemes in the National Park in areas where new build is not an option and so ensure that affordability is secured in the long term
- seek changes to national planning policy which would allow local and essential needs policies to be used in the National Park as a whole

3.4.5 The NPA can also contribute in varying degrees to creating and safeguarding employment and income (particularly where these are related to land-use), to goals for education, transport, parking and mobility, and to reducing or designing out crime through development plan policies, and to promoting Welsh language and culture.



School group kayaking

Quality of Life

“Such beauty raises an emotion in me that no other place in the world can.”
Residents and Visitor Survey

Table 3: The contribution of the National Park to Welsh Assembly Government goals¹⁶

Goal	Examples of contributions made by the National Park Authority
A Healthy Future	• making the links between health and educational attainment; care for the person, the community and the environment • helping make exercise free, easy and ‘addictive’ • removing barriers of all kinds that prevent or discourage people from taking exercise • helping to maintain high environmental quality • promoting working and inspiring landscapes • safeguarding peace and tranquillity • encouraging wildlife-friendly, high quality local produce
A Prosperous Society	• protecting a wonderful base for living, working communities • stimulating knock-on benefits for the economy • promoting new and traditional skills • maximising the impact of the Sustainable Development Fund by encouraging innovation and targeting funding • encouraging local business and attractive business locations through grants, initiatives & advice
Living Communities	• working in partnership to deliver Community Plan objectives • delivering a shared and equitable National Park Management Plan and Local Development Plan • contributing to a range of public and sustainable transport initiatives

¹⁶ These are currently outlined in One Wales - A progressive agenda for the government of Wales, 27th June 2007

Quality of Life

“Beauty, wilderness, my family, all my roots.”
Residents and Visitor Survey

Goal	Examples of contributions made by the National Park Authority
Learning for Life	- stimulating lifelong curiosity and challenging attitudes through enjoyable, outdoor-based learning - enabling people to make lifestyle changes
A Fair and Just Society	- engaging with people on policy - making the National Park’s assets, and NPA services, available to all
A Sustainable Environment	- conserving the National Park’s special qualities and wider environment - protecting and enhancing the economic base of natural and cultural resources - encouraging the demand for and the sustainable management of renewable resources - helping adapt to and mitigate climate change
A Rich and Diverse Culture	- celebrating and conserving cultural heritage - safeguarding the community context of Welsh language and culture - welcoming new cultural influences and outlooks
Good Governance	- consulting and informing people about what the NPA intends to do - scrutinising practice, performance and budgeting

4 Landscape Quality and Tranquillity

The National Park is not a static natural landscape but a changing cultural landscape - a many-layered canvas that reflects how the environment, the economy and people's values have changed through time.

The NPA exists to protect the National Park landscape and to help people to get out and enjoy it.

4.1 AIM

Conserve and enhance landscape quality and tranquillity.

4.2 ASSESSMENT

4.2.1 Landscape quality is vulnerable to a number of chronic and acute threats. Most of the issues identified in this Management Plan (and the measures to address them) have implications of some sort for the appearance and integrity of the landscape, but of particular significance are:

- climate change and responses to it
- land management practices, which have particular implications for semi-natural habitat and its wildlife, and for management of natural stocks and flows, such as soils and water
- development: the National Park has a very limited landscape capacity for development in general and for housing in particular

4.2.2 Although a significant area of the National Park is tranquil by most definitions, traffic noise and insensitive use of some powered watercraft can erode peace and quiet. Military

activity at the ranges at Penally, Manorbier and Castlemartin creates a significant noise issue.

4.2.3 Light pollution, as glare or skyglow, cuts many people off from the majesty of the night sky.

4.3 EVIDENCE FOR ASSESSMENT

4.3.1 The wider state of the National Park

4.3.1.1 Information on the other attributes of the National Park is given throughout the Management Plan. In terms of progress on National Park purposes:

- the state of biodiversity is a major concern
- climate stability is a global issue
- soil resources are believed to be degraded
- air quality is generally very good
- water quality is generally good but diffuse pollution is a problem and there is potential uncertainty about future water availability
- geological features are generally in good condition
- protected features of the archaeological and historic environments are generally in good condition, but unprotected elements may be at risk

4.3.1.2 Evidence for these statements can be found in the relevant sections of this Management Plan.

4.3.2 Landscape Character Assessment

4.3.2.1 The NPA commissioned a Landscape Character Assessment in 2006, based on evaluation of five aspects of landscape. The aspects relate to geology, habitat cover, visual and sensory attributes, historic character, and to cultural associations.

Landscape Quality and Tranquillity

“The seascape and the landscape have their distinctive beauty and bonding in Pembrokeshire.”

Residents and Visitor Survey

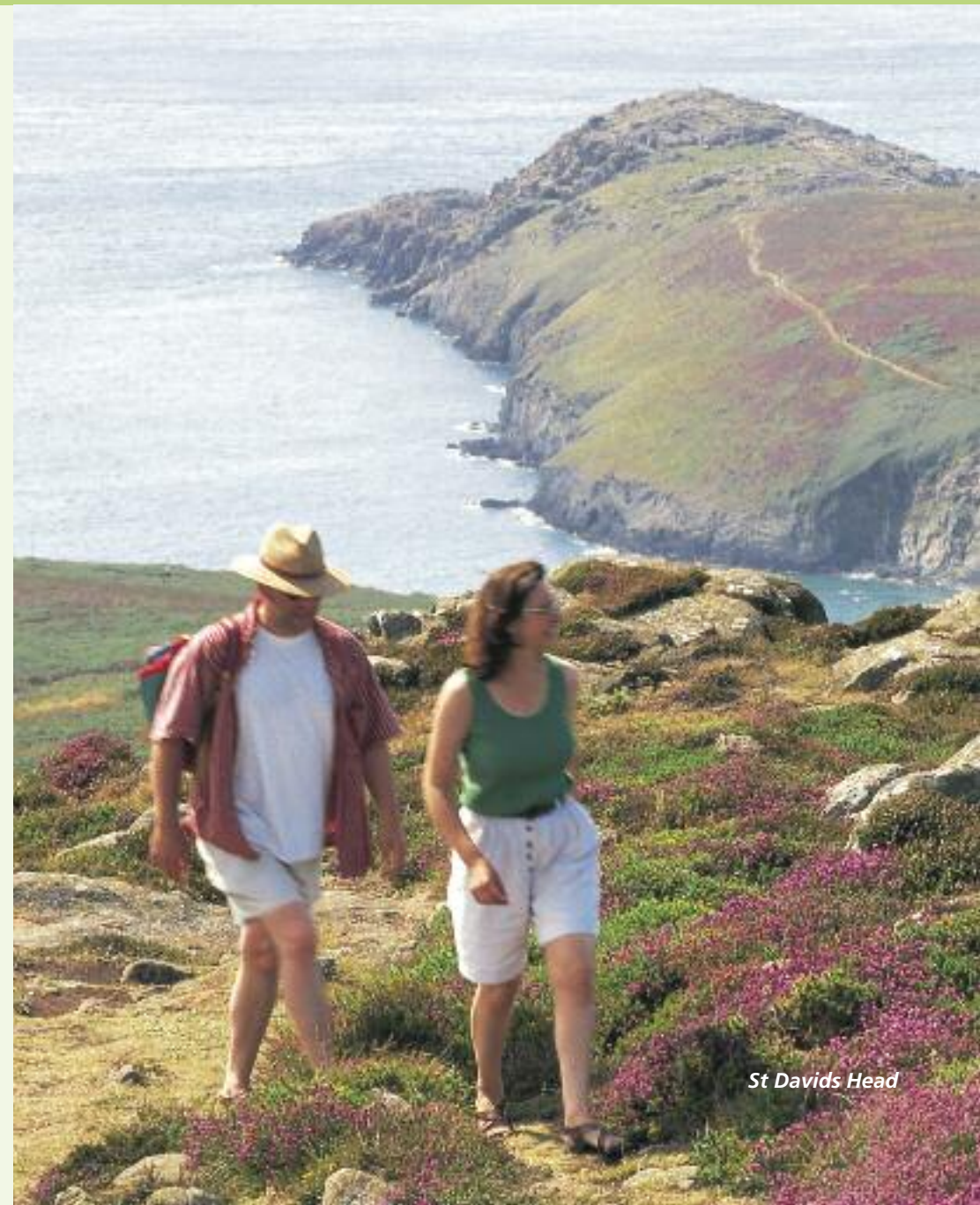
4.3.2.2 The Assessment identified 28 distinct Landscape Character Areas lying within, or partly within, the National Park. A data sheet for each Landscape Character Area identifies the particular attributes of these areas and the threats they face, and sets out management guidance for them. This guidance will take the form of Supplementary Planning Guidance for the current Joint Unitary Development Plan for Pembrokeshire 2000-2016. It is anticipated that it will also become Supplementary Planning Guidance for the Local Development Plan.

4.3.3 Planning Inspectors' reports and the National Park Settlements Capacity Study

4.3.3.1 In the report of the public inquiry for the Pembrokeshire Coast National Park Local Plan in 1997 the Planning Inspector made the following comments on housing development and landscape capacity:

"The correct approach must be to start with environmental considerations, and to examine the extent to which further housing land allocations are compatible with them. Such an approach must almost certainly lead to a total housing land allocation that represents a policy of severe restraint and that does not reflect past completion rates."

"This must follow from the considerations that National Park designation represents the highest status of protection as far as landscape and scenic beauty are concerned: that the Park is already the most densely populated of all the National Parks; and that its ability to accept further housing must be constrained by its environmental capacity. It would be wholly incorrect, and a negation of the National Park designation, to treat the Park as being no different in policy terms from the rest of the county, and to apportion new housing between them on a pro rata basis, relative to their populations."



St Davids Head

Landscape Quality and Tranquillity



Carew Castle

4.3.3.2 In the report of the Public Inquiry for the Joint Unitary Development Plan for Pembrokeshire (January 2006) the Inspector made the following comment regarding development and the landscape:

"...it is entirely appropriate that the National Park, by reason of its designation as an area of special landscape character, should be the subject of a policy which imposes fairly severe restrictions on development that would harm those very qualities."

4.3.3.3 A Settlements Capacity Study¹⁷ was commissioned in 2007, as an adjunct to the Landscape Character Assessment study for the whole of the National Park. The Settlements Capacity Study looks at the ability of National Park settlements to accommodate further housing development, and the assessment for each settlement is set in the context of the relevant landscape character area(s).

4.3.4 Remoteness, and noise and light pollution

4.3.4.1 People value remoteness and tranquillity very highly. Everyone has their own idea of what 'tranquillity' means, but it usually implies a sense of distance from roads, from built-up areas and/or from people. Semi-natural or relatively unmodified habitat cover can add to the impression of tranquillity, and so remoteness and tranquillity are often, but by no means always, found together.

4.3.4.2 The factors particularly likely to affect impressions of remoteness and tranquillity in the National Park are: visible development or intensive land use, traffic noise, light, intrusive noise from recreational activity, firing on the ranges, waste and litter, and activity arising from mineral and aggregate workings. These topics are addressed elsewhere in this Management Plan, with the exception of pollution by light and noise, which is covered in this section.

17 'Settlements' have been defined in accordance with criteria derived from national planning guidance in Wales. 'Capacity' relates to landscape and visual criteria, and the study identifies, in particular, opportunities and constraints relating to settlement expansion.

Landscape Quality and Tranquillity

“The sheer beauty of the coastline. Having walked the entire length of the coastal path walk in all kinds of weather, I believe there is nothing more beautiful.”

Residents and Visitor Survey

4.3.4.3 Because tranquillity can be defined by the presence or absence of spoiling forces, such as sources of intrusive light or noise, it can be mapped approximately by plotting the presence of spoiling forces and ‘seeing what’s left’. The criteria used to produce tranquillity maps¹⁸ are based on people’s desire to distance themselves from roads, settlements, other development and infrastructure, and noise and light sources. National trends in light pollution, mapped by the Campaign to Protect Rural England over the period 1993 – 2000, show a general brightening of night skies. An updated tranquillity map of Wales, including dark night sky mapping, has been commissioned by the Countryside Council for Wales and is expected to be available in 2009.

4.4 POLICY

4.4.1 L1: Maintain landscape quality and function

4.4.1.1 The ways in which people perceive and experience landscape are very personal, and depend on associations and expectations amongst other factors.

4.4.1.2 **Since landscape and people’s perceptions of it change, the emphasis of management policy should be on achieving high landscape quality and value, and not just on protecting particular visual attributes of the landscape.** By ‘high landscape quality and value’ we mean, in particular, a healthy ecosystem, properly functioning natural processes, and the myriad social and economic benefits which these generate.

4.4.1.3 In the UK, a National Park is primarily a landscape designation¹⁹, so L1 is a governing principle. However, because any change in any component of the landscape has the potential to affect landscape quality, including visual

character, L1 is only fully achievable through all other policies in the Management Plan, and through all relevant partner organisations. In addition therefore to pursuing its own corporate work programme, the NPA will continue to pursue National Park purposes by proactively brokering the ownership, lease or management of key assets of the National Park by appropriate third parties.

4.4.2 L2: Maintain seascape quality and function

4.4.2.1 The islands, coastal scenery and marine wildlife were key reasons for the National Park’s designation¹⁹. **The seaward boundary of the National Park on the mainland and on the islands is Mean Low Water Mark, but the state of the wider marine environment directly and indirectly affects the special qualities and people’s enjoyment of what is essentially a maritime National Park.** The condition of the marine environment and trends in the factors affecting it are therefore major considerations for the NPA, even though its direct statutory influence below Mean Low Water is limited.

4.4.2.2 While management policy on one side of Mean Low Water can have significant effects on the other side, the natural and economic relationships and the cultural associations which cross this artificial boundary are not always reflected in the operational arrangements between the many organisations involved. So L2, like L1, is a governing principle, but one which will only be achievable through legislative change, cross-boundary planning and partnership working.

4.4.2.3 The Marine and Conservation Act contains proposals for marine planning and policy which should help integrate activities on land and at sea. There is however no explicit mechanism for integrating the management of terrestrial

¹⁸ <http://www.cpre.org.uk/campaigns/landscape/tranquillity/our-tranquillity-map-explained>

¹⁹ The National Park is a Category 5 Protected Landscape - an ‘area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.’ International Union for the Conservation of Nature (1994) Guidelines for Protected Area Management Categories. Cambridge.

Landscape Quality and Tranquillity



Garn Fawr

protected landscapes with that of coastal/marine protected areas (nor is there legislative provision for designation of seascape areas). Guidance on management of coastal protected landscapes has however independently been produced²⁰.

- 4.4.2.4 Issues relating to marine biodiversity and inshore and coastal recreation are covered more fully in the 'Biodiversity' and 'Enjoying the National Park' sections of the Management Plan.

4.4.3 L3: Respect environmental capacity

- 4.4.3.1 Development proposals have to be closely screened for their effects on the features which National Park designation is intended to protect. **The National Park landscape has a very limited tolerance to additional development.** Because development which takes place outside the National Park boundary can nevertheless affect the National Park, strict application of the boundary in making decisions is not always appropriate.
- 4.4.3.2 Specific considerations for development plan policy are given throughout this Management Plan. Of particular relevance to this section is that development planning policy should:
- provide development to meet the needs (including affordable housing needs) of the local population subject to National Park purposes, and in particular within the National Park's landscape capacity
 - prioritise use of scarce land supply or reuse of buildings so as to make the most contribution to sustaining local communities, and use higher densities where appropriate
 - exclude major development proposals, that is proposals of

²⁰ <http://www.europarc-ai.org/>

Landscape Quality and Tranquillity

“One particularly unique aspect is the lack of light pollution of the night sky. It is wonderful to get such a clear view of the ‘greatest show on earth’”

Residents and Visitor Survey

UK significance, unless exceptional circumstances can be demonstrated (i.e. where, after rigorous examination, there is shown to be overriding public need and there is no potential for locating the development elsewhere or meeting the need in some other way)

- adopt and complement the Wales Spatial Plan approach for the Pembrokeshire Haven area when defining settlement hierarchy
- continue to work with utilities partners to underground existing and new overhead wires throughout the National Park, and ensure that advertising and signs do not compromise visual quality

4.4.4 L4: Protect dark skies

4.4.4.1 **Many people are keen to establish dark sky preserves in the UK and National Parks could offer some ideal candidate areas.**

4.4.4.2 Planning authorities can restrict light pollution from new developments which include a lighting system²¹. The lighting impacts of a new dwelling (one in an isolated area, for example) can also be taken into account in determining the principle of that dwelling. Lighting is also a planning consideration if it impacts on bats, which are a European protected species. The Local Development Plan for the National Park will reflect these considerations.

4.4.4.3 Obtrusive light from business and residential premises can be classed as a nuisance²². Pembrokeshire County Council investigates complaints of light nuisance and makes an assessment using statutory guidance. If light nuisance exists then an abatement notice can be served; complainants can also take proceedings themselves.

4.4.5 L5: Limit noise pollution

4.4.5.1 **Unwanted noise detracts from people’s enjoyment of the National Park and can affect people’s health and wellbeing²³.** General sources of noise include traffic, machinery and aircraft noise. In the context of this Management Plan the primary ‘point’ sources of noise pollution are some forms of motorised recreation, e.g. use of personal watercraft (see ‘Enjoying the National Park’), and military use (including firing after dark).

4.4.5.2 Military range areas can however have considerable biodiversity value because military use has displaced other, more damaging, land uses, and, although public access to some range areas is restricted, they still have an ‘existence’ value. In addition, an area like Frainslake Sands/Brownslade Burrows (for example) can act as a control - revealing just how disturbed other beach/dune systems really are. Nevertheless, development planning policy should not allow significant intensification of use or extension of Ministry of Defence sites unless exceptional circumstances are demonstrated.

²¹ Highways and road sign lighting are the responsibility of the highways authority (i.e. Pembrokeshire County Council in the National Park)

²² The Clean Neighbourhoods and Environment Act 2005 amended the statutory nuisance regime of the Environmental Protection Act 1990

²³ Disturbance also has implications for wildlife (see ‘Biodiversity’ section)

5 Biodiversity

“Getting children from the cities to take an interest in the Parks by getting them involved in the development.”

Residents and Visitor Survey

‘Biodiversity’ means all life - plants and animals, their genetic variation and the ecosystems on which they and we depend.

Biodiversity is essential to people’s physical, economic and spiritual wellbeing.

5.1 AIM

Conserve and enhance National Park biodiversity.

5.2 ASSESSMENT

5.2.1 The state of biodiversity, and trends in the major factors affecting it, are major causes of concern.

5.2.2 An estimated 40% of Local Biodiversity Action Plan habitats and species are in unfavourable condition, as are many of the features of designated sites in the National Park and the rest of Pembrokeshire.

5.2.3 The wider countryside is fragmented by landuse, ecosystem function is degraded and climate change will exacerbate existing pressures on wildlife, as well as adding new ones.

5.3 EVIDENCE FOR ASSESSMENT

5.3.1 The state of Local Biodiversity Action Plan habitats and species

5.3.1.1 The county and adjacent waters of Pembrokeshire are covered by a Local Biodiversity Action Plan which identifies habitats and species of local, national or international importance. Individual habitat and species action plans exist for many of these.

5.3.1.2 The condition of Local Biodiversity Action Plan habitats and species is assessed on the basis of UK Common Standards attributes²⁴. For habitats these attributes are area, structure and function, and typical species. For species the attributes are population dynamics/ranges and habitat size.

5.3.1.3 Review in 2003 of the state of habitats and species listed in the Local Biodiversity Action Plan estimated that 20% were in favourable condition, 13% were unfavourable but recovering, 40% were unfavourable and declining and 27% were in an unknown condition. This situation is a reflection of wider ecosystem quality and function - evident also from the state of some features of designated sites.

5.3.2 The state of features of designated sites

5.3.2.1 There are 13 Special Areas of Conservation²⁵, 5 Special Protection Areas²⁶, 60 Sites of Special Scientific Interest, 7 National Nature Reserves²⁷ and a Marine Nature Reserve²⁸ lying wholly or partly within the National Park. About 80% of the length of the National Park coastline is designated Site of Special Scientific Interest and the boundaries of the three marine Special Areas of Conservation overlap around 75% of the National Park’s coastline and account for about 60% of the inshore area.

²⁴ <http://www.jncc.gov.uk/page-2217>

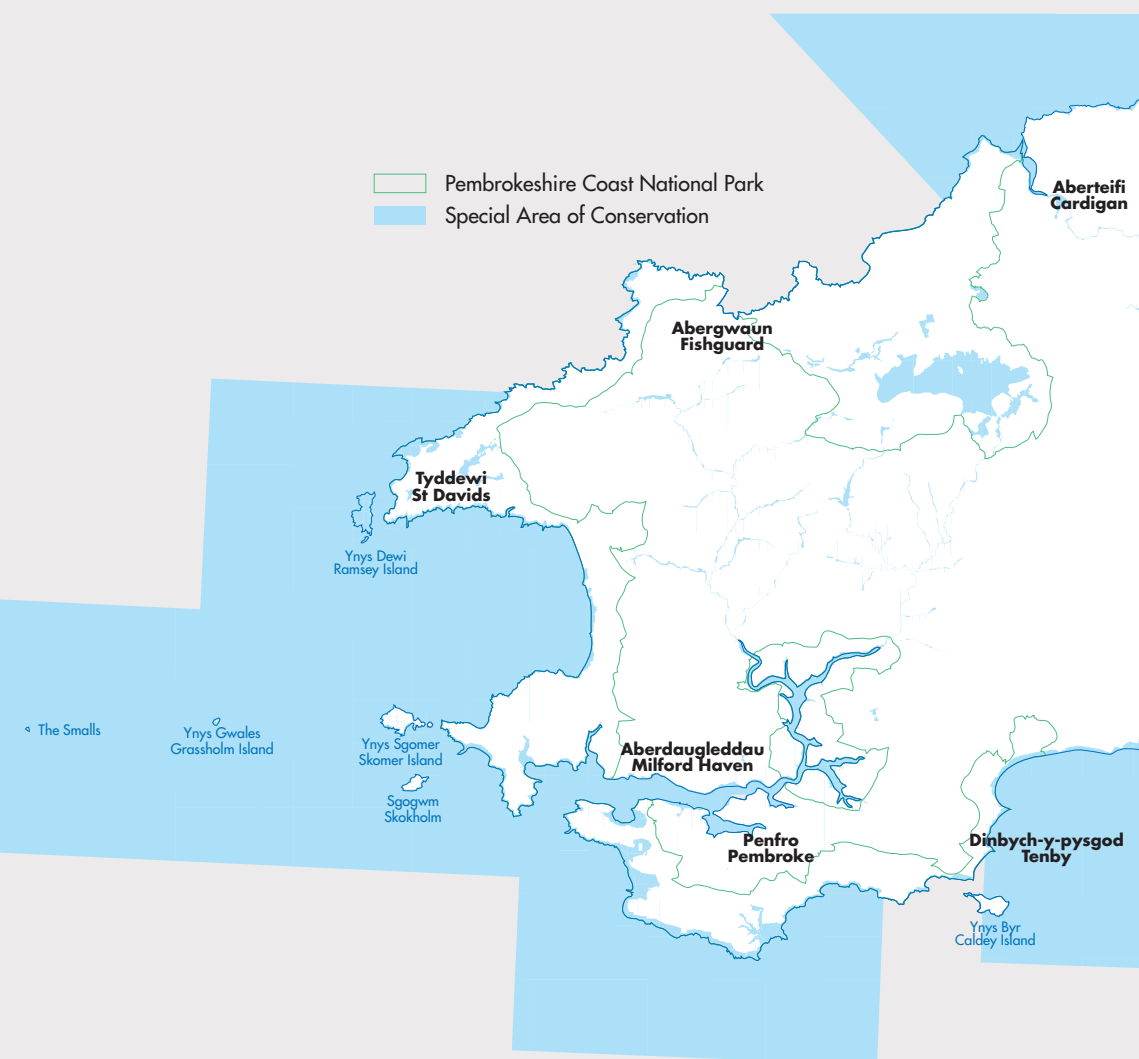
²⁵ Cardigan Bay, Carmarthen Bay and Estuaries, Cleddau Rivers, Gweunydd Blaencleddau, Limestone Coast of South West Wales, North Pembrokeshire Woodlands, North West Pembrokeshire Commons, Pembrokeshire Bat Sites and Bosherton Lakes, Pembrokeshire Marine, Preseli, River Teifi, St Davids, Yrbeston Tops

²⁶ Ramsey and St Davids Peninsula Coast, Skokholm and Skomer, Grassholm, Castlemartin Coast, and Carmarthen Bay

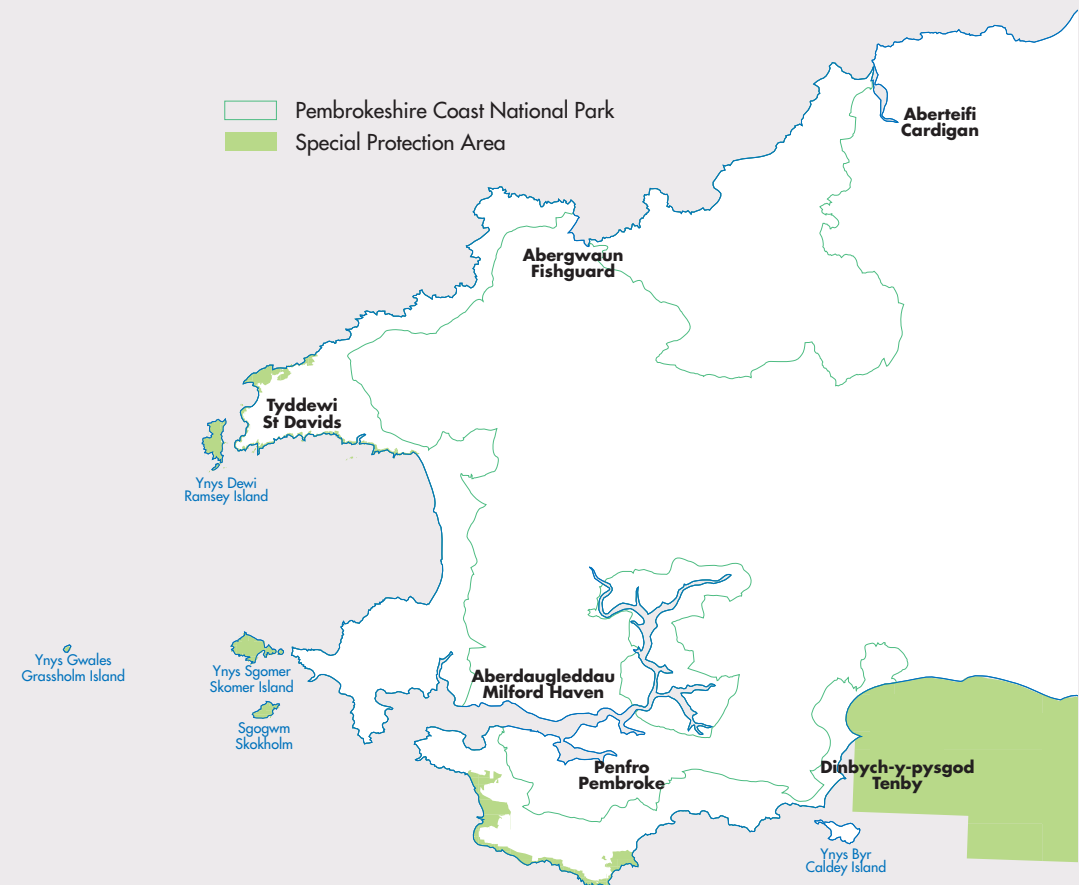
²⁷ Pengelli Forest, Ramsey, Skokholm, Skomer, Stackpole, Ty Canol, Grassholm

²⁸ Skomer

Biodiversity



Map 5a:
Special Areas of Conservation within or partly within the National Park



Map 5b:
Special Protection Areas within or partly within the National Park

Biodiversity

“Fabulous range of birds and butterflies and wild flowers.”

Residents and Visitor Survey

5.3.2.2 Based on Countryside Council for Wales data (collated at but pre-dating Q1 2007), the status of individual features of terrestrial and marine Special Areas of Conservation and Special Protection Areas lying wholly or partly within the National Park is as follows:

Special Area of Conservation feature status (National Park area)	Number of features	Percentage of features
Favourable / Favourable maintained	28	32.2
Favourable declining / Favourable unclassified	6	6.9
Unfavourable recovering / Unfavourable no change	13	14.9
Unfavourable / Unfavourable unclassified / Unfavourable declining	38	43.7
No data	2	2.3

Special Protection Area feature status (National Park area)	Number of features	Percentage of features
Favourable unclassified	5	62.5
Not assessed	3	37.5

5.3.2.3 Based on best available knowledge (collated at but pre-dating Q1 2007), the status of individual features of wildlife Sites of Special Scientific Interest that lie wholly or partly within Pembrokeshire is as follows:

Site of Special Scientific Interest feature status (Pembrokeshire area)	Number of features	Percentage of features
Favourable	77	56.2
Unfavourable	60	43.8

5.3.2.4 Based on Countryside Council for Wales data (collated at but pre-dating Q2 2007), the status of features of National Nature Reserves (including species assemblages) which lie wholly or partly within the National Park is as follows:

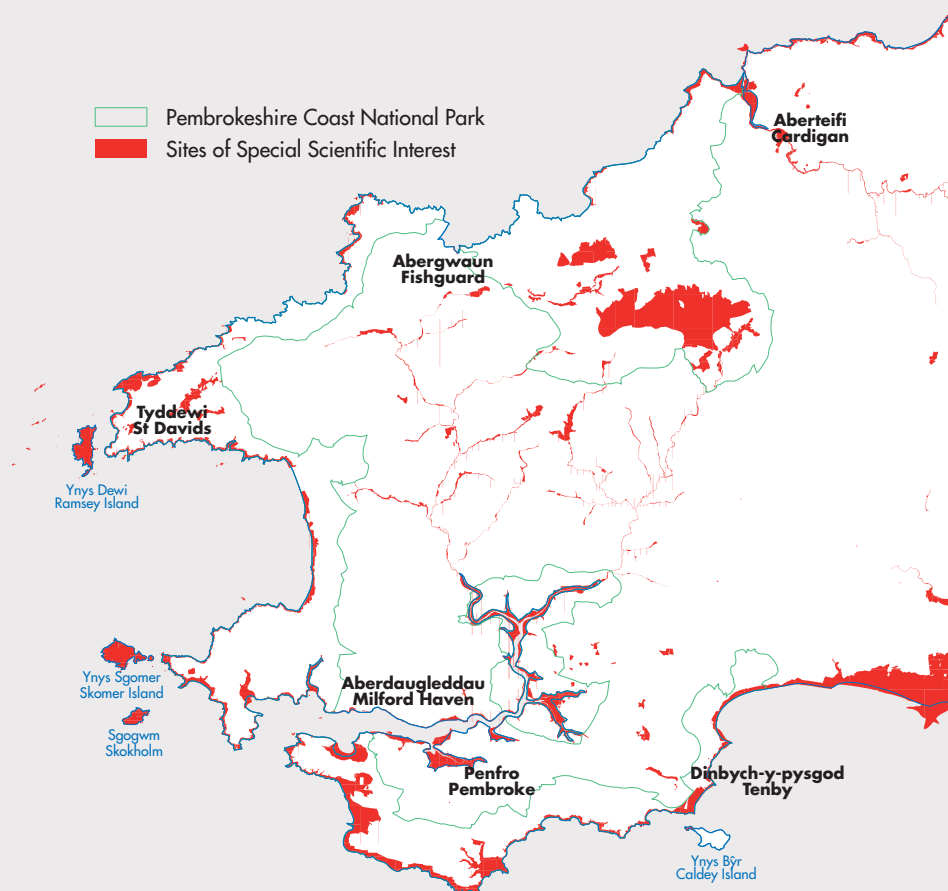
National Nature Reserve ²⁹ feature status (National Park area)	Number of features	Percentage of features
Favourable	31	51.7
Unfavourable recovering	14	24.1
Unfavourable declining	3	5.2
Unknown	11	19

²⁹ Excludes Skokholm, which was designated as a National Nature Reserve in December 2008

Biodiversity

“The coastal areas are my favourite places, their natural beauty, peacefulness, remoteness and closeness to wildlife are what make them special to me.”

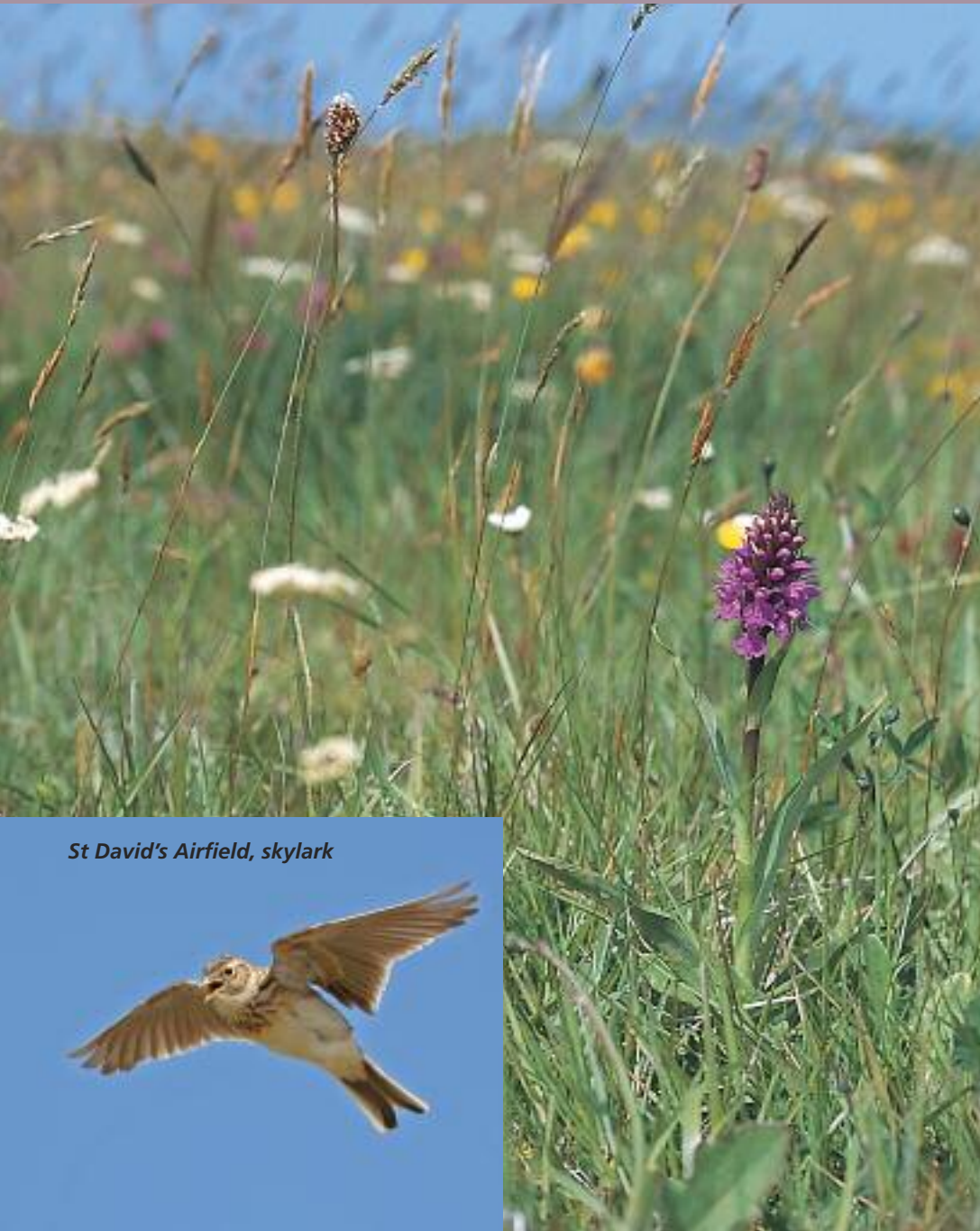
Residents and Visitor Survey



Map 5c:
Sites of Special Scientific Interest within or partly within the National Park



Biodiversity



St David's Airfield, skylark

5.3.3 Connectivity and the state of the wider countryside

- 5.3.3.1 **Protected sites like Special Areas of Conservation or Sites of Special Scientific Interest are immensely important as 'pilot lights' which can in theory reignite biodiversity health in the wider countryside or wider marine environment. But they cannot exist in isolation.** The wider countryside context in which they and other wildlife sites are found must be able to provide the ecosystem functions necessary to the integrity of protected sites. The wider countryside must also be permeable to wildlife; terrestrial and marine environments must afford links between sites and populations (even more important given climate change) otherwise the pilot lights themselves will go out.
- 5.3.3.2 Habitat survey of Wales took place between 1979 and 1997. The survey showed the amount of land within Pembrokeshire classified as species-poor, indicating the difficulty species populations face in moving around the Pembrokeshire countryside, and showing how sites of wildlife interest have become isolated. This is particularly the case away from the coastal slopes and estuary areas.
- 5.3.3.3 Wales Environment Strategy Outcomes 19-21 are particularly relevant to this section. These relate to halting and reversing biodiversity loss, improving the management of the wider countryside for wildlife, and improving the condition of protected sites. Outcome 21 specifies the following targets for Wales: 95% of international designations in Wales to be in favourable condition by 2010; 95% of Wales' Sites of Special Scientific Interest to be in favourable condition by 2015, and all Wales' sites to be in favourable condition by 2026.

Biodiversity

“My favourite is the coastal path. I enjoy the views of sea and the coastline and the chance to see seals and seabirds.”

Residents and Visitor Survey

5.4 POLICIES

5.4.1 B1: Promote an ecosystem approach to land management

- 5.4.1.1 **Land viewed as economically marginal to agriculture has often been managed at a low intensity and therefore retained a greater wildlife interest than intensively-managed land.** Conservation organisations' limited resources, through management agreements with farmers for example, have therefore usually been able to achieve most wildlife gain in these areas.
- 5.4.1.2 A series of changes in agricultural policy arrangements mean that there may now be more opportunity for conservation partners to influence management on intensively-managed land, which accounts for about 70% of the National Park area. Aspects of intensive management which have had a particular impact of wildlife include:
- undergrazing and overgrazing, both of which can degrade habitat quality
 - ploughing, reseeding or conversion to other uses which can result in habitat loss and fragmentation
 - mechanisation and drainage leading to loss of edge habitats and features such as hedgerows, ancient trees, copses, ponds, ditches and small wetlands
 - loss of winter stubbles, increased monoculture of crops and grass and the switch from hay to silage resulting in deterioration of the wildlife quality of cropped and grazed land and destruction of invertebrates and ground-nesting birds
 - mechanisation and applications (e.g. pesticides, fertilisers, soil conditioners) which damage food chains, soil and water
 - loss and neglect of farm woodlands



Top: Coastal grazing
Bottom: chough



Biodiversity

“Threats from the downturn in farming - loss of management for the land and habitats.”

Residents and Visitor Survey



Local produce

- 5.4.1.3 **Climate change, by squeezing wildlife's climate space, compounds the effects of intensive land management.**
- 5.4.1.4 Many habitats and species communities, however, have developed alongside traditional pastoral land management regimes and benefit from particular land management practices, such as hay cropping, specific grazing regimes, and coppicing. On land marginal to agriculture the problem has often been the withdrawal of these practices, i.e. neglect.
- 5.4.1.5 On both counts - intensification and neglect - low intensity land management is essential to much wildlife conservation. Revisions to agricultural policy, including cross-compliance measures and programmes such as Tir Gofal, the Welsh Assembly Government's whole-farm agri-environment scheme, are designed to address some of these issues. However there are a number of factors that may conspire against any rapid reestablishment of semi-natural habitat - degraded soils for example.
- 5.4.1.6 Research by the Countryside Council for Wales and others is showing how habitat connections could be strategically restored across Wales. **Improving habitat connectivity is not about 're-wilding' but about promoting restoration management for features like hay meadows, woodland, and marshy grassland in the wider countryside, and preferably in the course of agricultural production.** The NPA works with landowners and conservation partners to make the most of habitat potential and landowner interest - capitalising on local circumstances to add value to schemes like Tir Gofal, and targeting effort where it will offer the best return in terms of wildlife outcomes. The Wales-level habitat linkages researched by the Countryside Council for Wales provide a strategic and exciting context to local effort and opportunity.

Biodiversity

5.4.1.7 Land management has a profound effect on the visual appearance of the countryside. There are key links then between B1 and many other policies in the Management Plan - in particular those to do with management of soil and water, carbon management for climate change mitigation and adaptation, cultural heritage, the wider character and quality of the landscape, and people's enjoyment of it.

5.4.2 B2: Limit the impacts of climate change on biodiversity

5.4.2.1 Climate change is likely to include long term changes in distribution of habitats and species, but many of the specific impacts and their effects in combination with other factors affecting wildlife cannot be accurately known.

5.4.2.2 Climate change is not new; the difference this time is the human contribution to it and the fact that it comes accompanied by many other human pressures on the environment and its inhabitants. Collectively these pressures (especially where they result in habitat fragmentation) reduce the options for natural adaptation precisely when those options are most needed. Climate change therefore makes the need to reduce non climate-related pressures³⁰ even greater.

5.4.2.3 Building on B1, we urgently need an ecosystem-based approach to terrestrial reserves and to the connectivity of the wider countryside - as well as upscaling where possible the existing, and often necessarily opportunistic, measures.

5.4.2.4 In particular, **land management and conservation bodies must explore with the Welsh Assembly Government the additional scope to promote ecological resilience measures - through national schemes like Tir Gofal/Glastir and through local complementary measures - rewarding farmers for catchment-sensitive, carbon-sensitive and 'connection-sensitive' farming.** Such measures, sensibly deployed, could

also help add security to farm incomes, reduce flood risk, reduce food miles and contribute to food and energy security.

5.4.2.5 The NPA and partner organisations currently manage some species deemed to be invasive or noxious on land they own or manage. Managing marine introduced or alien species is even more problematic. In addition, climate change will mean that species' climate space will move. Some species, in colonising new areas, may be regarded in those areas as non-native; organisations' perceptions of what constitutes an invasive and/or non-native species may then have to alter with climate change.

5.4.3 B3: Promote regional and local conservation-grade food production and consumption

5.4.3.1 People's interest in, and the availability of, environmentally- and socially-benign produce, including marine produce, has enjoyed continued growth. Economic pressures could however depress demand and favour cheaper production methods, making it even more important for conservation organisations to help increase food retailers' and consumers' awareness of conservation issues, and to promote local production and processing.

5.4.3.2 **National debate on food security is growing; the issues are closely allied to climate change and economic dependence on fossil fuels.** Oil/gas production scenarios and climate change mitigation measures point to a need for reduced dependence on energy inputs to, and a re-localisation of, agriculture. This could include diversification of farm portfolios to include fibre and biomass production, and perhaps small-scale biofuel production (e.g. for on-farm use). Community horticulture and allotment schemes should also be supported.

³⁰ Greenhouse gas reduction proposals are contained in the Climate stability and energy security section of this Plan; specific mitigation measures can also be found in other sections.

Biodiversity



Skomer Marine Nature Reserve

5.4.3.3 Concerns about food security have helped to rekindle debate about genetic modification of crops. There are serious doubts about the effectiveness of buffer zones in preventing genetic cross-contamination, and the implications for biodiversity and for conventional and organic farming - borne out by other countries' experiences - are potentially far-reaching. The NPA therefore urges a fully restrictive policy on genetically-modified organisms.

5.4.4 **B4: Promote an ecosystem approach to marine management**

5.4.4.1 Fishing practice, pollution from land or at sea, development and coastal defence can all affect the state of wildlife and marine coastal processes, and therefore affect people's enjoyment and experience of the National Park. Climate change will bring its own impacts, such as changes to sea column temperatures and ocean acidification, and, as on land, is likely to magnify the significance of other factors.

5.4.4.2 **The UK has lacked a strategic marine management framework, and allocation and delivery of enforcement powers has been patchy. There has in effect been an institutional failure to protect 'the last great Commons'.**

5.4.4.3 The Marine and Coastal Access Act includes provision for UK marine planning, based on marine policy statements shared by the UK's administrations. In Wales, Assembly Ministers constitute the marine planning authority; Ministers will also have powers to designate Marine Conservation Zones which would be governed by licensing and conservation orders.

5.4.4.4 Management of Marine Special Areas of Conservation and Special Protection Areas plays a major role in protecting marine habitats and species of international importance,

Biodiversity

*“...the sheer wildness everywhere I went.
You felt very free when you were in the Park.”*

Residents and Visitor Survey

and the NPA welcomes the agreed joint-agency site management schemes which exist or are in development. However, site health is dependent also on issues being addressed in the wider marine environment. Under current legislation, Sites of Special Scientific Interest do not extend below Mean Low Water Mark and the only statutory UK mechanism for protecting marine sites of national importance is that of Marine Nature Reserve designation.

5.4.4.5 The Marine and Coastal Access Act means that Skomer Marine Nature Reserve automatically becomes a Marine Conservation Zone, and that marine Special Areas of Conservation and Special Protection Areas will be protected by conservation orders similar to those proposed for the Marine Conservation Zones. Collectively these would be part of a wider network of Marine Protected Areas.

5.4.4.6 **The NPA hopes that marine planning will provide a much simplified and transparent statutory basis for management of marine resources within an equitable, ecosystem-based framework and a wider European context of Regional Seas.** In the interim, management scheme prescriptions for marine Special Areas of Conservation features provide the relevant authorities with clear leads. Issues include:

- fishing effort (see B5 below)
- disturbance: recreational and commercial shipping noise, sonar and concussion, wash, dredging and trawling, and visual sources can all disturb wildlife, affecting, for example, their habitat space, feeding ability and breeding success
- intertidal species collection: while the NPA is the legal occupier of much of the foreshore in the National Park it has no direct regulatory control; bye-law making powers reside with the South Wales Sea Fisheries Committee



Top: Pod of Common dolphin Bottom: Skomer Island



Biodiversity



Local fresh-fish

- water quality: issues include individual traumatic marine pollution events (dumping, discharge, spill), and also diffuse pollution from land
- mineral and aggregates dredging: this can cause direct and indirect damage to the seabed and alter coastal processes. Dredging off the Pembrokeshire Coast should be opposed at least until the effects on coastal processes and natural and cultural resources are understood
- oil and gas exploration and exploitation: this can cause damage and disturbance to marine habitats and species. The Department for Business, Enterprise and Regulatory Reform (the former Department for Trade and Industry) has licensed blocks for oil and gas exploration off the Pembrokeshire Coast. Limited exploration has so far taken place. Oil and gas exploration and exploitation should only occur within the context of a national energy strategy and applications for licences should be subject to impact assessment
- capital and maintenance dredging: dredged material results from capital works and from maintenance operations. Dumping/sediment transport of dredged material can damage marine habitats and species, through silt suspension and deposition for example

5.4.5 B5: Support sustainable fisheries policy

- 5.4.5.1 **Sustainable fisheries management means achieving optimal condition for marine biodiversity and securing the future of fishing and related activities.** This is a major supporting component of B4.
- 5.4.5.2 Commercial fishing can impact on fish stocks, on non-target species, on links in the food chain (such as seabirds) and on the seabed. Lost fishing gear can entangle wildlife as it

Biodiversity

*“...wild and beautiful coast.”
Residents and Visitor Survey*

continues to ‘ghost fish’. However fishing effort is hard to control and there is a continuous drive for fleet modernisation. More than 80% of EU stocks are overfished. Concerned consumers can find out more about the risk status of fish from the Marine Conservation Society’s ‘fish online’ website³¹.

- 5.4.5.3 Currently, fisheries in Wales are managed by the Welsh Assembly Government, by two Sea Fisheries Committees and by the Environment Agency. The intention is to modernise fisheries management and provide a consistent management structure for the whole of Wales. Some new powers will be necessary and the intention is that these will be secured through the Marine and Coastal Access Act; the aim is for the new structure to be in place by April 2010³².

5.4.6 B6: Limit the impacts of development on wildlife

- 5.4.6.1 Development on land or at sea can destroy or fragment habitats and disturb species. Legislation and national planning guidance emphasise protection of statutory sites and species. Development planning policy should also take into account the needs of Local Biodiversity Action plan habitats and species and connectivity requirements in the wider countryside.
- 5.4.6.2 Although the NPA’s direct development planning control ceases at mean low water, many marine developments require landward infrastructure, and the NPA is a statutory consultee for many offshore proposals. The NPA therefore has a degree of influence over marine development. The Local Development Plan for the National Park area will contain policies to protect wildlife from development, and to enhance it where possible.

³¹ <http://www.fishonline.org/>

³² <http://wales.gov.uk/about/departments/depc/epcstructure/fisheries/managementofwelshseafisheries/?lang=en>,
retrieved 2/12/08

Puffin with sandeels



6 The Archaeological Resource

The archaeological resource in Pembrokeshire is exceptionally rich and varied and includes all kinds of evidence of past human activities, from the earliest human settlement through to the present day.

The historic landscape goes beyond single sites and monuments. It's made up of towns, villages and hamlets, along with all the routes which link them and the fields and industries which provided a livelihood for the people who lived there. It bears the marks of people's beliefs, their leisure and their day-to-day activities.

So the archaeological resource is not simply the one-off sites and historic monuments, but all the features which link them together and bind them into what we call 'landscape'.

6.1 AIM
Conserve and enhance the archaeological resource.

6.2 ASSESSMENT

6.2.1 Ancient monuments which have legal protection (i.e. that are 'scheduled') are on the whole in reasonable condition, but other features (including as yet undiscovered remains) may be at risk.

6.3 EVIDENCE FOR ASSESSMENT

6.3.1 The number and condition of Scheduled Ancient Monuments

6.3.1.1 The Ancient Monuments and Archaeological Areas Act 1979 (As Amended) is the currently the primary legislation

safeguarding ancient monuments and archaeological remains. Protection is achieved by including nationally important sites on a schedule and thereby controlling operations on and around the sites. Scheduled Ancient Monuments represent an important cross-section of the known archaeological resource; the Historic Environment Record for the National Park area contains 279 Scheduled Ancient Monuments.

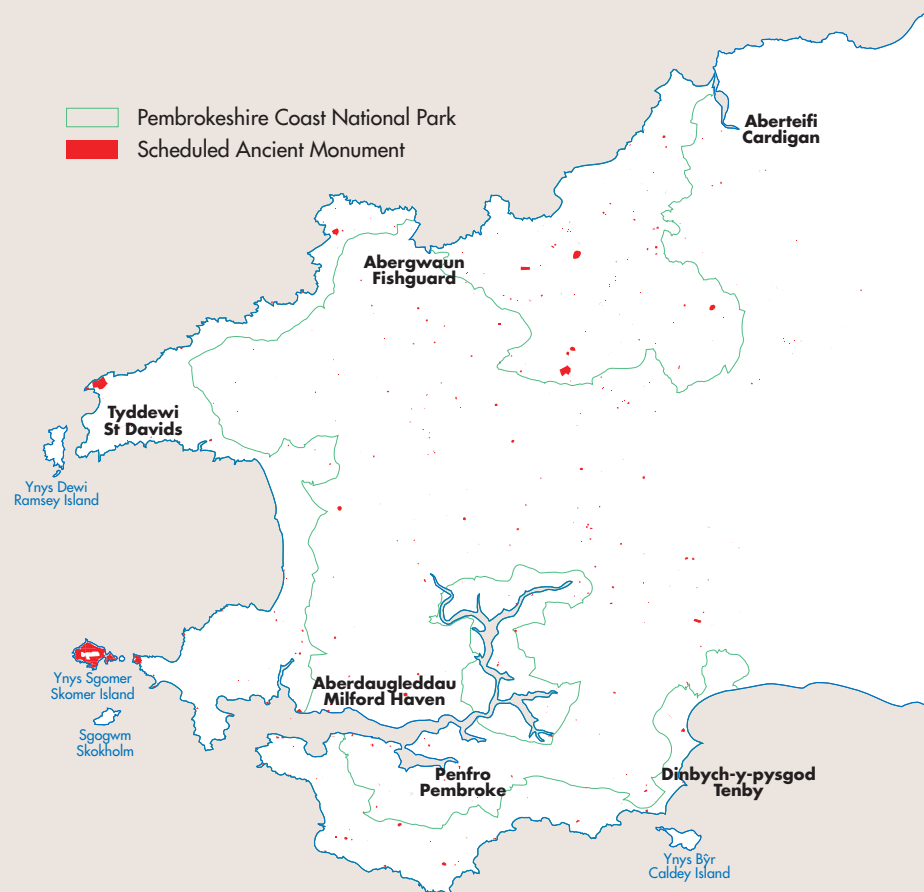
6.3.1.2 Cadw is responsible for scheduling sites and monuments. Over time, more categories of monument will be considered, and further sites will be scheduled. Cadw aims to assess sites on a five-yearly basis, and to establish whether their condition is stable, improving or declining. Condition reporting on Scheduled Ancient Monuments is made by Field Monument Wardens who visit them over a five-year period. The last round of visits was completed in 2003, and the figures for Wales³³, and for the National Park for the same period are shown in the table below.

Table 6a: Status of Scheduled Ancient Monuments in the National Park

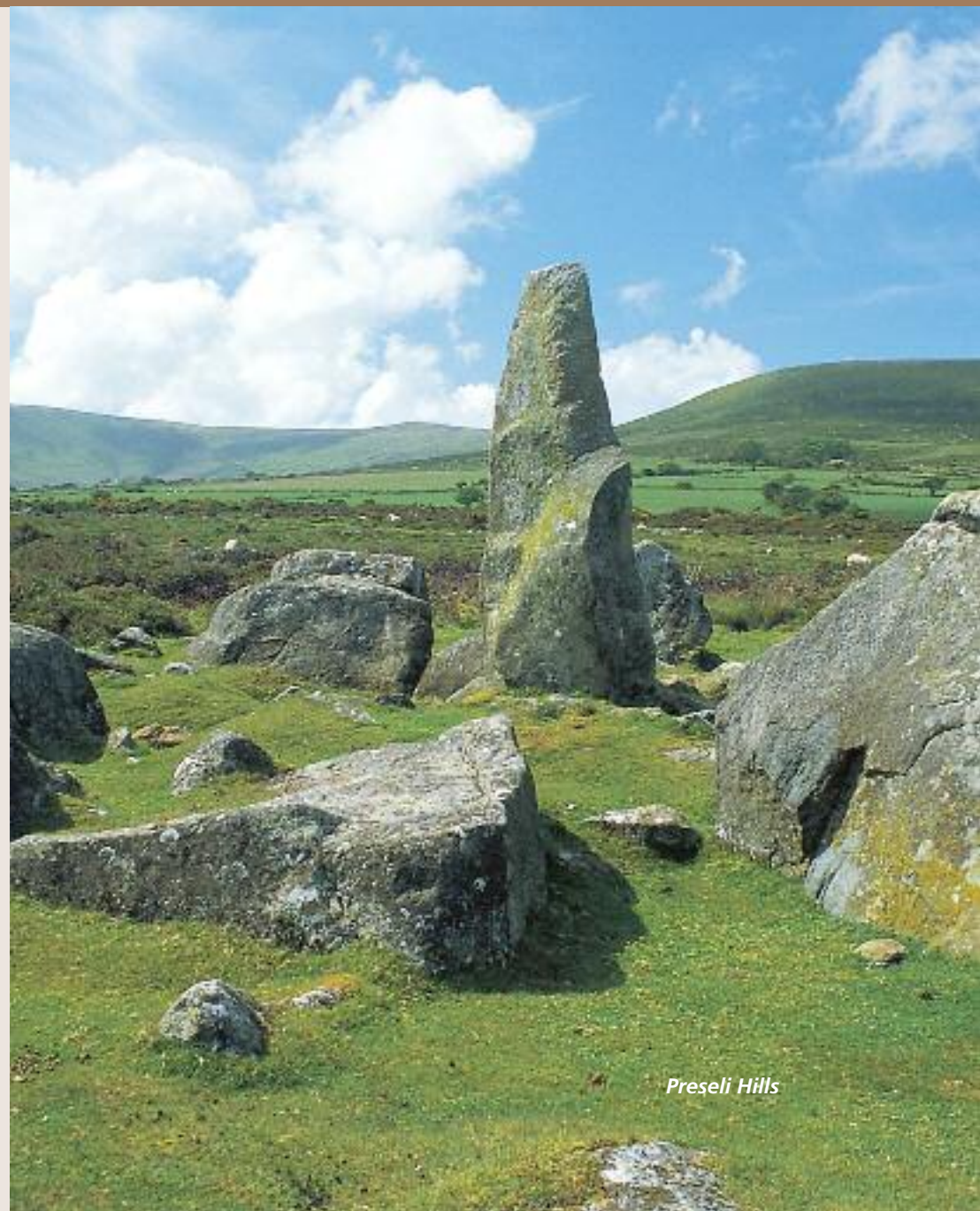
SAM condition (trend in 5 years prior to resurvey)	National Park (%)	All-Wales (%)
Stable / Improved	83.48	87.3
Superficial Disturbance	4.7	6
Moderate Disturbance	11.1	4.8
Severe Disturbance	0.72	1.8
Destroyed	0	0.1

33 Total SAMs surveyed in the five years previous to 2003:3101 (of a total of 3909 SAMs)

The Archaeological Resource



Map 6a:
Scheduled Ancient Monuments in the National Park



Preseli Hills

The Archaeological Resource

“The prehistoric memorials - they are magic.”

Residents and Visitor Survey

6.3.1.3 While scheduled monuments are on the whole in reasonable condition, scheduling only provides protection for the monument itself, so monuments' settings and immediate surroundings may nevertheless be at risk.

6.3.2 The number and typical condition of Historic Environment Record entries

6.3.2.1 Information about known archaeological sites and features is contained within the Historic Environment Record (formerly referred to as the regional Sites and Monuments Record). The Historic Environment Record for the National Park is held and maintained by Dyfed Archaeological Trust, and has been formally recognised and adopted by the NPA.

6.3.2.2 **There are almost 6000 sites in the National Park area listed on the Historic Environment Record.** However, the nature of the information varies - for some sites, detailed reports are held, whereas, for others, the record consists only of hearsay, tradition, or a note in an antiquarian record. It is as a result difficult to make a meaningful overall assessment of the condition of the sites known in the National Park area. When the nature and, sometimes, location, of a site is unknown, it is impossible to make an assessment of its condition. However, for those sites which are known and visited, records are made of condition and guidelines are provided to try and encourage consistency between assessors.

6.3.3 Historic Landscape character

6.3.3.1 Significant historic landscapes, the elements that give them their historic character, and the landscapes' risk status, are identified in two Registers. Registration does not afford statutory landscape protection.

6.3.3.2 The Register of Landscapes of Outstanding Historic Interest in Wales (maintained by Cadw, the International Council on Monuments and Sites and the Countryside Council for Wales) includes four areas in the National Park:

- Preseli
- St David's Peninsula and Ramsey Island
- Skomer Island
- the Milford Haven Waterway

6.3.3.3 The Register of Landscapes of Special Historic Interest in Wales lists five further National Park historic landscapes:

- Newport and Carningli
- Pen Caer
- Stackpole Warren
- part of the Lower Teifi Valley
- Manorbier

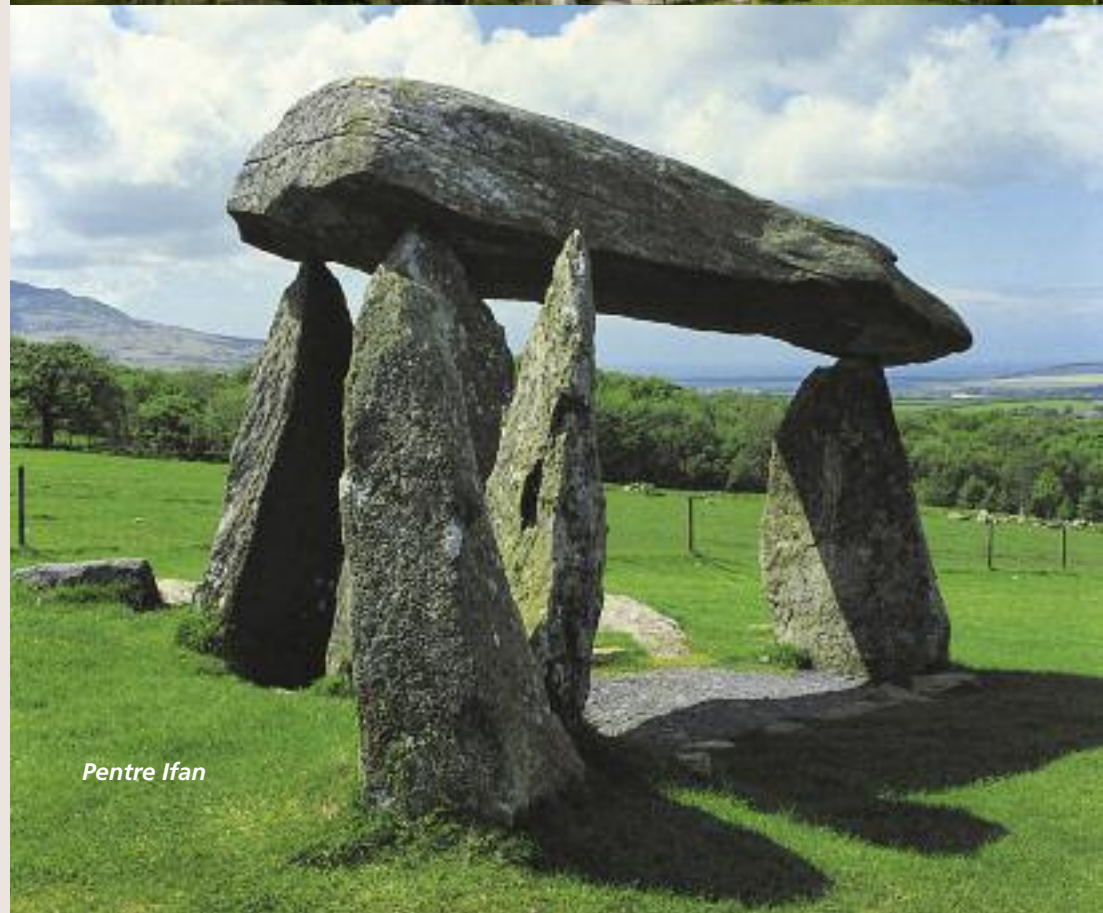
6.3.3.4 Cadw has funded a programme of characterisation to improve understanding of the elements that make up registered landscapes of historic interest. The descriptions of these character areas are available online³⁴. By understanding and identifying specific elements which contribute significantly to the overall landscape character, partners can better protect these landscapes through existing statutory instruments. Overall, it is clear that **the pattern and nature of field boundaries and vernacular buildings are key features of our distinctive landscapes.** These factors have been taken into account in recent NPA studies (such as the Landscape Character Assessment and sustainable design guidelines) and will continue to be factors influencing planning decisions and guidance.

34 <http://www.dyfedarchaeology.org.uk>

The Archaeological Resource



Map 6b:
Landscapes of Outstanding and of Special Historic Interest in the National Park



The Archaeological Resource

6.4 POLICIES

6.4.1 AR1: Strengthen the protective framework for the archaeological resource

- 6.4.1.1 Currently, the main statutory protection for the archaeological resource is the 1979 Ancient Monuments and Archaeological Areas Act (As Amended). The built heritage is largely protected under the 1990 Listed Buildings and Conservation Areas Act. Both Acts are supported by secondary legislation.
- 6.4.1.2 The system works by selecting those archaeological monuments deemed to be the best examples of their type and placing them on a register (the Schedule) and controlling what may or may not be done to them. However enforcement action is infrequent, and there are few or no incentives for pro-active management to improve the condition of sites.
- 6.4.1.3 The system of Scheduled Ancient Monuments and Listed Buildings is under review. If passed, the Heritage Protection Bill will bring in a unified register of 'Heritage Assets' and consent procedures would change. The proposed Bill has the potential to strengthen heritage protection, but there is still a need for secondary supporting legislation to be developed.
- 6.4.1.4 Local authorities, including the NPA, should be at the forefront of developing this legislation, and ensuring that this opportunity is seized. **The NPA would like to see a situation where good management is better rewarded, but where enforcement is clearer and easier in cases of deliberate damage.** The NPA should be a champion of good management for the archaeological resource at every level, from individual landowners to government.

6.4.2 AR2: Encourage proactive management of archaeological sites

- 6.4.2.1 Many archaeological sites lie on privately owned and managed land, and inappropriate land management is probably the greatest threat to the archaeology of the National Park. Agricultural mechanisation and accompanying practices (such as deep ploughing or land drainage) can affect buried features, standing remains and landscape-scale features such as field systems. While many landowners actively conserve the features on their holdings, other landowners may require greater incentives and also a greater knowledge of what the significant features actually are.
- 6.4.2.2 Cadw is the historic environment service of the Welsh Assembly Government. It has some Scheduled Ancient Monuments in guardianship, administers grant aid, carries out emergency works, and negotiates management agreements whereby landowners receive payments to manage monuments according to agreed management prescriptions. **Cadw's management agreements and capital payments are highly effective in improving the condition of Scheduled Ancient Monuments,** but they are rarely if ever available for non-Scheduled sites. Management agreements are reliant on the landowner making an application, and many are reluctant to do so without specialist advice.
- 6.4.2.3 Partnership between the NPA and Cadw allows the NPA to 'broker' management agreements, acting as the advisor and in some cases providing assistance with labour or materials. The NPA should continue to facilitate these management agreements. The NPA also offers its own management agreements. These operate primarily on sites of nature conservation interest, but also contain appropriate prescriptions for heritage conservation.

The Archaeological Resource

6.4.2.4 All-Wales schemes, such as the agri-environment scheme Tir Gofal, and Better Woodlands for Wales, also make provision for positive management of archaeological features, and these can include non-Scheduled as well as Scheduled monuments. However, these schemes have a finite amount of money available to accomplish a large number of works, and, the archaeological resource is not always seen as a priority. The NPA needs to continue to promote and support works to the historic environment through such whole farm and woodland schemes.

6.4.2.5 However, there is still a need for more pro-active management of archaeological sites and features within their changing contexts. **The NPA, with partners, needs to review the opportunities for schemes to integrate conservation of the natural and historic environments at a landscape scale.**

6.4.3 AR3: Raise awareness of the archaeological resource

6.4.3.1 Many cases of damage to archaeological features are due to neglect, or a lack of understanding of the feature's nature or importance. Raising awareness can help reduce damage, and increase people's enjoyment of their surroundings.

6.4.3.2 A variety of initiatives have been put in place in the National Park to encourage people to connect with the historic environment around them. Examples include walks and talks, schools visits and an annual newsletter and day-school. People can also get involved in excavation, survey and recording, which result in information being returned to the Historic Environment Record.

6.4.3.3 Carew Castle and Tidal Mill and Castell Henllys Iron Age Fort are the two major historic sites managed by the NPA and these, alongside sites managed by partner organisations, continue to offer outstanding opportunities



School group at Castell Henllys Iron Age Fort



The Archaeological Resource



Archaeological dig, West Angle

for increasing people's enjoyment of the archaeological resource within a landscape context. Other scheduled Ancient Monuments owned or managed by the NPA include Porthgain Harbour, Fishguard Fort and St Govan's Chapel. All the heritage sites that the NPA owns or manages should be examples of best practice in heritage conservation.

- 6.4.3.4 Recreational activity can damage or erode specific archaeological sites or features; people also remove artefacts from sites. Responses to these issues currently centre on awareness-raising, but more direct intervention may be necessary in some cases.

6.4.4 AR4: Manage the impact of development on the archaeological resource

- 6.4.4.1 Legislation and national planning guidance emphasise protection for important archaeological sites and landscapes of historic interest. Where development might affect archaeological remains, the nature of the remains and the effect the proposed development would have on them has to be determined before work can proceed.
- 6.4.4.2 Scheduled Ancient Monument protection afforded by the 1979 Act falls short of that given by other, related legislation. Although the scheduled areas of some Scheduled Ancient Monuments are extensive, the legislation relating to these areas has never been implemented. While supporting the existing statutory framework, the NPA believes that legislation relating to ancient monuments, archaeological areas and listed buildings needs to be strengthened. This could come, in part, through the proposed Heritage Protection Bill (see AR1) and all the supporting legislation which it would require. The NPA remains committed to the principle of strengthening legislation, although, at the time of publication, the Heritage Protection Bill is on hold.

The Archaeological Resource

*“The historic churches and spiritual places.”
Residents and Visitor Survey*

- 6.4.4.3 **Landuse policies within the National Park should continue to seek to protect the historic environment, and within the National Park area, development that adversely affects the historic environment will not normally be permitted.**

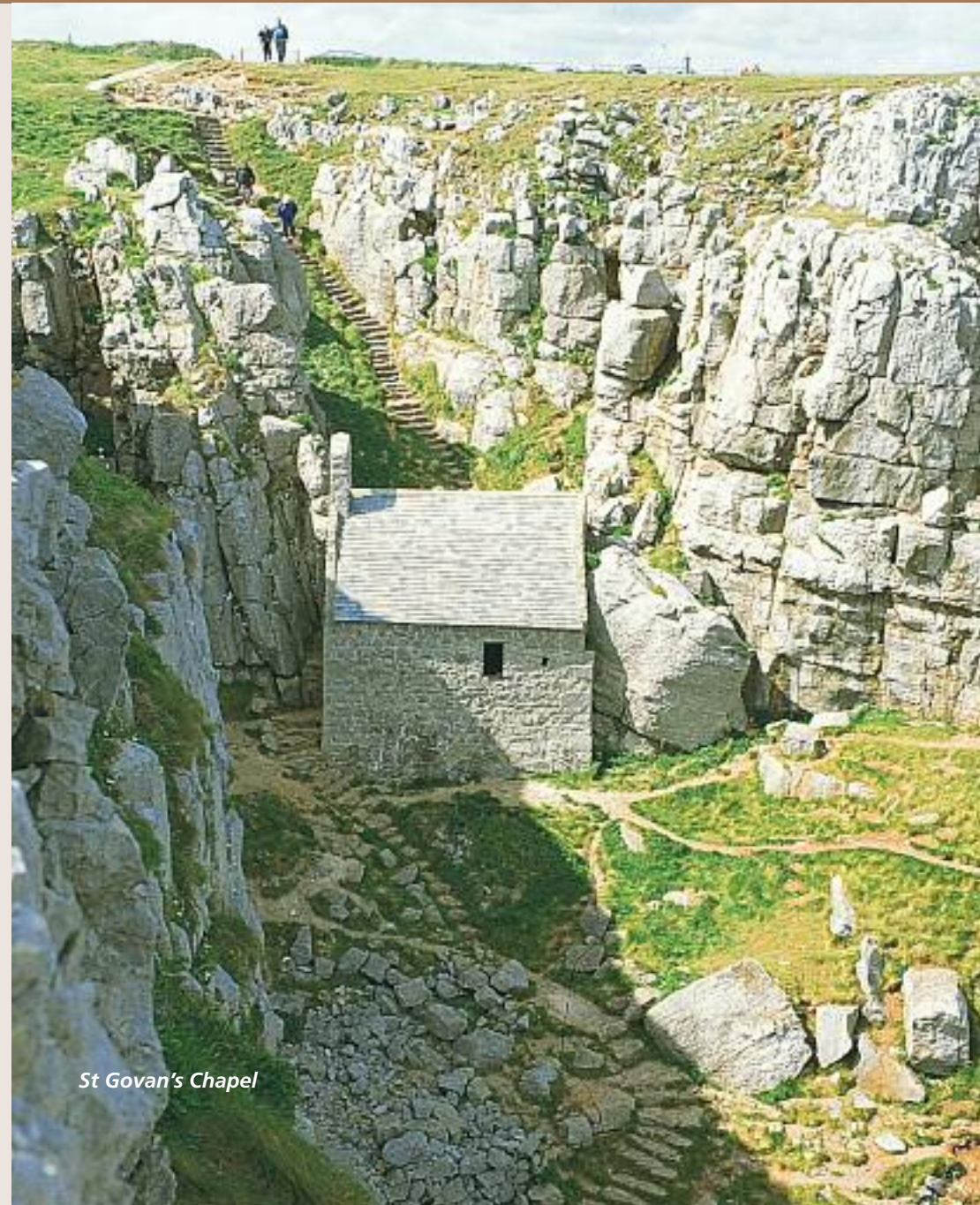
Mitigation measures include excavation or evaluation, or the alteration of designs to preserve archaeological features in situ.

- 6.4.5 **AR5: Mitigate the impact of natural processes on the archaeological resource**

- 6.4.5.1 Natural processes can be highly detrimental to archaeological sites; one of the obvious examples is coastal erosion. Wherever possible, the NPA will mitigate loss of information through processes like erosion by putting in place a programme of controlled information recovery - either through photography, survey, excavation, recording or sampling³⁵.

- 6.4.5.2 Such measures have a reciprocal relationship with access and training opportunities - they can both provide training grounds for volunteers, and also benefit from observations made by volunteers who have had experience of working on other sites within the National Park area.

³⁵ Any attempt to manage natural processes would have to be compatible with other management objectives, in particular those of designated sites; if European sites were concerned a project level Habitats Regulations Assessment would need to be undertaken.



St Govan's Chapel

7 The Historic Environment

Historic and contemporary buildings and structures shape the character of an area, and contribute towards people's sense of place, cultural heritage, and their wider quality of life.

The National Park's history, geography and geology are reflected in a built resource of great variety and distinctiveness ranging in date from pre-history to present day.

7.1 AIM

Conserve and enhance the historic environment.

7.2 ASSESSMENT

Most of the historic buildings in the National Park are in good condition, although a number require repair and reuse.

7.3 EVIDENCE FOR ASSESSMENT

7.3.1 The number and condition of Listed Buildings

7.3.1.1 Listed Buildings are of special architectural and historic interest, and the number of them therefore reflects the significance and diversity of the historic built environment. Listed Buildings are the cream of the National Park's historic built resource and range in type from medieval churches and castles to milestones and telephone kiosks.

7.3.1.2 The National Assembly for Wales, acting on the advice of Cadw, lists buildings of special architectural and/or historic interest, and completed an all-Wales survey in 2005. Listing covers not only the building in question but also its curtilage and buildings within the curtilage where they pre-date 1948. Buildings can also be individually spot-listed.

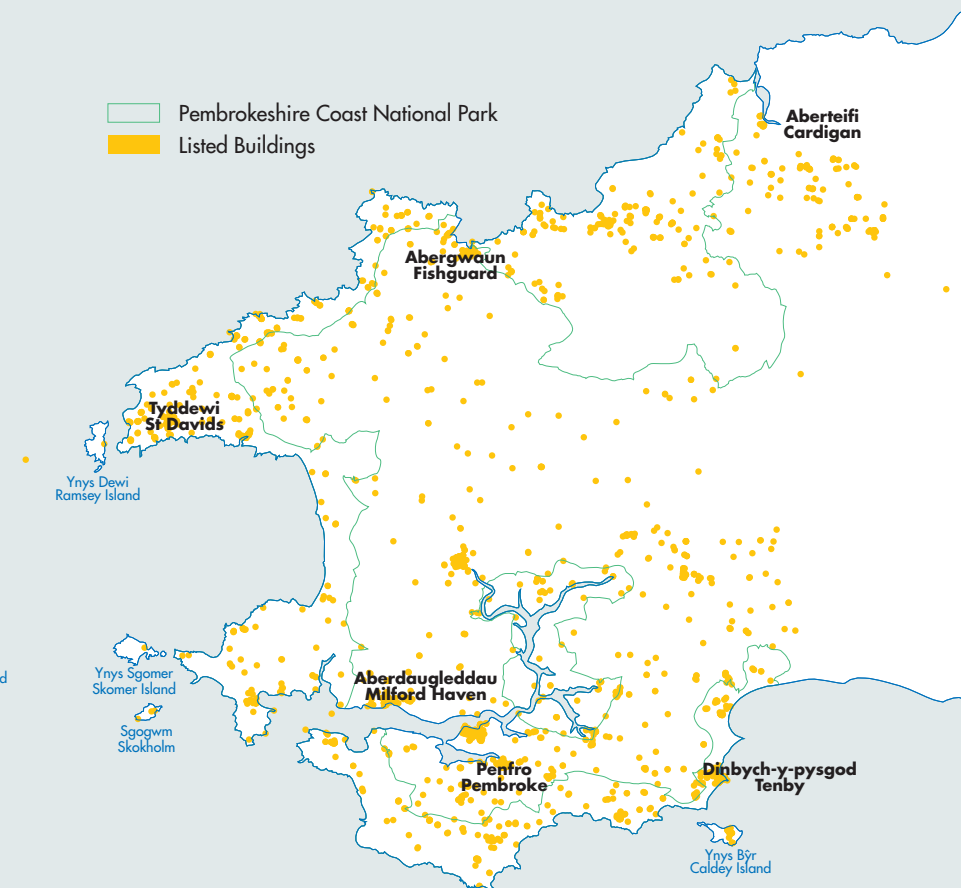
The Smalls

Ynys Gwales
Grassholm Island

Ynys Sgomer
Skomer Island
Sgogwm
Skokholm

Ynys Dewi
Ramsey Island

Pembrokeshire Coast National Park
Listed Buildings



Map 7a: Listed Buildings in the National Park

The Historic Environment

“...wonderful range of architectural styles - very distinctive local feel to it.”

Residents and Visitor Survey

7.3.1.3 Listed Buildings are then graded as I, II* and II according to their importance. **There are 1242 Listed Buildings in the National Park:** 28 of Grade I; 74 of Grade II*, and 1140 of Grade II.

7.3.1.4 The NPA has a responsibility to ensure that historic buildings are conserved and an action plan is being drawn up in order to work with owners towards the conservation of them. Priorities are based on the Buildings at Risk Register, undertaken in conjunction with Cadw in 1998 to establish the condition of Listed Buildings within the National Park. The buildings surveyed (every five years) are divided into 5 categories with a view to prioritising buildings in need of urgent repairs. The risk categories are:

- 1: High Risk (danger of structural failure)
- 2: Medium Risk (localised structural problems)
- 3: Low Risk (in need of immediate repair)
- 4: Fair (in need of minor maintenance)
- 5: Good (not at risk)

7.3.1.5 The number of Buildings at Risk (that is, in categories 1, 2 or 3) in 2008 is 63, down from 71 in 2006 (and from 92 in 1999). The Register is to be reviewed in 2008/2009.

7.3.1.6 12 of the 63 Buildings At Risk are ‘dually’ protected as Scheduled Ancient Monuments. Their scheduled status has priority over listed building legislation, which limits NPA powers for enforcement and action.

7.3.2 The number and condition of Conservation Areas

7.3.2.1 **Areas of special architectural or historic interest meriting protection are designated as Conservation Areas.**

7.3.2.2 Designating Conservation Areas is a statutory responsibility



Angle Tower

The Historic Environment



Map 7b: Conservation Areas in the National Park

of the NPA, and there are currently 14 within the National Park. These are Angle, Caerfarchell, Caldey Island, Little Haven, Manorbier, Portclew, Porthgain, Saundersfoot, Solva, St Davids, Tenby, Trevine, Newport and Newport Parrog.

- 7.3.2.3 A Conservation Area in Nevern is currently under consideration, and other areas may be considered during the Management Plan period. The anticipated number of Conservation Areas in the National Park is 16.
- 7.3.2.4 After designation of a Conservation Area, production of Conservation Area Statements, and then of Proposals Documents, with full public consultation, is also a statutory duty of the NPA. The Character Statements assess the importance of the Conservation Areas, together with their physical condition and risk factors. The Proposals Documents contain strategic policies for preservation and enhancement.
- 7.3.2.5 These documents were drawn up in partnership with the Conservation Area Working Groups (elected through the relevant City/Town/Community Councils). They will form supplementary planning guidance to the current development plan, the Joint Unitary Development Plan, which covers the county of Pembrokeshire.
- 7.3.2.6 Townscheme grants operated in Tenby and St Davids, in conjunction with Cadw and other external funding. **Conservation Area Grants, funded by the Welsh Assembly Government, now operate in all 14 Conservation Areas.**
- 7.3.3 The number of Parks and Gardens of Special Historic Interest**
 - 7.3.3.1 Cadw, the International Council on Monuments and Sites and the Countryside Council for Wales have compiled a Register of Parks and Gardens of Special Historic Interest in

The Historic Environment

“A beautiful and peaceful area, rich in heritage.”

Residents and Visitor Survey

Wales. The Register identifies the importance of the listed parks and gardens, but does not afford statutory protection to them.

- 7.3.3.2 Fifteen Historic Parks and Gardens lie wholly or partly within the National Park boundary. They are graded on a criteria basis and consist of 1 Grade I, 2 Grade II* and 12 Grade II sites. There is currently no condition or risk survey for Historic Parks and Gardens.

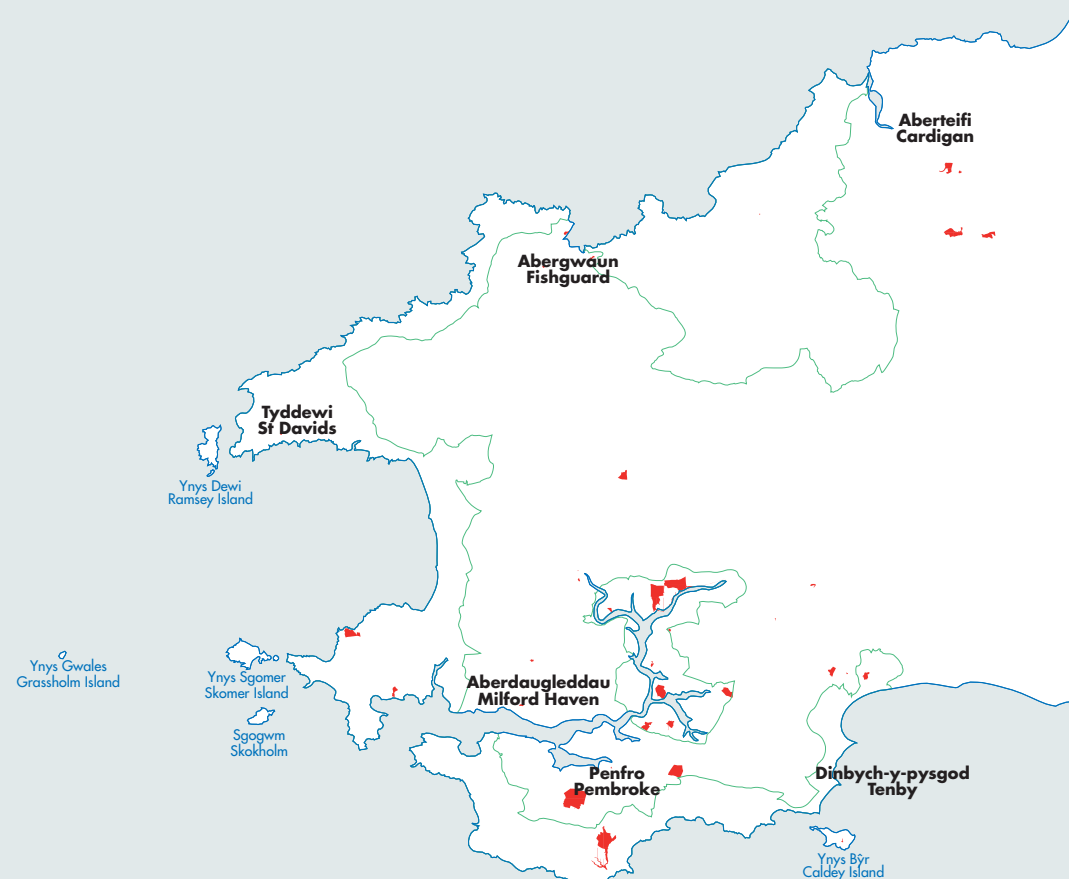
7.3.4 The state of ‘the Ordinary’

- 7.3.4.1 The designated resource accounts for less than 2% of the total historic built heritage of the National Park. From cottages to farmhouses and field-walls to barns, non-designated buildings contribute individually and cumulatively to local distinctiveness of the local built environment.
- 7.3.4.2 There is currently no established way of assessing the state of features of local distinctiveness in the built environment but in the NPA’s view, the character of the local built environment is being eroded in some cases by damaging operations, removal, misrepair and neglect.

7.4 POLICIES

7.4.1 H1: Strengthen the legislative planning and management context of the historic environment

- 7.4.1.1 The future of the historic environment will be addressed by proposed reforms in heritage legislation (see AR1) and by addressing external factors such as awareness, enforcement and resources.
- 7.4.1.2 The NPA is responsible for integrating conservation policy with wider planning policy for the area and for the designation of Conservation Areas. The NPA exercises



Map 7c: Parks and Gardens of Special Historic Interest in the National Park

The Historic Environment



controls over works to listed buildings and over demolitions in Conservation Areas. It has powers to secure the repair of listed buildings which have been allowed to fall into disrepair and to make grants towards the cost of repairing historic buildings (whether or not these are listed).

- 7.4.1.3 **Many unlisted buildings conceal features of historic/architectural importance**, and these are often revealed during alterations or repairs. The NPA may consider serving Building Preservation Notices or requesting 'spot-listing' when these features are revealed.

7.4.2 H2: Raise awareness of the historic built environment

- 7.4.2.1 The cumulative effect of loss of small detail along with misrepair can have a marked impact on buildings. Inappropriate development and agricultural practices can erode the character and distinctiveness of historic landscapes. Advice is vital to prevent misrepair and provision of advice is a core NPA function. To make staff resources more efficient, more general technical advice to owners of historic buildings is being provided on the NPA's website.
- 7.4.2.2 Awareness issues may be addressed through various media, grants (linked for example to Conservation Areas or Listed Buildings), or through long term management agreements in the cases of larger and more complex sites. The NPA also provides technical advice.

7.4.3 H3: Assist with the maintenance costs of historic buildings

- 7.4.3.1 **While historic buildings are often living, working places, caring for them can be costly, involving specialist materials and skills.** This can be a major burden and the NPA has a positive role to play in assisting with grants in National Park Conservation Areas and in providing advice on all aspects of the historic built environment.

7.4.4 H4: Manage the impact of development on the historic built environment

- 7.4.4.1 Planning policy must ensure that development reflects the National Park's special landscape and townscape qualities, and local distinctiveness, meets the highest standards for resource use, and takes account of the impact of a changing climate.
- 7.4.4.2 The NPA can offer guidance and apply incentives and enforcement to guard against loss of character within the historic environment. The NPA has powers under the 1990 Listed Buildings and Conservation Areas Act to enforce repairs, remove dereliction and restrict permitted development rights. Resources must be in place to carry out enforcement in cases where awareness or grant initiatives fail.
- 7.4.4.3 Building reuse is generally supported where this will contribute to the character of the area and safeguard historic features or biodiversity. Exceptions apply to buildings that are or would become unsightly as a result. The NPA will promote re-use of building material from such buildings in new development.

The Historic Environment

7.4.5 H5: Promote traditional building techniques and local materials

- 7.4.5.1 The use of local timber, lime mortar and recycled products is increasingly important in addressing issues of resource and energy use. Coed Cymru, the NPA and Pembrokeshire County Council work with producers and end-users to improve the availability and utility of local timber for building and furnishing, but there are few if any appropriate sources of local building stone and roofing slate; quarries are geared up primarily for aggregate production. There is scope for local small-scale working of appropriate building stone.
- 7.4.5.2 Local training initiatives are focusing on traditional techniques of, for example, lime rendering and building in clom. If use of local and traditional materials in building is to increase significantly there is a continued need to build the skill base and put additional resources into product development. Future efforts should build on existing initiatives and expand the range of materials and techniques used; such measures could also provide a range of vocational training opportunities.



Abereiddi Mill

8 Geodiversity

Geodiversity includes all geological and geomorphological features and processes. It covers bedrock, overlying deposits (including soils) and the minerals and fossils within them. It also covers natural landforms and any natural processes that are currently modifying them.

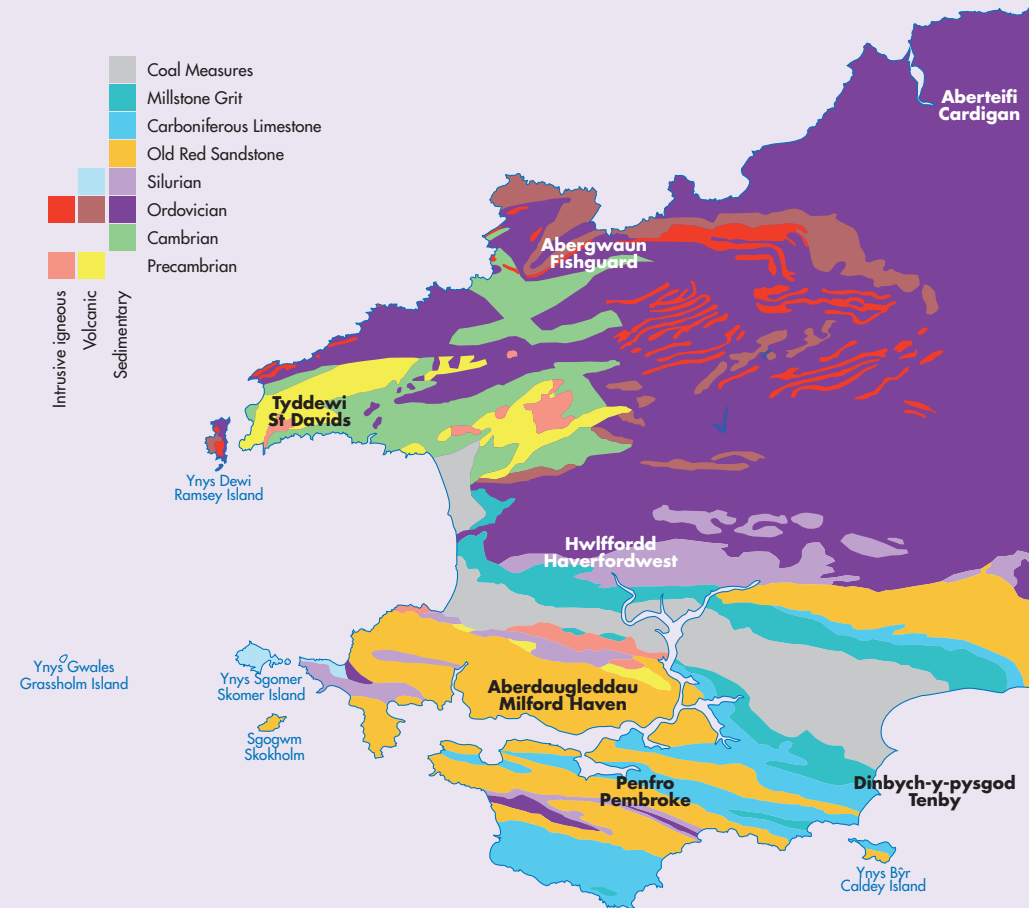
The National Park has a greater variety of geological and landform scenery than any area of the same size in the British Isles. Coastal scenery was a key reason for the designation of the National Park and of the Pembrokeshire Coast Path National Trail.

8.1 AIMS

- Protect and promote the National Park's geological and geomorphological resource
- Conserve and enhance soil resources and quality

8.2 ASSESSMENT

- 8.2.1 The geological resource is generally in good condition, with special geological and landform features currently safeguarded, but **climate change could have significant implications for some of our coastal scenery.**
- 8.2.2 The state of the National Park's soil resource is not accurately known, but the NPA believes it to be under pressure from some land management practices and from climate change. In some cases **management change is likely to be urgently required to prevent soil loss and degradation and therefore to protect future agricultural revenue, biodiversity and functional roles such as that played in the carbon cycle.**



Map 8a: Geological map of Pembrokeshire

Geodiversity

8.3 EVIDENCE FOR ASSESSMENT

8.3.1 The condition and accessibility of Geological Conservation Review sites

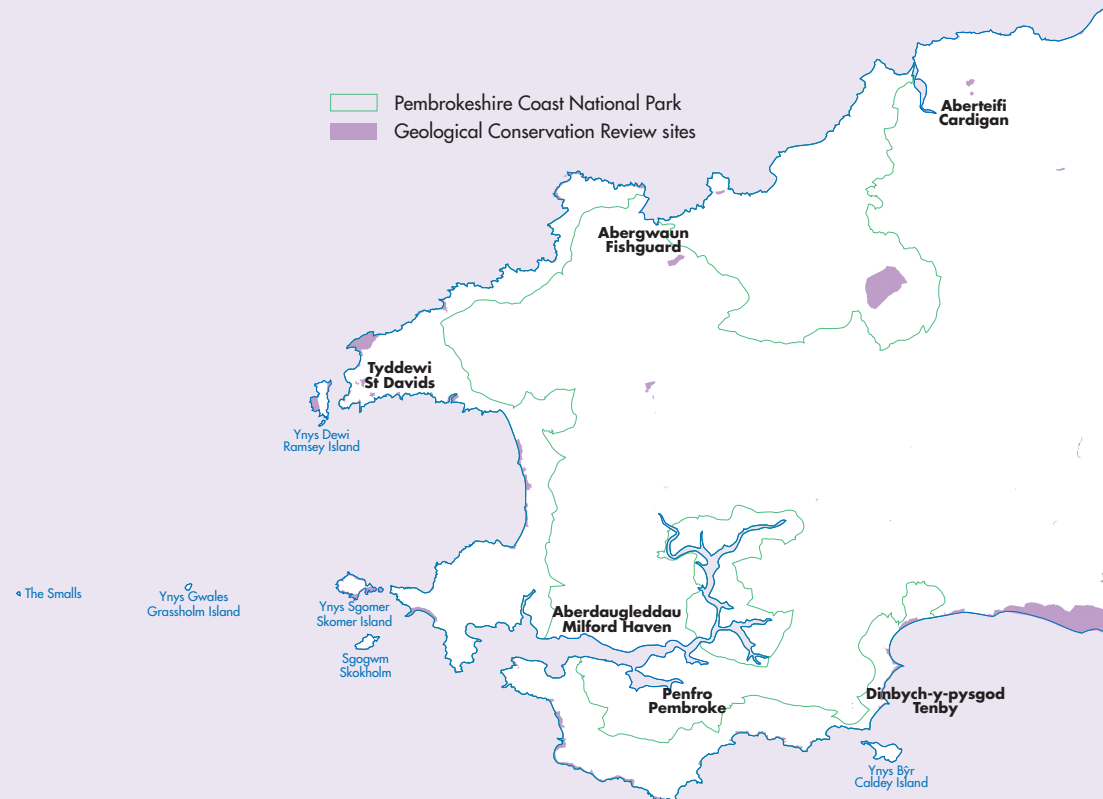
8.3.1.1 Geological Conservation Review sites are sites of national or international importance, designated under Site of Special Scientific Interest legislation for the feature or features of geological significance within them. **There are 51 Geological Conservation Review sites in the National Park, covering approximately 40% of the Park's coastline** (excluding Milford Haven and the Daugleddau) and a number of inland areas. Many of these Geological Conservation Review sites are of international significance.

8.3.1.2 The table below summarises the condition and trend of Geological Conservation Review site features. Condition for geological sites is mainly dependent on accessibility, visibility and usability for research and education.

Table 8a: Condition of Geological Conservation Review sites in the National Park

Condition and trend	Number of features	Percentage
Favourable no change*	44	68
Favourable declining	9	14
Unfavourable	8	12
Unknown	4	6

*This category includes sites classed as 'Favourable no significant change', 'Favourable unknown' and 'Favourable improved'.



Map 8b Geological Conservation Review Sites in the National Park

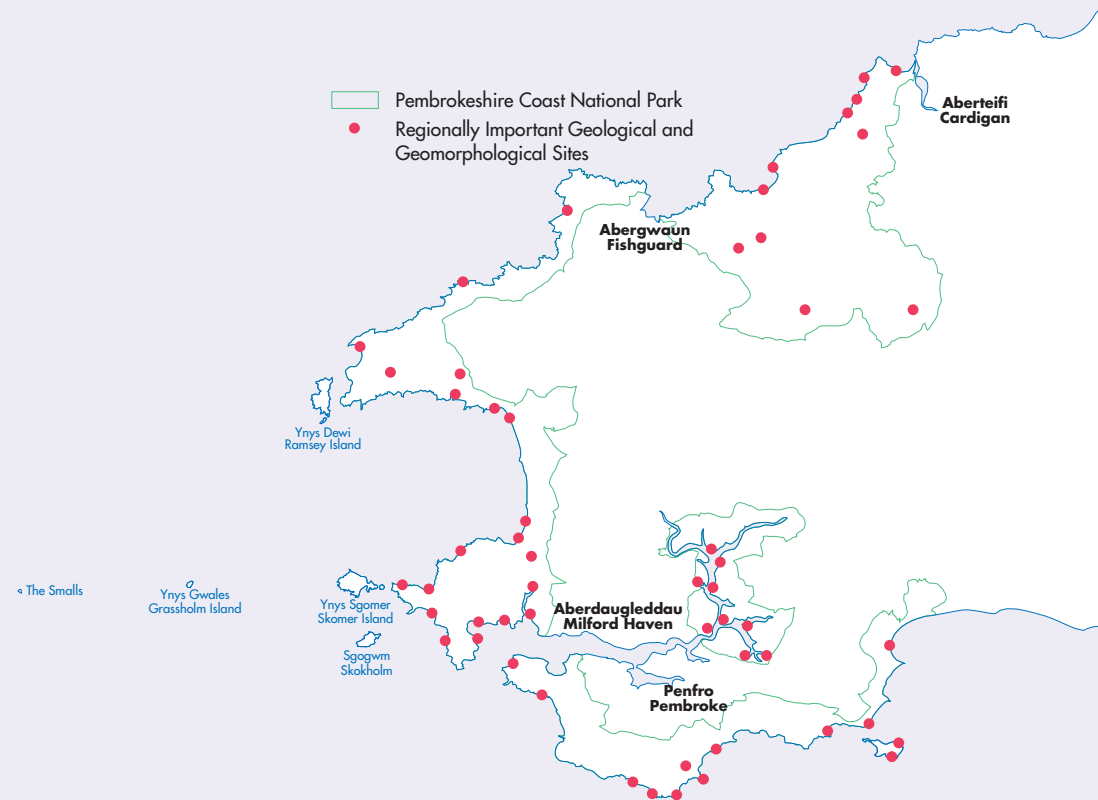
Geodiversity

8.3.2 The condition of Regionally Important Geological Sites

- 8.3.2.1 In addition to the Geological Conservation Review sites, candidate Regionally Important Geological and Geomorphological Sites have been identified in the National Park. These are estimated to cover a further 30% of the coastline. Assessment of these sites started in 2007 and is likely to be an ongoing process.
- 8.3.2.2 In many inland areas there has been a significant loss of key exposures to erosion (up to 80% since the last phase of detailed geological mapping was carried out in the early 1900s). This may have occurred through development, dumping of waste materials or simply due to lack of management (resulting in development of scrub vegetation for example). In the latter two cases the geological resource may sometimes be recoverable if sufficient financial and human resources are made available.
- 8.3.2.3 Some erosion is generally necessary to maintain coastal exposures, and is a process of interest in itself, but resources are needed to ensure that geological features are recorded and that natural processes are documented. Such work is also essential to ensure that civil engineering schemes (e.g. coastal protection) are appropriate and cost effective.

8.3.3 Progress on the Environment Strategy for Wales' strategic outcome for soils

- 8.3.3.1 Soils have functional and intrinsic value. As the basis of ecology and agriculture, they underpin our economy and our health and wellbeing. They are ecosystems in their own right and support all other terrestrial ecosystems through their roles in the carbon, water and atmospheric cycles. They are also of interest in and of themselves, and can relate the prehistory and history of the National Park. Because they take a long time to form, soils are effectively a non-renewable



Map 8c: Regionally Important Geological and Geomorphological Sites in the National Park*

Geodiversity

*“...great diversity of geology.”
Residents and Visitor Survey*

resource. The National Soil Resources Institute provides an interactive viewer of UK soil types at <http://www.landis.org.uk/soilscapes/>.

- 8.3.3.2 The Environment Strategy for Wales’ strategic outcome for soils (Outcome 16) relates to soils’ ability to support biodiversity, store carbon and provide other important ecosystem services. Action proposed to achieve the outcome is set out in the Strategy and in the draft Welsh Soils Action Plan³⁶. The Management Plan aims to contribute to this outcome and to be able to relay progress.

8.4 POLICIES

8.4.1 G1: Manage the impacts of development on geodiversity

- 8.4.1.1 Development can damage or destroy geological sites/features and damage or significantly alter soils.
- 8.4.1.2 Geological Conservation Review sites are designated under the legislation for Sites of Special Scientific Interest, and development planning must protect these; however non-statutory aspects of the resource are at risk. Development planning policy and management should:
- protect important features of geodiversity using an audit of the resource to inform decision-making
 - restrict new mineral workings and extensions unless exceptional circumstances are demonstrated³⁷
 - promote recycling of aggregate materials, minerals efficiency and use of alternatives
 - review re-instatement and afteruse plans for all active quarries
 - protect soils and agricultural land

³⁶ <http://new.wales.gov.uk/consultations/closed/environment/130308welshsoilsactionplan/?lang=en> retrieved 12/11/08

³⁷ See e.g. H5



Stack Rocks

*“Wildlife, flora, fauna, natural rock formations and views from the cliffs.
The uniqueness of the rock pool and pool life for children.”*
Residents and Visitor Survey



Geology event

8.4.2 G2: Promote land management which improves soil condition

8.4.2.1 A number of land management practices are potentially damaging to soils:

- drainage and ploughing can lead to increased runoff and erosion with downstream pollution effects, and damage to the buffer areas around watercourses
- use of some machinery can lead to compaction and 'capping' (creation of a fine impermeable layer of soil), which can lead to more runoff and flooding
- pesticide and herbicide application and the use of antibiotics can lead to changes in vegetation coverage and soil biota
- other impacts may arise from artificial fertiliser use, ground disturbance by livestock, overgrazing (especially in upland areas) and afforestation

8.4.2.2 Sympathetic land management is therefore essential to protecting soil condition and productivity. Low intensity management and good practice codes can assist; policies for protecting biodiversity and addressing climate change also apply.

8.4.3 G3: Manage the impacts of climate change on geodiversity

8.4.3.1 Climate change may result in increased coastal erosion (through increased storminess and extreme weather) and soil erosion (e.g. through higher rainfall and run-off). Temperature changes also affect soils' ability to store carbon. Responses to climate change are described in the relevant section of the Management Plan and are not repeated here.

Geodiversity

8.4.3.2 Climate change also highlights the need to reduce the exposure of geodiversity and soils to the other sources of risk identified in this section, in particular those arising from land management which may be exacerbated by climate change.

8.4.4 G4: Raise awareness of the geological resource

8.4.4.1 Safeguarding the geological resource depends on people's awareness and understanding. It is therefore important to promote appropriate public access to, and understanding of, the geological resource. This is currently achieved through a combination of providers of both formal and informal education.



9 Climate Stability and Energy Security



Castlemartin cliffs

The UK Climate Projections 2009³⁸ give the following central estimates for Wales in the 2080s, based on medium emissions scenarios: an increase in winter mean temperature of 2.8°C; an increase in summer mean temperature of 3.6°C; a change in winter mean precipitation of 19%; a change in summer mean precipitation of -20%. Storms are expected to become more frequent and more violent.

A National Assembly for Wales research paper on peak oil³⁹ (July 2008) notes that the UK's oil production peaked in 1999, that the UK became a net importer of oil in 2006, and that imports will form an increasing proportion of oil consumption in the UK.

The UK's National Security Strategy (March 2008)⁴⁰ cites climate change and competition for energy as key challenges, and also makes reference to security of food and water supplies.

The International Energy Agency warned in its 2007 outlook of a possible supply-side crunch in the period to 2015, involving an abrupt escalation in oil prices⁴¹.

The UK government has set a target for an 80% reduction in greenhouse gas emissions, from 1990 levels, by 2050.

The three National Park Authorities in Wales are taking a corporate approach to the issues of climate change and energy supply.

38 <http://ukcp09.defra.gov.uk/content/view/40/6/>

39 <http://www.assemblywales.org/08-042.pdf>

40 http://www.cabinetoffice.gov.uk/reports/national_security_strategy.aspx

41 <http://www.iea.org/Textbase/npsum/WEO2007SUM.pdf>

Climate Stability and Energy Security

9.1 AIMS

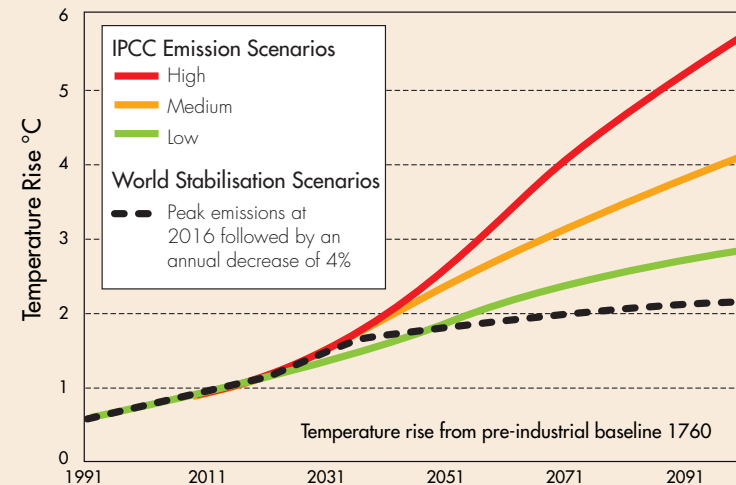
- Reduce greenhouse gas emissions
- Reduce reliance on fossil fuels
- Adapt to climate change

9.2 OUTLOOK

9.2.1 Climate change, including abrupt climate change, is not new; what is different this time is that it comes accompanied by many other human pressures on the environment and its inhabitants. Collectively these pressures reduce the options for natural adaptation precisely when those options are most needed. So the longer term impact of climate change makes it even more important to address existing problems, which range from habitat fragmentation and environmental degradation to energy-hungry food production and fuel poverty.

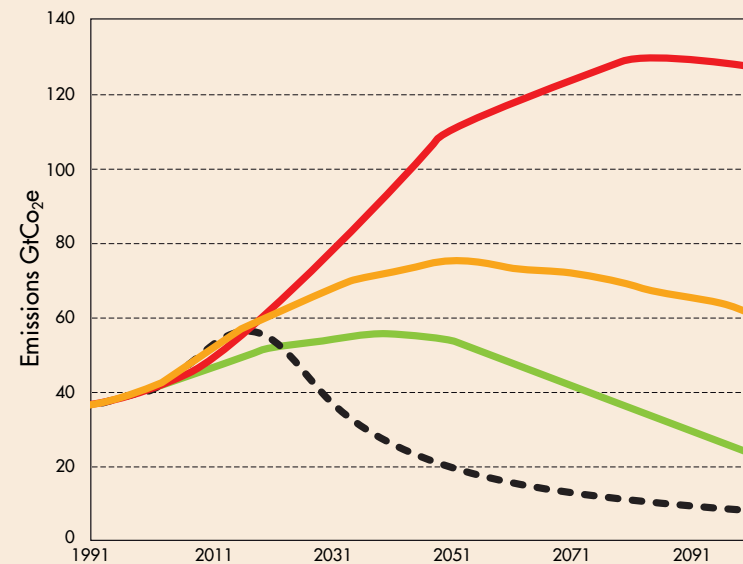
9.2.2 Addressing all the underlying and interacting issues will put huge claims on organisations' resources and more than ever the problems will need to be attacked in the most effective way and at the most effective levels. Importantly, all the 'familiar' measures for wildlife conservation must also be recognised as measures of adaption to climate change.

9.2.3 Significant and possibly rapid change in the National Park's landscape character is likely, from climate change and/or from measures deployed to offset climate change. However, the latter are more potentially reversible. Relevant authorities will therefore need to find ways of retaining landscape values and utility even as landscape character changes. This will require a dynamic interpretation of National Park purposes and a tolerance to new emergent landscapes.



Graphic 9a: Global warming projections

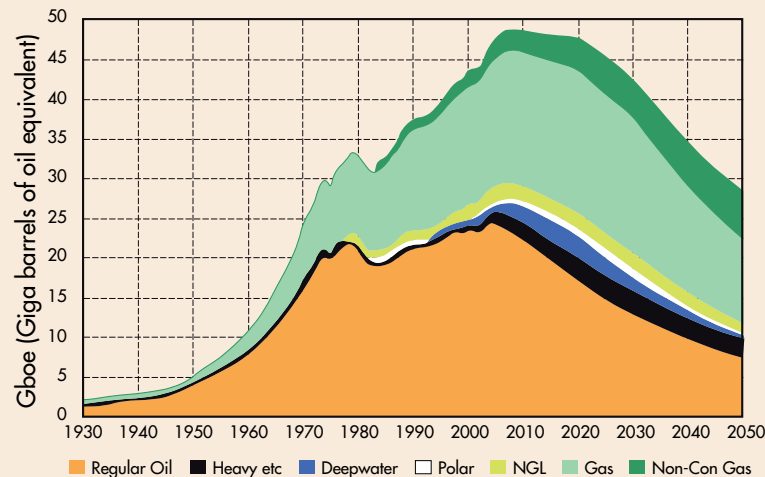
Source: Adapting to Climate Change Team, DEFRA



Graphic 9b: Global Emissions of Greenhouse Gases

Source: Adapting to Climate Change Team, DEFRA

Climate Stability and Energy Security



9.3 PEAK OIL

- 9.3.1 Using Gross Domestic Product as the main measure of economic success has predicated the world economy on growth - growth underwritten by fossil fuels and increased consumption by members of an expanding global population.
- 9.3.2 The immediate problem for the world's growth-based economy is not of running out of fossil fuels but of not having the ever-increasing quantities it needs. At some stage in the relatively near future the points of peak global output of oil and gas will be passed - some countries have already passed their domestic peaks. As global consumption ratchets up, the big questions concern the timing of the

collective, global peak and the nature and implications of the production downslope as more and more countries become or seek to become net importers⁴³.

- 9.3.3 **With global population still increasing, and with a growing overall hunger for energy, the peaks of oil and gas could herald major social and economic turbulence if alternative energy sources and alternatives to oil-based materials are not available, and if there is no energy descent plan for oil-dependent economies.**
- 9.3.4 The effects of peak oil could interact with the impacts of climate change itself. Both could have implications for migration and food security; climate change could in addition give rise to new patterns of human disease, for example.
- 9.3.5 Oil and gas peaks will not automatically mean that greenhouse gas emissions start to decline; countries may make increased use of coal, or burn biomass faster than it is replaced. However coal and biomass do not have the immediate versatility of oil for transport or in terms of derivative materials like plastics. Nations' willingness and ability to reduce emissions may in any case reduce as and when input costs, led by oil, start to climb.
- 9.3.6 New oil/gas finds, higher oil prices and the effect these have on the viability of exploration of and extraction or conversion from other fossil fuels are less relevant to peak oil than actual rate of production achieved and the energy cost of extraction and processing.
- 9.3.7 So peak oil increases still further the urgency of reassessing the human love affair with fossil fuels and economic growth. The good news is that many of the measures needed to engineer a soft landing from peak oil - the energy descent - are the same as those identified as

42 From http://www.aspo-ireland.org/contentFiles/newsletterPDFs/newsletter99_200903.pdf Gboe = Giga barrels of oil equivalent; NGL = Natural Gas Liquids.

43 See for example http://en.wikipedia.org/wiki/Export_Land_Model

Climate Stability and Energy Security

Policy	Energy descent benefit	Policy	Energy descent benefit
CC1: Contribute to national targets for energy conservation and efficiency and for renewable energy CC4: Reduce, repair, reuse, recycle	- Increases security of energy supplies - Reduces fossil fuel reliance - Addresses fuel inequality/poverty - Increases public awareness - Develops civic responsibility - Diversifies regional economies	L1: Maintain landscape quality and function L2: Maintain seascape quality and function B1: Promote an ecosystem approach to land management B2: Limit the impacts of climate change on biodiversity B4: Promote an ecosystem approach to marine management B5: Support sustainable fisheries policy G2: Promote land management which improves soil condition CC3: Encourage carbon-sensitive land management	Conserves / increases ecological productivity
B3: Promote regional and local conservation-grade food production and consumption H5: Promote traditional building techniques and local materials	- Increases security of food supplies - Develops civic responsibility - Diversifies regional economies	CC5: Reduce risks of/from fluvial and coastal flooding W1: Manage flow rates and groundwater levels W3: Limit the impact of climate change on water resources and quality W5: Manage the impact of development on water resources and quality	- Reduces community risk - Conserves / increases ecological productivity
CC2: Encourage use of public transport and reduce car use	Reduces dependency of the rural economy on car use and transport	E1: Promote appropriate types of recreation E2: Remove barriers to people's enjoyment of the National Park E3: Manage coastal and inland access/recreation opportunities E4: Manage access to inshore and inland waters	- Improves public health and wellbeing - Develops personal responsibility
L3: Respect environmental capacity U1: Promote the National Park as an inspirational basis for lifelong learning U2: Explain organisations' purposes and values U3: Involve people in decision making U5: Help people to make lifestyle changes	Facilitates all other cells in this table		

Table 9a: Energy descent benefits of Management Plan policies

Climate Stability and Energy Security



Top: Milford Haven waterway Bottom: Parking issues, Freshwater West



necessary to reduce greenhouse gas emissions and achieve other Management Plan aims (Table 9a).

9.3.9 Economies specialise in order to gain comparative advantage, but as a result they become more dependent on import/export trade, more dependent on fossil fuels as the feedstock for manufacturing and transport, and generally less self-reliant. At the same time both the probability and impact of systemic failure at a national and global level may be greater, so as local economic self-reliance gets harder to achieve it also becomes more important. If the specific effects of climate change and of declining oil/natural gas output on landscapes, on economies and on society are unpredictable, then **resilience and adaptability will have to be amongst Wales' and the UK's watchwords.**

9.3.10 Planning for climate change is complicated by "non-linear" and in-combination effects with other factors. Probabilistic climate projections are now available⁴⁴; however, partners should perhaps be wary of investing too much effort into any one reduced set of forecast problems and instead promote general environmental and human resilience and adaptability.

9.3.11 This means continuing to manage the existing issues, through all the other policies in this Management Plan (a) as issues in their own right and (b) in recognition of the brake that, if unaddressed, they put on adaptability.

9.3.12 Climate change throws existing issues into even sharper relief and highlights the fundamental policy changes and massive upscaling and redirection of effort required.

9.4 POLICIES

9.4.1 **CC1: Contribute to national targets for energy conservation and efficiency and for renewable energy**

⁴⁴ <http://ukcp09.defra.gov.uk/>

Climate Stability and Energy Security

- 9.4.1.1 Growing demand from developing and industrialising countries may have additional and in-combination effects, for example further intensification of agriculture and loss of marginal land. Against this backdrop, governments may start to put more emphasis on regional economic self-reliance and on (domestic) security of supply of energy and of food.
- 9.4.1.2 Protected landscapes like National Parks might be seen as early contributors because of their natural assets, rural skills, renewable energy potential and relative proximity to centres of population. Many energy measures could, with planning, be accommodated without compromising protected landscapes' special qualities (e.g. small hydropower, wave/tidal, geothermal, solar, photovoltaic, domestic turbines, wood fuel combined heat and power).
- 9.4.1.3 Oil and gas production volumes cannot increase indefinitely, and many predictions are that global oil production is, or will shortly start, declining. The National Park and the region have high renewable energy potential, and, **while renewable energy development can have landscape impacts, so too does business as usual**. The NPA commissioned a Renewable Energy Assessment in order to review possible renewable energy resources, technologies, energy efficiencies and conservation measures and their appropriateness within the National Park. The Assessment indicates the suitability of and potential for particular types of renewable energy proposals in the National Park to householders, communities, developers and planners.
- 9.4.1.4 Huge carbon and cost savings remain to be made from increasing energy conservation and efficiency, and the Welsh Assembly Government's aspiration is for all new buildings to be carbon neutral by 2011. Guidance and grants are available to householders and businesses from a

range of sources, and development planning policy can support efforts by requiring:

- all new dwellings and other new buildings to achieve high resource and efficiency standards
- a minimum carbon dioxide emission reduction of 25% below the current building regulation baseline in all new buildings (excluding householder applications and extensions)
- energy, water and drainage efficiency improvements in proposed extensions or modifications - and where appropriate and practicable, in the original building

9.4.2 CC2: Encourage use of public transport and reduce car use

- 9.4.2.1 As a means of transport, the car affords convenience and flexibility - however significant population groups including young people, the elderly and those without a car can be transport poor. Enabling and persuading people to reduce reliance on the car is not easy, especially in peripheral areas like Pembrokeshire. While the vast majority of visitors will continue to come to Pembrokeshire by car in the short term, there's considerable scope for offering people a real choice of transport when they arrive.
- 9.4.2.2 The NPA is not a highway authority, but works closely with Pembrokeshire County Council which is the relevant authority for the Park area and is a partner in the Pembrokeshire Greenways partnership which promotes access to the countryside for all. A Regional Transport Plan (incorporating the former Local Transport Plan) is maintained and delivered by South West Wales Integrated Transport Consortium (a partnership of constituent local (highway) authorities).

Climate Stability and Energy Security



9.4.2.3 Partners should continue to work together to achieve a shift to more sustainable transport modes, within the context of the regional and local transport plans. A gradual and structured approach is indicated, aimed at offering a real and attractive public transport choice for local people and for visitors. This can be achieved in ways that benefit everyone - enhancing rather than detracting from tourism businesses or from the quality of the visitor experience.

9.4.2.4 The NPA works with transport providers and welcomes efforts to improve public transport (via measures such as innovative and extended services), and discourage car use (through appropriate traffic and parking management for example). Care however is needed to ensure that people with no options other than car use are not discriminated against.

9.4.2.5 The NPA will resist development proposals that cause significant concerns about transport impacts and will ensure that new development provides appropriate access for vehicles, cyclists and pedestrians. The NPA will also resist road improvements unless there is a compelling need demonstrated, reasonable alternatives can be shown to be unavailable, and all practicable mitigation measures will need to be implemented.

9.4.3 CC3: Encourage carbon-sensitive land management

9.4.3.1 **Extensive land management to conserve soil carbon, restore upland, floodplain and coastal wetlands and suitable and varied woodland expansion and management could allow protected landscapes to make a significant contribution to mitigation and adaptation, with an enhanced role for farmers and other land managers.**

Climate Stability and Energy Security

9.4.3.2 The geographic spread of protected landscapes in the UK could be exploited positively in this way. This policy should be considered in conjunction with policy B1 ('Promote an ecosystem approach to land management.')

9.4.4 CC4: Reduce, repair, reuse, recycle

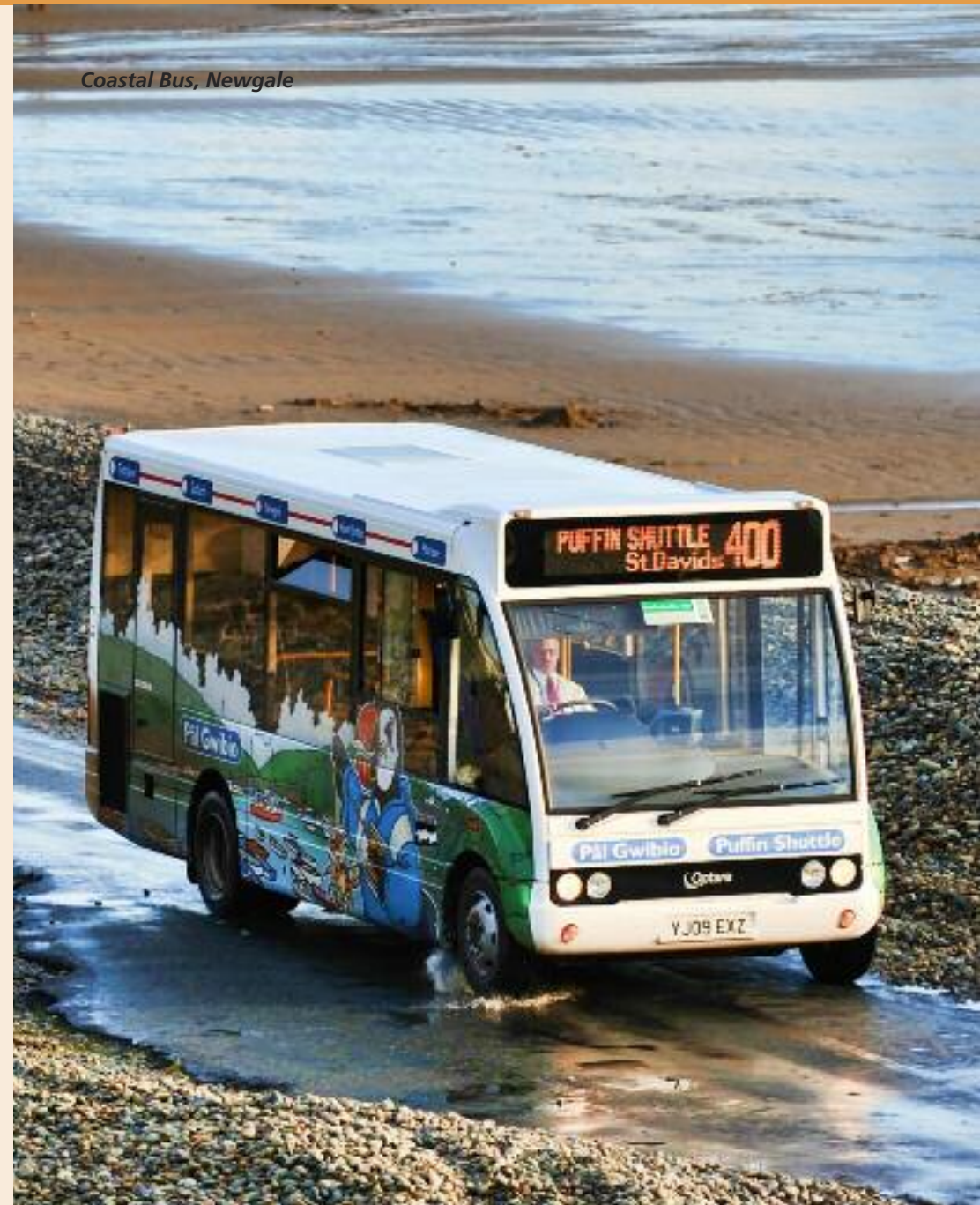
9.4.4.1 Pembrokeshire County Council is the waste management authority, but the NPA is part of the South West Regional Waste Plan Group and will continue to work with partners to address waste issues (including litter and fly tipping). The National Park should accommodate local community and commercial waste and recycling facilities where appropriate, and partners should increase awareness through education about the importance of reducing waste and recycling, reusing and other sustainable options for waste.

9.4.5 CC5: Reduce risks of/from fluvial and coastal flooding

9.4.5.1 **A number of areas and settlements have been identified as at risk from the effects of storms and sea level rise over the next decade.** Development planning policy should direct development away from those areas which are or will within the next 50 years be prone to flooding and inundation, unless there are sound social or economic justifications, and only permit sustainable defence of the coast to protect existing communities or assets where practicable and the longer term and natural evolution of the coast is not jeopardised.

9.4.6 CC6: Promote regional and local conservation-grade food production and consumption

9.4.6.1 Text at B3 applies.



Coastal Bus, Newgale

10 Air Quality



Above: Tycanol Woods

Right: Lichen



Air quality directly affects our health and wellbeing and the health of habitats and species. It also affects water quality and the condition of the built environment.

10.1 AIM

Safeguard National Park air quality.

10.2 ASSESSMENT

10.2.1 Air quality in the National Park is high, although traffic emissions and windborne pollution can be issues.

10.3 EVIDENCE FOR ASSESSMENT

10.3.1 Performance against Air Quality Strategy objectives

10.3.1.1 The Department of Environment, Transport and the Regions' Air Quality Strategy for England, Scotland, Wales and Northern Ireland sets out objectives for local authorities for reducing specified air pollutants⁴⁵ and these are formalised in the Air Quality Regulations 2000. The objectives are drafted in line with European Directives and UK law, policy and standards, and relate primarily to human health.

10.3.1.2 Air quality monitoring and management locally is a statutory duty of Pembrokeshire County Council. Pembrokeshire County Council monitors ambient air quality and certain emissions sources in and adjacent to the National Park, as does the Environment Agency; both have an enforcement role.

10.3.1.3 If a local authority finds any places where the objectives are unlikely to be achieved, it must declare an Air Quality Management Area. There are currently no Air Quality Management Areas in Pembrokeshire.

⁴⁵ Benzene, 1,3-Butadiene, Carbon monoxide, Lead, Nitrogen dioxide, Nitrogen Oxides, Ozone Particles (PM₁₀), Sulphur dioxide

Air Quality

“Peace, beauty, clean air, exhilaration of the wind and waves...”
Residents and Visitor Survey

10.4 POLICIES

(Please see also the section on climate change.)

10.4.1 A1: Reduce traffic emissions

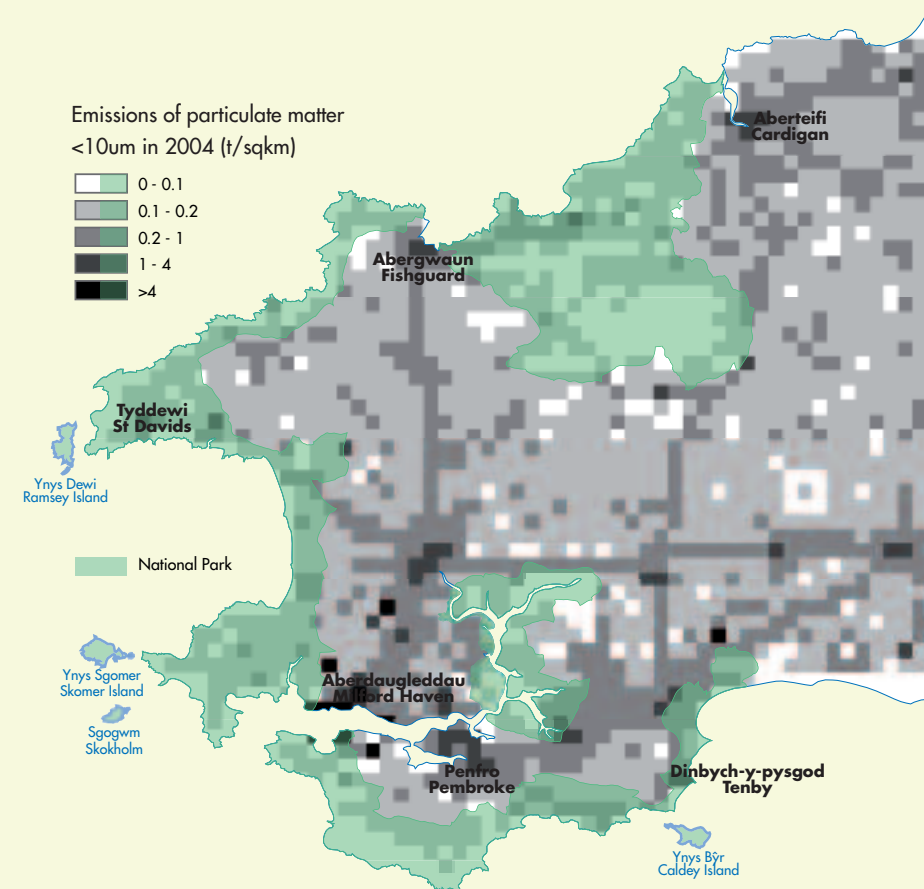
10.4.1.1 Traffic is a major source of most of the pollutants targeted by the UK Air Quality Strategy. Pollutants of particular concern are nitrogen dioxide and particulates from road transport, and measures to reduce these are likely to help reduce other pollutants identified in the Strategy. Partners should support the lead organisations, namely Pembrokeshire County Council and the Environment Agency, in their pursuit of UK Air Quality Strategy objectives.

10.4.1.2 **Government figures for volumes of UK road traffic, and the net distance it travels, show likely continued growth⁴⁶, so less-polluting vehicles are not a complete solution to the air quality issue.** (Nor do they address other traffic-related effects, such as fragmentation of communities and dispersal of services.)

10.4.2 A2: Mitigate pollutant/environmental interactions

10.4.2.1 In certain weather conditions locally generated pollutants can be trapped and deposited in higher concentrations than normal. Easterly winds can bring airborne pollution from south-east Wales, England and continental Europe into Pembrokeshire and the National Park.

10.4.2.2 Inborne pollutants of particular concern are particulates (dust) and pollutants that react to give rise to ground level ozone. A fuller understanding of pollutant/environmental interactions, coupled with reduction measures, could enable partners and industry to mitigate problems.



Map 10a: Particulates: Pembrokeshire distribution

46 e.g. Department for Transport: Transport Statistics for Great Britain 2006, Table 7.5

11 Water Resources and Quality

The quality and quantity of water in catchments affecting the National Park directly influence people's health and wellbeing, the condition of habitats and species - including sites of European importance - and people's enjoyment of the National Park.

11.1 AIM

Conserve and enhance water quality and resources.

11.2 ASSESSMENT

- 11.2.1 Most of the water taken from rivers in Pembrokeshire is used for public water supply, and Dwr Cymru Welsh Water's water resources plan⁴⁷ for the area forecasts no requirement to increase licence volumes during the 25 year planning period. However, the plans are reviewed annually and recent revised population growth estimates, along with proposed industrial developments, indicate that additional resources may be needed to meet these demands in the future.
- 11.2.2 There are concerns that abstraction for spray irrigation during periods of dry weather may adversely affect river flows in Pembrokeshire; de-watering associated with mineral extraction may also affect water resources. Changes in land use and drainage systems may influence river flow regimes, particularly in the upland reaches of catchments.
- 11.2.3 Much of West Wales has been exempt from groundwater licensing and abstraction is not currently quantified in these areas. This situation will change as a result of the Water Act 2003 as the groundwater exempt area status will be removed.
- 11.2.4 **Climate change could alter the dynamics of water supply and demand, hydrology and pollution concentrations.**

47 Every five years water companies in England and Wales submit detailed water resources plans to the Office of Water Services and the Environment Agency. The plans describe how the companies intend to meet predicted customer demand over a 25 year planning period.



Water Resources and Quality

11.2.5 Inland water quality has much improved in recent years, but diffuse (as opposed to point source) pollution and nutrient enrichment from some agricultural uses are significant issues and, by their nature, can be difficult to manage.

11.2.6 Coastal water quality, as assessed through bathing water standards, is generally high.

Management Unit - watercourses	Current status	Target status 2012	Target status 2018
Western Cleddau	No water available	No water available	No water available
Eastern Cleddau	Over licensed	Over licensed	Over licensed
Never, Gwaun	Water available	Water available	Water available
Alun, Solva, Castlemartin	No water available	No water available	No water available
Cartlett Brook, Westfield Pill, Gann Flats, Cresswell River, Ritec	Water available	Water available	Water available

Table 11a: CAMS assessment of water availability - watercourses

Source: Environment Agency Wales

Management Unit - groundwaters	Current status	Target status
Bosherston groundwater	No water available	No target set (no management possible until exemption status removed).
Park Springs groundwater	No water available	
Milton groundwater	Over licensed	
Pendine groundwater	Water available	

Table 11b: CAMS assessment of water availability - groundwater

Source: Environment Agency Wales

Water Resources and Quality



Gwaun Valley

11.3 EVIDENCE FOR ASSESSMENT

11.3.1 Catchment Abstraction Management Strategy assessment of water resources

11.3.1.1 The Environment Agency Wales' Catchment Abstraction Management Strategy (CAMS) 2006 (with 2007 update) provides the following assessment of water resources.

11.3.2 River basin management plan objectives and Environmental Status

11.3.2.1 River basin management plans are being drafted by the Environment Agency Wales, in concert with government, statutory agencies, industry and others, in accordance with the Water Framework Directive.

11.3.2.2 The Western Wales River Basin district management plan will cover the National Park area; its objectives are likely to cover water resources and quality, wildlife and recreation. Environmental status (biological and chemical) of river stretches, and of modified water bodies, will be assessed. The Management Plan will in future be able to relay environmental status and progress against the objectives. Inadequate status will be addressed by programmes of measures drawn up by the Environment Agency.

11.3.2.3 **The River Basin district management plan process has identified a number of significant water management issues for Western Wales: climate change** (which affects flow rates and groundwater levels, demand, salinity, runoff, siltation etc.); **pollution** (organic pollution, pesticides, phosphorus and sediment); **abstractions and de-watering**.

11.3.3 Quality of identified Bathing Waters

11.3.3.1 There are 20 bathing waters identified under the EC Bathing Waters Directive in the National Park. The EC Mandatory Standard is the legally prescribed standard test for bathing

Water Resources and Quality

*“...the clean, clear water.”
Residents and Visitor Survey*

water cleanliness. Blue Flag and Green Coast Awarded beaches must also satisfy the EC Guideline Standard, which is 20 times more stringent.

11.3.3.2 To be awarded the Blue Flag, beaches must also satisfy a range of other criteria, including access, health and safety and physical cleanliness. The Green Coast Award recognises beaches of Guideline Standard which do not have the levels of development and management associated with 'traditional' beaches which are more obviously Blue Flag candidates. 11 National Park beaches have a Blue Flag award and 14 beaches have a Green Coast award.

11.3.3.3 Bathing water quality in the National Park is susceptible to intense or prolonged rainfall since many beaches feature watercourses. Revisions to the Bathing Water Directive will reflect this susceptibility by looking at performance based on water quality during the previous five years.

11.4 POLICIES

11.4.1 W1: Manage flow rates and groundwater levels

11.4.1.1 The Environment Agency Wales' Catchment Abstraction Management Strategy for the Cleddau and Pembrokeshire Coastal Rivers is a six-year plan which provides an assessment of water resources, a framework for licensing by the Environment Agency of water abstraction (where this exceeds 20m³ of water per day) and a means of facilitating licence trading.

11.4.1.2 The Cleddau and Pembrokeshire Coastal Rivers Catchment Abstraction Management Strategy covers most of Pembrokeshire and a small part of Carmarthenshire and includes the catchments of the rivers Eastern and Western Cleddau and a number of coastal rivers, namely the Nevern, Gwaun, Alun, Solva, Ritec, Cresswell, Castlemartin Corse, Westfield Pill and Gann Flats Stream.



Pembrokeshire estuaries: important sites for waders



Cleddau Estuary



Bosherston

Water Resources and Quality



Pwll March, Newgale

11.4.1.3 Abstraction licensing takes account of the river flows required to protect ecological objectives within the area; if a particular conservation interest is affected (e.g. a Special Area of Conservation) then higher flows may be protected. A review of abstraction consents specifically looked at existing licences in respect of Special Area of Conservation requirements, and the determination process for applications for abstraction will consider the requirements of Special Areas of Conservation. Licensing also takes effluent dilution requirements, navigation and other in-river needs into account.

11.4.1.4 When it becomes possible to regulate and license groundwater abstraction in the Catchment Abstraction Management Strategy area the Environment Agency will be better able to identify resource availability and the likely restrictions that would be imposed on abstractions.

11.4.1.5 The NPA and partners should support the Environment Agency in its delivery of the Catchment Abstraction Management Strategy and the Pembrokeshire and Ceredigion Rivers Catchment Flood Management Plan, currently in preparation (see also W5 below). Support measures will include appropriate development planning and land management policies.

11.4.2 W2: Reduce water pollution

11.4.2.1 The Water Framework Directive commits European member states to achieve good environmental status of all water bodies (including marine waters up to 1 kilometre from shore) by 2015. Good ecological status refers to the quality of the structure and function of surface water ecosystems.

11.4.2.2 Pollution from individual outfalls and drains into rivers, estuaries and coastal waters has decreased significantly in the last 35 years and biological quality has improved as a

Water Resources and Quality

*“...fantastic, almost tropical beaches in the South,
wild pebble beaches in the North.”*

Residents and Visitor Survey

result; however diffuse pollution remains a problem. **Issues include acidification of freshwater, and nutrient enrichment and pollution related to intensive farming practices.**

11.4.2.3 Agri-environment schemes, cross-compliance measures and good practice codes can help reduce polluting inputs from agriculture. The Environment Agency undertakes catchment survey in catchments where diffuse pollution is a problem, in order to raise awareness of inappropriate management practices and to promote good practice.

11.4.2.4 Land management practice can result in soil erosion. In addition to the implications for the soil resource itself, the impacts of erosion for water include increased runoff, siltation, sediment suspension, and pollution (e.g. by carried pesticides). With more intense precipitation events likely to arise from climate change, soil erosion is likely to become an issue of increasing importance. (Please see also policies for soil management.)

11.4.2.5 **Partners should continue to support the Environment Agency and land managers in pursuit of catchment objectives.**

11.4.3 W3: Limit the impact of climate change on water resources and quality

11.4.3.1 Impacts of climate change on water may include: changes in flow rates and groundwater levels; flooding, altered patterns of demand for water; salination of freshwater by sea-level rise; changes in pollutant flushing rates; increased runoff and erosion.

11.4.3.2 Generic responses to climate change are described in the relevant section (9). Climate change also highlights the need to reduce the exposure of water resources to other pressures identified in this section, particularly where there

are in-combination effects (e.g. high abstraction demand during periods of low rainfall).

11.4.4 W4: Reduce marine pollution risks

11.4.4.1 Marine pollution has direct and indirect ecosystem effects. Individual pollutants can have short, medium and/or long term effects (highly persistent toxic substances and heavy metals can remain a problem for decades or centuries).

Marine litter can lead to physical injury, poisoning and entanglement of marine wildlife.

11.4.4.2 Various partners, including the NPA, contribute to pollution prevention, contingency planning and control measures with the aim of reducing background levels of pollution in the marine environment.

11.4.5 W5: Manage the impact of development on water resources and quality

11.4.5.1 Development planning policy should take water-related issues into account from an early stage in the process of identifying land for development and redevelopment. In particular, policy should:

- promote increased efficiency and demand management of water resources, particularly in those areas where additional water resources may not be available. Policy should ensure that sewage disposal facilities and surface water draining capacity are adequate for new development
- include policies on the location of potentially polluting developments and the importance of separating incompatible uses as required by Planning Policy Wales
- take account of British Geological Survey data on potential ground movement and subsidence, of information on potentially contaminated land and of shoreline management planning

12 Enjoying the National Park

National Parks were designated in part for the outdoor recreation opportunities they offer. Enjoyment of the National Park's special qualities is obviously an end in itself; it also contributes significantly to people's health and wellbeing and is a mainstay of the region's economy. By managing the landscape that people come to enjoy and the Pembrokeshire Coast Path, inland rights of way, beaches and car parks that the majority of visitors use, the NPA and its partners manage and protect some of the most important tourism 'facilities' in Pembrokeshire.

Outdoor recreation can lead people to have an increased regard for the environment and can generate increased support and commitment to National Park purposes and to sustainability in general. In some instances, recreation can however have negative impacts on the special qualities, and on other people's enjoyment of them.

12.1 AIM

Promote sustainable public enjoyment of the special qualities of the National Park.

12.2 ASSESSMENT

12.2.1 Access and recreational provision is in general very good. Most recreational activities are easily accommodated and the direct impacts of outdoor

recreation do not in general pose a significant threat to the special qualities of the National Park.

- 12.2.2 The location and/or timing of some activities, or the manner in which they are conducted, can potentially cause problems. There may be impacts on other people's enjoyment of the National Park (and in particular people's enjoyment of tranquillity), and/or disturbance to wildlife for example, or damage to the archaeological environment. These instances are relatively few and in most cases can be addressed by low key management or voluntary codes of practice.
- 12.2.3 There may also be wider impacts associated with some levels of recreational use - for example increased traffic volumes (which may have site or area-specific implications), an increased burden on infrastructure (e.g. water use and sewerage) and more pressure for facilities - which may in turn encourage higher use levels. High user volumes at a particular time may turn a basically innocuous activity into a potential problem.
- 12.2.4 Competition for a limited recreational resource can bring users themselves into conflict. The current seasonality of tourism means that some opportunities are 'under-used' off-season, and over-used at other times.
- 12.2.5 Climatic and economic factors will continue to shape visitor season and demand. For example, wetter winters and increased storminess might make UK holidays less attractive out of the traditional season, but warmer summers, a weak pound and fewer cheap flights might encourage more UK citizens to holiday at home. It is difficult to know the likely net effect of climate and economy on recreation in the National Park, but physical consequences of climate change on outdoor recreation could include:

Enjoying the National Park

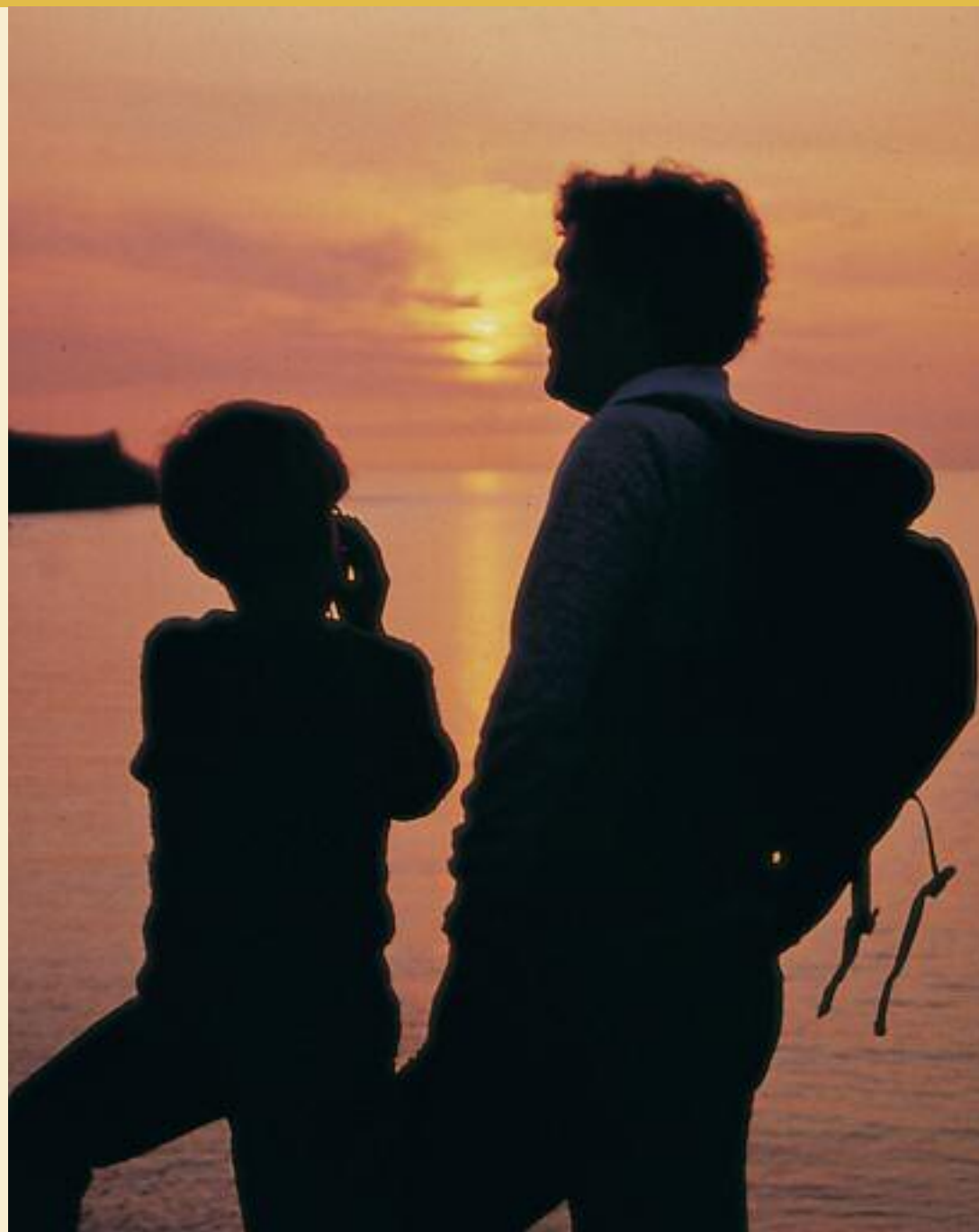
“A friendly reception...the vitality of the people of Pembrokeshire.”
Residents and Visitor Survey

- movement inland of some beaches and loss of others
- loss of coastal roads and beach head bridges
- cliff erosion, new inlets, losses/gains in tidal access and losses of estuary-side paths at certain states of the tide
- accelerated loss to erosion of historic features and relocation of habitat
- more variability in bathing water quality

12.3 EVIDENCE FOR ASSESSMENT

12.3.1 Feedback and use levels

- 12.3.1.1 User survey and feedback/complaints data suggests a high degree of satisfaction with current access and recreational provision. **A survey in 2007 indicated that satisfaction levels with the Pembrokeshire Coast Path were among the highest for any National Trail in the UK.**
- 12.3.1.2 There is also a high level of user satisfaction with inland rights of way. A Rights of Way Improvement Plan was completed in 2008 by the NPA and Pembrokeshire County Council; surveys for the Improvement Plan and consultation with the Local Access Forum indicated a generally high level of public satisfaction with path condition and signage. Specific problems included dog fouling, rutted/muddy/overgrown paths, poor signage, litter, blockages and restricted access on Ministry of Defence land.
- 12.3.1.3 The 2003 Pembrokeshire Visitor Survey identified walking as by far the most popular activity undertaken by visitors and the repeat survey carried out in 2007 suggests that its importance is increasing. Information on user numbers (such as path count data) is helpful for management purposes but is limited in terms of user satisfaction.



Enjoying the National Park



Kite Surfing, Broad Haven

12.3.1.4 4.7 million Pembrokeshire visitor days were recorded in 1994. The Recreation Audit⁴⁸ of south-west Wales in 2004 identified the scale, distribution and indicative impacts of activities in the National Park, and is being developed by the Pembrokeshire Coastal Forum as a basis for recreation planning and management. Otherwise there is little systematic monitoring of recreation trends in the National Park.

12.3.2 Assessment of environmental, community and user capacity

12.3.2.1 **Enjoyment of the National Park should be based on the National Park's special qualities, and should not damage them or others' enjoyment of them.** Trend monitoring undertaken in relation to other management aims (and identified in other sections in this Management Plan) is important in helping to identify pressures arising from or exacerbated by pressures from recreation.

12.3.3 The state of the access network and of recreational provision

12.3.3.1 The NPA and its partners monitor the state of the access network and of many recreation opportunities. The NPA is currently preparing (2009), with partners, a more detailed recreation management plan for the National Park and Pembrokeshire Coast. Some of the main areas of opportunity and challenge are described below.

12.4 POLICIES

12.4.1 E1: Promote appropriate types of recreation

12.4.1.1 The National Park is a key attraction for visitors to Pembrokeshire and south-west Wales. **Helping people to enjoy and understand the special qualities of the National Park is a core NPA responsibility.** In the unlikely event of an irreconcilable conflict between National Park purposes, the 'Sandford

⁴⁸ http://library.coastweb.info/701/1/Report_Final.pdf

Enjoying the National Park

*“Contrasting landscapes: mountains, valleys, farmland, seascapes.”
Residents and Visitor Survey*

principle’ gives priority to conservation goals.

12.4.1.2 The NPA’s view is that recreation promotion needs to take more account of the benefits and impacts of different activities, and that recreation in the National Park should in general:

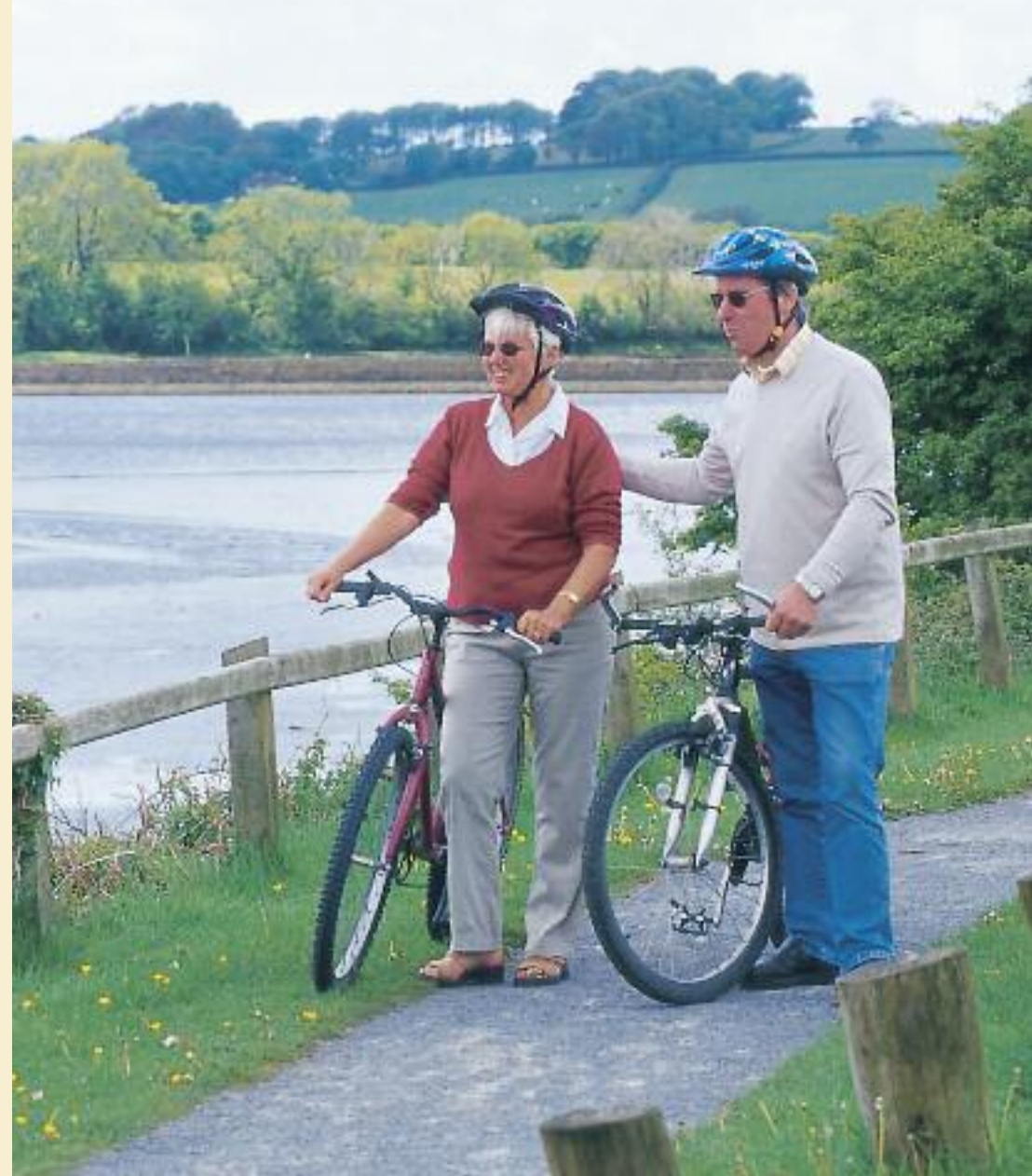
- be based on the special qualities of the National Park, fit well into the landscape and be non-intrusive
- encourage physical exercise and provide opportunities to learn about the special qualities of the National Park
- be accessible to a wide variety of people with different abilities and from different backgrounds
- reflect people’s different expectations (so some areas should be easy to use and enjoy, for example, while others remain more challenging and wild)
- be developed with the support of local communities, users and businesses and where possible promote community development and cohesion

12.4.1.3 Promotion of the area to visitors is the remit of Pembrokeshire County Council, of the Regional Tourism Partnership and of tourism/recreation operators, and the NPA works closely in partnership with these and other organisations under the Tourism Strategy for South and West Wales⁴⁹. Nevertheless, promotion could be better aimed to deliver more for National Park purposes. In particular:

- activities which promote health and/or for which spare capacity exists could be encouraged
- demand for more intrusive activities could be reduced or carefully directed (especially where management controls are limited, such as in inshore waters)

49 ‘Open All Year’: http://www.swwtp.co.uk/english/pages/e_framedoc.html

Cyclists, Carew Mill Pond



Enjoying the National Park

“Opportunities for all - young/old, abled/disabled, poor/rich to enjoy the Park.”
Residents and Visitor Survey

- people who are not fully benefiting from what the National Park has to offer could be informed of opportunities, and
- the seasonal nature of demand could be better regulated (by extending the season rather than by increasing visitor numbers at peak times)

12.4.2 E2: Remove barriers to people’s enjoyment of the National Park

12.4.2.1 People’s demand for recreation is a function of their age, ability, past experience, wealth, expectation and willingness to try something new. The NPA and its partners must be able to cater for most possible variations and offer

Main attributes of activity	Management and promotion
1. Has health benefits, is non-intrusive, is inherently non-polluting and is based on active enjoyment of the special qualities of the National Park.	Widespread promotion and minimal management, unless there are impacts associated with high volumes of the activity or the activity is conducted commercially. Examples might be walking, sea rowing and swimming.
2. Has similar attributes to those above, provided the participants are responsible and choose their location/season sensibly, but the activity does have potential for adverse impact.	Activities may require zoning or codes of conduct and close liaison between users and conservation organisations. Activity can be promoted providing that the initiatives associated with the promotion are committed to good practice. Examples might be climbing, canoeing and coasteering.
3. May or may not have health benefits but, may have public safety consequences and/or environmental impact if pursued in certain ways or at certain locations, and may generate complaints from other users.	If there are good contacts with participants/providers and training and good practice can be encouraged then activity can be promoted, subject to progress on good practice, and activities focused on a few sites that can be monitored. Otherwise promotion would be limited. Examples might be wildlife boat trips, kite surfing and beach riding.
4. May or may not have health benefits but by its nature or scale compromises the special qualities of the National Park and/or features of designated sites. May have public safety consequences and may generate complaints from other users. Is usually powered and has associated sustainability issues.	These activities would not be promoted. They would be resisted, zoned or otherwise liable to strong management intervention on land in the public realm. Examples might be hovercraft use, quad biking on public land and power boat events.

Table 12a: What level of management and promotion should different activities receive?

Enjoying the National Park

appropriate recreational opportunities to all those who want them, from beginner to expert, as well as proactively encouraging people who might not typically take part to consider doing so..

12.4.2.2 Accordingly the NPA and partners will continue to remove the barriers to people's participation in the types of activities identified for promotion under E1. Although much has been done to improve access to the National Park for all, many factors - such as lack of awareness of the opportunities, lack of disposable income or transport, or caring responsibilities - can act as barriers. While there is no single characterisation of an 'excluded person', since any of these factors may affect anyone, excluding factors may often occur in combination.

12.4.2.3 **Significant lengths of easy access paths have been improved and promoted on the Pembrokeshire Coast Path** because this is where the greatest demand is concentrated. Routes featured on the NPA website can be searched for ease of access. The NPA will however ensure that the National Park continues to offer a range of experiences, from the easy to the challenging. This may mean that **in some areas, which offer particularly arduous terrain or recreational challenge, paths will be deliberately left unimproved to complement the wild experience valued by those who use those areas.**

12.4.3 E3: Manage coastal and inland access/recreation opportunities

12.4.3.1 Much of the attraction of the National Park, and as a consequence the pressure for recreation, is focussed in a narrow coastal strip. Many of the access opportunities are therefore concentrated in what might be called the public realm - that is on land owned by public or 'semi-public' bodies - where there is often a right or perceived right of public access. In Pembrokeshire this description applies to



Disabled Ramblers Group

Enjoying the National Park

much of the undeveloped coast, with the Pembrokeshire Coast Path National Trail giving access to long stretches of cliff land, and almost all the foreshore having public access through local authority leases.

12.4.3.2 The coastal scenery and beaches are the National Park's most important attraction and are a key reason for the high frequency of repeat visits from those living outside the area. Beach and inshore recreation are the basis of the tourism product of Pembrokeshire, particularly in the south. The 2007 visitor survey found that around 25% of summer visitors engage in beach activities as their main occupation. The corresponding percentages for autumn or spring visitors are 5% and 9% and through the winter surfers, kites and windsurfers join family groups and dog-walkers out to get some air.

12.4.3.3 There are more than 50 clearly identifiable beaches in the National Park. On most of them the foreshore is leased by the NPA, with beaches east of Giltar Point leased by Pembrokeshire County Council. Many of the beachheads are in public ownership and most beach management functions are provided by Pembrokeshire County Council, working closely with the Environment Agency Wales, The National Trust, the Countryside Council for Wales, the Royal National Lifeboat Institution, the NPA and others.

12.4.3.4 In many ways beaches are one of the last 'commons' where there are, or are perceived to be, few rules. It is only if activities are done without consideration for others or if the numbers get too great that there is any real problem. The concerns that do arise stem mainly from conflicts between users and from recreation-related impacts on local communities. The following issues are raised regularly:

- loose dogs and dog fouling

- fast power craft (in particular personal watercraft) close inshore
- noise (again, particularly from personal watercraft) and general anti-social behaviour
- fires, illegal camping and habitat damage
- vehicles on beaches
- complaints regarding regulation (e.g. charging, dog restrictions)
- horse-riding (in large groups) on beaches during the summer
- vandalism

12.4.3.5 Pembrokeshire County Council manages the beach award and management process (i.e. for Blue Flag, Green Coast and Seaside awards) through a coordination group that involves a wide range of organisations. Pembrokeshire County Council also provides a cleaning service for award beaches and a responsive service on non-award beaches, as well as a litter cleaning service for many public promenades, roadsides and beachheads complemented by voluntary Coastcare groups. In addition, Pembrokeshire County Council manages water safety through a lifeguard service provided by the Royal National Lifeboat Institution, and applies and enforces dog restrictions on parts of key beaches throughout Pembrokeshire.

12.4.3.6 Water quality - a particularly important reputational issue for Pembrokeshire - is managed jointly by Pembrokeshire County Council and the Environment Agency Wales. The number of beaches regularly reaching guideline quality has increased steadily over the last 20 years. If beach water quality is found to be below the expected standards, investigations of sewerage, drainage systems and river catchments are instigated to attempt to identify the issues.

Enjoying the National Park

12.4.3.7 **The 300km Pembrokeshire Coast Path National Trail gives almost continuous access to the coastline.** The 1997 survey suggested that there are around 915,000 Coast Path user days. NPA, National Trust and Ministry of Defence owned land, plus de facto access seaward of the Pembrokeshire Coast Path, provide extensive area access opportunities and potential on the coast.

12.4.3.8 Funding from the Countryside Council for Wales enables the NPA to deliver a high level of Coast Path management. Recent focus has been on providing easy access and removing obstacles to access in some sections, but we have been keen to maintain the wild and challenging nature of other sections. The Pembrokeshire Coast Path Strategy will be revised within the next two years. Anticipated challenges include, in no particular order:

- balancing demand for ease of access with demand for a challenging experience
- adapting the coastal recreational resource to a changing climate
- helping those who market and promote the coast and the path to make more of the special qualities of the National Trail, within the context of the all-Wales Coast Path
- establishing opportunities for better area-wide access and multi-use, especially cycling

12.4.3.9 **Inland rights of way in the National Park form a large 853km network, and 82% is open and available for use.** The NPA has delegated powers from Pembrokeshire County Council to manage most of the inland rights of way.

12.4.3.10 Although the Pembrokeshire Coast Path is the most heavily used path, the ability to take circular walks from it is part of its attraction. Circular routes greatly increase the scope for -



Coast Path, Marloes

Enjoying the National Park

Cycling, St Govan's



and attraction of - walking or running. They also provide a series of valuable community links. A geographical spread of more than 200 of the best circular walks is prioritised for maintenance and widely promoted.

12.4.3.11 There is increasing provision of on- and off-road cycle routes in the National Park, by Pembrokeshire County Council and Sustrans, including traffic-free routes and National Cycle Network. Inter-town and country lane cycle routes are generally very good, and while there are off-road cycling opportunities (such as the coastal route in Range East), there are limited opportunities for specialist mountain biking. Potential opportunities are however being explored.

12.4.3.12 88% of the 189km bridleway network is open and available for use, but its recreational potential for riders is limited by route fragmentation.

12.4.3.13 Challenges include, in no particular order:

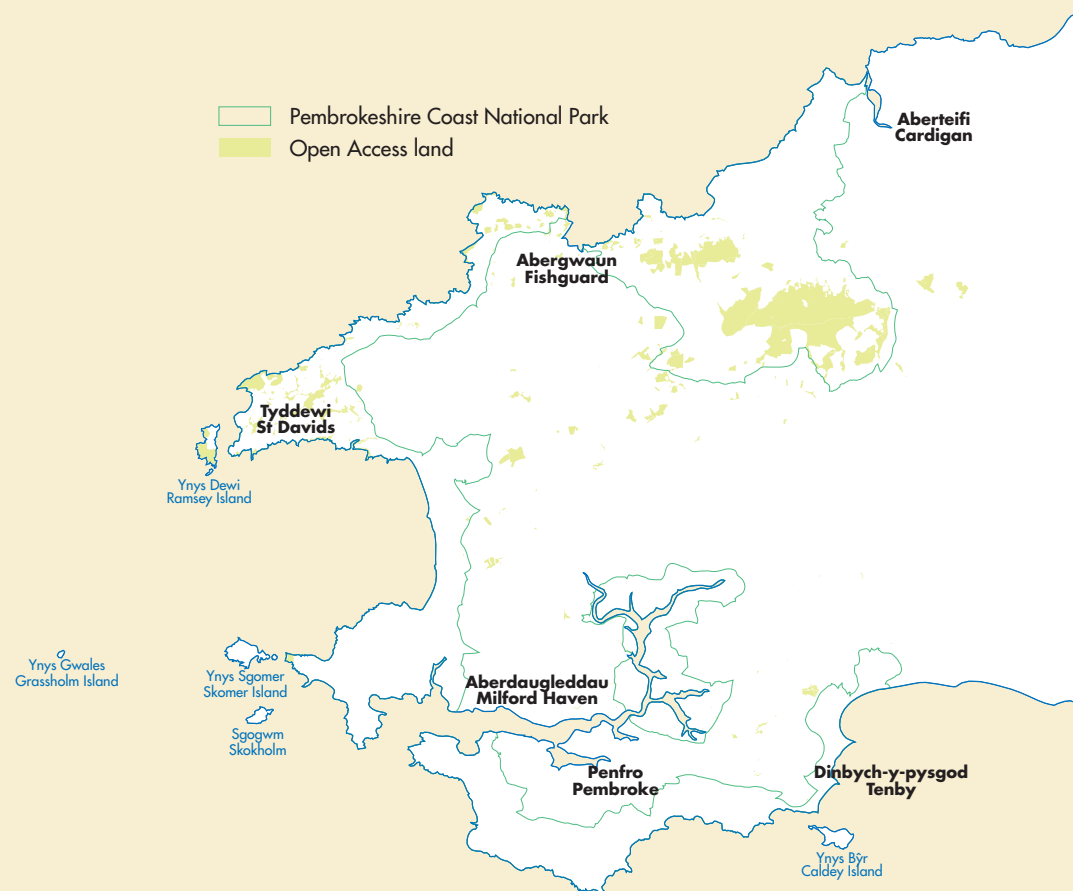
- completing a strategic network of rights of way
- improving the quality and accessibility of some paths
- moving from standard solutions to those which reflect the local qualities of the landscape
- resourcing an ever-increasing maintenance load as the length of paths to be maintained increases
- working with local communities to increase local interest, use and involvement with the path network
- making the most of opportunities for mountain biking
- addressing the fragmentary nature of the bridleway network
- responding to the impacts of climate change

12.4.3.14 Around 4,524 hectares of common land and coastal slope

Enjoying the National Park

and 1,188 hectares of open country was designated as access land in the National Park as a result of the Countryside and Rights of Way Act in 2000 - about 10% of the National Park. De facto access already existed over most of this land, and patterns of use have not changed greatly since the Act. However, the Act increased the management role of the NPA in relation to these areas and access to previously inaccessible areas has improved with blocked paths being opened in strategic locations. The NPA will continue to work closely with landowners and recreational users to make the most of the opportunities that the new right of access offers.

- 12.4.3.15 The beaches and rights of way network are only part of the way in which people access the coast and countryside: car parks and associated facilities are important to local people and to visitors. The NPA owns and manages approximately 50 car parks and parking areas in the National Park, Pembrokeshire County Council provides around 80 more, and the National Trust, community councils and private owners also provide facilities.
- 12.4.3.16 **The challenge with car parking is finding the right balance of facilities.** Most sites are overstretched for a few days in peak season but there is little point in extending facilities which may be only used fully for a few days of the year. Increased car parking is also likely to encourage more car use and lead to increased pressure on the recreational resource and on what are often narrow access roads. On the other hand, inadequate car parking may lead to congestion and blocked roads as drivers try to park elsewhere.
- 12.4.3.17 The situation is particularly difficult as climate, health and access issues interact. The Greenways Partnership has established a major increase in bus use in Pembrokeshire.



Map 12a: Access land in the National Park

Enjoying the National Park

“...the many miles of scenic inland walks.”

Residents and Visitor Survey



Paddle Boarding - Ramsey Sound

This is widely promoted and well-used. Free parking (and the vast majority of car parks in the National Park are free) may however encourage car use at a time when increasing use of public transport is a priority.

12.4.3.18 Challenges for the future therefore include:

- better coordination of the parking offered by different agencies
- gaining public support for more charging car parks to encourage greater bus use
- resisting most proposals for new and extended car parks unless an unusually good case can be made
- finding resources to maintain and upgrade a set of car parks which were built in the 1960s and 1970s and are in need of major refurbishment
- ensuring that development planning policy attracts visitors outside the peak season and ensures that the National Park continues to hold its attraction as a landscape of national and international importance

12.4.4 E4: Manage access to inshore and inland waters

12.4.4.1 The Strategic Plan for Water Related Recreation in Wales⁵⁰ indicates that water facilities in Wales are under-used. The coastal strip, Daugleddau and Eastern and Western Cleddau rivers form a key recreational interface in the National Park. The NPA works closely with water recreation partners to promote and manage water-related activities, subject to the achievement of management policies for wildlife, landscape and heritage conservation.

12.4.4.2 **There are excellent opportunities inshore for swimming, surfing, kayaking/canoeing, windsurfing or otherwise enjoying the water and exploring the coast.** These activities confer huge benefits to people's health and wellbeing, as

⁵⁰ http://www.brighton.ac.uk/waterrecreation/files/wales_plan.pdf

Enjoying the National Park

well as tourism potential. Tides and topography limit navigation in inshore waters for some craft, and three military ranges constrain access to sea danger areas off the south coast.

12.4.4.3 There is good boat access (subject to tide and draught) on the Milford Haven Waterway as far upstream as Haverfordwest and Canaston Bridge. There are no rivers with navigation rights above the tidal limits in Pembrokeshire, but opportunities for negotiated access exist (outside the National Park) on the Eastern and Western Cleddau rivers. The only significant non-tidal rivers in the National Park are the Nevern and the Gwaun - both of these are open for fishing use and offer riverside footpaths but on-water recreation potential (subject to agreement) is limited to in-spite canoe use.

12.4.4.4 A large number of slipways exist around the coast and on the Milford Haven Waterway, in numerous ownerships. There are low levels of management: most slipways are unmanned and free. While this makes them popular it can also make it more difficult to manage intrusive activities and fund improvements. The NPA provides several of the slipways across beaches, and licenses local community groups to manage moorings.

12.4.4.5 Many launch sites are in village or remote locations with narrow road access and are not ideal for increasingly large vehicle/trailer combinations. Launching across small beaches can cause disruption and pose risks. Although beach launching has always taken place, an increase in the use of four wheel drive vehicles for towing has increased the potential for conflict between different beach users. In response, the NPA has started to employ seasonal slipway wardens at key sites. Concerns about increased beach parking or safety concerns about beach launching limit the



Go4it! activity

Enjoying the National Park



Horse riding, Freshwater West



Porthclais



Sailing, Solva

scope to improve or expand existing slipways, and the potential for new slipways is limited.

12.4.4.6 The NPA works with Milford Haven Port Authority to provide a jointly-funded water ranger service on the Milford Haven Waterway to help users to enjoy the opportunities, and also to enforce the Waterway Recreation Plan, which includes activity zoning.

12.4.4.7 Harbour access outside the Haven is heavily tide-dependent. This (added to the exposed nature of much of the coast, tidal rips, and sea danger areas) limits the potential for expansion of coastal cruising. There has however been a recent major increase in canoe and rowing use which have advantages of sustainability, affordability and, in the case of rowing, a strong community element.

12.4.4.8 Reasonably-priced moorings are available around the coast and in the Haven. These lie mainly in small harbours and small blocks of offshore moorings, but there is a shortage of all-tide visitor moorings and a very low level of provision for visiting boats. Milford and Neyland marinas together provide over 600 berths; there are plans for new facilities at Goodwick, Milford Haven and Pembroke Dock.

12.4.4.9 Management of inshore waters presents some particular issues. **The voluntary Pembrokeshire Marine Code, coordinated by the Pembrokeshire Coastal Forum, is highly successful but enforcement backup is also needed.**

Management measures beyond voluntary agreements tend to be weak and there is no evident way to limit growth to a sustainable level. Pembrokeshire County Council has indicated an intention to update their bathing water byelaws, but without national willingness to introduce licensing, training or insurance requirements, management tools will tend to be weak in inshore waters. Outside

Enjoying the National Park

harbours and bathing waters there is no byelaw system and very little on-water monitoring or enforcement.

12.4.4.10 Challenges for the future include:

- strengthening management of inshore waters, managing use levels at key launch sites and encouraging longer season use of existing facilities
- making use of the potential at some slipways to increase overall use, through promotion and/or active outreach (e.g. to young people), while keeping other areas undeveloped and tranquil
- introducing charging for slipway use if increased use means more management is required for safe and sustainable use and managing the probable displacement effects
- responding to calls to limit or ban noisy craft such as hovercraft and personal watercraft with knock-on enforcement costs and implications
- reviewing options for providing a more accessible and attractive launching facility for dive boats giving access to the Haven and the islands
- encouraging more use of the Waterway by local people, especially through activities which are sustainable, healthy and inclusive
- expanding the principles of the *Go4It* initiative to encourage more local young people to make better use of the waterway
- ensuring that marina berth and mooring holders are required to abide by the Milford Haven Port Authority user guide



Cliff climbing

13 Understanding the National Park



Understanding, enjoyment and conservation of the special qualities of the National Park and the wider environment are closely linked.

Our hope is that the National Park inspires in people a lifelong interest in and care for their immediate and wider surroundings, and offers people of every generation ample opportunity to improve their health and wellbeing.

13.1 AIM

Promote public understanding of the special qualities of the National Park.

13.2 ASSESSMENT

- 13.2.1 Working with and through partner organisations, including recreation operators, conservation and heritage bodies, and schools, and various media, the NPA aims to increase people's active support for National Park purposes.
- 13.2.2 It's often difficult to assess the effectiveness of a specific initiative on people's knowledge, attitudes or behaviour. However, the NPA's work in this area is highly rated overall by users, and NPA sites and services which are particularly relevant to the aim of understanding score highly in independent assessments. The NPA would however like to see a broader awareness of the benefits of National Parks and broader uptake of the opportunities.
- 13.2.3 **General awareness of environmental and health issues appears to be increasing. This may be because of increased coverage of the issues and/or greater receptivity by people - but these could in themselves be because many of the issues are growing more acute.**

Understanding the National Park

13.2.4 Audiences which the NPA and its partners find it harder to reach include those aged 14-25, less-able people, people on low income, other disadvantaged groups, ethnic minorities and, naturally enough, people who are not particularly interested in the National Park. Many people are understandably unclear about which organisations do what and why in the National Park.

13.3 EVIDENCE FOR ASSESSMENT

13.3.1 Feedback from users and independent assessment of results

13.3.1.1 The potential 'learning audience' is limitless, although it can be segmented in various ways to reflect the different outcomes sought. It is not always easy to gauge or attribute partners' success in influencing people because of the many external factors often involved. The NPA relies heavily on user satisfaction survey and independent assessment of NPA-operated sites and services. Assessment includes performance in award schemes and an all-UK National Park information centre survey that takes place every two years.

13.3.1.2 Indirect measures of effectiveness include measures of take-up of publications, visits and repeat visits to sites, and website traffic. The NPA aims to attain or exceed any best practice and accessibility standards relevant to our services.

13.3.2 Awareness as a factor affecting the state of the National Park

13.3.2.1 **The state of the National Park itself is a measure of the net outcome of awareness and behaviour, not just of individuals but - perhaps more significantly - that of organisations and policy-makers.**

13.3.2.2 In particular, this Management Plan identifies awareness as a significant factor affecting the state of the archaeological



Coasteering

Understanding the National Park

"The absolute fantastic feel of the place from when I was a kid and we camped near Monkstone - to now when I have brought my family back - only it's better even than through the rose-tinted specs of childhood."

Residents and Visitor Survey



Young visitors to Oriel y Parc, St Davids

resource, the historic environment, geodiversity and water quality. Trends in broader factors that affect the state of the National Park - such as climate change and land management - imply that significantly different policy directions are needed, to encourage and enable people to make the necessary changes in their behaviour as individuals.

13.4 POLICIES

13.4.1 U1: Promote the National Park as an inspirational basis for lifelong learning⁵¹

- 13.4.1.1 The National Park offers complex and fascinating geology, diverse wildlife and a rich historic landscape. Its communities, settlements and culture are equally diverse. The National Park and its communities can all motivate people in various ways - to appreciate beauty, to value wild places, to go and play outdoors, or to paint or write or make music. There is a danger though that any deterioration in the quality of the National Park leads to declining expectations of 'what should be there' in successive generations - and then to further deterioration.
- 13.4.1.2 The NPA operates many sites and services that specifically promote understanding through enjoyment and experience of the National Park. These include programmes of activities and events, schools programmes, National Park visitor centres, Oriel y Parc landscape gallery in St Davids, Carew Castle and Tidal Mill, Castell Henllys Iron Age Fort and a host of historic, wildlife and recreation sites. However U1 is a principle uniting all NPA functions, and can apply also to partner organisations in the public and private sectors.

⁵¹ "Lifelong learning sees citizens provided with learning opportunities at all ages and in numerous contexts: at work, at home and through leisure activities, not just through formal channels such as school and higher education." http://en.wikipedia.org/wiki/Lifelong_learning, retrieved 070808

Understanding the National Park

13.4.2 U2: Explain organisations' purposes and values

- 13.4.2.1 Publicly-funded partners in particular must project a clear image and identity in terms of their ethos and functions, demonstrate performance, improvement and value for money, share skills and delivery where appropriate, and should be easily identifiable and contactable when problems arise.
- 13.4.2.2 Trust and reputation are prerequisites to any organisation's ability to change attitudes and behaviour. These can only arise from meaningful two-way engagement, transparency, and evidence of organisational learning.
- 13.4.2.3 A particular challenge for the NPA is that negative perceptions can result from planning casework. **The NPA's development management service works closely with planning applicants - thereby ensuring that 85-90% of planning applications gain approval**, and that high quality development results. However, determination of planning applications - whether the outcome is approval or rejection - can often result in at least one disaffected party. Gaining acceptance of the rationale for planning decisions is a challenge for all local planning authorities, and particularly for National Park authorities, since development planning issues are often thrown into sharper relief in National Parks.

13.4.3 U3: Involve people in decision making

- 13.4.3.1 **Working with the existing capital of people's knowledge, skills and goodwill is essential**, and the NPA seeks to involve people in strategic planning (such as management planning and development planning) as well as in more operational decisions (such as path creation and maintenance or site management).



Planning consultation

Understanding the National Park



13.4.3.2 Engagement with community councils and with communities of interest, such as clubs and societies, is essential to this policy. Many people however are not involved with these sorts of groups and the NPA recognises that more effort is needed to engage with individuals.

13.4.4 U4: Tailor messages to audience and outcome

13.4.4.1 In a world full of competing messages, and overrun with communication devices, the power, volume, frequency, combination, format and appeal of messages need to be tailored for their intended audience if they are to have any impact.

13.4.4.2 More attention should perhaps be given to targeting effort where the gains will be greatest. For example, **some of the biggest and most lasting gains in terms of future environmental protection and social responsibility may come from helping children and young people to explore and enjoy the National Park.** There are strong links from this to U5 below, and to principles of social inclusion.

13.4.4.3 Very rarely there may be tensions to be resolved between broadening understanding, and the means by which this is done, and other Management Plan aims. Examples might include pressure for provision of certain types of interpretation on stretches of undeveloped coast, or information about the location of endangered or vulnerable species.

Understanding the National Park

“The timeless beauty of the Park. We have been coming to the Park now for over 13 years and now are showing our children the beauty and spectacular coastline that has inspired us over the years.”

Residents and Visitor Survey

13.4.5 U5: Help people to make lifestyle changes

13.4.5.1 Increased understanding and different attitudes do not guarantee behavioural change, since there may be barriers that prevent people from taking the action they would like to. The barriers could relate to particular exclusion issues (such as remoteness and lack of transport), but could affect anyone (for instance the availability and cost of sustainably-caught fish).

13.4.5.2 The NPA aims to enable progressive learning and changes in behaviour, in itself as an organisation and in others. Here again the NPA needs to continue to look outwards, working with communities, local partner organisations and the Welsh Assembly Government so as to safeguard the National Park and the environmental and social context in which it exists.



Beach wheelchair initiative

14 Conclusion

This section highlights some of the Management Plan's key messages relating to National Park purposes.

- 14.1 Although the National Park Authority's duty to 'foster socio-economic wellbeing' applies in the pursuit of National Park purposes, efforts to achieve the purposes automatically bring extensive social and economic benefits in and of themselves. Welsh Assembly Government goals, spatial plan objectives for the Pembrokeshire Haven area, the aims of the Community Plan for Pembrokeshire, and the Health, Social Care and Wellbeing Strategy for Pembrokeshire provide a strategic framework for the NPA and its partners. The NPA will continue to work with communities, local partner organisations and the Welsh Assembly Government to safeguard the National Park and the environmental and social context in which it exists.
- 14.2 Development planning has a key role in delivering social and economic benefits, as well as in maintaining the character of the National Park and helping people to enjoy it. The Management Plan indicates policy directions for the Local Development Plan for the National Park, and both plans were developed in tandem in their early stages.
- 14.3 One of a worldwide family of protected areas, the National Park is not a static natural landscape but a changing cultural landscape - a many-layered canvas that reflects how the environment, the economy and people's values have changed through time. In common with other areas of the UK, landscape quality is subject to a number of chronic and acute pressures, including climate change, some land management practices, development pressure, and noise and light pollution.
- 14.4 There are innumerable wildlife conservation success stories on sites in Pembrokeshire, but the wider countryside is fragmented by land uses and the marine environment is also under pressure. Ecosystem function (on land and at sea) is degraded and climate change will exacerbate existing pressures on wildlife, as well as adding new ones. Protecting wildlife sites is of key importance but it is not sufficient: habitat connections must be strategically restored across Wales and the UK. There is additional scope for relevant authorities to promote ecological resilience measures and to reward farmers for catchment-sensitive, carbon-sensitive and connection-sensitive farming. Such measures would also help to add security to farm incomes, reduce flood risk, reduce food miles, contribute to food and energy security and reconnect people with land management and the food they eat. The Marine and Coastal Access Act must herald a new era of marine resource management, within an equitable, ecosystem-based framework.
- 14.5 Ancient monuments with legal protection are on the whole in reasonable condition, but other features may be at risk. Most of the historic buildings in the National Park are in good condition, although a number require repair and reuse.
- 14.6 The geological resource is generally in good condition, with special geological and landform features and processes currently safeguarded, and largely accessible for study. However climate change could have significant implications for some of our coastal scenery.
- 14.7 The state of the National Park's soil resource is not accurately known, but the NPA believes it to be under pressure from some land management practices and from climate change. In some cases management change is likely to be urgently required to prevent soil loss and degradation and therefore to protect future agricultural revenue,

Conclusion

- biodiversity and soils' other roles, such as those played in the carbon cycle.
- 14.8 Air quality in the National Park is high, although traffic emissions and windborne pollution can be issues. Inland and coastal water quality is generally high, but there are problems from diffuse pollution in certain catchments and these can be hard to manage. Water resources for human consumption and river flows for ecosystem needs are generally sufficient but climate change could alter the dynamics of water supply and demand, hydrology (including incursion by saltwater) and pollution concentrations.
- 14.9 Climate change casts all the other issues that affect the National Park into even sharper relief and highlights the fundamental policy changes required. Climate change will require an increasingly dynamic interpretation of National Park purposes and a tolerance to new emergent landscapes. All the 'familiar' initiatives for wildlife conservation and management of soils and water must also be recognised as measures of adaption to climate change.
- 14.10 There is an increasingly apparent contradiction between fossil-fuelled economic growth and 'one planet' welfare. The good news is that many of the measures needed to engineer a soft landing from production peaks in oil and natural gas are the same as those identified as necessary to reduce greenhouse gas emissions and achieve other Management Plan aims.
- 14.11 Finally, the NPA retains a pivotal role in encouraging low-impact, high-benefit, year-round recreation, with particular emphasis on involving people who haven't fully benefited from what the National Park has to offer. The NPA's conservation and recreation functions are essential to supporting the major part the NPA plays in inspiring people to care for the environment and in encouraging personal responsibility and self-reliance through experience of the great outdoors.



The National Park Authority would like to thank everyone who has contributed to this Management Plan. We look forward to working with you to deliver it.

Annex: List of Management Plan policies

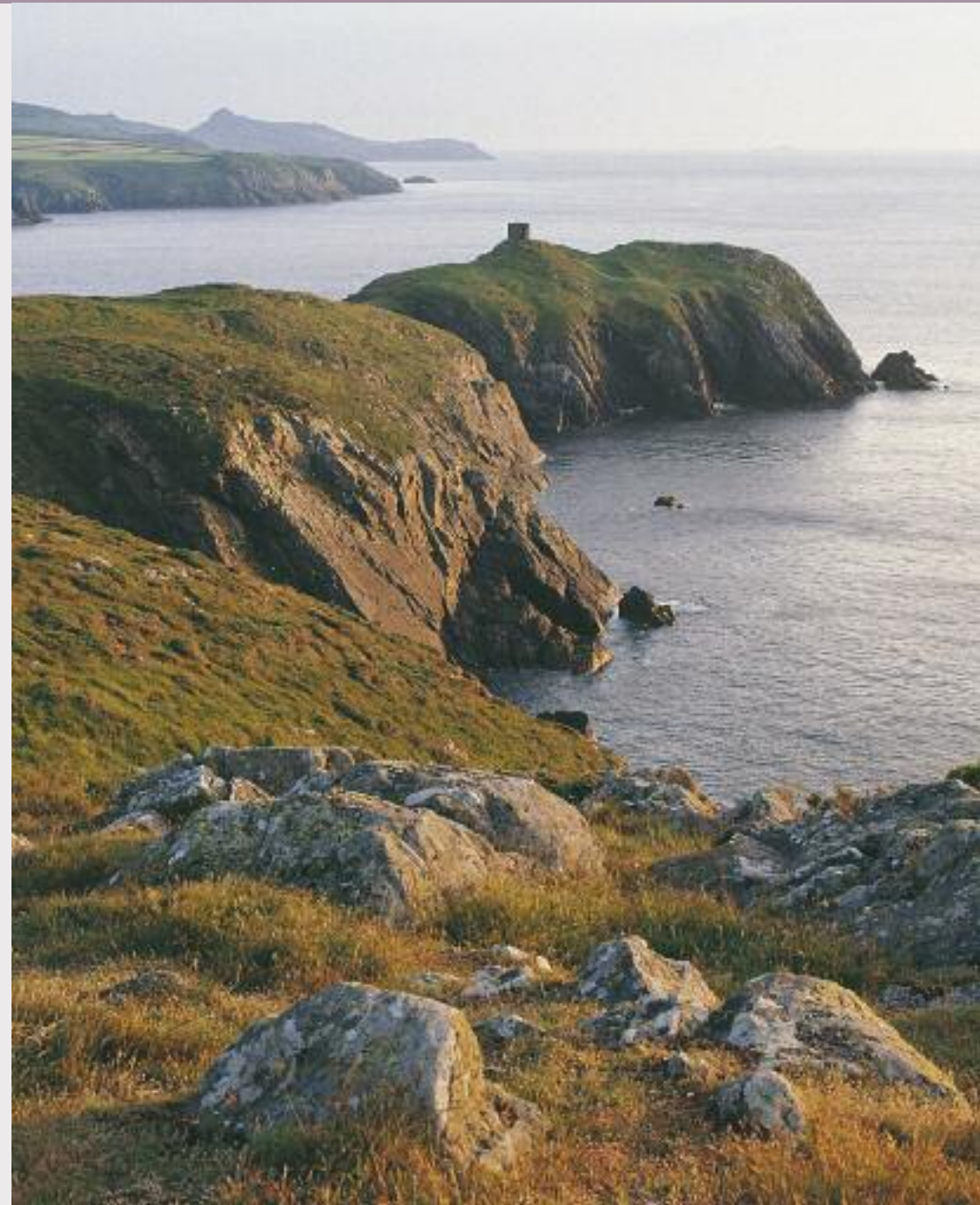
L1:	Maintain landscape quality and function	H5:	Promote traditional building techniques and local materials
L2:	Maintain seascape quality and function	G1:	Manage the impacts of development on geodiversity
L3:	Respect environmental capacity	G2:	Promote land management which improves soil condition
L4:	Protect dark skies	G3:	Manage the impacts of climate change on geodiversity
L5:	Limit noise pollution	G4:	Raise awareness of the geological resource
B1:	Promote an ecosystem approach to land management	CC1:	Contribute to national targets for energy conservation and efficiency and for renewable energy
B2:	Limit the impacts of climate change on biodiversity	CC2:	Encourage use of public transport and reduce car use
B3:	Promote regional and local conservation-grade food production and consumption	CC3:	Encourage carbon-sensitive land management
B4:	Promote an ecosystem approach to marine management	CC4:	Reduce, repair, reuse, recycle
B5:	Support sustainable fisheries policy	CC5:	Reduce risks of/from fluvial and coastal flooding
B6:	Limit the impacts of development on wildlife	CC6:	Promote regional and local conservation-grade food production and consumption
AR1:	Strengthen the protective framework for the archaeological resource	A1:	Reduce traffic emissions
AR2:	Encourage proactive management of archaeological sites	A2:	Mitigate pollutant/environmental interactions
AR3:	Raise awareness of the archaeological resource	W1:	Manage flow rates and groundwater levels
AR4:	Manage the impact of development on the archaeological resource	W2:	Reduce water pollution
AR5:	Mitigate the impact of natural processes on the archaeological resource	W3:	Limit the impact of climate change on water resources and quality
H1:	Strengthen the legislative planning and management context of the historic environment	W4:	Reduce marine pollution risks
H2:	Raise awareness of the historic built environment	W5:	Manage the impact of development on water resources and quality
H3:	Assist with the maintenance costs of historic buildings	E1:	Promote appropriate types of recreation
H4:	Manage the impact of development on the historic built environment	E2:	Remove barriers to people's enjoyment of the National Park
		E3:	Manage coastal and inland access/recreation opportunities

Annex: List of Management Plan policies

- E4: Manage access to inshore and inland waters
- U1: Promote the National Park as an inspirational basis for lifelong learning
- U2: Explain organisations' purposes and values
- U3: Involve people in decision making
- U4: Tailor messages to audience and outcome
- U5: Help people to make lifestyle changes

***Right: Trwyncastell
Backcover: Ceibwr***

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