

**NEW FOREST NATIONAL PARK AUTHORITY  
AUTHORITY MEETING – 16 JANUARY 2007**

**CLIMATE CHANGE UPDATE**

**Preliminary evaluation of the potential impacts of climate change on the interim list of special qualities**

## 2.1 Landscape

Special quality	Description	Potential Impact of climate change on special quality	Level of impact?
Outstanding Natural Beauty	Landscapes and countryside considered to be of very high aesthetic appeal and relatively unspoilt by inappropriate development. The key characteristics and elements are:	Increasingly arid in summer – changing species composition	Medium
	Diversity – the New Forest is characterised by an intimate mosaic of landscape elements that vary between vast extensively managed open expanses and closed / enclosed countryside.	No major change (?)	Low
	Trees (the large number of ancient trees)	Potential loss of veteran trees	High
	Ancient woodlands (and their large scale)	change in species composition and character	Medium - Low
	The ancient and ornamental woodlands	change in species composition and appearance	Medium - Low
	Extensive wood pasture	change in species composition	Low
	Extensive areas of heathland	change in species composition / more vulnerable to accidental fire	High for wetland habitats – low others
	Free-roaming grazing animals – especially associated with ponies but also cattle, pigs, donkeys, deer	changes in agricultural practices	Low
	Numerous ponds, valley bogs, flushes, near natural water courses and slow-moving streams	vulnerable to drought and hydrological change	High
	A mosaic of small holdings with small-scale agricultural fields enclosed by hedgerows	vulnerable to agricultural intensification / drought	Low
	The wild and flat Solent shoreline	vulnerable to sea level rise	High
	Dramatic, clean shingle shores and spits	vulnerable to sea level rise	High
	Grazed coastal marsh with network of ditches and creeks, flat muddy salt marsh and estuarine mudflats	vulnerable to sea level rise	High
	Lagoons at Keyhaven	vulnerable to sea level rise and coastal squeeze	High
	A stunning and unique wooded foreshore between Calshot and Lymington	vulnerable to sea level rise	Medium
	unspoilt seascape and long / big sky views to the Solent, Isle of Wight and Channel	no change	Low
	Views in and out of the Park on the coast and in the Avon Valley unfenced roads	no change except if landscape becomes more arid	Low
	landscape elements of now redundant land uses that are now valued for their visual landscape qualities e.g. marl pits, old gravel works	no change	Low
	a 'make-do and mend' approach and unpolished feel to many features – that is derived from the traditional (but fast disappearing) poverty of the rural economy in the New Forest	no change	Low
	Lack of street lamps	unaffected / no change	Low
Lack of kerbs	unaffected / no change	Low	
Grazed lanes	unaffected / no change	Low	
New Forest Gravel tracks	unaffected / no change	Low	
Tranquillity and timelessness	Relative freedom from sights sounds and impacts of aircraft / traffic / modern life across extensive parts of the New Forest.	<ul style="list-style-type: none"> <li>unaffected / no change</li> <li>indirect effects due to increasing traffic and development</li> </ul>	Medium
Remoteness	Many parts of the New Forest are relatively remote from roads or built areas – at least within the context of the lowland south east of the UK. You can lose yourself in nature.	Not directly affected / no change May be indirect effects from a wide range of development pressures, traffic	Medium - Low

		congestion and increased access / recreation	
A connectivity with the changing seasons	The relationship with the natural seasons is a more intense experience in the New Forest	Seasonality is changing with reduced / milder winter season Potential implications for the design of certain woodlands e.g. use of conifers etc – and climate change on some species like beech Bracken and other invasives may be favoured	Medium
	The glorious <i>New Forest Autumn</i> is of the highest quality with an intense experience of colour (e.g. golden beech leaves, purple heather), mellowness, sounds and smells. Its importance lies in the extent of woodland and bracken cover – and the large concentration of mature and ancient trees.		Medium
Geography of Contrast with surrounding environments	As a negative special quality – the New Forest's relative naturalness and beauty contrasts dramatically as an island oasis within the agriculturally intensified / developed industry and urban environments that abut and fringe the boundary of the Park (especially on the Eastern and South Western edges) – a lack of any buffer before highly developed landscapes. The active and developing industry of the waterside and Fawley dominates the skyline of a large area of the Park	<ul style="list-style-type: none"> <li>• unaffected / no change</li> <li>•</li> </ul>	Low
Dynamism	Almost uniquely in the UK – and certainly uniquely in the lowlands, many of the New Forest landscape features are able to move and change dynamically in space and time within the mosaic of the wider landscape – in response to the relatively extensive grazing and un-intensive management / low level of intervention. Relatively natural processes are able to operate in some places.	<ul style="list-style-type: none"> <li>• unaffected / no change</li> <li>• but natural processes are constrained in some places and having some places to move to</li> <li>• Dependent on the survival of pastoralism and commoning – and long-term variations of grazing pressure</li> </ul>	Low
Openness	The most extensive area of unenclosed and open country in lowland Britain	<ul style="list-style-type: none"> <li>• unaffected / no change</li> <li>• Under threat from the pressures to fence roads and enclose other habitats for management</li> </ul>	Low
Rivers and streams	Generally the New Forest's water courses are relatively undamaged or altered by human intervention – an important concentration of near natural geomorphological features that have generally been damaged elsewhere in the lowlands.	<ul style="list-style-type: none"> <li>• Hydrology may be threatened by climate change</li> </ul>	High
A truly cultural landscape	The Forest survives as an ecological system of interacting natural and social elements that have no parallel in Western Europe – at least at this scale (Tubbs, 1986). The perambulation covers 37,907 ha.	<ul style="list-style-type: none"> <li>• Species and habitats may be threatened by climate change</li> <li>• Some species will benefit and others lose out</li> <li>• Some species will become extinct</li> </ul>	High

## 2.2 Habitats and Wildlife

Special quality	Description	Potential Impact of climate change on special quality	Level of impact?
Diversity, large extent and quality of the mosaic of ancient semi-natural habitats – and their dynamism and	Open Forest <ul style="list-style-type: none"> <li>• Woodland</li> </ul>	Potential compositional change – some species benefit more than others from earlier growth and extended growing season / impacts of earlier springs and late frosts / changed hydrology / increased vulnerability to storm damage / changing reproductive success	Medium
	<ul style="list-style-type: none"> <li>• Wood pasture (more than 90% lost in England since the 1300s – Peterken.)</li> </ul>	Individual trees may be vulnerable to summer	Medium

interconnectivity		drought / ozone and pollution effects / increased vulnerability to storm damage / Spread of scrub?	
	<ul style="list-style-type: none"> <li>Acid grassland</li> </ul>	Loss to heather and heath / Spread of scrub?	Medium - High
	<ul style="list-style-type: none"> <li>Lowland dry heath (massive losses elsewhere in lowland UK)</li> <li>Wet heath</li> </ul>	Likely increase Likely loss and relocation as hydrology changes / Spread of scrub?	Low High
	<ul style="list-style-type: none"> <li>Valley bogs and mires</li> </ul>	Likely reduction due to changed hydrology – change in species composition to Purple moor grass? Spread of scrub?	High
	The spatial variety is in great part due to the free ranging grazing by herbivores		Low
	Solent coast and Southampton Water		
	<ul style="list-style-type: none"> <li>Shingle banks</li> </ul>	Loss due to erosion, coastal squeeze and removal of sediment flow	High
	<ul style="list-style-type: none"> <li>Mud flats</li> </ul>	Loss due to erosion, coastal squeeze and removal of sediment flow	High
	<ul style="list-style-type: none"> <li>Salt marsh</li> <li>Lagoons</li> <li>Wooded foreshore (the main concentration of this habitat in the UK)</li> </ul>	Loss due to erosion, coastal squeeze and removal of sediment flow Uncertain Squeezed by erosion against agricultural fields	High High Medium – High
	<p>Avon Valley</p> <ul style="list-style-type: none"> <li>water meadows</li> <li>ponds and water</li> <li>woodland</li> </ul> <p>Enclosed Countryside</p> <ul style="list-style-type: none"> <li>woodland</li> <li>grassland</li> <li>open water</li> <li>bog and mire</li> <li>heath</li> <li>hedges</li> </ul>	Improving towards favourable conservation status  But major threats continue to put habitats at risk e.g. climate change, development	High
Relatively intact natural area. A high level of inter-connectedness	Many extensive areas of habitat are mostly intact as habitat units and split by only a few roads i.e. a low level of habitat fragmentation which has affected so much of lowland UK.	Under threat from development pressures, traffic and road improvements; neglect and inappropriate management, lack of knowledge / awareness	Low
A dynamic system and the extent of the pastoral system	<ul style="list-style-type: none"> <li>Not managed at a small plot scale for individual species</li> <li>A constantly evolving landscape under the influence of large grazing animals</li> <li>Dynamic but relatively undisturbed by intensive agriculture</li> <li>Dependent on variations in numbers of stock over time</li> </ul>	Dependent on the survival of pastoralism and commoning – and long-term variations of grazing pressure	Low

The New Forest has a rich biodiversity with a high number of significant species of conservation interest and important assemblages of various groups – its biological wealth is greater than the sum of its parts. For many groups, the New Forest is now their most important UK locality (Tubbs, 1986).	Higher plants <ul style="list-style-type: none"> <li>number of notable species</li> <li>exceptional concentration of ancient trees</li> </ul>	Many populations still in reasonably good and favourable status but are at risk from a range of issues e.g. changing management, grazing levels, invasive introduced species, climate change, lack of knowledge and awareness of the resource and its management requirements	High
	Lower plants – mosses, lichens and ferns <ul style="list-style-type: none"> <li>Rich and diverse bryophyte community of more than 400 species</li> <li>Unique lichen assemblage of circa 344 species is thought to be the last survival of the typical lowland western European assemblage – and the most important lowland area in Europe</li> </ul>		High
	Fungi <ul style="list-style-type: none"> <li>Over 2600 species of macro-fungi recorded</li> </ul>		High
	Mammals <ul style="list-style-type: none"> <li>14 species of bat</li> <li>Excellent for deer</li> <li>Range of other species</li> </ul>		Low
	Invertebrates <ul style="list-style-type: none"> <li>At least approx. 50% of the UK fauna occur in the New Forest (Tubbs, 1986)</li> <li>1234 species of Lepidoptera – Moths and Butterflies (55% of the UK species)</li> <li>1539 species of Coleoptera – Beetles (47.5% of UK species)</li> <li>Exceptional dragonfly fauna – 27 of the UK's 38 species</li> <li>22 out of 33 species of grasshoppers and crickets occur</li> </ul>		Medium
	Birds <ul style="list-style-type: none"> <li>Important assemblages of lowland and woodland breeding species</li> <li>Internationally important numbers of over wintering / breeding migratory species on the coast</li> </ul>		Medium
	Reptiles and amphibians <ul style="list-style-type: none"> <li>All UK species present apart from the Natterjack Toad</li> </ul>		Low
	Freshwater Fish		High
Accessibility of wildlife to people	People have ready and easy access to a range of special wildlife species - and can enjoy the experience at close quarters		High
Biogeography	<ul style="list-style-type: none"> <li>Significant location in the south of the UK</li> <li>A mild and moist climate</li> <li>A number of southern species present – interesting location to assess the impacts of climate change and species / habitat responses</li> <li>Species with easterly, westerly and southerly distribution overlap here</li> <li>Hampshire is the richest county of the UK in terms of species richness – and the New Forest is key to that</li> </ul>		High

## 2.3 History

Special quality	Description	Potential Impact of climate change on special quality	Level of impact?
Commoning and continuity of a socio-economic system that maintains the cultural landscape and management	<ul style="list-style-type: none"> <li>Commoning is as intimate a part of the ecosystem as is the vegetation (Tubbs, 1986)</li> <li>a working Forest</li> <li>free-roaming animals / ponies including in the villages Pony drifts</li> <li>other rights of common and restrictions</li> <li>continuity of forest law, administration and unique institutions and traditions - Verderers, Commoners and common rights - a direct link back to feudalism – a</li> </ul>	<ul style="list-style-type: none"> <li>affected by changes to grazing availability</li> </ul>	Medium

	<ul style="list-style-type: none"> <li>modern manifestation of the medieval pastoral system</li> <li>poverty of commoning (contrasting with great wealth)</li> <li>vaccaries</li> </ul>		
Antiquity of the landscape and its depth	<ul style="list-style-type: none"> <li></li> </ul>		Low
Unique story of land ownership –/ few private estates			Low
Unique stories and historic heritage	<ul style="list-style-type: none"> <li></li> </ul>		Low
Richness of archaeology	Castles Old Manors Salterns Tide mills Charcoal burning Boiling Mounds Prehistoric – bronze age barrows (and settlements / field systems?)/ iron age forts / standing monuments Roman influence Military tradition – and impact of WWII (airfields / defences / Calshot) Military sea defences dating from Henry VIII’s activity through to Second World War. Agricultural Smithing Submerged coastal archaeology Periods of change and stability – still visible in the landscape Gunpowder factory and manufacture Industrial archaeology Fish farms (Fawley – monastery) Clay, gravel and mineral extraction Timber production for mining and trenches Bramshaw telegraph Bee Gardens Hunting Lodges	<ul style="list-style-type: none"> <li>Unaffected n/a except at the coast where erosion may cause loss</li> <li>Recording may be required</li> </ul>	High on coast  Medium inland
Settlement patterns	Squatting and the way that people have colonised the wastes Dispersed homesteads Extensive and linear villages Lost villages	<ul style="list-style-type: none"> <li>Unaffected n/a</li> </ul>	Low
Shipbuilding	Bucklers Hard Oak Timber production for shipbuilding	<ul style="list-style-type: none"> <li>Unaffected n/a except by sea level rise?</li> </ul>	Medium

## 2.4 Cultural Heritage

Special quality	Description	Potential Impact of climate change on special quality	Level of impact?
The New Forest Pony	<ul style="list-style-type: none"> <li>A unique and well-known breed – recognised widely and closely associated with the New Forest</li> </ul>	<ul style="list-style-type: none"> <li>Unaffected n/a ?</li> </ul>	Low - Medium
Large amount of information	Amount of documentation, protection sense of community	<ul style="list-style-type: none"> <li>Unaffected n/a</li> </ul>	Low
Pride in traditional	New Forest Shows	<ul style="list-style-type: none"> <li>Unaffected n/a</li> </ul>	Low



Unique facilities and experiences	Opportunities to camp on sites in relatively unimproved areas yet close to civilisation and facilities	<ul style="list-style-type: none"> <li>• Unaffected n/a</li> <li>• Increased level of activity</li> </ul>	Medium
Ability to get lost in the woods	Access is not too managed or regimented	<ul style="list-style-type: none"> <li>• Unaffected n/a</li> </ul>	Low
High quality of life	The Forest has a strong but gentle spirit	<ul style="list-style-type: none"> <li>• Probably unaffected n/a</li> </ul>	Low
feeling of space / solitude / peace / Smell of ponies	A place to unwind / feeling refreshed / place to exercise / impact on soul and well being / connection with the living world / connection and engagement with the countryside / potential to close the divide between town and country / spiritual / ready access to the experience	<ul style="list-style-type: none"> <li>• Unaffected n/a</li> </ul>	Medium

## 2.6 Environmental Quality

Special quality	Description	Potential Impact of climate change on special quality	Level of impact?
Dark skies		<ul style="list-style-type: none"> <li>• Unaffected n/a</li> </ul>	Low – Medium
Clean air		<ul style="list-style-type: none"> <li>• Not directly affected n/a but under threat from development / industry / traffic</li> </ul>	Low – Medium
Lack of litter		<ul style="list-style-type: none"> <li>• Unaffected n/a</li> <li>• Indirectly under threat from development / industry / traffic / modern farm methods / increasing recreation</li> </ul>	Low - Medium
Quietness		<ul style="list-style-type: none"> <li>• Unaffected n/a</li> </ul>	Low - Medium

## 2.7 Buildings, settlements and villages

Special quality	Description	Potential Impact of climate change on special quality	Level of impact?
Some Major houses and buildings	Beaulieu Abbey, Hurst and Calshot Castles, Sway Tower, The Queen's House etc	<ul style="list-style-type: none"> <li>• affected</li> </ul>	Medium
Local building materials	<ul style="list-style-type: none"> <li>• White / red bricks depending on location</li> <li>• Use of corrugated sheeting and an ad hoc building style is typical of traditional commoning and small-holding buildings</li> <li>• The vernacular building history and architecture generally reflects the poverty of the area and that of the commoning way of life</li> <li>• use of Cob construction</li> <li>• Use of Thatch</li> <li>• Use of Timber frame</li> <li>• Wooden fronted homes at Norley Wood</li> </ul>	<ul style="list-style-type: none"> <li>• Unaffected n/a except that some current building materials may not be suitable in future climates (especially in respect of temperature / resilience in storms)</li> </ul>	Medium
Intimate hamlets, villages in various forms from loose and spreading to linear		<ul style="list-style-type: none"> <li>• Unaffected n/a</li> </ul>	Low

## Potential impacts on the New Forest National Park

	Threats?	Opportunities?
Biodiversity	<ul style="list-style-type: none"> <li>▪ Uncertainty over how individual species will respond but those at the edge of their range are at risk – changes may be subtle at first and affect habitat composition;</li> <li>▪ There will be winners and losers;</li> <li>▪ Species may be lost more quickly in adverse conditions than others colonise;</li> <li>▪ Species may be unable to migrate due to barriers of roads, development / unsuitable habitat, resulting in local extinction;</li> <li>▪ changes and greater variation in hydrology e.g. lower water tables in summer;</li> <li>▪ Biodiversity is strongly influenced by land use - changes in land-use management driven by climate e.g. in agriculture, tourism and forestry may impact nature conservation;</li> <li>▪ Loss or erosion of some habitats e.g. valley bogs, wet heathland;</li> <li>▪ Effect on stream temperatures and invertebrates / fish ecology;</li> <li>▪ Increase in drought stress to trees and bogs and other vulnerable species;</li> <li>▪ Increase in damage to trees in extreme events and early frosts;</li> <li>▪ Fish migration and spawning impeded by low flows;</li> <li>▪ Increased erosion risk to soft coastal habitats and coastal squeeze;</li> <li>▪ Risk to species requiring sub-zero period to break seed dormancy;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Flora and fauna with pronounced southern distribution become more widespread – some species will gain others lose;</li> <li>▪ Expansion of some habitats and development of new community types;</li> <li>▪ Spread of species new to the UK;</li> <li>▪ To use agri-environment mechanisms to Integrate land management to aid nature conservation;</li> <li>▪ To develop ecological networks and green infrastructure to enable species to migrate and use spatial planning for integrating nature conservation with other land uses;</li> <li>▪ To ensure that existing habitats are managed in better condition and hence more resilient to changing climate;</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Risk of expansion of invasive species (e.g. bracken);</li> <li>▪ Increased visitor pressure on natural environment;</li> <li>▪ Increased incidence of fire in hot dry summers;</li> <li>▪ Reduction in extent and location of wet heath and some mires;</li> <li>▪ Timing and phenology will be upset and inter-related species may be out of synchrony.</li> </ul>	
Coast	<ul style="list-style-type: none"> <li>▪ Rising sea levels and possible increased storminess will increase coastal erosion and damage coastal infrastructure;</li> <li>▪ Natural assets such as beaches, wetlands, mudflats, salt marshes and dunes may be lost and their flora and fauna will be affected -silting of estuaries?</li> <li>▪ Deterioration in water quality and increase in algal blooms;</li> <li>▪ Increased run-off and leaching from land?</li> <li>▪ Protecting or relocating coastal assets may be too costly, therefore in some cases managed retreat may be the best option;</li> <li>▪ Retreating from coastal areas in some locations, may not be viable, and protecting them will be very expensive;</li> <li>▪ Properties in high risk areas will lose value, and may become uninsurable or unsaleable, resulting in losses for individuals and lending institutions;</li> <li>▪ Replacement of existing sea defences (e.g. Lymington – Keyhaven sea wall has a limited life of approx. 50 years at current rate of sea level rise) unlikely to be affordable.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased tourism on the coast may boost local economy;</li> <li>▪ Increased marine activity, water sports, surfing etc but pressures could arise from increased tourism and activity in the coastal fringe.</li> </ul>
Historic environment	<ul style="list-style-type: none"> <li>▪ Increased visitor pressures and deterioration due to wear and tear;</li> </ul>	<ul style="list-style-type: none"> <li>▪ increased revenue for historic buildings from expansion in tourism in</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Potential increase in storm damage, light-degradation, rain damage, fungal and beetle damage to historic buildings;</li> <li>▪ Maintenance of historical planting schemes will be difficult in gardens which were created in a colder climate;</li> <li>▪ Archaeological sites could deteriorate as they dry out in summer and suffer greater erosion in extreme events;</li> <li>▪ Sites in coastal locations may be lost as sea levels rise;</li> <li>▪ Flooding, coastal erosion, subsidence and storminess may all cause damage to buried and exposed features;</li> <li>▪ Vegetation change may affect preservation and condition of archaeological remains.</li> </ul>	<p>warmer climate;</p> <ul style="list-style-type: none"> <li>▪ some new sites will be revealed by erosion.</li> </ul>
Buildings and villages	<ul style="list-style-type: none"> <li>▪ Increased need for cooling of buildings in summer, but less demand for heating in warmer winters. Practical technologies needed for passive cooling of buildings, to avoid more releases of greenhouse gases in powering air conditioning systems;</li> <li>▪ Greater pressure for new infrastructure that may conflict with landscape design objectives e.g. increased use of solar-panels, wind turbines, balconies, non-traditional building design etc;</li> <li>▪ Buildings on clay are vulnerable to subsidence and ground movement from shrinkage during drought;</li> <li>▪ Planning and design of new and existing buildings / other infrastructure needs to meet the new climate;</li> <li>▪ Many existing and proposed buildings are in locations vulnerable to flooding or exposed to storm damage;</li> <li>▪ Increased maintenance costs.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduced heating demand, especially in winter, and therefore reduced heating costs;</li> <li>▪ Commercial opportunities for developing wood fuels and other environmental technologies;</li> <li>▪ Increased scope for outdoor activities around buildings, especially in summer and a café culture;</li> <li>▪ Increased potential for renewable sources of energy;</li> <li>▪ Increased need for shading (e.g. more trees in village streets and roads / by water);</li> <li>▪ Potential lifestyle changes from greater use of the external environment around buildings;</li> <li>▪ Increased use of existing water efficient technologies to reduce water consumption especially in summer.</li> </ul>

<p>Agriculture and Commoning</p>	<ul style="list-style-type: none"> <li>▪ Higher carbon dioxide levels and a longer growing season will enhance growth of some crops and offer the potential for growing new crops if practices adapt to changes in timing of seasons – may also result in pressure to intensify agriculture;</li> <li>▪ Potential increase in pests and diseases, including species new to the region;</li> <li>▪ Increased need for irrigation and on-farm storage, owing to reduced summer rainfall and higher temperatures;</li> <li>▪ Potential loss of competitive advantage for some sectors of South East agriculture e.g. current livestock management may become less viable than areas further north due to drought and impact on grass growth and increased heat stress – changes in needs for buildings and their design – need for more shade in fields;</li> <li>▪ Intense rainfall in winter may increase direct and indirect damage to crops and soils, causing soil erosion, accessibility problems, blocked drains and damage to rural roads;</li> <li>▪ Decreased soil quality and increased erosion due to increased run-off from winter rainfall;</li> <li>▪ Possible increase in wind, heat and storm damage during severe events;</li> <li>▪ Lack of winter chilling;</li> <li>▪ Other issues as important in decision making e.g. CAP reform, economics etc and it is difficult to predict how farmers will respond;</li> <li>▪ Some loss of land on coast;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Longer and earlier growing season;</li> <li>▪ Increased growth rates and yields (but not quality?);</li> <li>▪ Potential for new crops;</li> <li>▪ Reduced frost damage should increase productivity;</li> <li>▪ Potential increased growth rate (e.g. for forest trees);</li> <li>▪ Increased visitor numbers to the region in warmer weather means a larger market, particularly for local specialities;</li> <li>▪ Changes to food and drink consumption patterns, including ice creams, cold drinks and salads in summertime.</li> </ul>
<p>Business</p>	<ul style="list-style-type: none"> <li>▪ Increased costs because of</li> </ul>	<ul style="list-style-type: none"> <li>▪ Many new product and</li> </ul>

	<p>restricted water supply and changes to energy costs;</p> <ul style="list-style-type: none"> <li>▪ Increased downtime from loss of energy supplies and telecommunications during extreme climate events;</li> <li>▪ Transport infrastructure may be severely affected by events;</li> <li>▪ Impacts on development potential and the extent of land available for business;</li> <li>▪ risks from not giving new climate issues sufficient attention.</li> </ul>	<p>service opportunities for business to exploit the new and changing conditions;</p> <ul style="list-style-type: none"> <li>▪ Changes to food and drink consumption patterns, including ice creams, cold drinks and salads in summertime;</li> <li>▪ To treat climate change as another business risk.</li> </ul>
Tourism	<ul style="list-style-type: none"> <li>▪ Warmer, sunnier summer weather and milder winters are likely to encourage more outdoor leisure and extend the tourist season;</li> <li>▪ Increased traffic and congestion could worsen if tourism increases with warmer summers;</li> <li>▪ changing visitor patterns and habits;</li> <li>▪ Rising sea levels and flooding threaten coastal amenities;</li> <li>▪ Health implications of increased heat stress, food poisoning and exposure to sun;</li> <li>▪ Increased visitor and climate related pressures on the natural environment attractions, services, transport and utilities;</li> <li>▪ Storm and flood damage to caravan sites and other tourist infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Longer, more reliable summer season leading to increased visitor numbers and visitor spend;</li> <li>▪ Warmer winters, leading to a more year-round tourist season;</li> <li>▪ Potential increase in UK holidays, urban tourism and city breaks as Mediterranean destinations become too hot.</li> </ul>
Local communities	<ul style="list-style-type: none"> <li>▪ Climate change will increase frequency of heat waves which affect health and safety of workers, as well as causing short-term increases in mortality and ill health, in the sick and elderly;</li> <li>▪ Milder winters should reduce winter mortality rates;</li> </ul>	

	<ul style="list-style-type: none"> <li>▪ Climate change is likely to increase frequency of winter flooding with long-term psychological impacts for those affected;</li> <li>▪ Increased levels of anti-social behaviour and an increase in accidental and deliberate fires on open spaces.</li> </ul>	
Landscapes	<ul style="list-style-type: none"> <li>▪ Increasingly arid landscape that may change in character - and the typical New Forest landscapes may be degraded in some aspects (the outcome of the balance between increasing wetness in winter and summer drought is not clear);</li> <li>▪ the small scale intricate pattern of traditional pastures may not be conducive to the extended grazing systems that would be best suited to taking advantage of a longer grass-growing season;</li> <li>▪ flow rates in streams and rivers will reduce in summer and increase in winter – major temperature, erosion and ecological issues in summer and winter.</li> </ul>	<ul style="list-style-type: none"> <li>▪ With the dynamic nature of the New Forest new landscapes will evolve of equal beauty?</li> </ul>
Forestry	<ul style="list-style-type: none"> <li>▪ Plantations and woodlands could be affected by soil moisture deficits;</li> <li>▪ There may be greater susceptibility to fungal diseases particularly for conifers;</li> <li>▪ Changes to natural structure and species composition of woods.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Higher carbon dioxide concentrations could increase growth rates and productivity.</li> </ul>