



# Strategic Environmental Assessment of the Isle of Wight LTP3

Environmental Report to accompany the  
Consultation Draft Island Transport Plan Strategy 2011-2038

Appendices

November 2010



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# Appendix A: Annex I of the SEA Directive

Statutory Instrument 2004 No. 1633

**The Environmental Assessment of Plans and Programmes Regulations 2004**

## **INFORMATION FOR ENVIRONMENTAL REPORTS**

1. An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.
2. The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.
3. The environmental characteristics of areas likely to be significantly affected.
4. Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Council Directive 79/409/EEC on the conservation of wild birds<sup>[10]</sup> and the Habitats Directive.
5. The environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.
6. The likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as –
  - (a) biodiversity;
  - (b) population;
  - (c) human health;
  - (d) fauna;
  - (e) flora;
  - (f) soil;
  - (g) water;
  - (h) air;
  - (i) climatic factors;
  - (j) material assets;
  - (k) cultural heritage, including architectural and archaeological heritage;
  - (l) landscape; and
  - (m) the inter-relationship between the issues referred to in sub-paragraphs (a) to (l).
7. The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.

- 8.** An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.
- 9.** A description of the measures envisaged concerning monitoring in accordance with regulation 17.
- 10.** A non-technical summary of the information provided under paragraphs 1 to 9.

## **Appendix B: Consultation responses received of the SEA Scoping Report**

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# Analysis of consultation responses received on the Isle of Wight LTP3 SEA Scoping Report (April to June 2010)

Organisation & contact: Environment Agency (Laura Bourke, Planning Liaison Officer, Solent & South Downs)				
Date received: 7th May 2010				
1	1	General comment	I am unable to provide detailed comments on the above, attached is a fact sheet for your information which I hope you find useful.	<p>The Environment Agency will not be responding to the Isle of Wight LTP3 Scoping Report consultation. This was confirmed by subsequent communication with Jon Maskell on 7th May 2010.</p> <p>The Factsheet provides useful information to support the assessment of the LTP3.</p>

Organisation & contact: Natural England (George Gittings, Environmental Planning Advisor, Government Team, South East Region)				
Date received: 1st June 2010				
1	1	General comment	As you may already be aware, Natural England's general position on Local Transport Plans (LTPs) is contained in the appended guidance, 'Natural England Guidance on Local Transport Plans and the Natural Environment'. This refers to the positive outcomes we are seeking on biodiversity, landscape, geodiversity and soils, climate change and energy and quality of life. The guidance sets out Natural England's 5 key priorities for LTPs and how these should be addressed under the 5 national transport goals. It also includes hyperlinks, in the footnotes, to a range of resources on issues such as the integration of Rights of Way Improvement Plans (ROWIPs) with LTPs, and guidance on Strategic Environmental Assessment (SEA) and Habitat Regulations Assessment.	The guidelines have been considered through the assessment process. The guidance document has also been provided to the LTP3 development team.
2	1	SEA methodology and approach	Natural England welcomes the approach to SEA set out in section 2 of the Scoping Report, including reference to best practice guidance. The thorough approach in presenting the environmental information themes set in sections 3-14 and the identification of key issues for each theme is also welcomed.	Comment noted
3	1	Chapter 5: Air quality	Section 5 Air quality – The report appears to focus on air quality issues in terms of human health and should also refer to the potential impacts on biodiversity, which may be different and sometimes have higher standards in terms of critical level / load than those relevant to human health, as set out in the UK Air Pollution Information System (APIS).	The key issues have been updated to reflect air quality issues for biodiversity.
4	1	Chapter 6: Biodiversity & Geodiversity	The report has correctly identified the Island's important biodiversity assets in terms of habitats, species and range of designated sites.	Comment noted.
5	1	Chapter 6: Biodiversity & Geodiversity	In terms of all existing sites of biodiversity importance, Natural England considers the SEA should promote the hierarchy of avoidance of impacts, necessary mitigation, consideration of alternatives and finally compensatory measures.	The hierarchy of avoidance of impacts has been promoted through the appraisal process and the recommendations set out in the Environmental Report.

6	1	Chapter 6: Biodiversity & Geodiversity	There should also be a positive commitment to site enhancement through the LTP, including delivery of net gains to Biodiversity Action Plan targets and contributing to the network of Biodiversity Opportunity Areas.	Comments fed back to the LTP3 development team. Site enhancement in this context has been promoted through the recommendation set out in the Environmental Report.
7	1	Chapter 6: Biodiversity & Geodiversity	In Box 3, Key issues, biodiversity and geodiversity, erosion is referred to as a threat to coastal habitats. However, it should also be noted that for some designated sites, erosion is part of the natural processes which have an important role in creating or maintaining features of interest.	Comment noted. Natural processes aspect of erosion has been acknowledged in updated key issues and baseline.
8	2	Chapter 8: Health	Section 8 Health – The references to promoting sustainable and healthier forms of travel is welcomed. Reference should also be added the increased mental wellbeing that people derive from access to the natural environment. Natural England strongly promotes the provision of multi-functional green infrastructure (GI), which will increase the connectivity of areas in which people travel and provide attractive routes for walking, cycling and recreation. GI is a cross-cutting issue relevant to a range of environmental themes. Please see further details in the South East Green Infrastructure Framework <a href="http://www.naturalengland.org.uk/regions/south_east/ourwork/greeninfrastructureframework.aspx">http://www.naturalengland.org.uk/regions/south_east/ourwork/greeninfrastructureframework.aspx</a> )	Green infrastructure provision is a decision making criteria for the landscape SEA Objective (SEA Objective 2) and the health and wellbeing SEA Objective (SA Objective 11).
9	2	Chapter 8: Health	We would also wish to see specific reference in the report to integrating LTPs with Rights of Way Improvement Plans (ROWIPs), as set out in the attached guidance.	This aspect has been considered through the appraisal process.
10	2	Chapter 10: Health	Section 10 Landscape – Natural England welcomes the emphasis on the protection of landscape, in particular the designated landscapes of the AONB and Heritage Coast. We would strongly advocate the use of Landscape Character Assessment to underpin all decisions affecting landscape across the whole Island, using methodologies consistent with those set out in Landscape Character Assessment: Guidance for England and Scotland Countryside Agency and Scottish Natural Heritage, 2002. This provides a sound basis for guiding, informing and understanding the ability of any location to accommodate change and to make positive proposals for conserving, enhancing or regenerating local character and distinctiveness, as detailed proposals are developed.	Comments fed back to the LTP3 development team. The principles of the Guidance has been reflected buy the recommendations of the SEA.
11	2	Chapter 10: Landscape	We would also support the methodology set out in the publication Guidelines for Landscape and Visual Impact Assessment, produced by the landscape Institute and the Institute of Environmental Management and Assessment in 2003 (2nd edition). This guidance is accepted good practice, and provides a transparent and robust process for informing decisions on impact assessment and significance. Natural England therefore advises that the SEA should include a commitment to a full assessment of the potential impacts of proposed LTP schemes using these methodologies. This should include the detailed design of highway infrastructure such as measures to avoid / reduce light pollution and noise levels, contributions to green infrastructure and use of traditional materials and designs in any built features.	The use of the methodology set out in Guidelines for Landscape and Visual Impact Assessment has been included in the recommendations for the implementation of the LTP3. The project level Environmental Assessments will also consider these issues. Many of the proposed schemes are not progressed to the extent which these project level considerations can be considered.
12	2	Chapter 13: Soil	The report correctly identifies that, as highlighted by the Soil Strategy for England, soil is a vital natural resource, with a range of key functions. Natural England would wish to see a commitment to manage all soils sustainably where soil movement is involved in road schemes, also in accordance with published guidance including the Highways Agency 'Design Manual for Roads and Bridges' and the Defra 'Code of Good Practice for the Sustainable use and management of soil on construction sites'. PPS7 Sustainable Development in Rural Areas requires that local planning authorities should 'take (best and most versatile land) into account along with other sustainability considerations when determining planning applications .. where significant development of agricultural land is unavoidable, local planning authorities should seek to use poorer quality land (grades 3b, 5 and 5) in preference to that of higher quality, except where this would be inconsistent with other sustainability considerations'. These considerations should therefore be taken into account where alternative new road schemes are being appraised.	Comments have been taken into account through the appraisal process. The best and most versatile agricultural land has been considered by the appraisal.

13	2	Appendix B: SEA Framework	Natural England supports the SEA objectives and outline methodology referred to sections 15 and 16 of the consultation report and the SEA framework in appendix B. With regard to targets and indicators, I would suggest additions on air quality relating to designated sites of nature conservation importance.	An additional decision making criteria relating to effects on nature conservation sites from air quality has been included under SA Objective 3 (biodiversity).
14	2	Appendix B: SEA Framework	For population, accessibility and transport, I would suggest that an additional indicator would be contributions to ROWIPs in terms of additional length of cycle routes / footpaths / bridleways access routes and improved connectivity of the cycleway / footpath network.	An additional indicator has been included for SA Objective 10 to reflect additional length of cycle routes / footpaths / bridleways and access routes.
15	2	Appendix D: PPP review	Natural England agrees with the schedule of relevant policies, plans and programmes identified in appendix D	Comment noted.
16	3	General comment	Natural England would welcome early dialogue where you consider that infrastructure proposals are likely to have significant impact on natural assets such as landscape, habitats / biodiversity, and air / water quality; or implications in terms of Green Infrastructure, Rights of Way and access to local natural green space and the wider countryside.	Comment noted and fed back to LTP3 development team.

**Organisation & contact: RSPB (Irene Curran, Conservation Officer)**

**Date received: 28th May 2010**

1	1	General comment	Thank you for consulting the RSPB on the Isle of Wight LTP3 Strategic Environmental Assessment Scoping Report. We have reviewed the document and consider that it provides a robust record of the existing environmental, social and economic conditions on the Isle of Wight.	Comment noted.
1	1	Key issues	We consider that the key issues that have been identified adequately reflect the challenges facing the Island. In particular, we welcome the inclusion of "recreational pressures on wildlife sites" as a key issue in Box 3.	Comment noted.
1	1	SEA Framework	We also welcome the SEA objectives that have been established and consider that they will provide a sound framework for appraising the sustainability of the Isle of Wight LTP3.	
1	1	General comment	We would greatly welcome the opportunity to comment on the Isle of Wight Local Transport Plan 3 and its supporting documents, including the Strategic Environmental Assessment and Habitats Regulations Assessment when you publish them for consultation.	Comment noted and fed back to LTP3 development team. The RSPB will continue to be consulted through the LTP3's development process.

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## **Appendix C: SEA Framework**

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## Isle of Wight LTP3 SEA Framework

	Environmental information theme	SEA Objective	Decision making criteria: Will the option/proposal...		Indicators	Targets
1	Historic environment	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance.	Q1a	Will it preserve buildings of architectural or historic interest and, where necessary, encourage their conservation and renewal?	Number of Grade I and Grade II* buildings at risk.	None (English Heritage)
					Number of Grade II and locally listed buildings at risk.	None (English Heritage)
			Q1b	Will it preserve or enhance archaeological sites/remains?	Proportion of scheduled monuments at risk from damage, decay or loss	None (English Heritage)
					Number/proportion of development proposals informed by archaeological provisions, including surveys	All (English Heritage)
			Q1c	Will it improve and broaden access to, understanding, and enjoyment of the historic environment?	Annual number of visitors to historic attractions	
Q1d	Will it preserve or enhance the setting of cultural heritage assets?	Proportion of conservation areas covered by up-to-date appraisals (less than five years old) and published management plans.				
2	Landscape	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	Q2a	Will it safeguard and enhance the character of the landscape and local distinctiveness and identity?	Application of detailed characterisation studies to new transport development	
					Application of detailed characterisation studies to new transport development	
			Q2b	Will it safeguard and enhance the character of the townscape and local distinctiveness and identity?	Application of detailed characterisation studies to new transport development	
					Application of detailed characterisation studies to new transport development	
			Q2c	Will it support the integrity of landscape quality in the Isle of Wight AONB?	Application of detailed characterisation studies to new transport development	
Q2d	Will it support the integrity of the two Heritage Coasts on the Isle of Wight?	Application of detailed characterisation studies to new transport development				
Q2e	Will it preserve or enhance the setting of cultural heritage assets?	Proportion of conservation areas covered by up-to-date appraisals (less than five years old) and published management plans.				

	Environmental information theme	SEA Objective	Decision making criteria: Will the option/proposal...		Indicators	Targets
			<b>Q2f</b>	Will it ensure that transport development is of high quality and locally distinctive?		
			<b>Q2g</b>	Will it contribute to the Island's green infrastructure networks?	Area of parks and green spaces per 1,000 head of population	2.83 hectares per 1,000 population for playing field provision (National Playing Fields Association Standard)
					Accessible Natural Greenspace	100% of population with Accessible Natural Greenspace of at least 2ha within 300m (or 5 minutes of their home (Natural England)
3	Biodiversity and geodiversity	Protect, enhance and manage biodiversity and geodiversity.	<b>Q3a</b>	Will it lead to habitat creation, matching BAP priorities?	Area of Nature Conservation designation per 1,000 population (ha).	At least 1ha of Local Nature Reserve per 1,000 population (Natural England)
					Area of new habitat creation reflecting Isle of Wight BAP priorities	Achieving the 2026 Regional biodiversity targets set out in the South East Plan
			<b>Q3b</b>	Will it maintain and enhance sites designated for their biodiversity interest and increase their area?	Number, area and condition of national, regional and locally designated sites in appropriate management	Achieving the 2026 Regional biodiversity targets set out in the South East Plan
			<b>Q3c</b>	Will it increase the area of sites designated for their geodiversity interest?	Area designated for geological interest	
			<b>Q3d</b>	Will it maintain and enhance sites designated for their geodiversity interest?	Condition of geological SSSIs	By 2010, to ensure that 95% of SSSIs are in favourable or recovering condition (target to directly reflect the national PSA target)
					Condition of Regionally Important Geological Sites	
			<b>Q3e</b>	Will it link up areas of fragmented habitat?	Extent (and condition) of priority habitats	
			<b>Q3f</b>	Will it increase awareness of biodiversity and geodiversity assets?	Number of school trips to the Island's Nature Reserves	
Number of accessibility improvements to LNRs and local sites (including geodiversity sites)						
<b>Q3g</b>	Will it lead to a loss of ancient woodland?	Planning permissions granted for any development that would result in the loss or deterioration of ancient woodland	Zero (Natural England)			

	Environmental information theme	SEA Objective	Decision making criteria: Will the option/proposal...		Indicators	Targets
			Q3h	Will it lead to effects on designated nature conservation sites from air quality issues?	Condition of SSSIs	By 2010, to ensure that 95% of SSSIs are in favourable or recovering condition (target to directly reflect the national PSA target)
4	Water	Maintain and improve the water quality of the Isle of Wight's rivers, coasts and groundwater.	Q4a	Will it lead to improved water quality?	% of watercourses classified as good or very good biological and chemical quality	All inland and coastal water bodies to reach at least "good status" by 2015 (Water Framework Directive)
					% of planning applications granted contrary to Environment Agency advice in relation to PPS23	Zero (Environment agency)
			Q4b	Will it reduce the overall amount of diffuse pollution to water?	% change in pollution incidents	
					% of planning applications granted contrary to Environment Agency advice in relation to PPS23	Zero (Environment agency)
% of projects incorporating sustainable drainage systems						
5	Material assets, soil, water	Conserve the Island's natural resources.	Q5a	Will it exacerbate water abstraction levels?	Abstractions by purpose	
			Q5b	Will it increase water consumption?	Average domestic water consumption (l/head/day)	To stabilise and then reduce the per capita consumption of water to 135 litres per day by 2016 (SE Plan)
			Q5c	Will it safeguard the Island's minerals resources for future use?	Area of land with potential for minerals use sterilised	
			Q5d	Will it utilise derelict, degraded and under-used land?	% of new transport infrastructure schemes taking place on previously developed land	
			Q5e	Will it lead to reduced consumption of materials and resources?	% of transport schemes utilising recycled and reused materials	
6	Soil	Protect and enhance the Island's soils resource.	Q6a	Will it lead to loss of the highest quality agricultural land?	Area of Grade 1, 2 and 3a land lost to new transport development.	
			Q6b	Will it reduce the overall amount of diffuse pollution to soil?	% change in pollution incidents	
					% of planning applications granted contrary to Environment Agency advice in relation to PPS23	Zero (Environment agency)
% of projects incorporating sustainable drainage systems						

	Environmental information theme	SEA Objective	Decision making criteria: Will the option/proposal...		Indicators	Targets
			Q6c	Will it maintain and enhance soil quality?	Area of contaminated land (ha)	
			Q6d	Will it reduce land contamination?	% of projects (by number and value) involving remediation of any kind	
7	Air quality	Reduce air pollution and ensure continued improvements to air quality.	Q7a	Will it lead to improved air quality?	Number of exceedances of air quality objectives	To meet national Air Quality Standards
					Number and area of Air Quality Management Areas	To meet national Air Quality Standards
					No. of days when air pollution is moderate or high for NO <sub>2</sub> , SO <sub>2</sub> , O <sub>3</sub> , CO or PM <sub>10</sub>	To meet national Air Quality Standards
8	Climate change	Minimise the Island's contribution to climate change.	Q8a	Will it help reduce the proportion of greenhouse gas emissions originating from transport?	Traffic flows	80% reduction of carbon dioxide emission by 2050 and a 26% to 32% reduction by 2020 (UK legally binding targets, Climate Change Act 2008)
					% of total emissions originating from transport	
				Proportion of electricity required for transport infrastructure produced from renewable resources	Produce 30% of energy from renewables by 2020 (The UK Low Carbon Transition Plan)	
			Q8b	Will it help raise awareness of climate change mitigation?	Modal shift on the Island	
9	Climate change	Plan for the anticipated effects of climate change.	Q9a	Will it increase the risk of flooding?	Amount of new development (ha) situated within a 1:100 flood risk area (Flood Zone 3) including an allowance for climate change	Zero (Environment agency)
						Number of planning applications approved where Environment Agency have sustained an objection on flood risk grounds
				Q9b	Will it reduce the risk of damage to property from storm events?	% of developments meeting the minimum standards for the "Surface Water Run-Off" and "Surface Water Management" categories in the Code for Sustainable Homes
					% of projects incorporating sustainable drainage systems	

	Environmental information theme	SEA Objective	Decision making criteria: Will the option/proposal...		Indicators	Targets
			Q9c	Will it facilitate landscape change for climate change adaptation (e.g. by protecting key landscape and biodiversity features)?	Amount of new greenspace created per capita	
			Q9d	Will it encourage the development of transport infrastructure prepared for the impacts of climate change?	Proportion of transport projects with climate change adaptation measures to address likely localised effects of climate change.	
10	Population, accessibility and transport	Reduce poverty and social exclusion and close the gap between the most deprived areas on the Isle of Wight and the rest of the Island.	Q10a	Will it reduce the need to travel?	Percentage of completed significant local service developments located within a defined centre	LTP3 to consider setting target
					Average distance (km) travelled to fixed place of work	LTP3 to consider setting target
			Q10b	Will it encourage walking and cycling?	Percentage of people aged 16-74 who usually travel to work by bicycle or on foot	LTP3 to consider setting target
					Proportion of new development providing cycle parking.	LTP3 to consider setting target
					Contribution of Rights of Way Improvement Plan to additional length of cycle routes / footpaths / bridleways and access routes.	LTP3 to consider setting target
			Q10c	Will it reduce car use?	Percentage of people aged 16-74 who usually travel to work by driving a car or van	To reduce private vehicle kilometres travelled (South East Plan)
			Q10d	Will it encourage the use of public transport?	Percentage of people aged 16-74 who usually travel to work by bus or train	By 2010 ensure 12% growth in bus and light rail use in England by 2010 (DfT)
					Number of journeys made by bus per annum	LTP3 to consider setting target
					Percentage of rural households within 800m of an hourly or better bus service	LTP3 to consider setting target
			Q10e	Will it improve links to the mainland from the Island?	Cost of ferry, catamaran and hovercraft services between the Island and the mainland	LTP3 to consider setting target

	Environmental information theme	SEA Objective	Decision making criteria: Will the option/proposal...		Indicators	Targets
					Frequency of ferry, catamaran and hovercraft services between the Island and the mainland	LTP3 to consider setting target
			Q10f	Will it improve access to services and facilities from rural areas?	Percentage of rural households within 800m of an hourly or better bus service	LTP3 to consider setting target
					Additional length of cycle routes / footpaths / bridleways and access routes.	
			Q10g	Will it increase provision of local services and facilities and reduce centralisation?	Percentage of residents surveyed finding it easy to access key local services.	LTP3 to consider setting target
			Q10h	Will it enable communities to influence the decisions that affect their neighbourhoods and quality of life?	Percentage of adults surveyed who feel they can influence decisions affecting their own local area	
			Q10i	Will it improve the satisfaction of people with their neighbourhoods as a place to live?	% respondents very or fairly satisfied with their neighbourhood	
			Q10j	Will it reduce crime and the fear of crime?	Crime Deprivation Index	
11	Health	Safeguard and improve community health, safety and well being.	Q11a	Will it improve access to services and facilities from rural areas?	Percentage of rural households within 800m of an hourly or better bus service	LTP3 to consider setting target
			Q11b	Will it provide sufficient areas of open space for all?	Area of parks and green spaces per 1,000 head of population	2.83 hectares per 1,000 population for playing field provision (National Playing Fields Association Standard)
					Accessible Natural Greenspace	100% of population with Accessible Natural Greenspace of at least 2ha within 300m (or 5 minutes of their home (Natural England)
					Number of planning permissions granted on open space land for other uses	
			Q11c	Will it improve long term health?	Life expectancy at birth	By 2010, increase average life expectancy at birth in England to 78.6 years for men and 82.5 years for women (DoH)

	Environmental information theme	SEA Objective	Decision making criteria: Will the option/proposal...		Indicators	Targets
					Standardised mortality rates	By 2010, reduce mortality from cancer by at least 20% in people under 75 (DoH)
			<b>Q11d</b>	Will it encourage healthy and active lifestyles?	% of adults (16+) participating in at least 30 minutes of moderate intensity sport and active recreation (including recreational walking) on three or more days of the week	To increase participation by 1% year-on-year until 2020 to achieve target of 50% of population participants in 30 mins activity, three times a week by 2020 (The Framework for Sport in England)
					The number of sports pitches available to the public per 1,000 population	2.83 hectares per 1,000 population for playing field provision (National Playing Fields Association Standard)
					Percentage of people aged 16-74 who usually travel to work by bicycle or on foot	LTP3 to consider setting target
			<b>Q11e</b>	Will it reduce obesity?	Percentage of adult population classified as obese	By 2010, stabilise incidences of obesity in children by 2010 (DoH)
			<b>Q11f</b>	Does it consider the needs of the Island's growing elderly population?	Percentage of older people being supported intensively to live at home	Increasing the proportion of older people being supported to live in their own home by 1% annually (DoH PSA)
			<b>Q11g</b>	Will it improve road safety?	Number of people killed or seriously injured (KSI) in road accidents	

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## **Appendix D: High Level Assessment Matrices**

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### SEA Objectives (Isle of Wight LTP3)

1. Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance
2. Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.
3. Protect, enhance and manage biodiversity and geodiversity.
4. Maintain and improve the water quality of the Isle of Wight's rivers, coasts and groundwater.
5. Conserve the Island's natural resources.
6. Protect and enhance the Island's soils resource.
7. Reduce air pollution and ensure continued improvements to air quality.
8. Minimise the Island's contribution to climate change.
9. Plan for the anticipated effects of climate change.
10. Reduce poverty and social exclusion and close the gap between the most deprived areas on the Isle of Wight and the rest of the Island.
11. Safeguard and improve community health, safety and well being.

#### Key

++	Likely strong positive effect
+	Likely positive effect
0	Neutral/no effect
-	Likely adverse effect
--	Likely strong adverse effect
+/-	Uncertain effect

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Isle of Wight Draft Strategy Interventions		SEA Objectives										
		SEA1	SEA2	SEA3	SEA4	SEA5	SEA6	SEA7	SEA8	SEA9	SEA10	SEA11
<b>Goal: Enhance and maintain our highway assets</b>												
1	Short term – prioritise limited funding available	Not an intervention										
2	Long term - develop Highway PFI to secure major funding to upgrade and maintain network	+	+	+/-	++	+/-	+	+/-	+	++	+	+
<b>Goal: Increase accessibility</b>												
3	Improve highway condition (PFI)	+	+	+/-	++	+/-	+	+/-	+	++	+	+
4	Best use of highway space	+/-	+/-	+/-	0	+	+	+/-	-	0	++	+/-
5	Network management	+/-	+/-	+/-	0	+	+	+	-	0	++	+/-
6	Traffic management techniques	+/-	+/-	+/-	0	+	+	+	-	0	++	+/-
7	Reduce reliance on car by increasing travel choice (walking, cycling, public transport)	++	++	++	+	+	+	++	++	0	++	++
8	Travel plans	+	+	+	0	0	0	++	++	0	++	++
9	Parking strategy	+	+	+	0	+	++	+	+	+	+	+
10	Parking enforcement	+	+	0	0	0	0	+	+	0	+	+
11	Highway and traffic management (to and from ports)	++	++	0	0	0	0	+	0	0	+	++
12	Work with operators & stakeholders	+	+	+	+	+	+	+	+	+	+	+
13	Work with neighbouring authorities	+	+	+	+	+	+	+	+	+	+	+
14	Ensure residents and visitors have good access to services, employment and countryside	+	+	+	0	0	0	+	+	0	++	++
<b>Goal: Improve road safety and health</b>												
15	Compilation and delivery of Road Safety Plan	+	+	0	0	0	0	+	+	0	++	++
16	Take a data led approach to monitor accident and casualty trends and identify appropriate action	0	0	0	0	0	0	0	0	0	+	+
17	Work in partnership with others on road safety training, awareness and travel initiatives	+	+	0	0	0	0	+	+	0	++	++
18	Treat any problem locations, routes and areas with appropriate engineering measures.	+	+	0	0	0	0	+	+	0	++	++
19	Provide safer walking and cycling routes and facilities	+	+	+	+	0	0	++	++	0	++	++
20	Introduce speed management measures where considered appropriate	++	++	0	0	0	0	+	+	0	++	++
21	Continue to undertake safety audits on all new and improved schemes	0	0	0	0	0	0	0	0	0	++	++
22	Work in partnership with others to promote health and lifestyle benefits of active travel	+	+	+	+	0	0	+	+	0	++	++
23	Encourage children to walk or cycle to school as part of School Travel Plans and Healthy Schools initiatives	+	+	+	+	0	0	+	+	0	++	++
24	Work in partnership with others to identify crime (and fear of crime) on transport network	0	0	0	0	0	0	0	0	0	++	++
25	Consider crime and fear of crime when designing new highways infrastructure including lighting and CCTV	0	0	0	0	0	0	0	0	0	++	++
<b>Goal: Support economic growth</b>												
26	Work with Planning colleagues on development and implementation of Local Development Framework	+	+	+	+	+	+	++	++	+	++	++
27	Ensure infrastructure to support development (eg secure Section 106, Community Infrastructure Fund, accessibility contributions)	-	+/-	+/-	0	0	0	+/-	+/-	0	++	++
28	Located close to workforce	+	+	+	0	0	0	++	++	0	++	+
29	Travel plans	+	+	+	0	0	0	++	++	0	++	++
30	Consider additional pressure on transport network and possible mitigation (eg network improvements, accessibility contributions).	+/-	+/-	+/-	0	+	+	+	-	0	++	+/-
31	Located close to employment, schools, shopping and services	+	+	+	0	0	0	++	++	0	++	++
32	Ensure good access to transport links (eg walking & cycling routes, public transport links & infrastructure)	+	+	+	0	0	0	++	++	0	++	++
33	Network management	+/-	+/-	+/-	0	+	+	+	-	0	++	+/-
34	Improve highways and associated areas as part of PFI	+	+	+/-	++	+/-	+	+/-	+	++	+	+
35	Encourage car free tourism	+	++	+	0	0	0	++	++	0	0	+
36	Access to ports	+	+	0	0	0	0	+	+	0	+	+
37	Encourage walking, cycling, public transport to accommodation, attractions and events	+	++	+	0	0	0	++	++	0	0	+
<b>Goal: Improve quality of life</b>												
38	Work with in partnership with operators in service and infrastructure provision	+	+	+	0	0	0	+	+	0	++	++
39	Work with operators to encourage discounted travel rates for young people and students	0	0	0	0	0	0	+	+	0	+	+

Isle of Wight Draft Strategy Interventions		SEA Objectives										
		SEA1	SEA2	SEA3	SEA4	SEA5	SEA6	SEA7	SEA8	SEA9	SEA10	SEA11
40	Support of over 60 bus scheme	0	0	0	0	0	0	0	0	0	++	++
41	Work with operators to increase access to key locations and promote national and local initiatives (eg Wight Wheels)	+	+	+	0	0	0	++	++	0	+	++
42	Seek to ensure travel information is widely available in a range of languages and formats	0	0	0	0	0	0	+	+	0	++	++
43	Support operators with introduction of suitable vehicles (eg installation of 'kassel' kerbing at bus stops).	0	0	0	0	0	0	0	0	0	++	++
44	Installation of dropped crossings at appropriate locations	0	0	0	0	0	0	0	0	0	+	+
45	Installation of appropriate infrastructure (eg 'tactile cones' on controlled crossings)	0	0	0	0	0	0	0	0	0	+	+
46	Consideration of transport barriers to those living in areas of multiple deprivation	0	+	0	0	0	0	+	+	0	++	++
47	Ensure residents and visitors have good access to services, employment and countryside	+	+	+	0	0	0	++	++	0	++	++
48	Consider noise reducing surfacing and landscaping as part of highway schemes (including PFI)	++	++	+	0	0	0	0	0	0	+	++
49	Consider development of a Noise Action Plan including management of transport noise.	++	++	+	0	0	0	0	0	0	+	++
<b>Goal: Respect the local environment</b>												
50	Ensure developments in keeping with environment including design and materials including visual screening and landscaping where appropriate	++	++	0	0	0	0	0	0	0	+	+
51	Appropriate location of new signs and street furniture to avoid street clutter	++	++	0	0	0	0	0	0	0	+	+
52	Respect settings of listed buildings, scheduled monuments and conservation areas	++	++	0	0	0	0	0	0	0	+	+
53	Ensure sensitively placed to strike balance between safety and townscape preservation	++	++	0	0	0	0	0	0	0	+	+
54	Ensure respect habitats with mitigation where necessary	0	+	++	+	0	+	0	0	0	0	0
55	Vulnerability of habitats considered during scheme/site selection	0	+	++	+	0	+	0	0	0	0	0
56	Timing of delivery	0	+	++	+	0	+	0	0	0	0	0
57	Re-use of construction materials in Highway schemes where possible	0	0	0	0	++	0	0	+	0	0	0
58	Consider use of local materials where possible	0	0	0	0	++	+	0	+	0	0	0
59	Minimise risk of pollution of groundwater and surface water during construction	0	0	+	++	0	+	0	0	0	0	+
60	Work with others on the development of local climate change report including likelihood of occurrence, severity, risk, threats and actions.	0	+	++	+	0	+	+	++	++	0	+
61	Consider impact of sea level rises, storm surges, flooding and increased temperatures when designing highways infrastructure.	0	+	++	+	0	0	0	0	++	0	+
62	Incorporate SUDS and balancing ponds into new infrastructure where appropriate	0	0	+	++	0	+	0	0	++	0	0
63	Work on emergency travel plans.	0	0	0	0	0	0	0	0	++	++	++
64	Increased mean temperatures may result in an increase in tourism and therefore seasonal congestion (see above)	Not an intervention										
65	Improve highway network (PFI)	+	+	+/-	++	+/-	+	+/-	+	++	+	+
66	Offer travel choice – walking, cycling, public transport, car sharing	++	++	+	0	0	0	++	++	0	++	++
67	Promote travel plans and home working	+	+	+	0	0	0	++	++	0	++	++
68	Work with planners and service providers on reducing the need to travel	+	+	+	0	0	0	++	++	0	++	++
69	Air quality monitoring and input into annual Air Quality Management Report	+	+	+	0	0	0	++	++	0	+	+
70	Encourage use of environmentally friendly vehicles (eg provision of electric car charging points, low emission buses)	0	0	0	0	++	0	++	++	0	+	+

**Appendix E: Detailed Assessment Matrices**

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# DETAILED ASSESSMENT MATRIX

## Interventions 2, 3, 34 and 65: PFI-related interventions

No.	SEA Objective	Description of predicted effect	Duration			Frequency	Temporary or permanent	Geographic significance	Magnitude	Level of certainty	Severity of significance	Positive or adverse	Mitigation or other action required?	Supporting comments / Proposed mitigation
			Short term	Medium term	Long term									
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance	Through improving the visual quality of the Island's roads, footways, cycle routes and street lighting, delivering the highway maintenance PFI has the potential to have benefits for the setting of the historic environment and the quality of landscape and townscape .	-/+	+	+	Ongoing	Permanent	Local	Low	Low	Negligible	Positive and negative	Yes	In the shorter term however increased maintenance activities have the potential to have impacts on localised noise pollution and visual effects. This may affect the setting of local cultural heritage assets.  The LTP3 should place a significant emphasis on high quality, sensitive design and appropriate siting of new signs and other street furniture to limit effects on the integrity of cultural heritage assets. It should also seek to support local distinctiveness and heritage interest, including distinctive transport-related heritage features such as rail arches or those of maritime interest.
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	In the medium and long term, delivering the highway maintenance PFI has the potential to have benefits for the landscape and townscape quality of the island through improving the visual quality of the island's roads, footways, cycle routes and street lighting.  In the shorter term however increased maintenance activities have the potential to have impacts on landscape quality through localised noise pollution and visual effects.	-/+	+	+	Ongoing	Permanent	Local	Medium	Medium	Minor	Positive and negative	Yes	Improved road surfacing and improved lighting management will help limit noise and light pollution on the island.  Transport maintenance schemes initiated through the PFI should seek to enhance the quality of the public realm and seek to limit effects from transport infrastructure on landscape quality.
3	Protect, enhance and manage biodiversity and geodiversity.	In the short term, maintenance and highway improvement activities have the potential to lead to effects on local habitats and species.  The PFI however provides the opportunity for improved maintenance of the Island's roads, pavements and cycleway networks to support habitats and species on the Island.	-/+	+	+	Ongoing	Permanent	Local	Medium	Low	Minor	Positive and negative	Yes	Potential longer and medium term effects on biodiversity depends on the use of biodiversity-friendly maintenance methods and the incorporation of features which support biodiversity linkages and networks within new and improved infrastructure. This includes related to habitat creation, pollution control, translocation and the use of ecological management techniques for features such as grassland, scrub, woodland and hedgerows on verges and on other parts of the network.

# DETAILED ASSESSMENT MATRIX

## Interventions 2, 3, 34 and 65: PFI-related interventions

No.	SEA Objective	Description of predicted effect	Duration			Frequency	Temporary or permanent	Geographic significance	Magnitude	Level of certainty	Severity of significance	Positive or adverse	Mitigation or other action required?	Supporting comments / Proposed mitigation
			Short term	Medium term	Long term									
4	Maintain and improve the water quality of the Isle of Wight's rivers, coasts and groundwater	Improved maintenance and enhanced drainage as a result of the PFI will support water quality through helping to reducing diffuse source pollution from the highway network.	+	+	+	Ongoing	Permanent	Local	Medium	Low	Minor	Positive	Yes	There is some potential for accidental pollution incidents from maintenance work, although this potential impact can be mitigated through implementation of pollution prevention procedures and environmental management plans.
5	Conserve the Island's natural resources.	The PFI has the potential to increase the generation of construction waste and use of raw materials due to the programme of works required to reverse historic underinvestment in the highways network.  In the longer term however, resource use and construction waste may be limited by the use of longer lasting, modern materials.	--	--	-/-	Ongoing	Permanent	Local	Medium	High	Minor	Negative	Yes	Other interventions within the LTP3 seek to encourage the use of recycled and secondary materials within local transport schemes and maintenance.
6	Protect and enhance the Island's soils resource.	The focus of the PFI is on highway maintenance rather than construction of major new transport infrastructure such as roads and bridges.									Neutral			There is therefore unlikely to be significant adverse impacts on soil resources.
7	Reduce air pollution and ensure continued improvements to air quality.	Improved road surfacing and maintenance may help reduce air quality issues linked to particulates etc.  Localised air quality issues may arise in the short term from construction activities linked to maintenance however.	-/+	+	+	Ongoing	Permanent	Local	Low	Low	Negligible	Positive and negative	Yes	Improved maintenance of the cycle and pedestrian network may also support modal shift through enhancing the appeal of walking and cycling. This will support air quality.  Air quality on the Isle of Wight is generally very good- alongside air quality hotspots in Newport are linked to nitrogen dioxide levels rather than particulates.

SEA Objectives

# DETAILED ASSESSMENT MATRIX

## Interventions 2, 3, 34 and 65: PFI-related interventions

No.	SEA Objective	Description of predicted effect	Duration			Frequency	Temporary or permanent	Geographic significance	Magnitude	Level of certainty	Severity of significance	Positive or adverse	Mitigation or other action required?	Supporting comments / Proposed mitigation
			Short term	Medium term	Long term									
8	Minimise the Island's contribution to climate change.	Improved maintenance of the cycle and pedestrian network may support modal shift through enhancing the appeal of walking and cycling. This will support modal shift and help limit greenhouse gas emissions from transport.	-/+	+	+	Ongoing	Permanent	Local	Low	Low	Negligible	Positive	Yes	Improved road surfacing and maintenance may also improve the efficiency of road use, reducing greenhouse gas emissions.
9	Plan for the anticipated effects of climate change.	Improved maintenance of the Island's highways network will help improve the resilience of the road, cycle and pedestrian network to the likely effects of climate change.	+	++	++	Ongoing	Permanent	Local	High	High	Moderate	Positive	No	This includes through enabling the use of surfacing which can withstand high temperatures; improvements to drainage, enabling improved response to extreme rainfall; reducing the risk of erosion; and other approaches to improve the resilience of the network to the effects of climate change.
10	Reduce poverty and social exclusion and close the gap between the most deprived areas on the Isle of Wight and the rest of the Island.	Improved highway assets, (including footpaths and cycle routes) will help support enhancements to the public realm, supporting the quality of neighbourhoods.  Highway maintenance and enhancements will promote social inclusion and access to jobs and services through supporting improvements to the quality of walking and cycling routes.	+	++	++	Ongoing	Permanent	Local	High	Medium	Moderate	Positive	No	The PFI also has the potential to improve and support training and employment opportunities on the Island.

# DETAILED ASSESSMENT MATRIX

## Interventions 2, 3, 34 and 65: PFI-related interventions

No.	SEA Objective	Description of predicted effect	Duration			Frequency	Temporary or permanent	Geographic significance	Magnitude	Level of certainty	Severity of significance	Positive or adverse	Mitigation or other action required?	Supporting comments / Proposed mitigation
			Short term	Medium term	Long term									
11	Safeguard and improve community health, safety and well being.	<p>Improved maintenance of the Island's highway network will help deliver safer roads and reduce traffic accidents.</p> <p>Improvements to pedestrian and cycle networks will promote cycling and walking, supporting modal shift and healthier modes of travel.</p> <p>Enhancements to street lighting and road layout will support personal security and perceptions of personal safety.</p>	-/+	+	+	Ongoing	Permanent	Local	Medium	Medium	Minor	Positive and negative	Yes	Highway improvements and maintenance programmes may however in the short term have negative effects on health and wellbeing from impacts on noise, vibration and light pollution.
<b>Overall Effect</b>	<p>The PFI will support social inclusion by providing an increase in the availability of employment and training opportunities on the island for local people from the likely programme of maintenance and improvement works. The PFI is also likely to support health and wellbeing by improving the quality of walking and cycling routes and the quality of the public realm, promoting healthier modes of travel, and supporting accessibility to health, leisure and recreational facilities. Enhanced lighting maintenance has the potential to improve perceptions of security (and if leading to more efficient lighting, has the potential to limit light pollution). Improved maintenance stimulated by the PFI provides the opportunity to support biodiversity assets on the island through improved management of verges, enhanced pollution control, ecological management techniques, habitat creation and a range of other actions. Similarly opportunities to increase the resilience of the highways network to the effects of climate change, including through improved drainage, the use of new materials and other aspects will be supported by the PFI. Enhancements to landscape and townscape quality, and the quality of the public realm have the potential be promoted by a reduction in noise pollution from improved road surfacing, enhancements to street furniture and appropriate design and layout of highways network.</p> <p>The PFI, through initiating maintenance and improvement works to reverse a significant period of underinvestment in the highways network, is likely to have a number of shorter term adverse effects. This includes through the effect of construction activities on: noise and air quality; the quality of the public realm; biodiversity assets; congestion issues; and on local residents' quality of life. Increased maintenance activities also have the potential to lead to an increase in use and the production of construction waste materials, although it should be noted that in the longer term resource use and construction waste may be limited by the use of longer lasting and high quality materials.</p>													
<b>Proposed Mitigation</b>	<p>To help mitigate some of the potential short term effects of construction activities linked with the maintenance regime, appropriate management regimes should be initiated to help limit effects on noise, air and water quality, visual impact, and on biodiversity assets. In this context the development of locally-specific design guidance which could be used in the implementation of future highway maintenance schemes should be promoted. The PFI should also seek to encourage the use of recycled and secondary sources within local transport schemes and maintenance programmes and initiate appropriate waste management programmes.</p>													

Key																																			
<b>The 'Duration' column is noted as:</b>	<table border="0"> <tr> <td>Major negative effect</td> <td>--</td> <td rowspan="4" style="text-align: center;"><b>Magnitude of significance is illustrated as:</b></td> <td><b>Adverse</b></td> <td>Severe</td> <td style="background-color: #8B4513;"></td> <td style="background-color: #006400;"></td> <td>Superior</td> <td rowspan="4" style="text-align: center;"><b>Beneficial</b></td> </tr> <tr> <td>Negative effect</td> <td>-</td> <td>Major</td> <td style="background-color: #FF0000;"></td> <td style="background-color: #008000;"></td> <td>Major</td> </tr> <tr> <td>Positive effect</td> <td>+</td> <td>Moderate</td> <td style="background-color: #FFA500;"></td> <td style="background-color: #90EE90;"></td> <td>Moderate</td> </tr> <tr> <td>Major positive effect</td> <td>++</td> <td>Minor</td> <td style="background-color: #FFD700;"></td> <td style="background-color: #00FF00;"></td> <td>Minor</td> </tr> <tr> <td>Neutral environmental effect</td> <td></td> <td></td> <td>Negligible</td> <td style="background-color: #FFD700;"></td> <td style="background-color: #90EE90;"></td> <td>Negligible</td> </tr> </table>	Major negative effect	--	<b>Magnitude of significance is illustrated as:</b>	<b>Adverse</b>	Severe			Superior	<b>Beneficial</b>	Negative effect	-	Major			Major	Positive effect	+	Moderate			Moderate	Major positive effect	++	Minor			Minor	Neutral environmental effect			Negligible			Negligible
Major negative effect	--	<b>Magnitude of significance is illustrated as:</b>	<b>Adverse</b>		Severe			Superior	<b>Beneficial</b>																										
Negative effect	-		Major				Major																												
Positive effect	+		Moderate				Moderate																												
Major positive effect	++		Minor			Minor																													
Neutral environmental effect			Negligible			Negligible																													

# DETAILED ASSESSMENT MATRIX

## Intervention 27: Ensure infrastructure to support development (e.g. secure Section 106, Community Infrastructure Fund, accessibility contributions)

No.	SEA Objective	Description of predicted effect	Duration			Frequency	Temporary or permanent	Geographic significance	Magnitude	Level of certainty	Severity of significance	Positive or adverse	Mitigation or other action required?	Supporting comments / Proposed mitigation
			Short term	Medium term	Long term									
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance	<p>The proposed junction improvements to be delivered through Section 106 agreements have the potential to have impacts on the setting of local cultural heritage assets and areas designated for their historic environment interest.</p> <p>An increase in traffic flows stimulated by the junction improvements have the potential to have impacts on historic environment assets over a wider area.</p>	-	-	-	Ongoing	Permanent	Local	Medium	Medium	Minor	Negative	Yes	<p>Coppins Bridge is on the edge of the Historic Town Centre Conservation Area, with a number of listed buildings in this vicinity. Widening of approach road and junctions have the potential to affect the integrity of the conservation area and the listed buildings present locally, depending on scheme design and layout.</p> <p>The relevant project level Environmental Impact Assessments will identify and examine potential effects on the historic environment and seek to mitigate effects.</p>
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	<p>Junction improvements (including at Coppins Bridge, River Way, St Mary's Roundabout and Hunnyhill Vicarage Walk) delivered through Section 106 agreements and other mechanisms have the potential to affect local townscape quality at these locations, depending on design and layout.</p> <p>Through contributing to an increase in traffic flows, the potential schemes may also have a wider negative impact on landscape and townscape character.</p>	-	-	-	Ongoing	Permanent	Local	Medium	Medium	Minor	Negative	Yes	<p>S106 agreements and similar mechanisms also have the potential to be used to deliver improvements to the quality of the public realm.</p> <p>The relevant project level Environmental Impact Assessment will identify and examine potential effects on the townscape (and landscape) from the proposed road schemes and seek to mitigate effects.</p>
3	Protect, enhance and manage biodiversity and geodiversity.	<p>Whilst the junction improvements proposed by the intervention are not at locations sensitive for biodiversity assets or are within Biodiversity Opportunity Areas, an increase in traffic stimulated by the measures has the potential to have some effects on biodiversity assets through road kills, severance and air quality issues.</p>	-	-	-	Ongoing	Permanent	Local	Medium	Medium	Minor	Negative	Yes	<p>Section 106 agreements can also be used to create new habitats and manage existing ones.</p> <p>The relevant project level Environmental Impact Assessments will identify and examine potential effects on biodiversity assets in the area and seek to mitigate effects. Effects on European sites have been screened out by the Habitats Regulations Assessment being carried out alongside the LTP3.</p>
4	Maintain and improve the water quality of the Isle of Wight's rivers, coasts and groundwater	Unlikely to be significant effects at this level of detail.									Neutral			

# DETAILED ASSESSMENT MATRIX

## Intervention 27: Ensure infrastructure to support development (e.g. secure Section 106, Community Infrastructure Fund, accessibility contributions)

	No.	SEA Objective	Description of predicted effect	Duration			Frequency	Temporary or permanent	Geographic significance	Magnitude	Level of certainty	Severity of significance	Positive or adverse	Mitigation or other action required?	Supporting comments / Proposed mitigation
				Short term	Medium term	Long term									
SEA Objectives	5	Conserve the Island's natural resources.	Junction improvements promoted through the intervention are likely to lead to the generation of construction waste and use of raw materials.	-	-	-	Ongoing	Permanent	Local	Negligible	Medium	Negligible	Negative	Yes	
	6	Protect and enhance the Island's soils resource.	The proposed junction improvements promoted through the intervention will not affect agricultural land.									Neutral			This is due to the proposed junction improvements' location in Newport.
	7	Reduce air pollution and ensure continued improvements to air quality.	<p>The proposed junction improvements to be delivered through Section 106 agreements and other mechanisms will support a decrease in congestion over the short and medium term. This will support air quality improvements at network 'pinch points'.</p> <p>In the longer term however, junction improvements have the potential to encourage to an increase in traffic growth in the wider area, with implications for air quality.</p>	+	+	-/+	Ongoing	Permanent	Local	Medium	Medium	Minor	Positive	No	<p>Coppins Bridge has had historic air quality issues- the 2006 Updated and Screening Assessment indicated that a Detailed Assessment for nitrogen dioxide was required due to identified exceedences of the annual mean objective exceedences of nitrogen dioxide over the previous three years. Other locations in Newport (such as Fairlee Road) have also recently seen air quality issues linked to nitrogen dioxide emissions from traffic.</p> <p>S106 agreements and similar mechanisms are also likely however to be used to deliver improved public transport, pedestrian and cycle links, measures which will support modal shift.</p>
	8	Minimise the Island's contribution to climate change.	<p>The proposed junction improvements to be delivered through Section 106 agreements and similar mechanisms will support a decrease in congestion over the short and medium term.</p> <p>In the longer term however, junction improvements have the potential to encourage an increase in traffic growth in the wider area. This has the potential to undermine a limitation of greenhouse gas emissions.</p>	-/+	-	-	Ongoing	Permanent	International	Negligible	Medium	Moderate	Positive and negative	Yes	S106 agreements are also likely however to be used to deliver improved public transport, pedestrian and cycle links, measures which will support modal shift. This will support a limitation of greenhouse gas emissions from transport.
	9	Plan for the anticipated effects of climate change.	Unlikely to be significant effects at this level of detail.										Neutral		

# DETAILED ASSESSMENT MATRIX

## Intervention 27: Ensure infrastructure to support development (e.g. secure Section 106, Community Infrastructure Fund, accessibility contributions)

No.	SEA Objective	Description of predicted effect	Duration			Frequency	Temporary or permanent	Geographic significance	Magnitude	Level of certainty	Severity of significance	Positive or adverse	Mitigation or other action required?	Supporting comments / Proposed mitigation
			Short term	Medium term	Long term									
10	Reduce poverty and social exclusion and close the gap between the most deprived areas on the Isle of Wight and the rest of the Island.	Section 106 agreements and similar mechanisms present the opportunity to provide improved accessibility through supporting new transport infrastructure and improving service provision.  The proposed junction improvements in Newport have the potential to support public transport links through reducing congestion.	+	++	++	Ongoing	Permanent	Local	High	Medium	Moderate	Positive	No	This will support accessibility to services, facilities and amenities and promote social inclusion.
11	Safeguard and improve community health, safety and well being.	Section 106 agreements and similar mechanisms provide the opportunity to support improved walking and cycling routes, enhancements to the public realm and improved open space and green infrastructure provision. This will support healthier lifestyles, including the use of healthier modes of travel.	+	+	+	Ongoing	Permanent	Local	Medium	Medium	Minor	Positive	No	Section 106 agreements and similar mechanisms can also support health and wellbeing through improving accessibility to health, leisure and recreational opportunities, and through promoting enhancements to the built environment.
<b>Overall Effect</b>	<p>The intervention seeks to encourage the delivery of new infrastructure through Section 106 agreements and other mechanisms. This has the potential to promote the provision of new and improved walking, cycling and public transport links, promoting the use of sustainable modes of transport and modal shift. It also has the potential to facilitate improvements to the quality of the built environment, contribute to enhanced green infrastructure provision and support a range of other benefits if appropriate planning obligations are introduced. Through facilitating these mechanisms, the intervention will help promote accessibility to services, facilities and amenities, support social inclusion and improve the quality of residents' neighbourhoods as places to live.</p> <p>The intervention puts forward four strategic junction improvements in Newport to mitigate the impact of new developments on traffic flows, including at Coppins Bridge, River Way, St Mary's Roundabout and Hunnyhill/Vicarage Walk. Whilst in the short term these junction improvements will support enhanced network functionality and a reduction of the adverse effects linked with congestion, in the longer term the measures have the potential to stimulate an increase in traffic flows. Without the 'locking in' of the benefits of the junction improvements, this will have implications for greenhouse gas emissions, air and noise quality, and the quality of the public realm. Increased traffic flows in the longer term may also have adverse effects on biodiversity assets, the historic environment and landscape and townscape quality.</p>													
<b>Proposed Mitigation</b>	<p>Junction improvements should seek to improve access by non car modes and 'lock in' potential benefits through incorporating new pedestrian and cycle links within schemes and promoting public transport accessibility. Appropriate design and layout of junction improvements should seek to improve local townscape quality and limit effects on water, air and noise pollution and biodiversity assets.</p> <p>The project level Environmental Impact Assessment for the junction improvements will identify and examine potential effects on environmental receptors and seek to mitigate effects.</p>													

Key		Adverse		Beneficial		
The 'Duration' column is noted as:	Major negative effect	--	Severe			Superior
	Negative effect	-	Major			Major
	Positive effect	+	Moderate			Moderate
	Major positive effect	++	Minor			Minor
	Neutral environmental effect	0	Negligible			Negligible

# DETAILED ASSESSMENT MATRIX

## Interventions 4, 5, 6, 30, 33: Interventions linked to improved network management, better use of highway space and traffic management.

No.	SEA Objective	Description of predicted effect	Duration			Frequency	Temporary or permanent	Geographic significance	Magnitude	Level of certainty	Severity of significance	Positive or adverse	Mitigation or other action required?	Supporting comments / Proposed mitigation
			Short term	Medium term	Long term									
1	Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance	In the longer term, an increase in road capacity at congestion bottlenecks and improved traffic management may support an increase in traffic flows over a wider area.	0	-	-	Ongoing	Permanent	Local	Low	Low	Negligible	Negative	Yes	This has the potential to have some effects on the setting of cultural heritage assets and the integrity of the island's historic environment near the road network.  No significant highway construction measures are proposed through this intervention however.
2	Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening distinctiveness and its special qualities.	Through increasing highway capacity at bottlenecks and optimising management of the road network, the measures have the potential to support an increase in traffic flows. This has the potential to have implications for landscape and townscape quality.	0	-	-	Ongoing	Permanent	Local	Low	Low	Negligible	Negative	Yes	Increased traffic flows are less likely to take place on routes within the AONB. The increase in traffic flows directly attributable to the interventions are likely to be slight.
3	Protect, enhance and manage biodiversity and geodiversity.	An improvement in the capacity of the road network may increase traffic flows, with some effects on biodiversity from air quality issues, road kills and severance.	-	-	-	Ongoing	Permanent	Local	Low	Low	Negligible	Negative	Yes	Changes in traffic flows may also have adverse effects on habitats and species, including through effects on air quality, from road kills and severance.
4	Maintain and improve the water quality of the Isle of Wight's rivers, coasts and groundwater	No significant effects at this level of detail.									Neutral			
5	Conserve the Island's natural resources.	Through improving existing capacity on the road network without the need for significant construction activities, the interventions will support this SEA Objective.	+	+	+	Ongoing	Permanent	Local	Medium	Low	Minor	Positive	No	Improved network management is an alternative to increasing capacity through the construction of new highways infrastructure. This will help conserve natural resources.
6	Protect and enhance the Island's soils resource.	Through improving existing capacity on the road network without significant land take, the interventions will support this SEA Objective.	+	+	+	Ongoing	Permanent	Local	Medium	Low	Minor	Positive	No	Improved network management will not require significant landtake and is an alternative to increasing capacity through the construction of new highways infrastructure.

# DETAILED ASSESSMENT MATRIX

## Interventions 4, 5, 6, 30, 33: Interventions linked to improved network management, better use of highway space and traffic management.

	No.	SEA Objective	Description of predicted effect	Duration			Frequency	Temporary or permanent	Geographic significance	Magnitude	Level of certainty	Severity of significance	Positive or adverse	Mitigation or other action required?	Supporting comments / Proposed mitigation	
				Short term	Medium term	Long term										
SEA Objectives	7	Reduce air pollution and ensure continued improvements to air quality.	Improvements in air quality at congestion hotspots in the Isle of Wight (including in Newport) will be supported in the shorter term by improved management of the highway network. In the longer term however, through improving the management of the highway network, the measures have the potential to encourage the growth of traffic through improving journey times and reliability. This will have implications for air quality.	+	+/-	-	Ongoing	Permanent	Local	Medium	Medium	Minor	Positive and negative	Yes	Whilst no air quality management areas exist on the Island an increase in traffic flows over the longer term and an expansion of road capacity may potentially lead to future issues at existing locations sensitive to air pollution, including linked to the Coppins Bridge junction in Newport, and on the Sandown, Lake and Shanklin road corridor.	
	8	Minimise the Island's contribution to climate change.	Increased capacity at bottlenecks and optimised management of the highway network has the potential to encourage the growth of traffic in the longer term.	+/-	-	--	Ongoing	Permanent	International	Negligible	Medium	Moderate	Positive and negative	Yes	This has the potential to reverse a shorter term reduction in greenhouse gas emissions resulting from congestion management. An overall increase in traffic flows stimulated by the measure has the potential to undermine efforts to meet the UK Government target of a 34% reduction in greenhouse gas emissions by 2020 and an 80% reduction by 2050 on 1990 levels.	
	9	Plan for the anticipated effects of climate change.	No significant effects at this level of detail.										Neutral			
	10	Reduce poverty and social exclusion and close the gap between the most deprived areas on the Isle of Wight and the rest of the Island.	The proposed interventions have the potential to improve access for car users through improving journey times and reliability. This will benefit those with access to a car, including from rural areas, where alternatives are more limited.  The measures also have the potential to improve journey times and reliability for bus routes, promoting accessibility by public transport.	++	++	++	Ongoing	Permanent	Sub-regional	Medium	Medium	Moderate	Positive	No	Poor accessibility is closely linked to the sectors of the population who suffer social exclusion, including people with learning difficulties, people with mobility problems, senior citizens, and people without English as their first language.	

# DETAILED ASSESSMENT MATRIX

## Interventions 4, 5, 6, 30, 33: Interventions linked to improved network management, better use of highway space and traffic management.

No.	SEA Objective	Description of predicted effect	Duration			Frequency	Temporary or permanent	Geographic significance	Magnitude	Level of certainty	Severity of significance	Positive or adverse	Mitigation or other action required?	Supporting comments / Proposed mitigation
			Short term	Medium term	Long term									
11	Safeguard and improve community health, safety and well being.	In the longer term, an increase in road capacity through improved network management may promote an increase in traffic flows over a wider area. This has the potential to lead to some air and noise quality issues, and road safety issues locally. This will have implications for the health and wellbeing of local residents.	-	-	-	Ongoing	Permanent	Local	Low	Low	Negligible	Negative	Yes	The measures however also have the potential to improve journey times and reliability for bus routes, promoting accessibility to health, leisure and recreational opportunities.
<b>Overall Effect</b>	The policy will support a reduction in congestion at hotspots on the Island in the short term, with benefits for journey times, accessibility for car users, and for air and noise quality. Bus routes will also be supported by improved traffic flows and management. This will support journey times and reliability, promoting accessibility by public transport. In the longer term however, through improving capacity at bottlenecks and optimising management of the highway network, the measures have the potential to lead to traffic growth as journey times and reliability improve. This has the potential to have some implications for longer term air and noise quality, the quality of landscape, townscape and the public realm, and have limited effects on the integrity of the historic environment. Potential effects are however likely to be insignificant due to the nature and scope of the measures.													
<b>Proposed Mitigation</b>	The interventions should seek to promote public transport use and walking and cycling through supporting bus priority and pedestrian and cycle priority within improved network and traffic management. The wider LTP3 should also seek to ensure that the benefits of capacity improvements stimulated by improved network management and better use of the highway network are 'locked in' through interventions to promote non-car modes of transport and restrain traffic growth.													

Key	
Major negative effect	--
Negative effect	-
Positive effect	+
Major positive effect	++
Neutral environmental effect	

The 'Duration' column is noted as:		Magnitude of significance is illustrated as:	
Major negative effect	--	<b>Adverse</b>	Severe
Negative effect	-	<b>Magnitude of significance is illustrated as:</b>	Major
Positive effect	+		Moderate
Major positive effect	++		Minor
Neutral environmental effect			Negligible

## **Appendix F: Proposed Monitoring Programme**

### Proposed SEA monitoring programme for the Isle of Wight LTP3

Potential negative effect / area for improvement	Indicator	Data Source	Frequency of monitoring and scale	Target/Trigger	Links to Baseline
Potential stimulation of car use by junction improvements and enhanced network management.	Traffic flows on key routes	IoWC and partners	Annually, Island wide	When flows increases year on year	SEA baseline data, accessibility and transportation
Effect of junction improvements and enhanced network management on air quality	No. of days when air pollution is moderate or high for NO <sub>2</sub>	IoWC and partners	Annually, Island wide	When number of days exceeds year on year	SEA baseline data, air quality
Effect of junction improvements and enhanced network management on increases in greenhouse gas emissions.	Carbon footprint of the Island	IoWC and partners	Annually, Island wide	When transport sector emissions increase year on year	SEA baseline data, accessibility and transportation climate change
Sourcing of electric charging points from renewable energy	Percentage of electricity provided at electric charging points sourced from renewable energy	IoWC and partners	Annually, Island wide	When proportion falls year on year	SEA baseline data, climate change

## **Appendix G: Policy and plan review**

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## Review of Policies, Plans and Programmes

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
<b>Accessibility and Transport</b>		
EU Sustainable Development Strategy (2006)	This Strategy identifies key priorities for an enlarged Europe to focus on up to 2010. This includes climate change and clean energy, sustainable transport, sustainable protection and consumption, health, better use of natural resources, social inclusion and fighting global poverty. It aims to achieve better policy integration in addressing these challenges, and to ensure that Europe looks beyond its boundaries in making informed decisions about sustainability.	Sustainable development should be the key consideration for the LTP3, which should aim to meet the EU's SD objectives.
EU European transport policy for 2010 : time to decide (2001)	Aims to strike a balance between economic development and the quality and safety demands made by society in order to develop a modern, sustainable transport system for 2010.	The LTP3 should support the aims of European and national policy framework.
ODPM PPG13: Transport (2001)	The objectives of this guidance are to integrate planning and transport at the national, regional, strategic and local level to: promote more sustainable transport choices for both people and for moving freight; promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling, and reduce the need to travel, especially by car.	The LTP3 should seek to reflect the aims of PPG13 by supporting forward planning on the Isle of Wight and supporting the integration of new development with high quality sustainable transport infrastructure.
Department for Transport: Transport White Paper: The Future of Transport – A Network for 2030 (2004)	Sets out factors that will shape transport in the UK over the next thirty years. Also sets out how the Government will respond to the increasing demand for travel, while minimising the negative impact on people and the environment.	The LTP should support the aims of the Future of Transport, including through promoting the White Paper's aim to minimise transport's effect on the environment.
Department for Transport: Towards a Sustainable Transport System: Supporting Economic Growth in a Low Carbon World (2007)	<p>The strategy sets out an approach for implementing the recommendations of the Eddington study<sup>1</sup> in relation to transport, and reflects the findings of the Stern Review of the economics of climate change. On this basis the strategy sets out the Government's five 'broad goals' for transport:</p> <ul style="list-style-type: none"> <li>• Maximise the competitiveness and productivity of the economy</li> <li>• Address climate change, by cutting emissions of carbon dioxide (CO2) and other greenhouse gases;</li> <li>• Protect people's safety, security and health;</li> <li>• Improve quality of life, including through a healthy natural environment; and</li> <li>• Promote greater equality of opportunity.</li> </ul>	The LTP3 should seek to promote these national goals for transport, as refined in the subsequent DfT document <i>Delivering a Sustainable Transport System</i> . (2008, see below)

<sup>1</sup> Sir Rod Eddington was jointly commissioned by the Chancellor of the Exchequer and the Secretary of State for Transport to examine the long-term links between transport and the UK's economic productivity, growth and stability, within the context of the Government's broader commitment to sustainable development. The Study was announced in Budget 2005 and reported on 1 December 2006 to accompany the 2006 Pre-Budget Report

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
Department for Transport: Delivering a Sustainable Transport System (2008)	<p>This further develops the broad goals presented in the DfT's <i>Towards a Sustainable Transport System</i> to the following:</p> <ul style="list-style-type: none"> <li>• To support national economic competitiveness and growth, by delivering reliable and efficient transport networks;</li> <li>• To reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change;</li> <li>• To contribute to better safety, security and health and longer life-expectancy by reducing the risk of death, injury or illness arising from transport and by promoting travel modes that are beneficial to health;</li> <li>• To promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society; and</li> <li>• To improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.</li> </ul>	These goals should act as the over-arching priorities for the LTP3, as recommended by Government guidance on LTP3s.
Department for Transport: The Future of Rail White Paper (2004)	Sets out a blueprint for a new streamlined structure for Britain's Railway. The proposals aim to provide a single point of accountability for the network's performance, allow closer working between track and train and provide for greater devolution of decision making.	The LTP3 should support an increase in rail usage, including through supporting linkages with stations on the Island Line and improving intermodality.
Department for Transport: An Evidence Base Review of Public Attitudes to Climate Change and Transport Behaviour (2006)	Summary report of the findings of an evidence base review investigating the research base on public attitudes towards climate change and transport behaviour.	The LTP3 should have a close focus on reducing greenhouse gas emissions from transport and supporting climate change adaptation on the Isle of Wight.
Department for Transport: National Cycling Strategy and Review (1996, reviewed 2005)	The National Cycling Strategy aims to increase cycle use for all types of journey. The Review focuses on the mechanisms established for the delivery of cycling and the effect these have had on increasing cycling rates.	The LTP3 should take into account the objectives of the National Cycling Strategy by improving cycle networks across the area, encouraging cycle friendly development, promoting travel plans and facilitating improvements to the public realm.
Government Office for the South East: South East Regional Transport Strategy	<p>The RTS, which is part of the RSS, states that Local authorities should have regard to the following general objectives when drawing up their Local Development Documents:</p> <ul style="list-style-type: none"> <li>• The overall objectives of the strategy are as follows:</li> <li>• Promoting management of and investment in the system, fully utilising existing transport capacity before justifying investment in additional capacity</li> <li>• Rebalancing the structure and use of the transport system in favour of more sustainable modes; and</li> <li>• supporting the regional spatial strategy, particularly managing and investing in interregional corridors and delivering urban</li> </ul>	The LTP3 should seek to support the RTS through facilitating reducing the need to travel, supporting a reduction in congestion and encouraging modal shift.

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
	<p>renaissance and sub-regional objectives.</p> <ul style="list-style-type: none"> <li>18 polices are set out by the RTS, relating to a variety of issues. These include: managing and investment in infrastructure; provision of public transport; rural transport; regional transport hubs and spokes; water transport; airports; freight; mobility management; parking; travel plans and advice; and delivery partnerships.</li> </ul>	
<p>Isle of Wight Council: Isle of Wight Local Transport Plan 2006-11 (2006)</p>	<p>The second Local Transport Plan for the Isle of Wight sets out the Island's transport strategy for the period 2006-11. The vision of the LTP is to provide a transport strategy that:</p> <ul style="list-style-type: none"> <li>Achieves a transport strategy that enhances the quality of Island life and helps ensure economic prosperity by connecting people, improving access for all;</li> <li>Enables the effective provision, coordination, and management of transport networks for all modes of transport and transport users, minimising delays and disruption;</li> <li>Minimises the number of casualties and fatalities caused by the operation or use of the transport networks, with an emphasis on the safety of vulnerable groups; and</li> <li>Protects the people, communities, air quality and environments that could be adversely by transport.</li> </ul> <p>To deliver this vision, the key priorities of the LTP2 were as follows:</p> <ul style="list-style-type: none"> <li>Where practicable and relevant, reduce journey lengths and the need to travel</li> <li>Where journeys cannot be avoided, work in partnership with the transport operators and others to make the best use of existing infrastructure across all modes and introduce measures, which will increase travel choices.</li> <li>In those circumstances where travel demand cannot be met by the existing infrastructure, then look at value for money solutions, which will provide additional infrastructure and facilities.</li> </ul>	<p>The LTP3 and associated Implementation Plans will revise and update this document.</p>

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
<p>Solent Transport Partnership: Solent Transport Strategy (part of Hampshire Local Transport Plan) (2006)</p>	<p>The Solent Transport Strategy was developed by the Solent Transport partnership on behalf of the Partnership for Urban South Hampshire.</p> <p>The strategy's main features are:</p> <ul style="list-style-type: none"> <li>• A land use strategy to encourage shorter journeys and sustainable communities by focusing development in and around the two cities of Southampton and Portsmouth;</li> <li>• A series of targeted marketing campaigns to encourage better travel planning by businesses in the area, including more flexible working patterns;</li> <li>• Improved management of the motorways and trunk roads, to make the most effective use of existing road space;</li> <li>• Strategies to tackle problems of accessibility caused by geography, especially on the Fareham-Gosport peninsula. This includes the development of a suitable solution for the peninsula's access and congestion problems, following the Government's decision not to fund the Fareham-Gosport-Portsmouth light rail scheme;</li> <li>• An emerging public transport strategy that is based on cost-effective bus priority measures and park and ride around each of the two cities. More expensive measures to improve the linkages between the two centres would be deferred to the longer term; and</li> <li>• Improved access to the key international gateways of Southampton Airport and the ports of Southampton and Portsmouth and the development of Southampton and Portsmouth as regional hubs.</li> </ul>	<p>The Isle of Wight LTP3 should consider cross Solent issues and seek to work with partners on the mainland to address shared problems and opportunities.</p>
<p>Isle of Wight Council: Sustainable Travel to School Strategy (2007)</p>	<p>Sustainable Travel to School Strategy seeks to increase the proportion of students who travel to school by walking, cycling, public transport and car share.</p> <p>The Strategy has a focus on improving:</p> <ul style="list-style-type: none"> <li>• Accessibility to school sites and services</li> <li>• Health through increased activity</li> <li>• Environment through reduced car use</li> </ul>	<p>The LTP3 should seek to encourage sustainable travel to school and seek to ensure continued increases in the proportion of students who travel by school by sustainable modes of transport.</p>

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
<b>Air Quality</b>		
EC Air Quality Directive (1996)	Aims to improve air quality throughout Europe by controlling the level of certain pollutants and monitoring their concentrations. In particular the Directive aims to establish levels for different air pollutants; draw up common methods for assessing air quality; methods to improve air quality; and make sure that information on air quality is easily accessible to Member States and the public.	The LTP3 should aim to reduce emissions from transport by seeking to reduce traffic flows and congestion and encouraging alternatives to car use. It should also have a close focus on improving air quality in the areas of poor air quality, including in Air Quality Management Areas designated due to emissions from transport.
DETR Air Quality Strategy for England, Scotland, Wales and Northern Ireland. Working Together for Clean Air (2000)	The Strategy provides specific UK targets for reducing air pollution and sets out local authority responsibilities for achieving most of these. It states that land use planning has a key role to play in contributing to these targets.	The LTP3 should aim to reduce emissions from transport by seeking to reduce traffic flows and congestion and encouraging alternatives to car use. It should also have a close focus on improving air quality in the areas of poor air quality, including in Air Quality Management Areas designated due to emissions from transport.
ODPM PPS23: Planning and Pollution Control (2004)	PPS23 is intended to complement the new pollution control framework under the Pollution Prevention and Control Act 1999 and the PPC Regulations 2000.	The LTP3 should aim to reduce emissions from transport by seeking to reduce traffic flows and congestion and encouraging alternatives to car use. It should also have a close focus on improving air quality in the areas of poor air quality, including in Air Quality Management Areas designated due to emissions from transport.
<b>Biodiversity and Geodiversity</b>		
EC Sixth Environmental Action Programme 2002-2012 (2002)	Nature and biodiversity (including soil communities) has been identified as one of four priority areas for Europe. The EAP requires specific action to counteract pressures arising notably from pollution, the introduction of non-native species, and potential risks from releasing genetically modified organisms.	The LTP3 should aim to promote development which supports environmental quality in the area through supporting air, soil and water quality. The LTP3 should also seek to reduce air, water and soil pollution near important biodiversity sites.
EC Biodiversity Strategy (1998)	Member states are required to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity, and integrate as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.	The LTP3 should have due regard to national, regional and local biodiversity strategies.
The Pan-European Biological and Landscape Diversity Strategy (1995)	The strategy aims to stop and reverse the degradation of biological and landscape diversity values in Europe.	The LTP3 should support the provision of green infrastructure and biodiversity-friendly design and layout to promote and enhance biological and landscape diversity.
UN Convention on Biological Diversity (1992)	The aims of the Convention include the conservation of biological diversity (including a commitment to significantly reduce the current rate of biodiversity loss), the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.	The LTP3 should include provision which enhances biological diversity (e.g. provision of woodland and greenspace) where possible in order to meet the requirements of the UN Convention, whilst at the same time avoiding biodiversity loss through careful choice and design of transport schemes.

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979)	The Convention seeks to conserve wild flora and fauna and their natural habitats, and to monitor and control endangered and vulnerable species.	Protected species are present throughout the Island, so the LTP3 should ensure that where transport schemes are necessary in areas containing these species, adequate mitigation is carried out before development commences. Monitoring of such species will also be necessary.
DEFRA Wildlife and Countryside Act (1981, as amended)	The principle mechanism for the legislative protection of wildlife in Great Britain.	Protected species are present throughout the Isle of Wight, so the LTP3 should ensure that where transport schemes are necessary in areas containing these species, adequate mitigation is carried out before development commences. Monitoring of such species will also be necessary.
DoE Biodiversity: The UK Action Plan (1994)	Government's strategy for protection and enhancement of biodiversity, from 1992 convention on Biodiversity commitments. Advises on opportunities and threats for biodiversity.	The LTP3 should support the provision of green infrastructure and biodiversity-friendly design and layout to support flora and fauna.
DEFRA: Working with the Grain of Nature: A Biodiversity Strategy for England (2002)	Government's strategy for the integration of biodiversity into public, private and voluntary sector policies and programmes in England.	<p>The LTP3 should seek to address the objectives of the biodiversity strategy by fully addressing biodiversity considerations through the development of the plan.</p> <p>In particular the LTP3 should support new transport infrastructure which avoids sensitive areas and seeks to support regional biodiversity networks.</p>
TCPA: Biodiversity by Design: A Guide for Sustainable Communities (2004)	The development process should consider ecological potential of all areas including both greenfield and brownfield sites. Local authorities and developers have a responsibility to mitigate impacts of development on designated sites and priority habitats and species and avoid damage to ecosystems.	The LTP3 should seek to reflect the aims of the Biodiversity by Design, and ensure appropriate mitigation is implemented wherever necessary.
DCLG: Planning Policy Statement 9: Biodiversity and Geological Conservation (2005)	<p>Sets out planning policies on protection of biodiversity and geological conservation through the planning system, replaces PPG 9 on nature conservation (published October 1994). The key principles of PPS9 are as follows:</p> <p>(i) Development plan policies and planning decisions should be based upon up-to-date information about the environmental characteristics of their areas. These characteristics should include the relevant biodiversity and geological resources of the area. In reviewing environmental characteristics local authorities should assess the potential to sustain and enhance those resources.</p> <p>(ii) Plan policies and planning decisions should aim to maintain, and enhance, restore or add to biodiversity and geological conservation interests. In taking decisions, local planning authorities should ensure that appropriate weight is attached to designated sites of international, national and local importance; protected species; and to biodiversity and geological interests within the wider environment.</p> <p>(iii) Plan policies on the form and location of development should take a</p>	Biodiversity considerations should be fully considered by the LTP3. In particular development of transport infrastructure should avoid sensitive areas and seek to ensure provision of wildlife friendly areas such as green space within new schemes. The value of local geodiversity assets should also be recognised by the LTP3.

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
	<p>strategic approach to the conservation, enhancement and restoration of biodiversity and geology, and recognise the contributions that sites, areas and features, both individually and in combination, make to conserving these resources.</p> <p>(iv) Plan policies should promote opportunities for the incorporation of beneficial biodiversity and geological features within the design of development.</p> <p>(v) Development proposals where the principal objective is to conserve or enhance biodiversity and geological conservation interests should be permitted.</p> <p>(vi) The aim of planning decisions should be to prevent harm to biodiversity and geological conservation interests. Where granting planning permission would result in significant harm to those interests, local planning authorities will need to be satisfied that the development cannot reasonably be located on any alternative sites that would result in less or no harm. In the absence of any such alternatives, local planning authorities should ensure that, before planning permission is granted, adequate mitigation measures are put in place. Where a planning decision would result in significant harm to biodiversity and geological interests which cannot be prevented or adequately mitigated against, appropriate compensation measures should be sought. If that significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission should be refused.</p>	
<p>Natural England: Securing Biodiversity: A New Framework for Delivering Priority Species and Habitats in England</p>	<p>The guide sets out a framework which has been developed to enhance the recovery of priority habitats and species in England (published under section 41 of the Natural Environment and Rural Communities (NERC) Act 2006).</p> <p>The Strategy seeks to:</p> <ul style="list-style-type: none"> <li>• encourage the adoption of an ecosystem approach and better embed climate change adaptation principles in conservation action;</li> <li>• achieve biodiversity enhancements across whole landscapes and seascapes;</li> <li>• achieve our priority habitat targets through greater collective emphasis on habitat restoration and expansion;</li> <li>• enhance the recovery of priority species by better integrating their needs into habitat-based work where possible, and through targeted species recovery work where necessary;</li> <li>• support the restoration of designated sites, including by enhancing the wider countryside in which they sit;</li> <li>• support the conservation of marine biodiversity, inside and outside of designated sites;</li> </ul>	<p>The LTP3 should support the framework through seeking to encourage an approach to transport infrastructure which supports a holistic approach to biodiversity requirements on the Island, incorporating green infrastructure, landscape protection and habitat provision.</p>

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
	<ul style="list-style-type: none"> <li>• establish and implement a delivery programme, with agreed accountabilities, for priority species and habitats in England;</li> <li>• improve the integration of national, regional and local levels of delivery;</li> <li>• improve the links between relevant policy-makers and biodiversity practitioners;</li> <li>• strengthen biodiversity partnerships by clarifying roles at England, regional and local levels.</li> </ul>	
English Nature: Climate Change - Space for Nature? (2006)	Scene setting information for the next 80 years in terms of climate change. Prescribes suggested actions to be taken now in preparation for change.	Provision of green space and green corridors within transport infrastructure will have benefits for biodiversity networks.
DEFRA England's Trees, Woods and Forests - a Consultation Document (2006)	Government objectives include: to safeguard England's resource of trees, woods and forests for future generations; to protect the environmental resources of water, soil and air, and to protect and enhance biodiversity and landscapes, and cultural values; to ensure that woodlands and trees enhance the quality of life for those living in, working in, or visiting England; to encourage the development of new or improved market for sustainable woodland products and services where this will deliver identifiable public benefits, nationally or locally.	The LTP3 should aim to protect trees and woods and recognise their value to landscape, biodiversity, climate change mitigation and adaptation, environmental quality and for the public realm. Planting of trees within the areas assigned for new or upgraded transport infrastructure should be encouraged.
DEFRA Guidance for Local Authorities on Implementing Biodiversity Duty (2007)	The Duty is set out in Section 40 of the Natural Environment and Rural Communities Act (NERC) 2006, and states that: "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". Particular areas of focus include: Policy, Strategy and Procurement; Management of Public Land and Buildings; Planning, Infrastructure and Development; and Education, Advice and Awareness.	Biodiversity considerations should be fully considered by the LTP3. In particular development of transport infrastructure should avoid sensitive areas and seek to ensure provision of wildlife friendly areas such as green space within new schemes. The value of local geodiversity assets should also be recognised by the LTP3.
South East England Biodiversity Forum: South East Biodiversity Strategy (2008)	The South East Biodiversity Strategy seeks to: provide a strategic framework for the delivery of biodiversity targets in the region; embed a landscape scale approach to restoring whole ecosystems; create the space needed for wildlife to respond to climate change; and be a core element within the strategies and delivery plans of organisations across the South East region.	The LTP3 should support the framework through seeking to encourage an approach to transport infrastructure which supports a holistic approach to biodiversity requirements on the Isle of Wight, incorporating green infrastructure, landscape protection and habitat provision.
Seeing the Wood for the Trees: A forestry and Woodland Framework for South East of England: 2004	<p>The Framework seeks the following outcomes for the region:</p> <ul style="list-style-type: none"> <li>• Trees and woodlands supporting the development of sustainable communities;</li> <li>• More people's health and well-being improved through visiting woodlands;</li> <li>• Greater use being made of trees and woodlands for community projects and activities;</li> <li>• Woodlands enhancing and protecting the region's</li> </ul>	The LTP3 should aim to protect trees and woods and recognise their value to landscape, biodiversity, climate change mitigation and adaptation, environmental quality and for the public realm. Planting of trees within areas of transport infrastructure should be encouraged.

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
	<p>environment, together with safeguards for the heritage features within them;</p> <ul style="list-style-type: none"> <li>• Woodland habitats and species being brought into good ecological condition;</li> <li>• The economic value of woodland products to the region being increased;</li> <li>• Woodlands playing a greater role in attracting tourism, inward investment and other economic activity;</li> <li>• Woodlands and trees, especially ancient woodlands and veteran trees, protected from loss;</li> <li>• Integrated, strategic planning of woodland management.</li> <li>• The skills base needed to manage our woodlands;</li> <li>• Increasing public awareness about woodlands and their management; and</li> <li>• The financial viability of woodland management secured.</li> </ul>	
Isle of Wight Local Biodiversity Action Plan	The Local Biodiversity Action Plan sets out the local priorities for biodiversity on the Isle of Wight. It identifies the priority habitats and species on the Island, setting targets for their conservation and outlining mechanisms for achieving these.	The LTP3 should support the objectives of the Biodiversity Action Plan through protecting and enhancing the Island's biodiversity networks and seeking to support priority habitats and species.
Isle of Wight Geodiversity Action Plan	<p>The LGAP for the Island seeks to promote the Isle of Wight through the conservation and sustainable development of its Earth Heritage</p> <p>The plan sets objectives, targets and determines indicators that will focus resources to conserve and enhance the Island's geodiversity. It will also in the longer term produce an electronic database audit of the Island's geodiversity. The LGAP is intended to link into other existing initiatives such as the Isle of Wight AONB, Local Biodiversity Action Plan, Historic Environment Action Plan, Historic Landscape Assessments and the Isle of Wight Council's corporate objective of 'Protecting the Island's Physical Environment'.</p> <p>The Objectives of the LGAP are:</p> <ol style="list-style-type: none"> <li>1. To audit the existing Earth Heritage resource of the Isle of Wight.</li> <li>2. To audit existing Earth Heritage interpretation on the Isle of Wight.</li> <li>3. To form an action plan to help conserve the Island's Earth Heritage resource.</li> <li>4. To form an action plan to develop in a sustainable way the Island's Earth Heritage Resource to the benefit of the Island community and visitor.</li> </ol>	The LTP3 should seek to protect, enhance and improve understanding of the Isle of Wight's rich geodiversity resource.

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
Brent Goose Strategy Group: Brent Goose Strategy (South East Hampshire Coast)	The principal aim of the Strategy is to ensure that sufficient feeding resources continue to be available to ensure the survival of the Brent Goose population, both at its current level and taking into account natural fluctuations in population. The underlying principle is to protect at least the existing level of grazing resource, ensuring no net loss.	The LTP3 should support the objectives of the Brent Goose Strategy, and seek to limit the loss of habitat, including of winter grazing areas.
Hampshire Wildlife Trust: Wader Roost Strategy (2010)	The strategy records the locations of all current roost sites and grassland feeding areas in the Solent area and identifies sites most vulnerable to sea-level rise and potential areas for creation of new roosts and feeding sites. The strategy seeks to inform local and strategic planning policies to provide protection from development and changes in land use. It will help target habitat creation under the new environmental stewardship schemes and inform possible additional site designations (e.g. SSSI, SPA, SINC if appropriate), and inform the assessment of off site impacts.	The LTP3 should seek to ensure that new transport infrastructure avoids feeding sites and areas with the potential for creating new roosts. It should also seek to support habitat creation at relevant sites.
<b>Climate Change</b>		
UN Framework Convention on Climate Change (1992)	Sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change.	The LTP3 should promote a package of measures to support climate change mitigation, including public transport investment, demand management, the promotion of smarter travel choices and integration of land use and transport planning to reduce the need to travel. It should also seek to encourage the use of new technologies and consider the use of mechanisms such as carbon budgeting.  The LTP3 should also facilitate climate change adaptation, through supporting the sustainable management of flood risk areas, facilitating a growth in green infrastructure and promoting the use of sustainable urban drainage systems.
IPCC Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997)	Commits member nations to reduce their emissions of carbon dioxide and other greenhouse gases, or engage in emissions trading if they maintain or increase emissions of these gases.	The LTP3 should promote a package of measures to support climate change mitigation, including public transport investment, demand management, the promotion of smarter travel choices and integration of land use and transport planning to reduce the need to travel. It should also seek to encourage the use of new technologies and consider the use of mechanisms such as carbon budgeting.
EC Sixth Environmental Action Programme 2002-2012 (2002)	Climate change has been identified as one of four priority areas for Europe. The EAP's main objective is a reduction in emissions of greenhouse gases without a reduction in levels of growth and prosperity, as well as adaptation and preparation for the effects of climate change.	The LTP3 should promote a package of measures to support climate change mitigation, including public transport investment, demand management, the promotion of smarter travel choices and integration of land use and transport planning to reduce the need to travel. It should also seek to encourage the use of new technologies and consider the use of mechanisms such as carbon budgeting.  The LTP3 should also facilitate climate change adaptation, through supporting the sustainable management of flood risk areas, facilitating a growth in green infrastructure and promoting the use of sustainable urban drainage systems.

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EU Sustainable Development Strategy (2006)	<p>This Strategy identifies key priorities for an enlarged Europe to focus on up to 2010, including climate change and clean energy, and sustainable transport.</p>	<p>The LTP3 should promote a package of measures to support climate change mitigation, including public transport investment, demand management, the promotion of smarter travel choices and integration of land use and transport planning to reduce the need to travel. It should also seek to encourage the use of new technologies and consider the use of mechanisms such as carbon budgeting.</p> <p>The LTP3 should also facilitate climate change adaptation, through supporting the sustainable management of flood risk areas, facilitating a growth in green infrastructure and promoting the use of sustainable urban drainage systems.</p>
UK Climate Change Act 2008 (2008)	<p>The 2008 Climate Change Act seeks to manage and respond to climate change in the UK, by:</p> <ul style="list-style-type: none"> <li>• Setting ambitious, legally binding targets;</li> <li>• Taking powers to help meet those targets;</li> <li>• Strengthening the institutional framework;</li> <li>• Enhancing the UK's ability to adapt to the impact of climate change; and</li> <li>• Establishing clear and regular accountability to the UK Parliament and to the devolved legislatures.</li> </ul> <p>Significantly, the Act sets a legally binding target of at least an 80 percent cut in greenhouse gas emissions by 2050 and at least a 34 percent cut by 2020. These targets are against a 1990 baseline.</p>	<p>The LTP3 should seek to support the proposed reductions in greenhouse gas emissions through promoting a package of measures to support climate change mitigation, including public transport investment, demand management, the promotion of smarter travel choices and integration of land use and transport planning to reduce the need to travel. It should also seek to encourage the use of new technologies and consider the use of mechanisms such as carbon budgeting.</p>
UK Renewable Energy Strategy (2009)	<p>The UK has committed to sourcing 15% of its energy from renewable sources by 2020 – an increase in the share of renewables from about 2.25% in 2008. The Renewable Energy Strategy sets out how the Government will achieve this target through utilising a variety of mechanisms to encourage Renewable Energy provision in the UK. This includes through streamlining the planning system, increasing investment in technologies and improving funding for advice and awareness raising.</p>	<p>The LTP3 should seek to support the aims of the strategy through promoting the use of renewable energy within transport infrastructure, and promoting low carbon technologies.</p>

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The UK Low Carbon Transition Plan (2009)	<p>The UK Low Carbon Transition Plan sets out how the UK will meet the Climate Change Act's legally binding target of 34 percent cut in emissions on 1990 levels by 2020. It also seeks to deliver emissions cuts of 18% on 2008 levels.</p> <p>The main aims of the Transition Plan include the following:</p> <ul style="list-style-type: none"> <li>• Producing 30% of energy from renewables by 2020;</li> <li>• Improving the energy efficiency of existing housing;</li> <li>• Increasing the number of people in 'green jobs'; and</li> <li>• Supporting the use and development of clean technologies.</li> </ul>	<p>The LTP3 should seek to support the proposed reductions in greenhouse gas emissions through promoting a package of measures to support climate change mitigation, including public transport investment, demand management, the promotion of smarter travel choices and integration of land use and transport planning to reduce the need to travel. It should also seek to encourage the use of new technologies and consider the use of mechanisms such as carbon budgeting.</p>
Planning and Climate Change: Supplement to PPS1 (2007)	<p>The PPS is a supplement to PPS1 and aims to focus on national policy and to provide clarity on what is required at regional and local levels. It also aims to ensure that decisions are made at the most appropriate level and in a timely fashion to deliver the action needed to address climate change.</p> <p>The Statement focuses on both mitigation and adaptation measures.</p>	<p>The LTP3 should promote a package of measures to support climate change mitigation, including public transport investment, demand management, the promotion of smarter travel choices and integration of land use and transport planning to reduce the need to travel. It should also seek to encourage the use of new technologies and consider the use of mechanisms such as carbon budgeting.</p> <p>The LTP3 should also facilitate climate change adaptation, through supporting the sustainable management of flood risk areas, facilitating a growth in green infrastructure and promoting the use of sustainable urban drainage systems.</p>
ODPM PPS25: Development and Flood Risk (2006)	<p>Explains how flood risk should be considered at all stages of the plan and development process in order to reduce future damage to property and loss of life.</p>	<p>The LTP3 should avoid the promotion of infrastructure which increases flood risk in existing or potential (due to climate change) flood risk areas. It should also seek to utilise the SFRA which has been carried out for the Isle of Wight, including the sequential/exception test where appropriate. The LTP3 should also seek to limit the risk of flooding from surface run off through the incorporation of SUDS and other measures.</p>
DCLG: PPS 25 Supplement: Development and Coastal Change (March 2010)	<p>The supplement to PPS25 sets out planning policies for managing development on coastal areas affected by coastal change.</p> <p>The main aims are as follows:</p> <ul style="list-style-type: none"> <li>• ensure that policies and decisions in coastal areas are based on an understanding of coastal change over time</li> <li>• prevent new development from being put at risk from coastal change by: i) avoiding inappropriate development in areas that are vulnerable to coastal change or any development that adds to the impacts of physical changes to the coast, and ii) directing development away from areas vulnerable to coastal change</li> <li>• ensure that the risk to development which is, exceptionally, necessary in coastal change areas because it requires a coastal</li> </ul>	<p>The LTP3 should seek to avoid inappropriate development in areas vulnerable to coastal change; ensure that coastal change impacts to be considered alongside wider social, economic and environmental spatial policy objectives; and seek to secure a positive contribution towards managing the impacts from coastal change in a coherent and sustainable way.</p>

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	<p>location and provides substantial economic and social benefits to communities, is managed over its planned lifetime, and</p> <ul style="list-style-type: none"> <li>ensure that plans are in place to secure the long term sustainability of coastal areas.</li> </ul> <p>It also suggests that local planning authorities should identify areas likely to be affected by physical changes to the coast and refer to this area as a Coastal Change Management Area.</p>	
DfT An Evidence Base Review of Public Attitudes to Climate Change and Transport Behaviour (2006)	Summary report of the findings of an evidence base review investigating the research base on public attitudes towards climate change and transport behaviour.	The LTP3 has a key role for influencing public behaviour in terms of changing travel patterns, reducing car use, and improving green infrastructure.
Government Office for the South East: Strategy for Energy Efficiency and Renewable Energy (2004)	The strategy seeks to encourage greater energy efficiency and the development of renewable energy sources over the short, medium and longer term.	The LTP3 should seek to support the aims of the strategy through promoting the use of renewable energy within transport infrastructure, and promoting low carbon technologies.
Carbon Trust: The Climate Change Challenge: Scientific Evidence and Implications (2005)	This report summarises the nature of the climate change issue. It explains the fundamental science and the accumulating evidence that climate change is real and needs to be addressed. It also explains the future potential impacts, including the outstanding uncertainties.	<p>The LTP3 should promote a package of measures to support climate change mitigation, including public transport investment, demand management, the promotion of smarter travel choices and integration of land use and transport planning to reduce the need to travel. It should also seek to encourage the use of new technologies and consider the use of mechanisms such as carbon budgeting.</p> <p>The LTP3 should also facilitate climate change adaptation, through supporting the sustainable management of flood risk areas, facilitating a growth in green infrastructure and promoting the use of sustainable urban drainage systems.</p>
South East Climate Change Partnership: Adapting to climate change: a checklist for development (2005)	The document, primarily aimed at developers, their partners, design teams, architects, surveyors and engineers, sets out a checklist and guidance for new developments to adapt to climate change. The aim is to future-proof developments and to build-in resilience to climate change impacts now and in the future.	The LTP3 should also facilitate climate change adaptation, through supporting the sustainable management of flood risk areas, facilitating a growth in green infrastructure and promoting the use of sustainable urban drainage systems. The LTP3 should also seek to ensure that transport infrastructure is future proofed against the effects of climate change through appropriate design, layout and the incorporation of features and areas which will help increase the resilience of the development area to future changes in climate.
Island Strategic Partnership: Eco Island: the Isle of Wight's Sustainable Community Strategy 2008-2020 (2008)	<p>The Island's Sustainable Community Strategy has a strong focus on climate change mitigation, including through seeking to promote energy efficiency and promoting investment in renewable energy on the Island.</p> <p>A major aim for the SCS is for the Island to have the lowest carbon footprint in England by 2020.</p>	The LTP3 should promote a package of measures to support climate change mitigation, including public transport investment, demand management, the promotion of smarter travel choices and integration of land use and transport planning to reduce the need to travel. It should also seek to encourage the use of new technologies and consider the use of mechanisms such as carbon budgeting.

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<b>Health</b>		
EC Together for Health: A Strategic Approach for the EU 2008-2013 (2007)	Building on current work, this Strategy aims to provide an overarching strategic framework spanning core issues in health as well as health in all policies and global health issues.	The LTP3 should seek to improve accessibility to health, sporting, leisure and recreational facilities, promote walking and cycling and support the provision of open space and enhanced sub-regional green infrastructure networks.
ODPM PPG17: Planning for Open Space, Sport and Recreation (2002)	Sets out open space, sport and recreation considerations for regional and local planning bodies. These include an assessment of needs and opportunities; setting local standards; maintaining an adequate supply of open space and sports and recreational facilities; planning for new open space and sports and recreational facilities; and planning obligations.	The LTP3 should seek to improve accessibility to sporting, leisure and recreational facilities, promote walking and cycling and support the provision of open space and enhanced sub-regional green infrastructure networks. This should draw on existing green infrastructure work which is being carried out on the Island.
DCMS & Strategy Unit: Game Plan: A Strategy for delivering Government's sport and physical activity objectives (2002)	The Government's long term vision for sport and physical activity by 2020 is to increase significantly levels of sport and physical activity, particularly among disadvantaged groups; and to achieve sustained levels of success in international competition.	The LTP3 should seek to improve accessibility to sporting, leisure and recreational facilities, promote walking and cycling and support the provision of open space and enhanced sub-regional green infrastructure networks.
DoH Tackling Health Inequalities: A Programme for Action (2003)	Lays the foundation for meeting the government's targets to reduce the health gap on infant mortality and life expectancy by 2010. The Programme emphasises the need to improve health and the factors that contribute to health faster in disadvantaged areas than elsewhere.	The LTP3 should seek to improve accessibility to health, sporting, leisure and recreational facilities, promote walking and cycling and support the provision of open space and enhanced sub-regional green infrastructure networks.
DoH Choosing Health: Making Healthy Choices Easier, White Paper (2004)	Sets out the key principles for supporting the public to make healthier and more informed choices in regards to their health. There is a particular focus on children and young people, and people from poorer communities.	The LTP3 should seek to improve accessibility to health, sporting, leisure and recreational facilities, promote walking and cycling and support the provision of open space and enhanced sub-regional green infrastructure networks.
DoH & Department for Work and Pensions Health and Safety Executive: Health, work and well-being - Caring for our future (2005)	Lays out a 'blueprint for change', so that work related illness and accidents can be avoided, but if not ensures people get fast treatment and that they can access occupational health when it is needed. It also puts the emphasis on creating healthy working environments.	The LTP3 should seek to improve accessibility to health, sporting, leisure and recreational facilities, promote walking and cycling and support the provision of open space and enhanced sub-regional green infrastructure networks.
DoH Our health, our care, our say: a new direction for community services (2005)	Puts emphasis on moving healthcare into the community and will therefore have an impact on sustainable development considerations, including supporting local economies and how people travel to healthcare facilities.	The LTP3 should seek to improve accessibility to health, sporting, leisure and recreational facilities, promote walking and cycling and support the provision of open space and enhanced sub-regional green infrastructure networks.
Forestry Commission: Trees and Woodlands - Nature's Health Service (2005)	Provides detailed examples of how the Woodland Sector (trees, woodlands and green spaces) can significantly contribute to people's health, well-being (physical, psychological and social) and quality of life. Increasing levels of physical activity is a particular priority.	The LTP3 should support appropriate planting within new and existing transport infrastructure, and promote the provision of high quality green infrastructure networks.

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<p>Countryside Agency: The Countryside in and Around Towns – A vision for connecting town and country in the pursuit of sustainable development (2005)</p>	<p>A vision for the landscape of urban/rural fringe environments and how to better manage these areas and make improvements. Key functions for the environment include: a bridge to the country; a gateway to the town; a health centre; a classroom; a recycling and renewable energy centre; a productive landscape; a cultural legacy; a place for sustainable living; an engine for regeneration; and a nature reserve.</p>	<p>New and improved provision of green infrastructure and improvements to existing networks should be key aims for the LTP3. This should support green infrastructure work already being carried out on the Island.</p>
<p>English Nature: Accessible Natural Green Space Standards in Towns and Cities: A Review and Toolkit for their Implementation (2003)</p>	<p>Aims to help Local Authorities develop policies which acknowledge, protect and enhance the contribution natural spaces make to local sustainability. Three aspects of natural space in cities and towns are discussed: their biodiversity; their ability to cope with urban pollution; ensuring natural spaces are accessible to everyone. The report aims to show how size and distance criteria can be used to identify the natural spaces which contribute most to local sustainability.</p>	<p>The LTP3 should seek to support the expansion of Accessible Natural Green Space, improve the quality of existing areas and support linkages between areas of open space.</p>
<p>Sport England: Mission Possible: The South East Plan for Sport (2004)</p>	<p>Setting out the regional action plan for sport, the plan aims to:</p> <ul style="list-style-type: none"> <li>• Make the South East an active and successful sporting region;</li> <li>• Drive up participation levels in the South East by at least 1% year on year;</li> <li>• Reduce the 'equity gap';</li> <li>• Increase club membership;</li> <li>• Increase the number of people receiving coaching and tuition;</li> <li>• Increase the number and quality of leaders for sport;</li> <li>• Increase the number of people taking part in competition;</li> <li>• Contribute to England becoming the best sporting nation in the world by 2020;</li> <li>• Establish a network of multi sport community clubs;</li> <li>• Disseminate best practice across the region;</li> <li>• Support innovation;</li> <li>• Encourage economic and environmental sustainability;</li> <li>• Put sport and active recreation at the heart of the planning process in the region;</li> <li>• Link whole sport plans to local delivery;</li> <li>• Maximise the positive impact of education in all its forms;</li> <li>• Use the natural resources of the region to increase participation</li> <li>• Encourage informal active recreation; and</li> <li>• All organisations involved in sport and active recreation to work in genuine partnership</li> </ul>	<p>The LTP3 should seek to improve accessibility to sporting, leisure and recreational facilities, promote walking and cycling and support the provision of open space and enhanced sub-regional green infrastructure networks.</p>

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<p>South East Regional Public Health Group: The South East England Health Strategy (2008)</p>	<p>The strategy aims to improve the health of the South East's residents through six themes:</p> <ul style="list-style-type: none"> <li>• Reducing health inequalities</li> <li>• Promoting a sustainable region</li> <li>• Promoting safer communities</li> <li>• Increasing the positive relationship between employment and health</li> <li>• Improving outcomes for children and young people</li> <li>• Improving outcomes in later life</li> </ul> <p>For each of these strategic themes, a single aim, five objectives and a number of associated actions by which progress can be monitored have been identified.</p>	<p>The LTP3 should seek to improve accessibility to sporting, leisure and recreational facilities, promote walking and cycling and support the provision of open space and enhanced sub-regional green infrastructure networks.</p>
<p>South East Green Infrastructure Network Briefing Note: A Green Infrastructure Framework for the South East (2008)</p>	<p>The Green Infrastructure briefing has been produced by the South East Green Infrastructure Network to raise awareness and introduce the 'Green Infrastructure Framework for the South East' project, in advance of the Framework's publication in 2009. The Framework will identify the common functions of GI and the essential principles for its delivery, and provide guidance on the planning and delivery of GI and its incorporation alongside other forms of infrastructure. The briefing sets out a number of principles as to how GI across the South East should be addressed, including that it should be:</p> <ul style="list-style-type: none"> <li>• Planned strategically;</li> <li>• Spatially distributed according to its function, and not restricted to a development site or administrative boundary;</li> <li>• Planned with a recognition of locally distinctive sense of place and landscape, to contribute to the preservation and enhancement of the natural and built heritage of the local area;</li> <li>• Planned to include provision made for its long term management and maintenance;</li> <li>• Fit for purpose within spatial planning; and</li> <li>• Recognised as an essential component of wider infrastructure requirements.</li> </ul>	<p>New and improved provision of green infrastructure and improvements to existing networks should be key aims for the LTP3. This should support green infrastructure work already being carried out on the Island.</p>
<p>Seeing the Wood for the Trees: A forestry and Woodland Framework for South East of England: 2004</p>	<p>The Framework seeks the following outcomes for the region:</p> <ul style="list-style-type: none"> <li>• Trees and woodlands supporting the development of sustainable communities;</li> <li>• More people's health and well-being improved through visiting woodlands;</li> </ul>	<p>The LTP3 should aim to protect trees and woods and recognise their value to health and wellbeing (as well as landscape, biodiversity, climate change mitigation and adaptation, environmental quality and for the public realm). Planting of trees within new and existing transport infrastructure should be encouraged by the LTP3.</p>

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	<ul style="list-style-type: none"> <li>• Greater use being made of trees and woodlands for community projects and activities;</li> <li>• Woodlands enhancing and protecting the region's environment, together with safeguards for the heritage features within them;</li> <li>• Woodland habitats and species being brought into good ecological condition;</li> <li>• The economic value of woodland products to the region being increased;</li> <li>• Woodlands playing a greater role in attracting tourism, inward investment and other economic activity;</li> <li>• Woodlands and trees, especially ancient woodlands and veteran trees, protected from loss;</li> <li>• Integrated, strategic planning of woodland management.</li> <li>• The skills base needed to manage our woodlands;</li> <li>• Increasing public awareness about woodlands and their management; and</li> <li>• The financial viability of woodland management secured.</li> </ul>	
<b>Historic Environment</b>		
UNESCO World Heritage Convention (1972)	Aims of the Convention are: defining cultural and natural heritage; recognising the protection and conservation; understanding the value; and establishing 'the World Heritage fund'.	The protection and enhancement of cultural heritage assets and their settings should be a key consideration for the LTP3.
Council of Europe: Convention on the Protection of the Architectural Heritage of Europe (1985)	Aims for signatories to protect their architectural heritage by means of identifying monuments, buildings and sites to be protected; preventing the disfigurement, dilapidation or demolition of protected properties; providing financial support by the public authorities for maintaining and restoring the architectural heritage on its territory; and supporting scientific research for identifying and analysing the harmful effects of pollution and for defining ways and means to reduce or eradicate these effects.	The protection and enhancement of cultural heritage assets and their settings should be a key consideration for the LTP3. The LTP3 should support high quality design of and appropriate layout within transport schemes.
Council of Europe: The Convention on the Protection of Archaeological Heritage (Revised) (Valetta Convention) (1992)	The convention defines archaeological heritage and identifies measures for its protection. Aims include integrated conservation of the archaeological heritage, and financing of archaeological research and conservation.	Archaeological assets, both potential and realised should be provided with full consideration through the LTP3.
DCMS Ancient Monuments and Archaeological Areas Act (1979)	An act to consolidate and amend the law retain to ancient monuments, to make provision of matters of archaeological or historic interest, and to provide grants by secretary of state to the Architectural Heritage fund.	Archaeological assets, both potential and realised should be provided with full consideration by the LTP3.

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<p>DCLG: Planning Policy Statement 5: Planning for the Historic Environment (March 2010)</p>	<p>PPS5: Planning for the Historic Environment sets out the Government's planning policies on the conservation of the historic environment in England.</p> <p>It presents the Government's objectives for planning for the historic environment, including:</p> <ul style="list-style-type: none"> <li>• To deliver sustainable development by ensuring that policies and decisions concerning the historic environment:</li> <li>• Recognise that heritage assets are a non-renewable resource</li> <li>• take account of the wider social, cultural, economic and environmental benefits of heritage conservation; and</li> <li>• recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term.</li> </ul> <p>To conserve England's heritage assets in a manner appropriate to their significance by ensuring that:</p> <ul style="list-style-type: none"> <li>• decisions are based on the nature, extent and level of that significance, investigated to a degree proportionate to the importance of the heritage asset</li> <li>• wherever possible, heritage assets are put to an appropriate and viable use that is consistent with their conservation</li> <li>• the positive contribution of such heritage assets to local character and sense of place is recognised and valued; and</li> <li>• consideration of the historic environment is integrated into planning policies, promoting place-shaping.</li> </ul> <p>PPS5 has a three main groups of policies. The first part of the document concentrates on plan making polices. The second part focuses on development management. A policy is also included for heritage and climate change,</p> <p>PPS5 replaces PPG15: Planning and the Historic Environment and PPG16: Archaeology and Planning.</p>	<p>The LTP3 should seek to support the integrity of the historic environment through facilitating the protection of assets, enhancing their settings and encouraging walking, cycling and improvements to the public realm. The LTP3 should also seek to protect and enhance historic transport features such as railway arches or canals and their surroundings.</p>

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DCLG: Planning Policy Statement 5: Planning for the Historic Environment: Practice Guide	The purpose of the Practice is to assist local authorities, owners, applicants and other interested parties in implementing Planning Policy Statement 5 (Planning for the Historic Environment) and to help in the interpretation of policies within the PPS.	The LTP3 should seek to support the integrity of the historic environment through facilitating the protection of assets, enhancing their settings and encouraging walking, cycling and improvements to the public realm. The LTP3 should also seek to protect and enhance historic transport features such as railway arches or canals and their surroundings.
Planning (Listed Buildings and Conservation Areas) Act (1990)	An act to consolidate certain enactments relating to special controls in respect of buildings and areas of special architectural or historic interest with amendments to give effect to recommendations to give effect to recommendations of the Law Commissions.	Development of transport infrastructure affecting listed buildings and conservation areas will need to have due regard to this Act.
Heritage Protection for the 21 <sup>st</sup> Century: White Paper (2007) and Heritage Protection Bill (2008)	Sets out a vision of a unified and simpler heritage protection system, which is easier to understand and use, and is more efficient, accountable and transparent. Also aims to increase the opportunities for public involvement and community engagement within the heritage protection system.	The LTP3 should seek to support the integrity of the historic environment through facilitating the protection of assets, enhancing their settings and encouraging walking, cycling and improvements to the public realm. The LTP3 should also seek to protect and enhance historic transport features such as railway arches or canals and their surroundings.
DCMS The Historic Environment: A Force for Our Future (2001)	Sets out how the historic environment holds the key to: an inspiring education resource; more attractive towns and cities; a prosperous and sustainable countryside; world class tourist attractions; and new jobs.	The LTP3 should seek to support the integrity of the historic environment through facilitating the protection of assets, enhancing their settings and encouraging walking, cycling and improvements to the public realm. The LTP3 should also seek to protect and enhance historic transport features such as railway arches or canals and their surroundings.
English Heritage and CABE: Buildings in Context: New Development in Historic Areas (2002)	Aims to stimulate a high standard of design when development takes place in historically sensitive contexts by showing 15 case studies in which achievement is far above the ordinary and trying to draw some lessons both about design and about the development and planning process, particularly regarding building in sensitive locations.	Development affecting areas of sensitivity for their historic environment value should have due regard to this document.
ODPM Secure and Sustainable Buildings Act (2004)	Amends the Building act, and others, with regard to sustainable construction practices and conservation of historic buildings. Also states the general nature of security provisions which should be in place at the construction stage and beyond.	The protection and enhancement of cultural heritage assets and settings should be a key consideration for the LTP3.
English Heritage: Conservation Principles for the Sustainable Management of the Historic Environment	This English Heritage document sets out the framework for the sustainable management of the historic environment. This is presented under the following six headline 'principles': Principle 1: The historic environment is a shared resource Principle 2: Everyone should be able to participate in sustaining the historic environment Principle 3: Understanding the significance of places is vital Principle 4: Significant places should be managed to sustain their values	The LTP3 should seek to ensure that these principles are taken into account through the development of new transport infrastructure and maintenance.

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	<p>Principle 5: Decisions about change must be reasonable, transparent and consistent</p> <p>Principle 6: Documenting and learning from decisions is essential.</p>	
<p>IOWC: Isle of Wight Historic Environment Action Plan (2008)</p>	<p>The Isle of Wight HEAP identifies areas of importance for archaeology, the historic landscape and the historic built environment and sets out strategies for their local management. It draws on the Historic Landscape Characterisation carried out on the Island.</p> <p>The overall aim of the Isle of Wight HEAP is to assist in the development of strategic planning policy, guidance and advice, to facilitate the conservation and management of the historic environment and to enhance community understanding and enjoyment of this resource.</p>	<p>The LTP3 should seek to support the integrity of the historic environment through facilitating the protection of assets, enhancing their settings and encouraging walking, cycling and improvements to the public realm. The LTP3 should also seek to protect and enhance historic transport features such as railway arches or canals and their surroundings.</p>
<p><b>Landscape</b></p>		
<p>Council of Europe: European Landscape Convention (2006)</p>	<p>Aims to promote the protection, management and planning (including active design and creation of Europe's landscapes, both rural and urban, and to foster European co-operation on landscape issues.</p>	<p>The LTP3 should support the development of infrastructure which protects, and where possible improves the landscape character of the area. This should include augmenting historic landscapes. Similarly it should seek to reduce the impact of traffic and transport infrastructure on landscape quality.</p>
<p>Isle of Wight AONB: Isle of Wight AONB Management Plan 2009-2014 (2009)</p>	<p>The plan is the statutory Management Plan for the nationally designated and protected landscape of the Isle of Wight AONB.</p> <p>The overall aim of AONB Management Plans is to ensure continuity and consistency of management over time and to conserve and enhance the natural beauty of the landscape for the use and enjoyment of future generations. The plan:</p> <ul style="list-style-type: none"> <li>• Highlights the distinctive qualities of the AONB.</li> <li>• Identifies the changes and issues affecting the AONB.</li> <li>• Presents a vision for the future of the AONB as a whole, in light of other national, regional and local priorities.</li> <li>• Sets priorities incorporating specific objectives that will help to secure that vision.</li> <li>• Clarifies the role of partners and other stakeholders, identifying what needs to be done, by whom, and when, in order to achieve the Plan's objectives.</li> <li>• Identifies how the objectives and actions will be measured and reviewed.</li> <li>• Seeks to raises the profile of the AONB and its purpose.</li> </ul> <p>The plan sets out a vision, priorities, objectives and key actions for nine</p>	<p>The LTP3 should seek to reflect the ambitions of the Management Plan. Particular areas where the LTP3 can have an influence include the protection of landscape quality including landscape features; tranquillity; noise, air and light pollution; and improvement of sustainable access to the Heritage Coasts.</p>

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
	<p>themes relating to the AONB. These include:</p> <ul style="list-style-type: none"> <li>• Landscape Character</li> <li>• Earth Heritage</li> <li>• Wildlife</li> <li>• Historic Environment</li> <li>• Climate Change</li> <li>• Living and Working - Communities and Development</li> <li>• Living and Working - Rural Economy</li> <li>• Traffic and Transport; and</li> <li>• Visiting and Enjoying.</li> </ul>	
IOWC: Isle of Wight Historic Environment Action Plan (2008)	<p>The Isle of Wight HEAP identifies areas of importance for archaeology, the historic landscape and the historic built environment and sets out strategies for their local management. It draws on the Historic Landscape Characterisation carried out on the Island.</p> <p>The overall aim of the Isle of Wight HEAP is to assist in the development of strategic planning policy, guidance and advice, to facilitate the conservation and management of the historic environment and to enhance community understanding and enjoyment of this resource.</p>	The LTP3 should support the development of infrastructure which protects, and where possible improves the historic landscape character of the area. This should include augmenting historic landscapes and promoting landscape scale environmental protection. Similarly it should seek to reduce the impact of traffic and transport infrastructure on landscape quality.
<b>Material Assets</b>		
EC Sixth Environmental Action Programme 2002-2012 (2002)	Natural resources and waste (in particular recycling) has been identified as one of four priority areas for Europe. The EAP requires member states to achieve 22% of electricity production from renewable energies by 2010; to significantly reduce the volumes of waste generated and the quantity going to disposal; and to give preference to waste recovery and especially to recycling.	The LTP3 should seek to support the aims of the Action Plan through promoting the use of renewable energy within transport infrastructure, and promoting low carbon technologies. The LTP3 should also promote resource efficiency, encourage the reuse of materials used in transport schemes, and seek to utilise recycled materials where appropriate.
EC Waste Framework Directive (1975, updated 2006)	Objective is the protection of human health and the environment against harmful effects caused by the collection, transport, treatment, storage and tipping of waste. Particular focus is placed on the re-use of recovered materials as raw materials; restricting the production of waste; promoting clean technologies; and the drawing up of waste management plans.	The LTP3 should promote resource efficiency, encourage the reuse of materials used in transport schemes, and seek to utilise recycled materials where appropriate.
EC Landfill Directive (1999)	Aims to prevent or reduce as far as possible negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, and on the global environment, including the greenhouse effect, as well as any resulting risk to human health, from the landfilling of waste, during the whole lifecycle of the landfill.	The LTP3 should promote resource efficiency, encourage the reuse of materials in transport schemes, and seek to utilise recycled materials where appropriate.

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
MPS1 Planning and Minerals	Sets out the principles and the key planning policy objectives against which plans for minerals and decisions on individual applications should be made. These cover the areas of exploration, survey, safeguarding, protection of heritage and countryside, supply, bulk transportation, environmental protection, efficient use, and restoration.	The LTP3 should, if relevant, recognise the potential of former minerals sites for landscape and biodiversity/geodiversity-led restoration. It should also, where appropriate, aim to safeguard against the sterilisation of certain minerals resources.
Cabinet Office: Waste Not, Want Not, A Strategy for tackling the waste problem (2002)	A study into how England's current waste management practices could be improved to reduce the current, and growing, waste problem.	The LTP3 should promote resource efficiency, encourage the reuse of materials in transport schemes, and seek to utilise recycled materials where appropriate.
DEFRA Waste and Emissions Trading Act (2003)	Sets out legislative provisions for waste (including waste sent to landfill, waste management in England and Wales, and recycling plans), and about penalties for non-compliance with schemes for the trading of emissions quotas.	The LTP3 should promote resource efficiency, encourage the reuse of materials in transport schemes, and seek to utilise recycled materials where appropriate.
DTI Energy White Paper: Our Energy Future – Creating a Low Carbon Economy (2003)	Sets out Government's long term energy policy, including requirements for cleaner, smarter energy; improved energy efficiency; reduced carbon emissions; and reliable, competitive and affordable supplies.	The LTP3 should seek to support the aims of the White Paper through promoting the use of renewable energy within transport infrastructure, and promoting low carbon technologies.
DTI Sustainable Energy Act (2003)	Aims include increasing the use of renewable energy; cutting the UK's carbon emissions; maintaining the reliability of the UK's energy supplies; promoting competitive energy markets in the UK; and reducing the number of people living in fuel poverty.	The LTP3 should seek to support the aims of the White Paper through promoting the use of renewable energy within transport infrastructure, and promoting low carbon technologies.
ODPM PPS22: Renewable Energy (2004)	Provides advice to planning authorities on how and where to develop renewable energy, and what types.	The LTP3 should seek to support the aims of the White Paper through promoting the use of renewable energy within transport infrastructure, and promoting low carbon technologies.
ODPM PPS10: Planning for Sustainable Waste Management (2005)	Planning authorities are encouraged to deliver sustainable waste management through the development of appropriate strategies for growth, regeneration and the prudent use of resources; and by providing sufficient opportunities for new waste management facilities of the right type, in the right place and at the right time.	The LTP3 should promote resource efficiency, encourage the reuse of materials in transport schemes, and seek to utilise recycled materials where appropriate.
DEFRA Waste Strategy for England (2007)	Aims are to reduce waste by making products with fewer natural resources; break the link between economic growth and waste growth; re-use products or recycle their materials; and recover energy from other wastes where possible. Notes that for a small amount of residual material, landfill will be necessary.	The LTP3 should promote resource efficiency, encourage the reuse of materials in transport schemes, and seek to utilise recycled materials where appropriate.
DTI Micro Generation Strategy (2006)	Acknowledges that local authorities can be pro-active in promoting small-scale, local renewable energy generation schemes through "sensible use of planning policies".	The LTP3 should promote resource efficiency, encourage the reuse of materials in transport schemes, and seek to utilise recycled materials where appropriate.
Government Office for the South East: Strategy for Energy Efficiency and Renewable Energy (2004)	The strategy seeks to encourage greater energy efficiency and the development of renewable energy sources over the short, medium and longer term.	The LTP3 should seek to support the aims of the Action Plan through promoting the use of renewable energy within transport infrastructure, and promoting low carbon technologies. The LTP3 should also promote resource efficiency, encourage the reuse of materials used in transport schemes, and seek to utilise recycled materials where appropriate.

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
<b>Population</b>		
EU Sustainable Development Strategy (2006)	This Strategy identifies key priorities for an enlarged Europe to focus on up to 2010. This includes health, social inclusion and fighting global poverty. It aims to achieve better policy integration in addressing these challenges, and to ensure that Europe looks beyond its boundaries in making informed decisions about sustainability.	The LTP3 should seek to: promote development location and layout which improves accessibility to services, facilities and amenities; improve public transport and walking and cycling networks; enhance the local environment through appropriate design and layout of transport infrastructure; and support sub regional green infrastructure networks.
UN The Aarhus Convention (1998)	Links environmental rights and human rights. It establishes that sustainable development can be achieved only through the involvement of all stakeholders and links government accountability and environmental protection.	The LTP3 should seek to: promote development location and layout which improves accessibility to services, facilities and amenities; improve public transport and walking and cycling networks; enhance the local environment through appropriate design and layout of transport infrastructure; and support sub regional green infrastructure networks. This will support community cohesion and help facilitate social inclusion.
ODPM PPS1 Delivering Sustainable Development (2005)	Sets out the Government's planning policies on the delivery of sustainable development through the planning system. Specific aims are: social progress which recognises the needs of everyone; effective protection of the environment; the prudent use of natural resources; and the maintenance of high and stable levels of economic growth and employment.	The LTP3 should support a limitation of deprivation on the Island by: promoting development location and layout which improves accessibility to services, facilities and amenities; improving public transport and walking and cycling networks; enhancing the local environment through appropriate design and layout of transport infrastructure; and the incorporation of green infrastructure.
ODPM Sustainable Communities: Building for the Future (2003)	Sets out a long-term programme of action for delivering sustainable communities in both urban and rural areas. It aims to tackle housing supply issues in the South East, low demand in other parts of the country, and the quality of our public spaces.	The LTP3 should seek to: promote development location and layout which improves accessibility to services, facilities and amenities; improve public transport and walking and cycling networks; enhance the local environment through appropriate design and layout of transport infrastructure; and the promote the incorporation of green infrastructure.
Social Exclusion Unit: Preventing Social Exclusion (2001)	The primary aims are to prevent social exclusion, and reintegrate people who have become excluded. Improvement is required in the areas of truancy, rough sleeping, teenage pregnancy, youth at risk and deprived neighbourhoods.	The LTP3 should seek to: promote development location and layout which improves accessibility to services, facilities and amenities; improve public transport and walking and cycling networks; enhance the local environment through appropriate design and layout of transport infrastructure; and support sub regional green infrastructure networks. This will support community cohesion and help facilitate social inclusion.
DCLG: Planning Policy Statement 12: Local Spatial Planning (2008)	PPS12 sets out the Government's policy on local spatial planning. Explaining what local spatial planning is, and how it benefits communities it also sets out what the key ingredients of local spatial plans are and the key government policies on how they should be prepared. It should be taken into account by local planning authorities in preparing development plan documents and other local development documents.  The document replaces <i>Planning Policy Statement 12: Local Development Frameworks</i> .	A key aspect of PPS12 is the integration of Local Development Frameworks with Sustainable Community Strategies (SCSs) and other regional and local plans and strategies. The LTP3 should therefore a support integration with the LDF which is currently being developed for the Island, and the SCS which is currently being implemented on the Island.

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
DCLG PPS3 Housing (2006)	Objectives include: high quality housing; a mix of housing, both market and affordable; a sufficient quantity of housing taking into account need and demand and seeking to improve choice; housing developments in suitable (accessible) locations; and efficient and effective use of land, including re-use of previously-developed land where appropriate.	The LTP3 should seek to ensure than land use planning and transport infrastructure provision is integrated to ensure that new areas of housing are accessible to services, facilities and amenities by the full range of sustainable transport modes.
DCLG Homes for the future: more affordable, more sustainable (2007)	The Housing Green Paper outlines plans for delivering homes; new ways of identifying and using land for development; more social housing-ensuring that a decent home at an affordable price is for the many; building homes more quickly; more affordable homes; and greener homes - with high environmental standards and flagship developments leading the way.	The LTP3 should seek to ensure than land use planning and transport infrastructure provision is integrated to ensure that new areas of housing are accessible to services, facilities and amenities by the full range of sustainable transport modes.
The Cultural Agenda South East England Cultural Consortium (2002)	<p>The regional Cultural Strategy seeks to</p> <p>“</p> <ul style="list-style-type: none"> <li>• Encompass the Region’s shared memory, experience and identity;</li> <li>• Include minority as well as majority interests;</li> <li>• Support the excellent as well as encouraging the wider and more inclusive participation;</li> <li>• Value the traditional as well as the experimental;</li> <li>• Emphasise lifelong learning and release individual creativity; and</li> <li>• See cultural activity as fundamental to people’s health, well-being and the quality of life in the Region.”</li> </ul>	The LTP3 should seek to improve access to cultural facilities on the Isle of Wight, promote an expansion of green infrastructure and support the protection and enhancement of environmental assets.

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
<p>South East Regional Housing Board: Regional Housing Strategy 2008- 2011 (2008)</p>	<p>The strategy, which covers the period 2008-11, sets out the housing strategy for the South East.. Its priorities are as follows:</p> <ul style="list-style-type: none"> <li>• Build more affordable homes;</li> <li>• Bring decent housing within reach of people on lower incomes; and</li> <li>• Improve the quality of new housing and of existing stock.</li> </ul> <p>Linked to these priorities, the main aims of the Strategy are to:</p> <ul style="list-style-type: none"> <li>• Make sure 35% of all new homes are affordable, either for rent or for part-rent/part-buy;</li> <li>• Make sure new affordable homes come in a range of sizes, to suit families as well as couples and singles;</li> <li>• Continued funding for local authority housing stock to meet the decent home standard; and</li> <li>• Make sure that new affordable homes meet high standards of building and energy efficiency.</li> </ul>	<p>The LTP3 should seek to ensure than land use planning and transport infrastructure provision is integrated to ensure that new areas of housing are accessible to services, facilities and amenities by the full range of sustainable transport modes.</p>
<p>Island Strategic Partnership: Eco Island: the Isle of Wight's Sustainable Community Strategy 2008-2020 (2008)</p>	<p>The main aims of the SCS in relation to the population environmental information theme include as follows:</p> <ul style="list-style-type: none"> <li>• Support economic development and regeneration, enabling all to be able to share in the Island's economic success, through increasing the skills of the whole community.</li> <li>• Reduce levels of obesity in all ages.</li> <li>• Improve health, emotional wellbeing and life expectancy across the Island.</li> <li>• Support vulnerable people to live independent lives.</li> <li>• Ensure people of all ages have places to live and things to do in their local area.</li> <li>• Reduce Crime and Substance Misuse.</li> <li>• Reduce Anti-Social Behaviour and Disorder.</li> <li>• Reduce the fear of crime and increase public confidence</li> <li>• Enhance how our local areas look and feel, now and in the future.</li> <li>• Make sure our children achieve better than the national average at school and college.</li> <li>• Reduce childhood inequalities, by tackling poverty, neglect and domestic violence.</li> <li>• Support families and carers to provide a safe and positive environment for our young people.</li> </ul>	<p>The LTP3 should support the aims of the Sustainable Community Strategy by promoting, healthier modes of travel, improving accessibility, supporting enhancements to the public realm, and integrating land use and transport planning.</p>

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
ODPM & Home Office: Safer Places: The Planning System and Crime Prevention (2004)	Practical guide to designs and layouts that may help with crime prevention and community safety, including well-defined routes, places structured so that different uses do not cause conflict, places designed to include natural surveillance and places designed with management and maintenance in mind.	The LTP3 should draw on this guide by promoting design and layout of transport infrastructure which improves perceptions of security and reduces crime and the fear of crime.
Home Office: Youth Justice - The next steps - companion document to Every Child Matters (2000)	The key proposals are to: strengthen parenting interventions; improve understanding of trials and trial preparation; manage remandees better in the community; establish a simpler sentencing structure with more flexible interventions; run community intensive supervision and surveillance as the main response to repeat and serious offending while still having custody available; introduce a more graduated progression between secure, open and community facilities; and improve youth justice skills and organisation.	The LTP3 should support transport infrastructure which improves the public realm, promotes an expansion of high quality green infrastructure networks, reduces the fear of crime and supports community cohesion.
Cabinet Office: Reaching Out: An Action Plan on Social Exclusion (2006)	Sets out an action plan to improve the life chances of those who suffer, or may suffer in the future, from disadvantage. Guiding principles for action include: better identification and earlier intervention; systematically identifying 'what works'; promoting multi-agency working; personalisation, rights and responsibilities; and supporting achievement and managing underperformance.	The LTP3 should seek to: promote development location and layout which improves accessibility to services, facilities and amenities; improve public transport and walking and cycling networks; enhance the local environment through appropriate design and layout of transport infrastructure; and support sub regional green infrastructure networks. This will support community cohesion and help facilitate social inclusion.
<b>Soil</b>		
Defra: Safeguarding our Soils: A Strategy for England (2009)	<p>The Soil Strategy for England outlines the Government's approach to safeguarding our soils for the long term. It provides a vision to guide future policy development across a range of areas and sets out the practical steps that are needed to take to prevent further degradation of our soils, enhance, restore and ensure their resilience, and improve understanding of the threats to soil and best practice in responding to them.</p> <p>Key objectives of the strategy include:</p> <ul style="list-style-type: none"> <li>• Better protection for agricultural soils;</li> <li>• Protecting and enhancing stores of soil carbon;</li> <li>• Building the resilience of soils to a changing climate;</li> <li>• Preventing soil pollution;</li> <li>• Effective soil protection during construction and development; and</li> <li>• Dealing with our legacy of contaminated land</li> </ul>	The LTP3 should seek to limit the loss of the highest quality agricultural land, support a reduction of soil loss and erosion, promote an improvement of soil quality, including a reduction of land contamination, and promote soil protection during the construction and development of transport infrastructure.

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
ODPM PPS7: Sustainable Development in Rural Areas (2004)	PPS7 states that the presence of best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification), should be taken into account alongside other sustainability considerations. Where significant development of agricultural land is unavoidable, local planning authorities should seek to use areas of poorer quality land (grades 3b, 4 and 5) in preference to that of a higher quality, except where this would be inconsistent with other sustainability considerations.	The LTP3 should seek to limit the loss of higher quality agricultural land.
Soils Lead Coordination Network: Soils and the Natural Heritage: a Vision by the Soils LCN for the Protection of the UK Soil Resource and Sustainable Use of Soils (2007)	<p>This document sets out the Soils Lead Coordination Network's vision for soil conservation.</p> <p>The "desired outcomes" of the vision are as follows:</p> <ul style="list-style-type: none"> <li>(i) Maintaining the diversity and biodiversity of UK soils;</li> <li>(ii) Controlling and when appropriate reversing loss of soil carbon and water-holding capacity;</li> <li>(iii) Reducing accelerated soil erosion and sediment transport into watercourses; and</li> <li>(iv) Ensuring appropriate status of soils in mitigation and remediation scenarios to control the impact of climate change.</li> </ul>	The LTP3 should seek to reflect the vision presented in the document by seeking to support a reduction of soil loss and erosion, promote an improvement of soil quality, including a reduction of land contamination, and promote soil protection during the construction and development of transport infrastructure.
<b>Water</b>		
Water Framework Directive 2000/60/EC	This provides an overarching strategy, including a requirement for EU Member States to ensure that they achieve 'good ecological status' by 2015. River Basin Management Plans were defined as the key means of achieving this.	The LTP3 should seek to ensure that water quality is not negatively affected by planned transport infrastructure development, particularly regarding surface run-off during and after construction.
DTI Building a Better Quality of Life: A Strategy for More Sustainable Construction (2000, currently under review)	Encourages construction industry to adopt a more sustainable approach towards development; identifies ten Themes for Action, which include conserving water resources.	The LTP3 should seek to ensure that water quality is not negatively affected by planned transport infrastructure development, particularly regarding surface run-off during and after construction. It should also seek to incorporate water efficiency measures where appropriate.
ODPM PPS23: Planning and Pollution Control (2004)	<p>Planning should aim to reduce the impacts of pollution through new and redevelopment and realise opportunities for new development to remediate areas of contaminated land. Potential effects of new development on environmental quality through pollution should be viewed as a "material consideration."</p> <p>For new development and redevelopment, the precautionary principle should be invoked where uncertainties occur.</p> <p>Local Development Documents should set out the criteria against which applications for potentially polluting developments will be considered.</p>	<p>The LTP3 should treat potential pollution from the development of transport infrastructure as a material consideration, help reduce land contamination and promote the precautionary principle where uncertainties occur.</p> <p>In this respect the LTP3 should seek to ensure that water quality is not negatively affected by planned transport infrastructure development, particularly regarding surface run-off during and after construction. It should also seek to promote the incorporation the provision of sustainable urban drainage systems and other measures to support water quality.</p>

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
ODPM PPS25: Development and Flood Risk (2006)	Explains how flood risk should be considered at all stages of the plan and development process in order to reduce future damage to property and loss of life.	The LTP3 should avoid the promotion of infrastructure which increases flood risk in existing or potential (due to climate change) flood risk areas. It should also seek to utilise the SFRA which has been carried out for the Island, including the sequential/exception test where appropriate. The LTP3 should also seek to limit the risk of flooding from surface run off through the incorporation of SUDS and other measures.
Planning Policy Statement 25 Supplement: Development and Coastal Change (March 2010)	<p>The supplement to PPS 25 sets out planning policies for managing development on coastal areas affected by coastal change.</p> <p>The main aims are as follows:</p> <ul style="list-style-type: none"> <li>• ensure that policies and decisions in coastal areas are based on an understanding of coastal change over time</li> <li>• prevent new development from being put at risk from coastal change by: i) avoiding inappropriate development in areas that are vulnerable to coastal change or any development that adds to the impacts of physical changes to the coast, and ii) directing development away from areas vulnerable to coastal change</li> <li>• ensure that the risk to development which is, exceptionally, necessary in coastal change areas because it requires a coastal location and provides substantial economic and social benefits to communities, is managed over its planned lifetime, and</li> <li>• ensure that plans are in place to secure the long term sustainability of coastal areas.</li> </ul> <p>It also suggests that local planning authorities should identify areas likely to be affected by physical changes to the coast and refer to this area as a Coastal Change Management Area.</p>	<p>The LTP3 should seek to ensure that new development in coastal areas in the borough fully considers the aspects highlighted in the Supplement to PPS25.</p> <p>LTP3 should seek to avoid inappropriate development in areas vulnerable to coastal change; ensure that coastal change impacts to be considered alongside wider social, economic and environmental spatial policy objectives; recognise that activities that require a coastal location such as recreation and tourism may provide economic benefit to communities; and seek to secure a positive contribution towards managing the impacts from coastal change in a coherent and sustainable way.</p> <p>It should also seek to ensure that new development in coastal areas considers coastal change through the utilisation of the emerging Shoreline Management Plan, and the consideration of any established Coastal Change Management Areas on the Island.</p>
DEFRA The Water Environment (Water Framework Directive) (England and Wales) Regulations (2003)	Requires all inland and coastal waters to reach "good status" by 2015. This is being done by establishing a river basin district structure within which demanding environmental objectives are being set, including ecological targets for surface waters.	The LTP3 should support transport infrastructure development which reduces the frequency and severity of pollution events, limits the risk of flooding and supports improvements to water quality.
Environment Agency: Water Resources for the Future: A Strategy for England and Wales (2001, reviewed 2005)	Looks at the steps needed to manage water resources to the 2020s and beyond, with the overall aim of improving the environment while allowing enough water for human uses.	The LTP3 should support development which reduces the frequency and severity of pollution events, limits the risk of flooding and supports improvements to water quality.

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
Environment Agency: Building a Better Environment: A Guide for Developers (2006)	Guidance on addressing key environmental issues through the development process (focusing mainly on the issues dealt with by the Agency), including managing flood risk, surface water management, use of water resources, preventing pollution.	The LTP3 should seek to ensure that new and improved transport infrastructure reflects the guidance document.
Isle of Wight Shoreline Management Plan (1997, currently being updated)	<p>The Isle of Wight Shoreline Management Plan, initially completed in 1997, is currently being updated.</p> <p>The SMP will:</p> <ul style="list-style-type: none"> <li>• set out the risks from flooding and erosion to people and the developed, historic and natural environment within the Isle of Wight;</li> <li>• identify opportunities to maintain and improve the environment by managing the risks from floods and coastal erosion;</li> <li>• identify the preferred policies for managing risks from floods and erosion over the next century;</li> <li>• identify the consequences of putting the preferred policies into practice;</li> <li>• set out procedures for monitoring how effective these policies are;</li> <li>• inform others so that future land use, planning and development of the shoreline takes account of the risks and the preferred policies;</li> <li>• discourage inappropriate development in areas where the flood and erosion risks are high; and</li> <li>• meet international and national nature conservation legislation and aim to achieve the biodiversity objectives.</li> </ul> <p>The SMP will include a series of statements presenting the preferred policy and implications for individual lengths of shorelines. This will be defined through three 'epochs', or periods of time: 0-20, 20-50, and 50-100 years from the present</p>	The LTP3 should seek to complement the developing Isle of Wight Shoreline Management Plan by promoting transport infrastructure and maintenance which supports current and future flood risk and coastal erosion management taking place on the Island. It should also seek to support the wider aims and actions relating to nature conservation, landscape and seascape protection and enhancement of the historic environment taking place on the Island.
Entec: Isle of Wight Strategic Flood Risk Assessment (November 2007)	A Strategic Flood Risk Assessment was completed for the Island area in November 2007. The document presents an examination of flood risk on the Island, including in key development areas, discusses surface water drainage on the Island, discusses the potential effects of climate change on flood risk, and presents proposed flood risk management and mitigation.	The LTP3 should have due regard to the outcome of the Isle of Wight SFRA and support flood risk management on the Island through appropriate design, layout and location of new transport infrastructure. The LTP3 should avoid the promotion of infrastructure which increases flood risk in existing or potential (due to climate change) flood risk areas. The LTP3 should also seek to limit the risk of flooding from surface run off through the incorporation of SUDS and other measures.

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	How it affects, or is affected by the LTP3 in terms of environmental issues*
Environment Agency: Isle of Wight Catchment Area Management Strategy (2004)	<p>The Isle of Wight CAMS is a strategy developed by the Environment Agency for managing water resources at the local level. The document guides water supply and use on the Island.</p> <p>The CAMS contains maps and descriptions of the local Water Management Units (WMUs), groundwater and surface water, and an assessment of water availability at times of low flow – normally mid to late summer. The CAMS also classifies each WMU into one of four categories: ‘over-abstracted’; ‘over-licensed’; ‘no water available’; or ‘water available’.</p> <p>The vision of the Strategy is to make the best use of water resources on the Isle of Wight in order to:</p> <ul style="list-style-type: none"> <li>• Ensure reliable supplies of water for the public</li> <li>• Protect rivers and wetlands from the effects of unsustainable abstraction</li> <li>• Share water between conflicting demands in the face of changes in legislation and in climate.</li> </ul> <p>The CAMS is due to be updated</p>	The LTP3 should seek to support sustainable water management and promote the sustainable use of water resources in new and improved transport infrastructure.
Southern Water: Water Resources Management Plan 2010-2035 (2009)	<p>The Water Industry Act 1991, as amended by the Water Act 2003, places a requirement on all water companies to prepare a Water Resources Management Plan (WRMP).</p> <p>The Water Resources Management Plan sets out how Southern Water proposes to ensure that there is sufficient security of water supplies to meet the anticipated demands of all its customers over the 25-year planning period from 2010 to 2035. It aims to address the following issues:</p> <ul style="list-style-type: none"> <li>• Security of water supplies;</li> <li>• New housing;</li> <li>• Climate change;</li> <li>• Energy use;</li> <li>• Impacts of environment legislation; and</li> <li>• Providing best value to customers</li> </ul>	The LTP3 should seek to support sustainable water management and promote the sustainable use of water resources in new and improved transport infrastructure.

\* This includes the environmental issues as set out in the SEA Directive - biodiversity, flora, fauna, population, human health, soil, water, air, climatic factors, material assets, cultural heritage (including architectural and archaeological heritage) and landscape - as well as socio-economic issues such as deprivation, economic factors and housing. The environmental information themes have been discussed further in **Table 3.1** in the main body of the Scoping Report.

# Appendix H: Baseline data

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## 1.1 Air quality

Air quality on the Isle of Wight is generally very good. This reflects the relatively small size of many of its settlements, its distance from major centres of population, and the rural nature of much of the Island.

Following the implementation of the Environment Act 1995, and since the publishing of the National Air Quality Strategy in 1997, IOWC have been undertaking reviews and assessments of air quality. These include for the following pollutants identified as possible risks to human health:

- ▶ Carbon Monoxide (CO);
- ▶ Benzene;
- ▶ 1,3 – Butadiene;
- ▶ Lead;
- ▶ Nitrogen Dioxide (NO<sub>2</sub>);
- ▶ Sulphur Dioxide (SO<sub>2</sub>); and
- ▶ Particulates (PM<sub>10</sub>).

The first air quality Review and Assessment for the Island in 2000 highlighted that air quality objectives would likely to be met. The next review, the 2004 Updating and Screening Assessment, concluded that the Council needed to undertake a Detailed Assessment for benzene, reflecting possible exceedences adjacent to a fuel storage depot in East Cowes, and sulphur dioxide, reflecting potential exceedences near to the three main ferry ports on the Island<sup>1</sup>.

In line with the relevant Defra guidance the council was required to produce an Air Quality Progress Report in April 2004 and April 2005. These concluded that there had been no changes since the previous Updated and Screening Assessment significant enough to result in exceedences of the air quality objectives<sup>2</sup>.

The following round of Review and Assessment, the 2006 Updated and Screening Assessment indicated that a Detailed Assessment for NO<sub>2</sub> was required due to identified exceedences of the annual mean objective at two monitoring sites in the area over the previous three years. These sites were at Coppins Bridge, Newport, and on the Sandown, Lake and Shanklin road corridor. The exceedences were considered to be as a result of road traffic emissions. The Council then conducted NO<sub>2</sub> diffusion tube analysis at these two locations as part of its Detailed Assessment. The results of the Detailed Assessment concluded that whilst there was no need at this stage to declare an Air Quality Management Area, significant increases in traffic at Fairlee Road in Newport would lead to exceedences of the guideline level for NO<sub>2</sub><sup>3</sup>.

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<sup>1</sup> The 2004 Updating and Screening Assessment can be accessed on:  
[http://www.iow.gov.uk/LIVING\\_HERE/ENVIRONMENT/ENVIRONMENTAL\\_HEALTH/Environmental\\_Protection/Air\\_Quality/4update/ng.asp](http://www.iow.gov.uk/LIVING_HERE/ENVIRONMENT/ENVIRONMENTAL_HEALTH/Environmental_Protection/Air_Quality/4update/ng.asp)

<sup>2</sup> The 2004 and 2005 Air Quality Progress Reports can be accessed on:  
[http://www.iow.gov.uk/LIVING\\_HERE/ENVIRONMENT/ENVIRONMENTAL\\_HEALTH/Environmental\\_Protection/](http://www.iow.gov.uk/LIVING_HERE/ENVIRONMENT/ENVIRONMENTAL_HEALTH/Environmental_Protection/)

<sup>3</sup> The 2006 Updating and Screening Assessment and subsequent Detailed Assessment can be accessed on:

The most recent Updating and Screening Assessment was released in April 2009. This highlighted that there was one site on Fairlee Road showing an exceedence of the NO<sub>2</sub> annual mean objective. Further analysis of the site highlighted that objectives would be met at the 'nearest relevant exposure'<sup>4</sup> to the location, which was set back at some distance from the site. The 2009 Updating and Screening Assessment therefore highlighted that Detailed Assessment is therefore not required for any pollutant<sup>5</sup>.

As the ongoing Review and Assessments have highlighted, no air pollution objectives are deemed unlikely to be met on the Isle of Wight. For this reason, no Air Quality Management Areas have been designated on the Island. However, potential exceedences relating to traffic and transport will continue to be monitored on the Island.

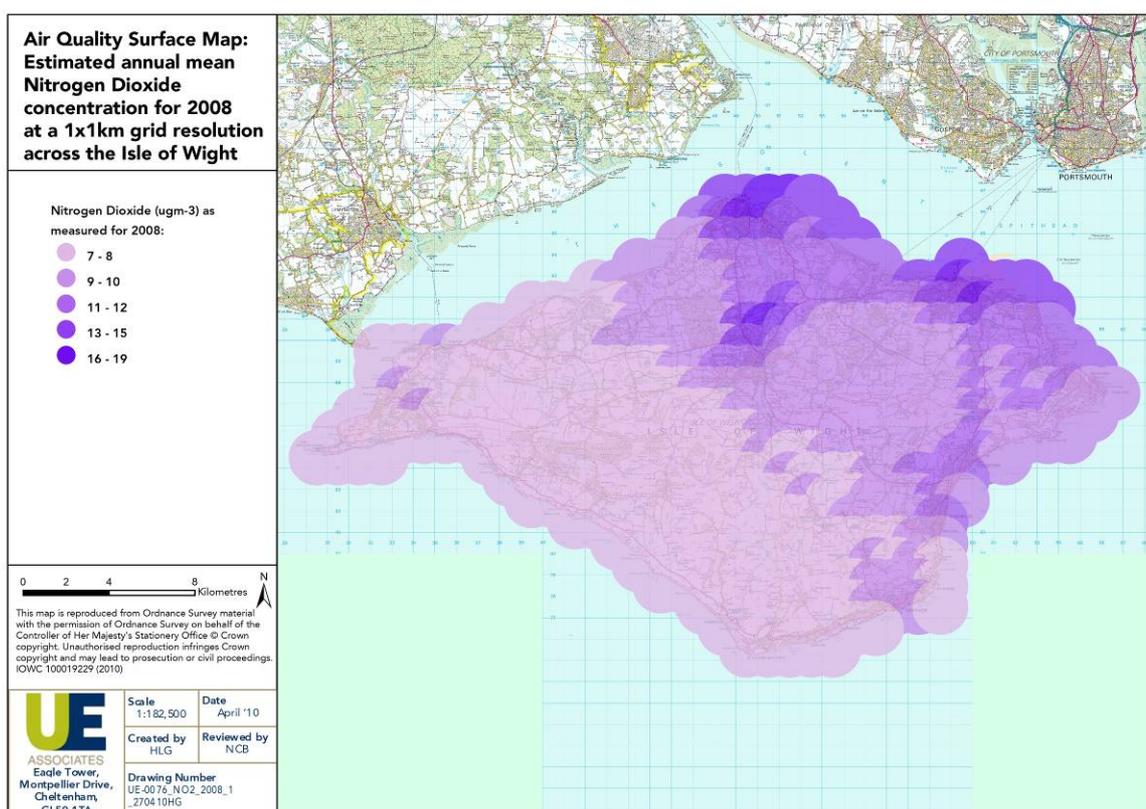


Figure 1: Air quality on the Isle of Wight: NO<sub>2</sub>(nitrogen dioxide) 2008.

## 1.2 Biodiversity and geodiversity

The Isle of Wight Biodiversity Assessment and Audit, *Wildlife on the Isle of Wight*<sup>6</sup> provides an in-depth overview of biodiversity assets on the Island. The SEA will utilise the detailed information included in this document throughout the appraisal process alongside other information available, including in the Isle of Wight Biodiversity Action Plan. This section therefore sets out a summary of the biodiversity information available locally.

[http://www.iow.gov.uk/LIVING\\_HERE/ENVIRONMENT/ENVIRONMENTAL\\_HEALTH/Environmental\\_Protection/Air\\_Quality/default.asp](http://www.iow.gov.uk/LIVING_HERE/ENVIRONMENT/ENVIRONMENTAL_HEALTH/Environmental_Protection/Air_Quality/default.asp)

<sup>4</sup> The nearest receptor potentially affected by poor air quality.

<sup>5</sup> The 2004 Updating and Screening Assessment can be accessed on:

[http://www.iow.gov.uk/LIVING\\_HERE/ENVIRONMENT/ENVIRONMENTAL\\_HEALTH/Environmental\\_Protection/Air\\_Quality/3update.asp](http://www.iow.gov.uk/LIVING_HERE/ENVIRONMENT/ENVIRONMENTAL_HEALTH/Environmental_Protection/Air_Quality/3update.asp)

<sup>6</sup> Isle of Wight Biodiversity Action Plan Steering Group (2000) *Wildlife on the Isle of Wight*

## 1.2.1 Habitats

The Isle of Wight contains a diverse mosaic of habitats, representing a microcosm of the south of England. Many of these habitats, such as chalk grasslands, the Island's maritime cliffs and slopes, and estuaries are deemed of particular importance, not only in a sub-regional context but also on a national and international scale. For example the Island's unenclosed and unimproved chalk grassland is important both as a semi-natural habitat and as a historic landscape type. It is rare in national terms and the Isle of Wight has 10% of the total area surviving within South East England<sup>7</sup>.

The Isle of Wight contains 26 recognised national Biodiversity Action Plan priority habitats, which are present both on the Island, and in the seas around the Island. **Table 1** presents the priority habitats which are present in and around the Island.

**Table 1: Priority habitats present on the Isle of Wight**

UK Biodiversity Action Plan priority habitats present on the Isle of Wight	
Wet woodland	Lowland wood pasture and parkland
Cereal field margins	Ancient and/or species rich hedgerows
Lowland meadows	Lowland dry acid grassland
Lowland calcareous grassland	Lowland heathland
Coastal and floodplain grazing marsh	Purple moor grass and rush pastures
Fens	Reedbeds
Eutrophic standing waters	Maritime cliffs and slopes
Coastal vegetated shingle	Coastal saltmarsh
Coastal sand dunes	Saline lagoons
Seagrass beds	Mudflats
Sheltered muddy gravels	Sublittoral sands and gravels
Littoral and sub-littoral chalk	<i>Sabellaria spinulosa</i> reefs
Sub-littoral sands and gravels	Mud habitats in deep water

A number of habitats were monitored in 2005/2006 as part of the Biodiversity Action Plan reporting process, which established their area on the Island, and whether they were declining, increasing, stable, or fluctuating<sup>8</sup>. The monitored habitats, and their status and trends, are presented in **Table 2**.

<sup>7</sup> Source: Isle of Wight County Archaeology and Historic Environment Service (2008) Historic Environment Action Plan, Isle of Wight Overview: [http://www.iwight.com/living\\_here/planning/images/IsleofWightHEAPOverview.pdf](http://www.iwight.com/living_here/planning/images/IsleofWightHEAPOverview.pdf)

<sup>8</sup> Source: Biodiversity Action Report System: <http://www.ukbap-reporting.org.uk/> [accessed 9<sup>th</sup> April 2010]

**Table 2: Priority habitats monitored on the Isle of Wight**

Habitat	Latest status	Latest trend
Coastal and floodplain grazing marsh	600 Hectares	Unknown
Coastal saltmarsh	164 Hectares	Declining (continuing/accelerating)
Coastal sand dunes	16 Hectares	Stable
Coastal vegetated shingle	4.50 Hectares	Stable
Fen, Marsh and Swamp	17 Hectares	Fluctuating - probably declining
Intertidal Mudflats	865 Hectares	Increasing
Lowland calcareous grassland	654 Hectares	Stable
Lowland dry acid grassland	113 Hectares	Stable
Lowland heathland	86 Hectares	Stable
Lowland meadows	198 Hectares	Fluctuating - probably declining
Lowland mixed deciduous woodland	2950 Hectares	Increasing
Maritime cliff and slopes	530 Hectares	Fluctuating - probably declining
Neutral grassland	207 Hectares	Fluctuating - probably declining
Reedbeds	42 Hectares	Stable
Saline lagoons	12.50 Hectares	Fluctuating - probably declining
Seagrass beds	6 Site(s)	Unknown
Wet woodland	160 Hectares	Stable

Habitat Action Plans (HAPs) are designed to provide a framework for action to conserve and enhance the Island's biodiversity. The following nine HAPs have been prepared for the Isle of Wight:

- ▶ Maritime Cliffs and Slopes HAP;
- ▶ Calcareous Grassland HAP;
- ▶ Heathland and Acid Grassland HAP;
- ▶ Lowland Meadows HAP;
- ▶ Wetlands HAP;
- ▶ Woodland HAP;
- ▶ Farmland HAP to include the national priority habitats ancient and species-rich hedgerows, cereal field margins, and eutrophic standing water;
- ▶ Solent Coastal HAP to include the national Priority Habitats Saltmarsh, Mudflats, Coastal Vegetated shingle, Coastal Sand Dunes and Saline Lagoons; and
- ▶ Generic HAP (in association with the Sustainable Community Strategy<sup>9</sup>).

<sup>9</sup> Island Strategic Partnership (2008) Eco Island: the Isle of Wight's Sustainable Community Strategy 2008-2020: <http://www.eco-island.org.uk/documents/eco%20island%20booklet.pdf>

### 1.2.2 Species

The Isle of Wight has a rich species diversity. The Island does not have many introduced species such as grey squirrels, deer or American mink. This has allowed populations of native animals which have become rare on the mainland, such as red squirrels, dormice and water voles to flourish. The relatively mild climate of the Island and maritime situation also provides a foothold for species on the northern edge of their European range<sup>10</sup>.

The Island contains 119 priority species, including the dormouse, song thrush, red squirrel, water vole, early gentian and skylark and the starlet sea anemone. In addition, another 477 species have been established as of local distinctiveness. They include a diverse range of species such as mantis shrimps, wasp spiders, wall lizards and pink wax-cap fungi. An estimated 72 species are considered to have become extinct locally within the last fifty years.<sup>11</sup>

A full species audit of the species deemed to be of national and local priority species present on the Island (October 2009) can be found on the Wild on Wight website at:

<http://www.wildonwight.co.uk/speciesreview/Revised%20Audit%20for%20publication%20Oct%202009.pdf>

Species Action Plans (SAPs) have, with the Habitat Action Plans prepared on the Island, been produced to provide a framework for action to conserve and enhance the Island's biodiversity. Two SAPs has been prepared on the Island:

- ▶ Red Squirrel SAP (2003)<sup>12</sup>; and
- ▶ Woodland Bat SAP (2005).

### 1.2.3 Nature conservation sites

The Isle of Wight contains a significant number of internationally designated, nationally designated and locally designated nature conservation sites.

European sites provide ecological infrastructure for the protection of sites which are of exceptional importance in respect of rare, endangered or vulnerable natural habitats and species within the European Union. These sites consist of Special Areas of Conservation (SACs, designated under the European Union Directive 92/43/EEC Habitats Directive) and Special Protection Areas (SPAs, designated under European Union Directive 79/409/EEC on the conservation of wild birds (the Birds Directive)). Government policy (PPS9<sup>13</sup> and Circular 06/05<sup>14</sup>) recommends that Ramsar sites<sup>15</sup> are treated as if they are fully-designated European sites for the purposes of considering development proposals that may affect them.

The following seven European sites are located within the Isle of Wight:

- ▶ Solent & Isle of Wight Lagoons Special Area for Conservation (SAC);

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<sup>10</sup> Isle of Wight Biodiversity Action Plan Steering Group (2000) Wildlife on the Isle of Wight

<sup>11</sup> Source: Wild on Wight website: <http://www.wildonwight.co.uk/species/species.php>

<sup>12</sup> The SAPs can be accessed on: <http://www.wildonwight.co.uk/saps.php>

<sup>13</sup> ODPM (2005): Planning Policy Statement 9: Biodiversity and Geological Conservation.

<sup>14</sup> ODPM (2005): Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.

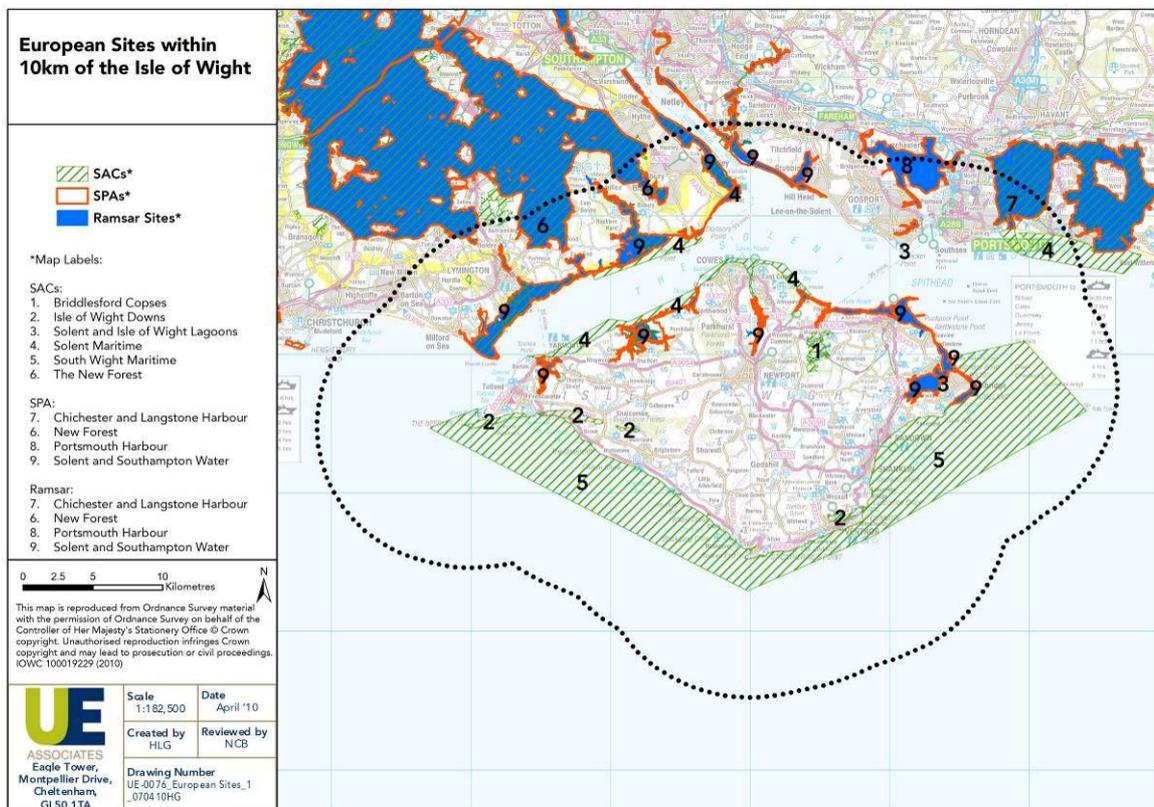
<sup>15</sup> UNESCO (1971): Convention on Wetlands of International Importance especially as Waterfowl Habitat. (Ramsar (Iran), 2 February 1971, UN Treaty Series No. 14583).

- ▶ Briddlesford Copses SAC;
- ▶ South Wight Maritime SAC;
- ▶ Isle of Wight Downs SAC;
- ▶ Solent Maritime SAC;
- ▶ Solent & Southampton Water Special Protection Area (SPA); and
- ▶ Solent & Southampton Water Ramsar Site.

In addition to these sites, seven European Sites lie within 10km of the Island. These are:

- ▶ The New Forest SAC (6km);
- ▶ New Forest SPA (6km);
- ▶ New Forest Ramsar Site (6km);
- ▶ Portsmouth Harbour SPA (6km);
- ▶ Chichester & Langstone Harbours SPA (9km);
- ▶ Portsmouth Harbour Ramsar Site (6km); and
- ▶ Chichester and Langstone Harbours Ramsar Site (9km).

The internationally designated sites on the Isle of Wight, and those located within 10km of the Island are presented in **Figure 2**.



**Figure 2:** European Designated nature conservation sites within 10km of the Isle of Wight

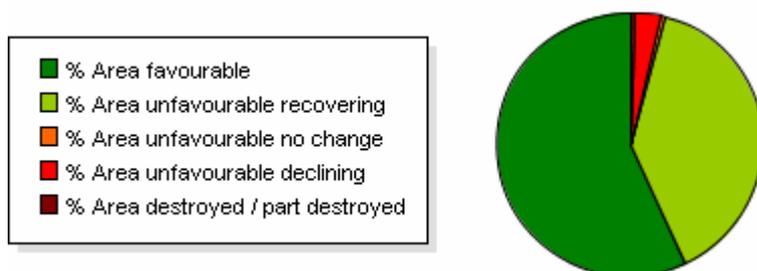
The Isle of Wight contains a number of nationally designated nature conservation sites, and there are 41 Sites of Special Scientific Interest (SSSI) on the Island. These cover 11% of the

Island' land area<sup>16</sup>. A number of these SSSIs have also been designated for the geological interest. Geological SSSIs are discussed in more detail in Section 1.2.5.

**Table 3:** SSSIs located on the Isle of Wight<sup>17</sup>

SSSIs located on the Isle of Wight		
Compton Down	Freshwater Marshes	Mottistone Down
Yar Estuary	Bouldnor and Hamstead Cliffs	Cranmore
Newtown Harbour	Northpark Copse	Parkhurst Forest
Thomess Bay	Medina Estuary	King's Quay Shore
Ryde Sands and Wootton Creek	Briddlesford Copses	Priory Woods
Shide Quarry	Arreton Down	Brading Marshes to St Helen's Ledges
Alverstone Marshes	Bembridge Down	Lake Allotments
The Wilderness	Cridmore Bog	Greatwood and Cliff Copses
Ventnor Downs	Rew Down	St Lawrence Bank
Compton Chine to Steephill Cove	Garstons Down	America Wood
Prospect Quarry	Rowridge Valley	Calbourne Down
Bonchurch Landslips	Colwell Bay	Bembridge School and Cliffs
Eaglehead and Bloodstone Copses	Headon Warren and West High Down	Lacey's Farm Quarry
Locks Farm Meadow	Thorness Bay	

Natural England has advised that, as of March 2010, 57.1% of the Isle of Wight's SSSI area was classified as 'favourable', 39% 'unfavourable recovering', 0.4% 'unfavourable no change' and 3.4% 'unfavourable declining'.<sup>18</sup> 0.2% of the area was classified as destroyed/part destroyed. Overall 96.1% of SSSI land by area on the Island was in a favourable or recovering condition. This meets the Government's Public Service Agreement (PSA) target to have 95% of the SSSI area in favourable or recovering condition by 2010.



**Figure 3:** Condition of SSSIs on the Isle of Wight<sup>19</sup>

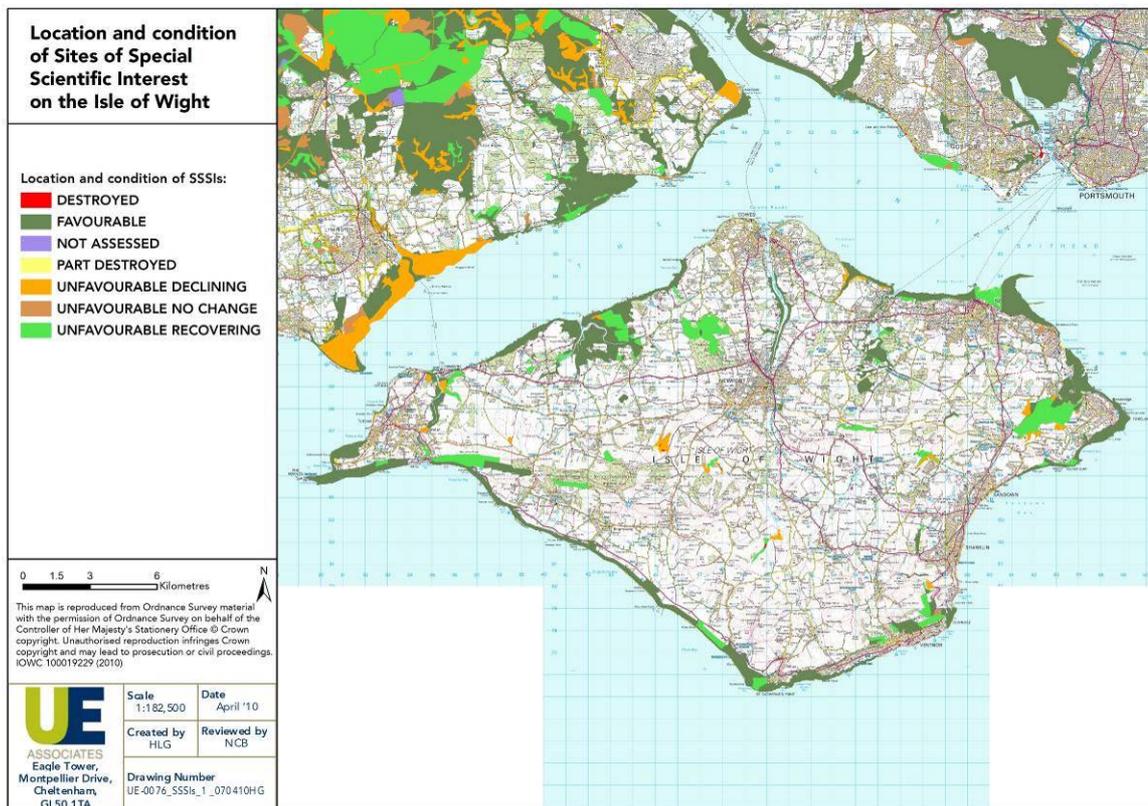
<sup>16</sup> Source: Nature on the Map: [www.natureonthemap.co.uk](http://www.natureonthemap.co.uk) [accessed 8<sup>th</sup> April 2010]

<sup>17</sup> Source: Natural England: [http://www.english-nature.org.uk/special/ssi/searchresults.cfm?ssi\\_name=&frmcounty=1251](http://www.english-nature.org.uk/special/ssi/searchresults.cfm?ssi_name=&frmcounty=1251) [accessed 8<sup>th</sup> April 2010]

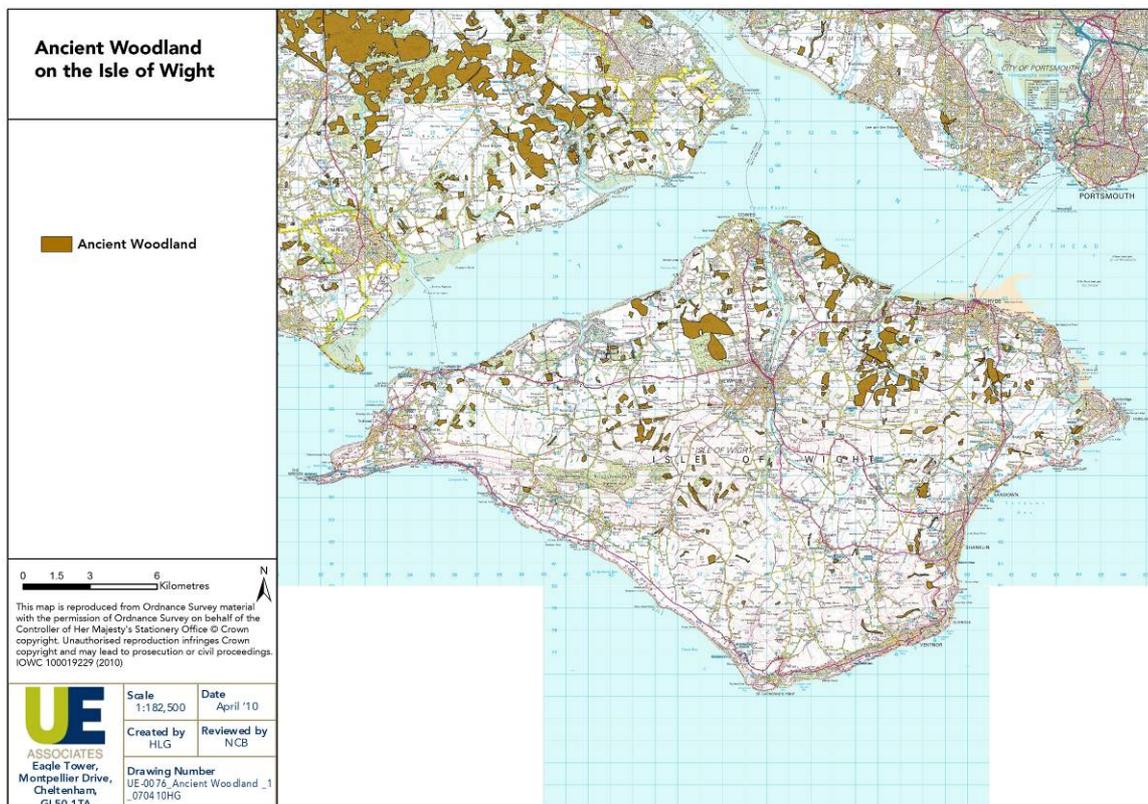
<sup>18</sup> Natural England SSSI condition statistics for the Isle of Wight: <http://www.english-nature.org.uk/special/ssi/reportAction.cfm?Report=sdr18&Category=C&Reference=1251> [accessed 8<sup>th</sup> April 2010]

<sup>19</sup> Natural England SSSI condition statistics for the Isle of Wight: <http://www.english-nature.org.uk/special/ssi/reportAction.cfm?Report=sdr18&Category=C&Reference=1251> [accessed 8<sup>th</sup> April 2010]

The location and condition of SSSI units on the Island are presented in **Figure 4**.

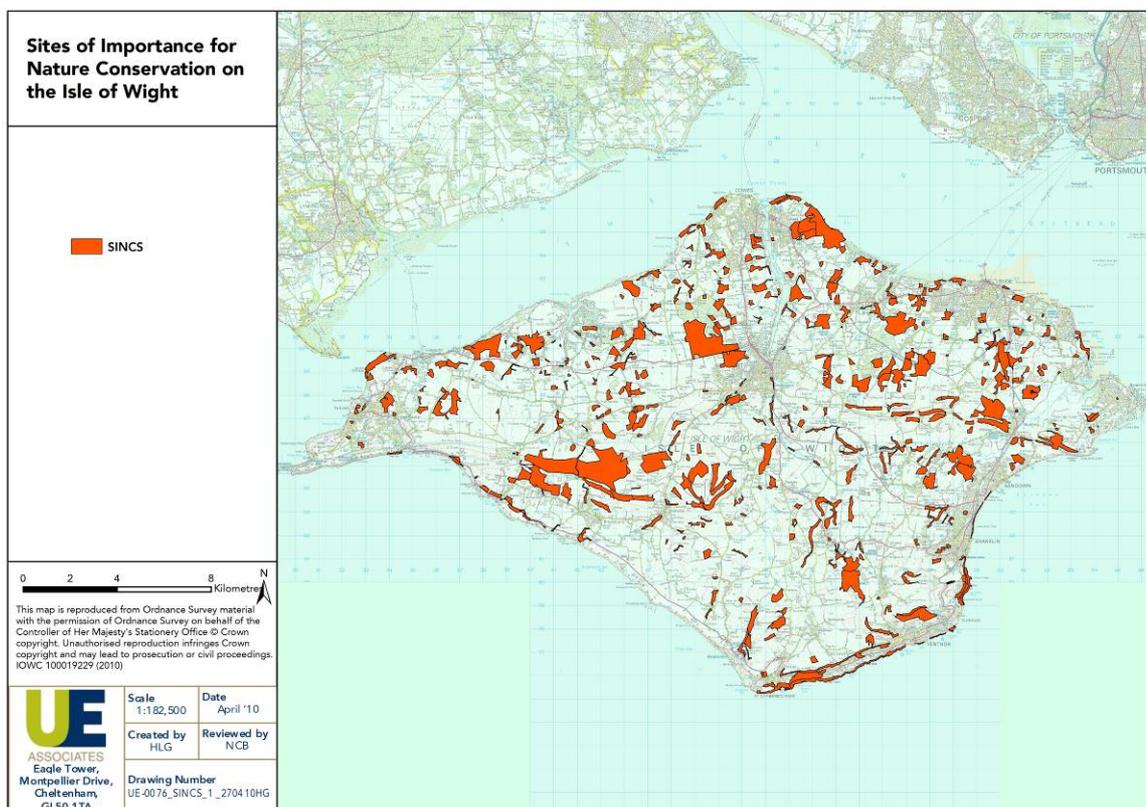


**Figure 4:** Location and summary of the condition of SSSIs on the Isle of Wight



**Figure 5:** Ancient woodland on the Isle of Wight

There are a number of sites that are important for nature conservation but are not covered by statutory national and international designations. On the Isle of Wight, they are defined as Sites of Importance for Nature Conservation (SINCs). Covering 10% of the Island's area, these incorporate a range of habitats, including areas of ancient semi-natural woodland (**Figure 5**), unimproved grasslands, remnant heathland, wetland and coasts and estuaries. The location of the SINCs on the Isle of Wight is presented in **Figure 6**.



**Figure 6:** Location of SINCS on the Isle of Wight

#### 1.2.4 Nature reserves

National Nature Reserves (NNRs) in England are areas nationally designated with the aim of securing protection and appropriate management of the most important areas of wildlife habitat. Whilst NNRs were previously designated by the Nature Conservancy, Natural England is now the body able to declare NNRs in England. In practice, NNRs are a selection of the most valuable parts of England's SSSIs.

The Isle of Wight contains one National Nature Reserve, the 288 hectare Newtown Harbour NNR. Newtown Harbour NNR has been designated as one of the best examples of undisturbed natural harbour on the south coast of England. The harbour supports a number of rare species and habitats, and is a wintering ground for wildfowl and waders, with important numbers of Brent goose, black-tailed godwit, wigeon and teal<sup>20</sup>.

Natural England encourages local authorities to formally designate appropriate sites as 'Local Nature Reserves' under Section 21 of the National Parks and Access to the Countryside Act 1949. A Local Nature Reserve (LNR) designation demonstrates a commitment by the local

<sup>20</sup> Source: Natural England: <http://www.naturalengland.org.uk/ourwork/conservation/designatedareas/nnr/1006110.aspx>

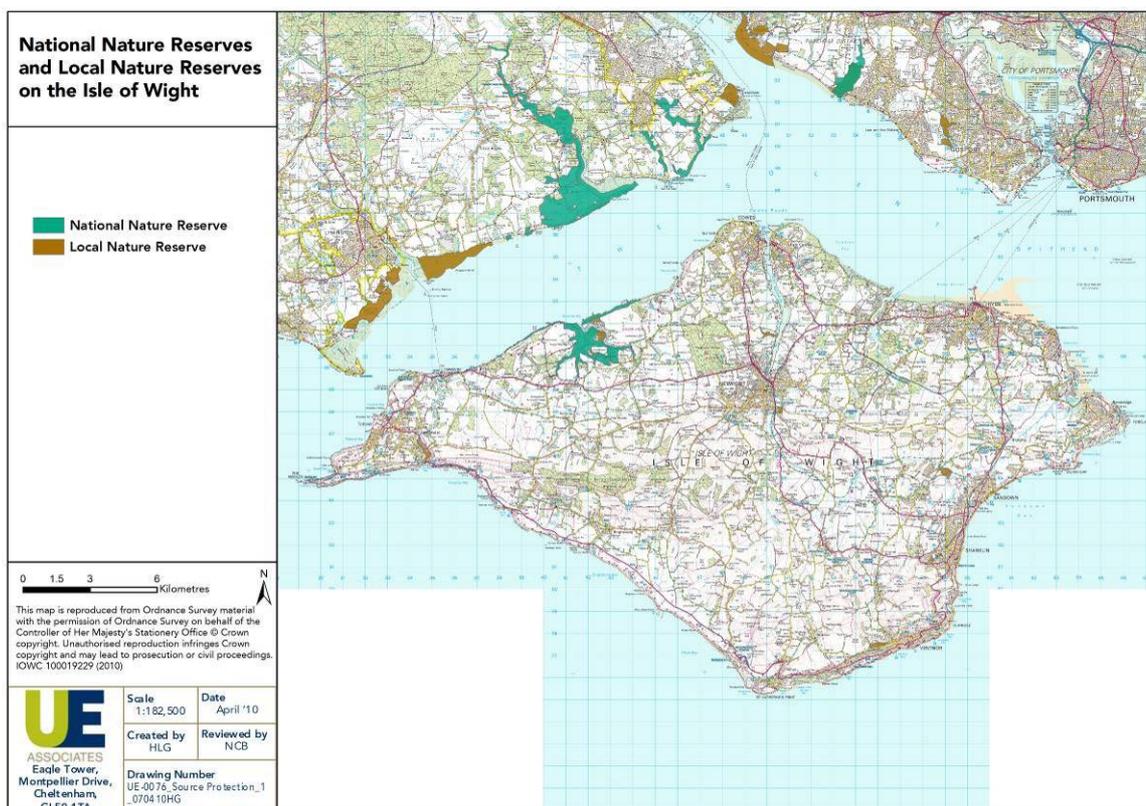
authority to manage land for biodiversity, protect it from inappropriate development and provide opportunities for local people to study and enjoy wildlife.

There are currently five LNRs on the Island managed by IOWC. These are:

- ▶ Afton Marsh;
- ▶ Rew Down;
- ▶ Dodnor Creek;
- ▶ Shide Chalk Pit; and
- ▶ Sibden Hill and Batts Copse.

The location of the NNR and LNRs on the Isle of Wight are presented in **Figure 7**. In addition the Wight Nature Fund manages sites at:

- ▶ Alverstone Mead, Alverstone ;
- ▶ Pelham Woods, St Lawrence;
- ▶ Mill Copse, Yarmouth; and
- ▶ Youngwoods Copse, Alverstone.



**Figure 7:** Location of the Isle of Wight's National Nature Reserve and Local Nature Reserves

#### 1.2.4.1 Biodiversity Opportunity Areas

Biodiversity Opportunity Areas (BOAs) are regional priority areas of great opportunity for restoration and creation of BAP habitats. BOAs do not include all the BAP habitats in a

region, but contain concentrations of wildlife habitat. Delivering BAP targets through BOAs will result in a landscape scale approach to conservation.

There are ten BOAs present on the Isle of Wight. Covering 40% of the Island, and 38,000 hectares<sup>21</sup> these are as follows<sup>22</sup>:

- ▶ Western Yar;
- ▶ Western Central Ridge (includes two sub sites);
- ▶ Medina Estuary;
- ▶ North-Western Woods;
- ▶ Southern Uplands;
- ▶ Eastern Yar Valley;
- ▶ Upper Medina Valley;
- ▶ Eastern Central Ridge (includes two sub sites);
- ▶ South West Coast; and
- ▶ North-Eastern Woods.

The descriptive statements, targets and opportunities for each BOA can be accessed at the South East England Biodiversity Forum's website<sup>23</sup>.

#### 1.2.5 Geodiversity

The geodiversity of the Isle of Wight is an important asset for the Island. Geodiversity is the collective term describing the geological variety of the Earth's rocks, fossils, minerals, soils and landscapes together with the natural process which form and shape them. Geodiversity underpins biodiversity by providing diversity of habitat and the ecosystem, with the soil being the link between them. It also embraces the built environment by providing the basis for neighbourhood character and local distinctiveness through building stone and material.

The Isle of Wight has a rich, diverse and well known geodiversity resource. Linked to this, the Island has a significant fossil record, notably including those of dinosaurs.

The geology of the Island demonstrates three distinct periods:

**Cretaceous (120-70 million years ago):** The southern half of the Isle of Wight is mostly of cretaceous strata, including Chalk, Lower and Upper greensand, Gault, and rocks of the Wealden Group. The oldest rocks present on the Island are the sands and clays of the Wealden Group, which are exposed on either side of the Island at Sandown in the east and in Brighstone Bay in the west. These are a rich source of dinosaur remains. Rocks of the succeeding Lower Greensand are exposed on the south coast, which comprise a thick sequence of marine deposited clays and sands. These are well exposed in the south-west of the Island around Atherfield and to the north of Sandown. The Lower Greensand gives way to the Gault Clay and the Upper Greensand, which on the Isle of Wight comprise sandy clays and

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<sup>21</sup> Source: South East England Biodiversity Opportunity Mapping Final Report (2009): [http://strategy.sebiodiversity.org.uk/data/files/BOA/final\\_report\\_south\\_east\\_england\\_biodiversity\\_opportunity\\_mapping\\_v1.doc](http://strategy.sebiodiversity.org.uk/data/files/BOA/final_report_south_east_england_biodiversity_opportunity_mapping_v1.doc)

<sup>22</sup> Source: South East Biodiversity Forum: [http://strategy.sebiodiversity.org.uk/data/files/BOA/all\\_areas\\_descriptions.doc](http://strategy.sebiodiversity.org.uk/data/files/BOA/all_areas_descriptions.doc)

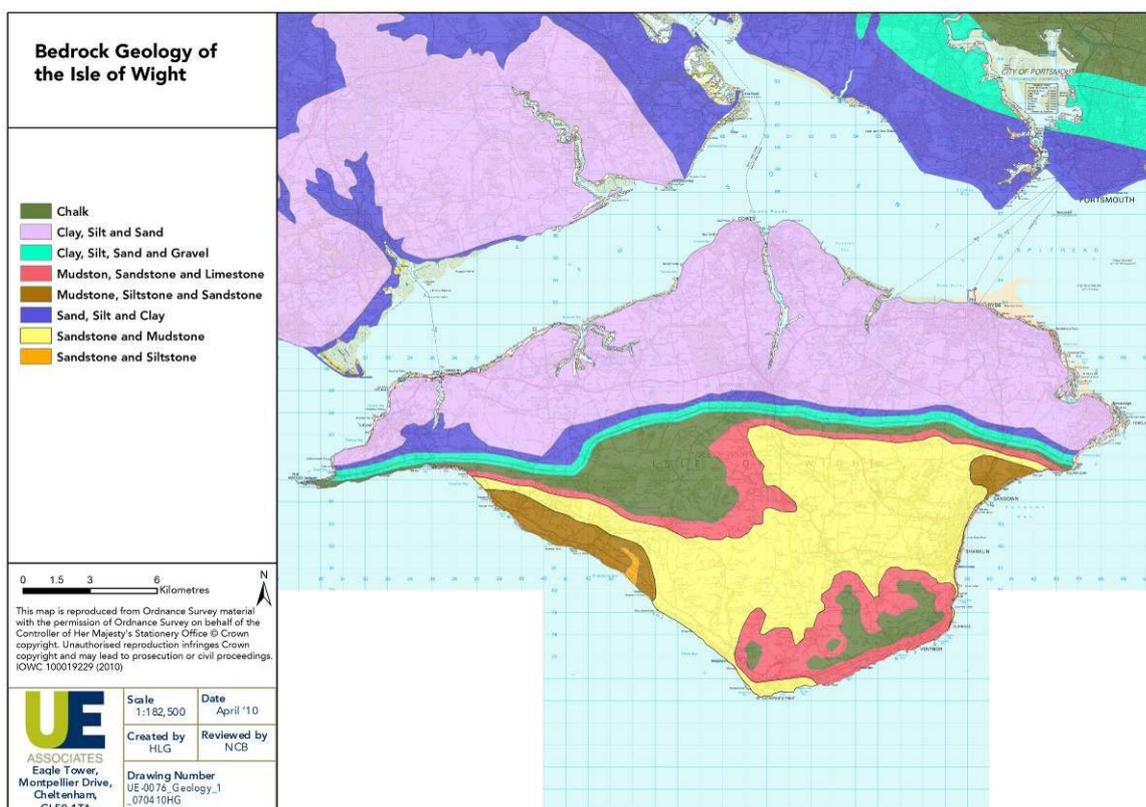
<sup>23</sup> <http://strategy.sebiodiversity.org.uk/pages/biodiversity-opportunity-areas-description.html>.

sandstones, which produce unstable areas of erosion. The overlying Chalk forms the spine of higher ground running across the centre of the Isle of Wight which extends to the its western extremity at the Needles rocks.

**Palaeogene (70-30 million years ago):** The sands and clays of this period are marked by the undulating landscape of the northern coastal plain of the Island. These consist of a thick sequence of marine, estuarine and freshwater sands and clays, including those of the Bracklesham, Barton, Solent, Thames and Lambeth Groups. These were deposited under shallow marine to intertidal conditions and contain a diverse assemblage of fossil molluscs, plant remains and reptiles.

**Quaternary (since 2 million years ago):** From approximately two and a half million years ago, the Earth underwent successive periods of extreme cooling and then re-heating known as the Quaternary (commonly known as the Ice Ages). This period is marked on the Island by gravel terraces in the main river valleys, rock debris on the chalk downs and peats and muds in the estuaries. Whilst the Isle of Wight was not covered with glacial ice, the flooding of the Solent river valley during the melting periods created a breach to the sea between Dorset and the Island. This separated the Island from the mainland about seven thousand years ago<sup>24</sup>.

**Figure 8** highlights the bedrock geology of the Isle of Wight.



**Figure 8: Geology of the Isle of Wight**

<sup>24</sup> Source Natural England: England's geology by county: <http://www.naturalengland.org.uk/ourwork/conservation/geodiversity/englands/counties/default.aspx> and Isle of Wight Local Geodiversity Action Plan

The rich geodiversity of the Island is highlighted by the presence of a number of sites designated for their geodiversity value. These include Geological SSSIs and Regionally Important Geological and Geomorphological Sites.

Geological SSSIs represent the best geology and geomorphology reflecting the UK's geodiversity. Sites are chosen for their past, current and future contributions to the science of geology and include coastal and upland areas, quarries, pits, mines, cuttings, and active landforms. Reflecting the rich geodiversity of the Isle of Wight, a significant number of the Island's SSSIs have been designated as Geological SSSIs. These include the following:

- ▶ Bembridge Down;
- ▶ Bembridge School and Cliffs;
- ▶ Bonchurch Landslips;
- ▶ Bouldnor and Hamstead Cliffs;
- ▶ Brading Marshes to St helen's Ledges;
- ▶ Colwell Bay;
- ▶ Compton Chine to Steephill Cove;
- ▶ Compton Down;
- ▶ Headon Warren and West High Down;
- ▶ King's Quay Shore;
- ▶ Lacey's Farm Quarry;
- ▶ Priory Woods;
- ▶ Prospect Quarry;
- ▶ Thorness Bay; and
- ▶ Whitecliff Bay and Bembridge Ledges.

Whilst a small number of Regionally Important Geological and Geomorphological Sites (RIGS) presently exist on the Island, the area covered by the RIGS are currently being updated. The Local Geodiversity Action Plan seeks to increase the number of these sites to create a comprehensive Island-wide network<sup>25</sup>.

## **1.3 Climate change**

### **1.3.1 Potential effects of climate change**

Climatic and anthropogenic-induced climate change are increasing concerns on the Isle of Wight. Locally defined levels of emissions are seen as contributing to national and international changes in climate with implications for a range of environmental and socio-economic receptors.

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<sup>25</sup> Price, T. & Jakeways, J. (2010): Isle of Wight Local Geodiversity Action Plan: <http://www.dinosaurisle.com/lgap.aspx>

In June 2009 the findings of research on the probable effects of climate change in the UK was released by the UK Climate Projections (UKCP09) team<sup>26</sup>. UKCP09 gives climate information for the UK up to the end of this century and projections of future changes to the climate are provided, based on simulations from climate models. Projections are broken down to a regional level across the UK and are shown in probabilistic form, which illustrate the potential range of changes and the level of confidence in each prediction.

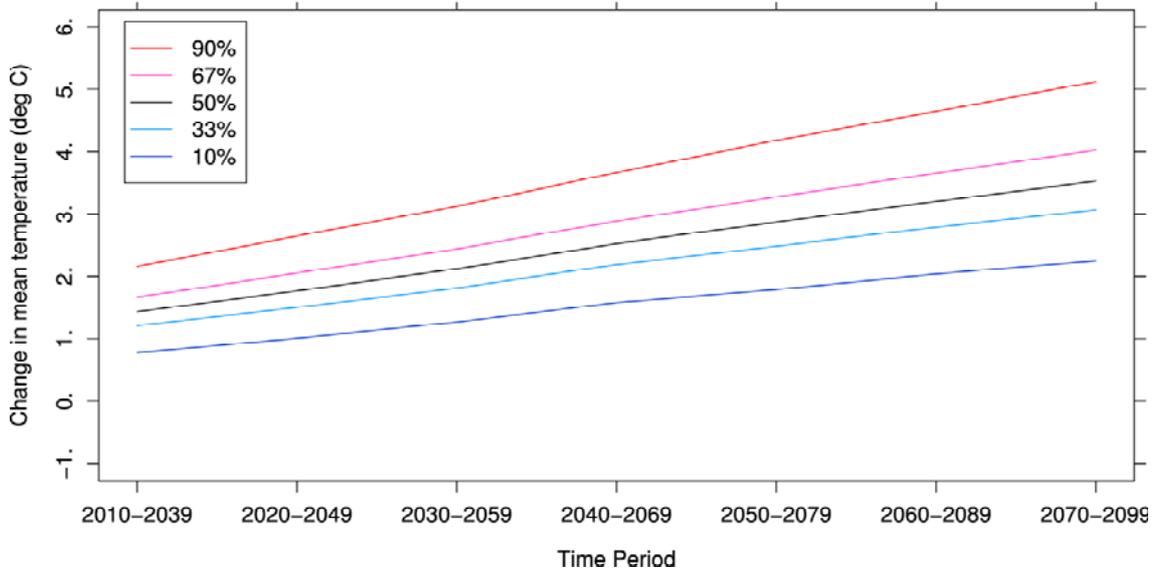
As highlighted by the research, the effects of climate change for the South East's climate by 2050 for a medium emissions scenario are likely to be as follows:

- ▶ Under medium emissions, the central estimate of increase in **winter mean temperature** is 2.2°C; it is very unlikely to be less than 1.1°C and is very unlikely to be more than 3.4°C. A wider range of uncertainty is from 0.9°C to 3.8°C.
- ▶ Under medium emissions, the central estimate of increase in **summer mean temperature** is 2.7°C; it is very unlikely to be less than 1.3°C and is very unlikely to be more than 4.6°C. A wider range of uncertainty is from 1.1°C to 5.2°C.
- ▶ Under medium emissions, the central estimate of increase in **summer mean daily maximum temperature** is 3.7°C; it is very unlikely to be less than 1.4°C and is very unlikely to be more than 6.5°C. A wider range of uncertainty is from 1.2°C to 7.3°C.
- ▶ Under medium emissions, the central estimate of increase in **summer mean daily minimum temperature** is 2.9°C; it is very unlikely to be less than 1.3°C and is very unlikely to be more than 5.1°C. A wider range of uncertainty is from 1.2°C to 5.7°C.
- ▶ Under medium emissions, the central estimate of change in **annual mean precipitation** is 0%; it is very unlikely to be less than -4% and is very unlikely to be more than 6%. A wider range of uncertainty is from -5% to 6%.
- ▶ Under medium emissions, the central estimate of change in **winter mean precipitation** is 16%; it is very unlikely to be less than 2% and is very unlikely to be more than 36%. A wider range of uncertainty is from 1% to 40%.
- ▶ Under medium emissions, the central estimate of change in **summer mean precipitation** is -18%; it is very unlikely to be less than -40% and is very unlikely to be more than 7%. A wider range of uncertainty is from -42% to 16%.

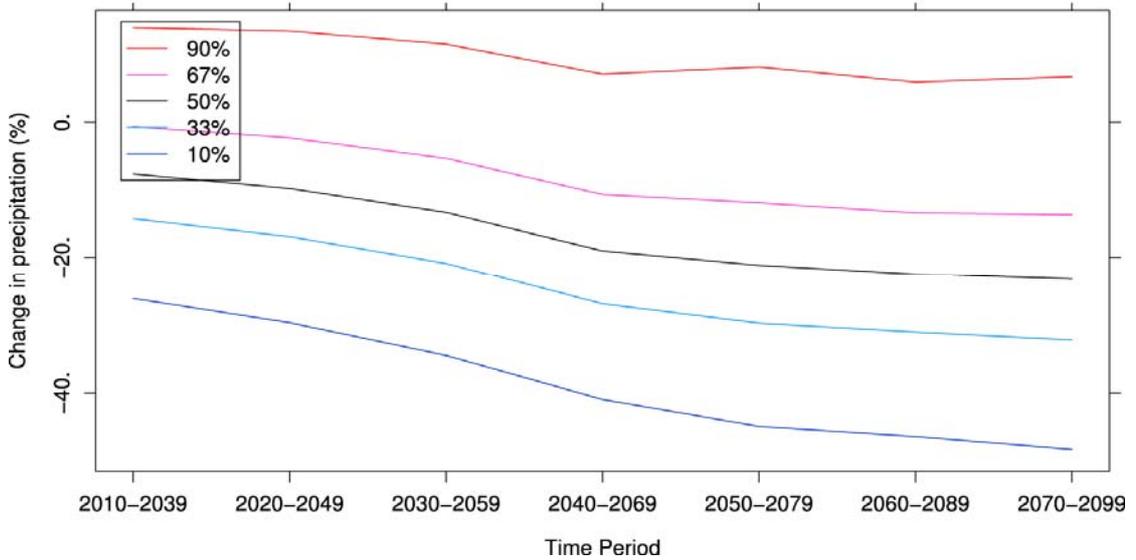
Presented below are a series of graphs to illustrate UKCP09 information for the South East region over a wider timescale to the end of the century. This is presented in five (10, 33, 50, 67 and 90%) probability levels for each 30-year time period:

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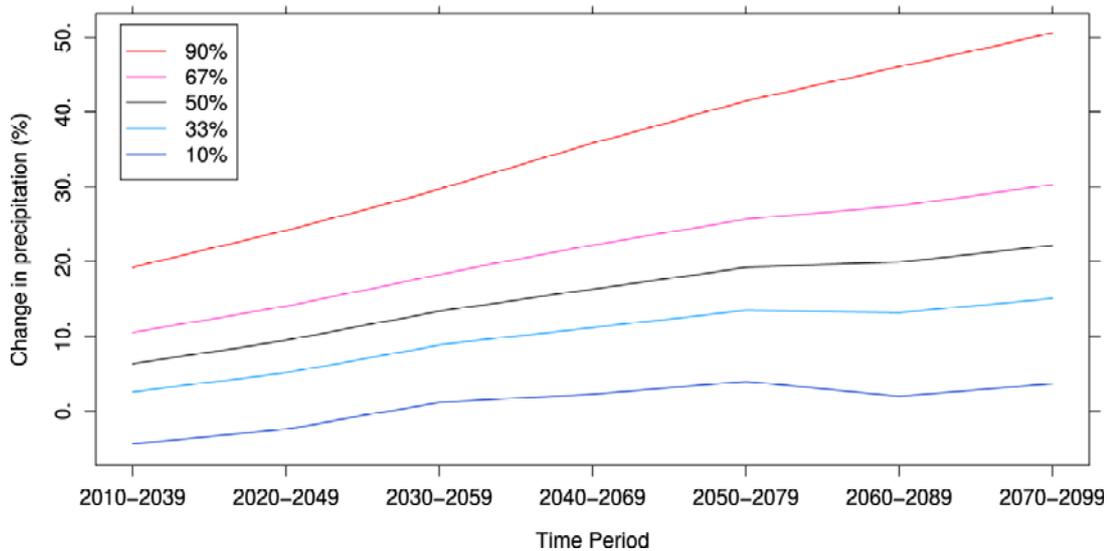
<sup>26</sup> The data was released in June 2009: See: <http://ukcp09.defra.gov.uk/index.html>



**Figure 9:** Changes in mean temperature in the South East to 2099 as a result of a medium emissions scenario



**Figure 10:** Changes in summer mean precipitation in the South East to 2099 as a result of a medium emissions scenario



**Figure 11:** Changes in winter mean precipitation in the South East to 2099 as a result of a medium emissions scenario

(Source for all three figures: UK Climate Projections 09

<http://ukclimateprojections.defra.gov.uk/content/view/1553/543/index.html> )

Resulting from these changes, the study has suggested that a variety of risks exist for the South East. The risks relevant to the Isle of Wight resulting from climate change include as follows:

- ▶ Increased incidence of heat related illnesses and deaths during the summer;
- ▶ Increase incidence of illnesses and deaths related to exposure to sunlight (e.g. skin cancer, cataracts);
- ▶ Increased incidence of pathogen related diseases (e.g. legionella and salmonella);
- ▶ Increase in health problems related to rise in local ozone levels during summer;
- ▶ Increased risk of injuries and deaths due to increased number of storm events;
- ▶ Effects on water resources from climate change;
- ▶ Reduction in availability of surface water in reservoirs and rivers for abstraction in summer;
- ▶ Adverse effect on water quality from low river levels and turbulent rivers flow after heavy rain and a reduction of water flow;
- ▶ Increased risk of flooding, including increased vulnerability to 1:100 year floods;
- ▶ Changes in insurance provisions for flood damage;
- ▶ A need to increase the capacity of wastewater treatment plants and sewers;
- ▶ A need to upgrade flood defences;
- ▶ Increased likelihood of summer droughts and soil and water deficits, leading to demand for increased irrigation;
- ▶ Soil erosion due to flash flooding;

- ▶ Loss of species that are at the edge of their southerly distribution;
- ▶ Spread of species at the northern edge of their distribution;
- ▶ Impact on the amount of grassland from a reduction in summer rainfall;
- ▶ Deterioration in working conditions due to increased temperatures;
- ▶ Changes to global supply chain;
- ▶ Increased difficulty of food preparation, handling and storage more difficult due to higher temperatures;
- ▶ An increased move by the insurance industry towards a more risk-based approach to insurance underwriting, leading to higher cost premiums for local business;
- ▶ Increased demand for air-conditioning;
- ▶ Increased drought and flood related problems such as soil shrinkages and subsidence;
- ▶ Impacts from an increased number of tourists due to warmer weather;
- ▶ Risk of rail tracks buckling due to increased temperature and road surfaces melting more frequently; and
- ▶ Flooding of roads and railways.

### 1.3.2 Greenhouse gas emissions

In relation to greenhouse gas emissions, the Isle of Wight has significantly lower per capita emissions than regional (South East) and national averages. Per capita CO<sub>2</sub> emissions on the Island have been falling broadly in line with regional and national averages.

As **Table 4** highlights, in relation to CO<sub>2</sub> emissions by end user, the proportion of emissions from transport is significantly lower than from industrial/commercial, and domestic sources. However, whilst emissions from industry/commercial and domestic transport fell between 2005 and 2007, emissions from transport have remained relatively stable. This has led to transport sources increasing as a proportion of overall greenhouse emissions, from 17% to 18%.

**Table 4:** CO<sub>2</sub> emissions in the Isle of Wight by source 2005-2007 (kilotonnes CO<sub>2</sub> and percentage)<sup>27</sup>

	Industry and commercial	Domestic	Land use change and forestry	Road Transport	Total
2005	327	354	13	143	837
	39%	42%	2%	17%	
2006	308	354	13	141	816
	38%	43%	2%	17%	
2007	297	336	13	141	788
	38%	43%	2%	18%	

<sup>27</sup> Source: Defra (November 2009): 2007 Local Authority Carbon Dioxide figures: [http://www.decc.gov.uk/en/content/cms/statistics/climate\\_change/gg\\_emissions/uk\\_emissions/2007\\_local/2007\\_local.aspx](http://www.decc.gov.uk/en/content/cms/statistics/climate_change/gg_emissions/uk_emissions/2007_local/2007_local.aspx) [Accessed 6th April 2010].

**Table 5** Per capita CO<sub>2</sub> emissions in Isle of Wight in comparison to regional and national averages 2005-2007 (tonnes CO<sub>2</sub>)<sup>28</sup>

	Per capita emissions Isle of Wight	Per capita emissions South East	Per capita emissions UK
2005	6.1	8.1	8.7
2006	5.9	8.0	8.6
2007	5.7	7.8	8.4

## 1.4 Health

Whilst in many respects health in the Isle of Wight is favourable, there are a number of aspects relating to health which have the potential to be improved.

Average life expectancy on the Isle of Wight is 78.4 for men and 82.7 for women. Whilst this higher than averages for England (77.3 and 81.6), life expectancy is lower in those parts of the Island which exhibit forms of deprivation. For example, in the most deprived areas of the Isle of Wight, on average, the predicted life expectancy for both men and women is five years less for those living in the least deprived areas of the Island.<sup>29</sup>

Early deaths from heart disease and stroke are favourable compared to England averages. Over the last ten years, death rates from all causes, and early deaths from heart disease and stroke, and from cancer have improved for men and women and are better than the England averages. Indicators of mental health however suggest higher rates of mental health problems on the Island than England averages.

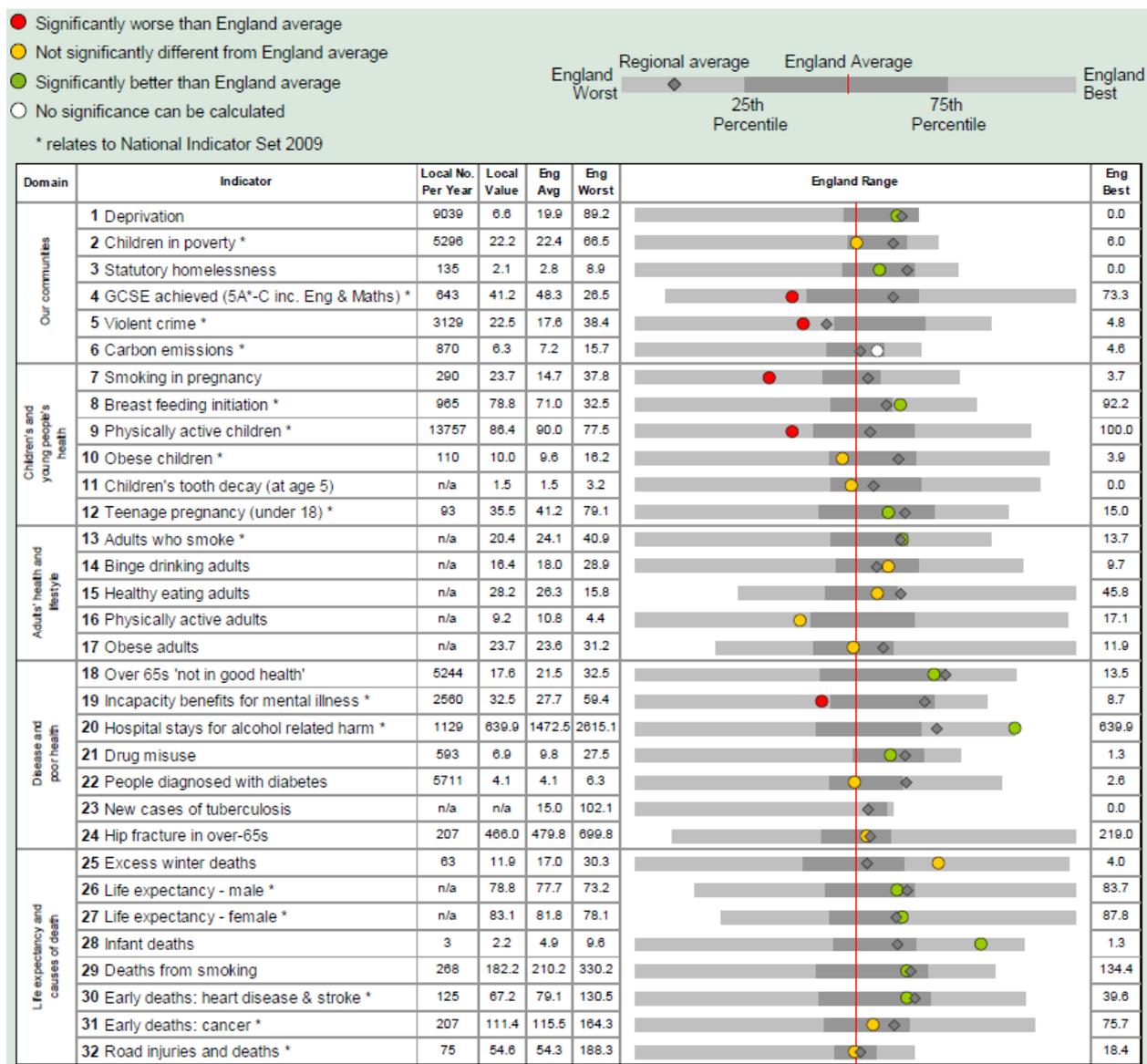
Indicators of child health are mixed on the Isle of Wight. Infant mortality and teenage pregnancy is lower than the England average, and children's tooth decay and the percentage of children classified as obese is similar to the England average. However, one in ten children in Reception Year are classified as obese and physical activity levels are lower than average. Smoking in pregnancy is also higher than the England average. Priorities for action identified in the Local Area Agreement for the Isle of Wight are: alcohol, smoking, obesity in children, teenage pregnancy and health inequalities<sup>30</sup>.

The health summary below highlights the mixed nature of health on the Island.

<sup>28</sup> Source: Defra (November 2009): 2007 Local Authority Carbon Dioxide figures: [http://www.decc.gov.uk/en/content/cms/statistics/climate\\_change/gg\\_emissions/uk\\_emissions/2007\\_local/2007\\_local.aspx](http://www.decc.gov.uk/en/content/cms/statistics/climate_change/gg_emissions/uk_emissions/2007_local/2007_local.aspx) [Accessed 6th April 2010].

<sup>29</sup> Department of Health, Isle of Wight Health Profile 2009: [http://www.apho.org.uk/resource/view.aspx?QN=HP\\_RESULTS&GEOGRAPHY=24](http://www.apho.org.uk/resource/view.aspx?QN=HP_RESULTS&GEOGRAPHY=24)

<sup>30</sup> Department of Health, Isle of Wight Health Profile 2009



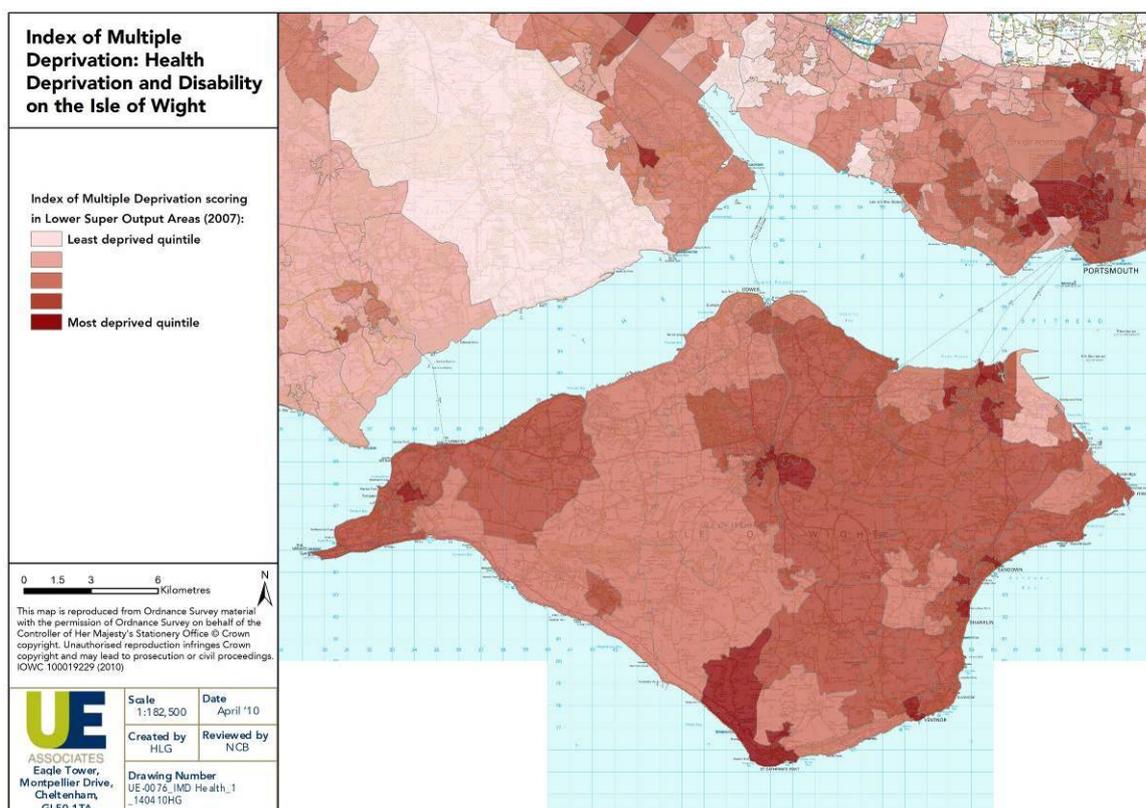
**Figure 12: Health summary for the Isle of Wight**

(Source: DoH, Isle of Wight Health Profile 2009 <http://www.apho.org.uk/>)

In the 2001 Census, 65% of people reported that they were in 'good health', with 9.7% reporting that they were of 'not good health'. **Table 6** indicates that the Isle of Wight has both lower levels of good health and higher levels of 'not good' health in comparison to regional and national averages. Likewise, the 2001 Census also reported that 38.1% of households on the Isle of Wight had one or more people with a limiting long-term illness (LLTI); this is higher than both South East and England averages. As highlighted by **Figure 13**, health deprivation is also high in parts of the Island. Whilst this reflects in part that the Island has a higher proportion of older people than regional and national averages, this demonstrates that there continue to be challenges relating to health on the island.

**Table 6: Limiting long-term illness and 'not good' health within the Isle of Wight.<sup>31</sup>**

	% of people with a limiting long-term illness	% of people with 'good' health	% of people with 'not good' health
<b>Isle of Wight</b>	21.96%	65.06%	9.73%
<b>South East</b>	15.47%	71.5%	7.12%
<b>England</b>	17.93%	68.76%	9.03%

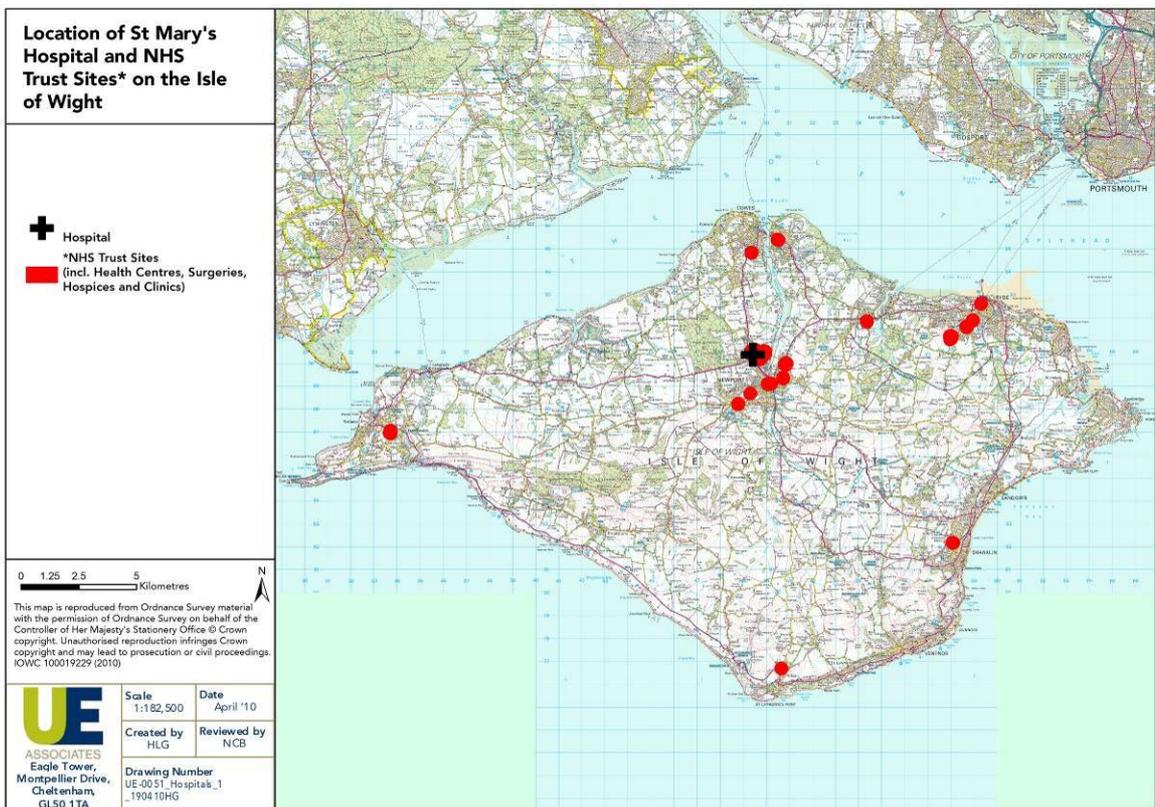


**Figure 13: Index of Multiple Deprivation on the Isle of Wight: Health deprivation and disability (source: ONS 2007)**

Health services on the Island are concentrated in the larger settlements of the Island, including Newport, Ryde, Cowes, Ventnor and Shanklin. Services are also provided in Totland, Wooton and Niton. The Island has one major hospital, St Mary's Hospital in Newport. This is supplemented by a number of health facilities on the Island, including 22 health centres / GP surgeries and 21 dental practices<sup>32</sup>. **Figure 14** presents the distribution of health facilities on the Isle of Wight.

<sup>31</sup> Source: National Statistics Online. 2001 Census Data [online]. Available from: <http://www.neighbourhood.statistics.gov.uk> [Accessed: 9 April 2010]

<sup>32</sup> Source NHS Direct: <http://www.nhs.uk/Pages/HomePage.aspx> [accessed 19<sup>th</sup> April 2010]



**Figure 14:** Distribution of health facilities on the Isle of Wight

In England, obesity is responsible for 9,000 premature deaths each year, and reduces life expectancy by, on average, 9 years. Obesity and levels of physical activity are seen as an increasing issue for the Island<sup>33</sup>, and one that will contribute to significant health impacts on individuals, including increasing the risk of a range of diseases, including heart disease, diabetes and some forms of cancer. Alongside, an ageing population has the potential to have implications for services in the Island. This stems from the impact of the growth of the older population on the development of health and social care services. An ageing population will also increase the dependency ratio on the Island.

## 1.5 Historic environment

### 1.5.1 Designated and non-designated features

The historic environment of the Isle of Wight, which gives the Island its sense of place and identity, is defined both by its individual heritage assets, designated and non-designated, and the setting of these assets through the Island's historic landscapes and townscapes. The historic development of the Isle of Wight has been influenced by a wide variety of factors, ranging from the Island's existence as an autonomous entity from the Norman conquest until 1293, its Tudor maritime history, the Island's significance during the Seven Years War, its popularity as a Victorian tourist destination, and the Island's strategic significance during the Second World War. This rich history is reflected by the Island's diverse cultural heritage resource, and whilst this resource includes better known assets such as Carisbrooke Castle,

<sup>33</sup> Including by the Sustainable Community Strategy

Osborne House, Yarmouth Castle and Appuldurcombe House, the historic environment in the Island is broad ranging, and incorporates a wide variety of features, sites and areas.

Many important features and areas for the historic environment on the Isle of Wight are recognised through historic environment designations. These include listed buildings, Scheduled Ancient Monuments and Registered Parks and Gardens, which are nationally designated, and conservation areas, which are usually designated at the local level. English Heritage is the statutory consultee for certain categories of listed building consent and all applications for scheduled monument consent. The historic environment is protected through the planning system, via conditions imposed on developers and other mechanisms.

There are a total of 1,971 listed buildings on the Isle of Wight, an increase from 1,917 in 2002<sup>34</sup>. These include 29 Grade I listed buildings, 60 Grade II\* listed, and 1,882 Grade II listed<sup>35</sup>. To accompany the national list, IOWC's Conservation and Design team has also developed a local list of buildings, parks and structures. The list is designed to recognise the contribution made by a building, park, or structure to local distinctiveness and to identifying buildings, parks and structures which are valued by local people as part of the local scene. Over 150 buildings, parks and structures are currently included on the local list<sup>36</sup>.

Conservation areas are areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance. Local authorities have the power to designate as conservation areas in any area of 'special architectural or historic interest' whose character or appearance is worth protecting or enhancing. This is judged against local and regional criteria, rather than national importance as is the case with listing. Conservation Area designation increases the local planning authority's control over demolition of buildings and over certain alterations to residential properties which would normally be classed as 'permitted development' and not require planning permission.

There are 32 conservation areas on the Isle of Wight, as presented in **Table 7**.

**Table 7: Conservation areas on the Isle of Wight and date designated**

Conservation Areas on the Isle of Wight		
Arreton – designated 14/07/83	Bonchurch – amended 13/04/06	Brading – amended 26/10/06
Briary – designated 12/07/79	Brighstone – designated 15/12/69, amended 23/12/09	Brook – designated 23/12/09
Calbourne – designated 15/12/69	Carisbrooke – designated 15/12/69	Cowes – amended 01/12/04
East Cowes (Centre) – designated 11/01/08	East Cowes (Esplanade) – designated 13/04/06	Freshwater Bay – designated 23/12/09
Godshell – designated 19/04/71	Hulverstone – designated 23/12/09	Mottistone – designated 23/12/09
Newport – amended 11/09/07	Newtown – designated 19/04/71	Norton Green – designated 10/05/96

<sup>34</sup> Source: English Heritage: Heritage Counts 2009: <http://www.english-heritage.org.uk/hc/>

<sup>35</sup> Source: Katie-Sue Wilson. Conservation Officer, IOWC [information gained 13<sup>th</sup> April 2010]

<sup>36</sup> Source: Katie-Sue Wilson. Conservation Officer, IOWC [information gained 13<sup>th</sup> April 2010]. The Local List as at May 2009 can be accessed on: [http://www.iwight.com/living\\_here/conservation\\_and\\_design/images/LocalList1STMAY2009.pdf](http://www.iwight.com/living_here/conservation_and_design/images/LocalList1STMAY2009.pdf)

Conservation Areas on the Isle of Wight		
Pound Green – designated 12/07/79	Ryde (including extended area) – designated 15/12/69, extended 07/12/99	Seaview – amended 03/09/07
Shalfleet – designated 19/04/71	Shanklin – designated 19/04/71	Shorwell – designated 15/12/69
St Helens – amended 20/06/07	St Helens (The Duver) – designated 20/06/07	St Johns – designated 06/12/88
St Lawrence – designated 23/10/86	Ventnor – amended 13/04/06	Whippingham Church – designated 15/11/04
Whitecroft – designated 25/08/04	Yarmouth – designated 15/12/69	

Approximately 30 additional areas on the Island have been highlighted as having potential for Conservation Area status<sup>37</sup>.

Figure 15 highlights the distribution of nationally listed buildings and conservation areas on the Isle of Wight.

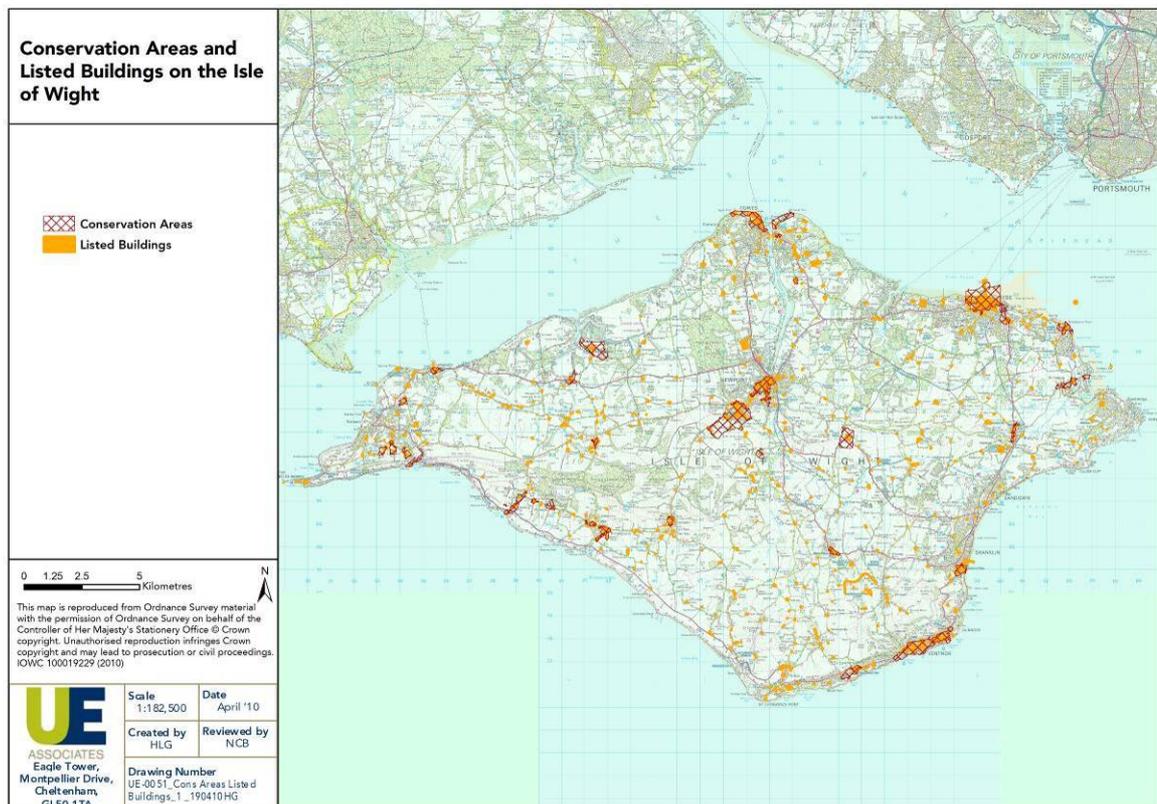


Figure 15: Historic buildings, scheduled monuments, parks and gardens and conservation areas on the Isle of Wight

There are over 500 archaeological records for the Isle of Wight on the Sites and Monument Record, the historic environment record for the Island. These include 203 scheduled monuments, which are sites of national importance and protected by the Ancient Monuments

<sup>37</sup> Source: The Isle of Wight Historic Environment Action Plan

and Archaeological Areas Act 1979. Scheduled monuments in the Island include a variety of features, from remains of abbeys, manors and Roman villas, to fish ponds and Second World War gun emplacements<sup>38</sup>. These may or may not be visible above ground.

The Register of Parks and Gardens of Special Historic Interest was first published by English Heritage in 1988. Although inclusion on the Register brings no additional statutory controls, registration is a material consideration in planning terms. Parks and gardens are registered as: Grade I, which are parks and gardens deemed to be of international importance; Grade II\*, which are parks and gardens deemed to be of exceptional significance; and Grade II, which are deemed to be of sufficiently high level of interest to merit a national designation. There are eight Registered Parks or Gardens on the Island<sup>39</sup>.

Since 2008, English Heritage has released an annual Heritage at Risk Register. The Heritage at Risk Register highlights the Grade I and Grade II\* listed buildings, and scheduled monuments, wreck sites and registered parks and gardens in England deemed to be 'at risk'. The 2009 Heritage at Risk Register highlighted that the following Grade I and Grade II\* listed buildings, scheduled monuments and Registered Park and Garden were deemed to be at risk on the Isle of Wight<sup>40</sup>:

**Table 8:** Listed buildings, scheduled monuments and registered parks and gardens included on the Heritage at Risk Register 2009<sup>41</sup>

Listed buildings, scheduled monuments and registered parks and gardens deemed to be 'at risk' on the Isle of Wight
<b>Listed buildings</b>
Hammerhead Crane, West Cowes
Northwood House, Cowes
Golden Hill Fort, Freshwater
Remains of Old Quarr Abbey, Binstead, Ryde
<b>Scheduled monuments</b>
Medieval settlement 100m south east and 350m north east of East Ashe Manor Farm, Brading
Bowl barrow known as 'Black Barrow': 670m NNE of Longstone Farmhouse, Brighstone
Two bowl barrows 250m south west of Calbourne Bottom, Brighstone
Bowl barrow on St Catherine's Down, 680m north of lighthouse on St Catherine's Hill, Chale
Bowl barrow on Newbarn Down: 1.1km south west of Rowridge, Brighstone
Bronze Age barrow and Anglo-Saxon cemetery on Bowcombe Down, 575m south east of Apesdown
Carisbrooke Romano-British villa
Two bowl barrows 180m WNW of Puck House, Fishbourne
Moated site 100m north east of Wolverton Manor, Shorwell
Three bowl barrows 540m east of Week Farm: part of a round barrow cemetery on Week Down, Ventnor

<sup>38</sup> Source: Isle of Wight Sites and Monuments Record

<sup>39</sup> Source: English Heritage: Heritage Counts 2009: <http://www.english-heritage.org.uk/hc/>

<sup>40</sup> Source: Heritage at Risk Register 2008, <http://risk.english-heritage.org.uk/>, [accessed 13<sup>th</sup> April 2010]

<sup>41</sup> Source: Heritage at Risk Register 2008, <http://risk.english-heritage.org.uk/>, [accessed 13<sup>th</sup> April 2010]

## Listed buildings, scheduled monuments and registered parks and gardens deemed to be 'at risk' on the Isle of Wight

### Registered park/ garden

Swainston, Clabourne

It should be noted that not all of the Isle of Wight's historic environment resource is subject to statutory designations, and non-designated features comprise a significant aspect of heritage which is often experienced on a daily basis by many people – whether at home, work or leisure. Whilst not listed, many buildings and other neighbourhood features are of historic interest. These are often considered to be important by local communities. For example, there are a number of parks and gardens and transport-related historic environment features of this nature on the Island. Likewise, not all nationally important archaeological remains are scheduled. In conjunction with landscape features, historic landscapes are also an integral part of the Island's historic environment resource. Historic landscapes on the Isle of Wight are discussed in more detail under the landscape environmental information theme.

## 1.6 Landscape

Landscape character on the Isle of Wight reflects both natural factors, including geology, landform and ecology, and human influences. Due to this interaction between natural and human influences, the historic environment and landscape character on the Island are closely linked.

### 1.6.1 The Isle of Wight Area of Outstanding Natural Beauty

The Isle of Wight has a high quality and varied landscape. Reflecting this, a significant area of the Island has been designated as an Area of Outstanding Natural Beauty (AONB), the Isle of Wight AONB.

AONBs were designated under the provisions of the National Parks and Access to the Countryside Act 1949 to protect high quality landscapes and to secure their permanent protection against development that would damage their special qualities. AONBs are designated solely for their landscape qualities, for the purpose of conserving and enhancing their natural beauty (which includes landform and geology, plants and animals, landscape features and the rich history of human settlement over the centuries).

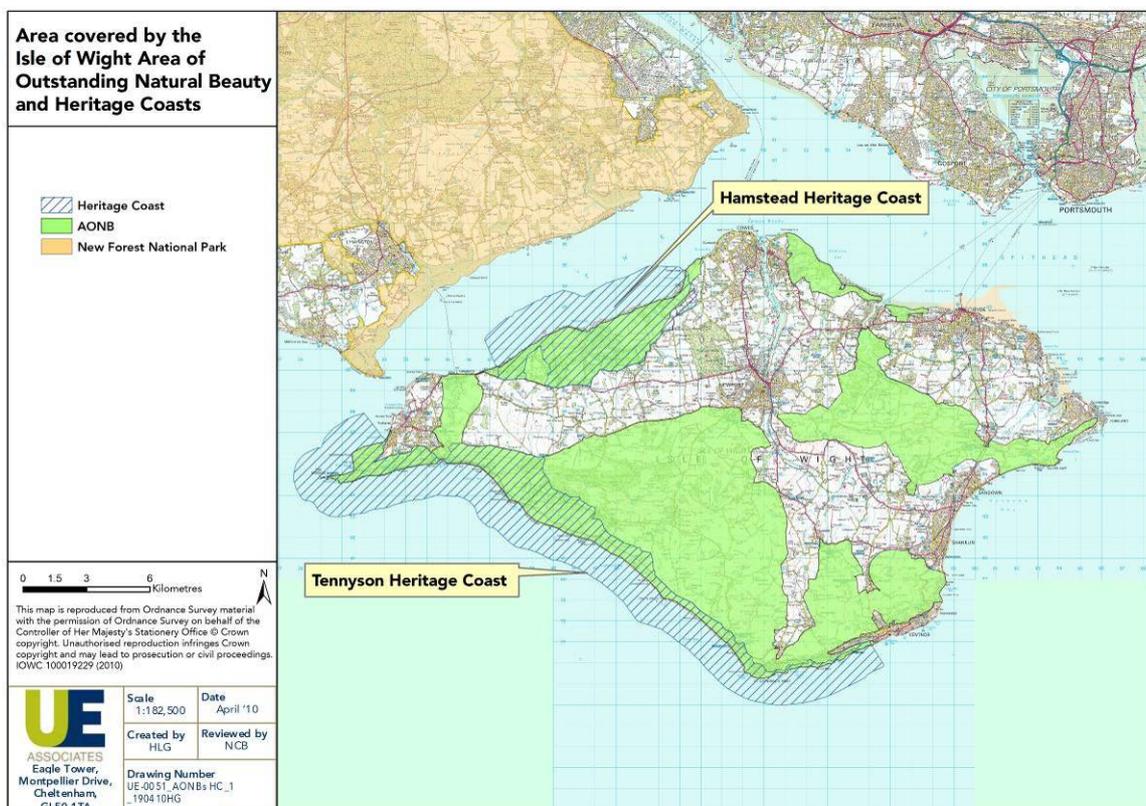
The Countryside and Rights of Way Act 2000 (CRoW Act) strengthened the profile and protection of AONBs. In particular, the Act:

- ▶ Placed a duty on all public bodies and statutory undertakers to 'have regard' to the purposes of AONBs;
- ▶ Established a process for creating AONB conservation boards, where this is supported locally; and
- ▶ Created a statutory responsibility for local authorities and conservation boards to produce and regularly review AONB Management Plans<sup>42</sup>.

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<sup>42</sup> Countryside and Rights of Way Act 2000, Part IV

The Isle of Wight AONB was designated in 1963, the 14th AONB to be confirmed in England and Wales, to reflect the Island's complex, diverse and high quality landscapes. The total area of the AONB is 191 square kilometres, which is approximately half the land area of the Island. The AONB is not continuous and is made up of five distinct land parcels across the Island<sup>43</sup>. The area of the Island covered by AONB status is presented in **Figure 16**.



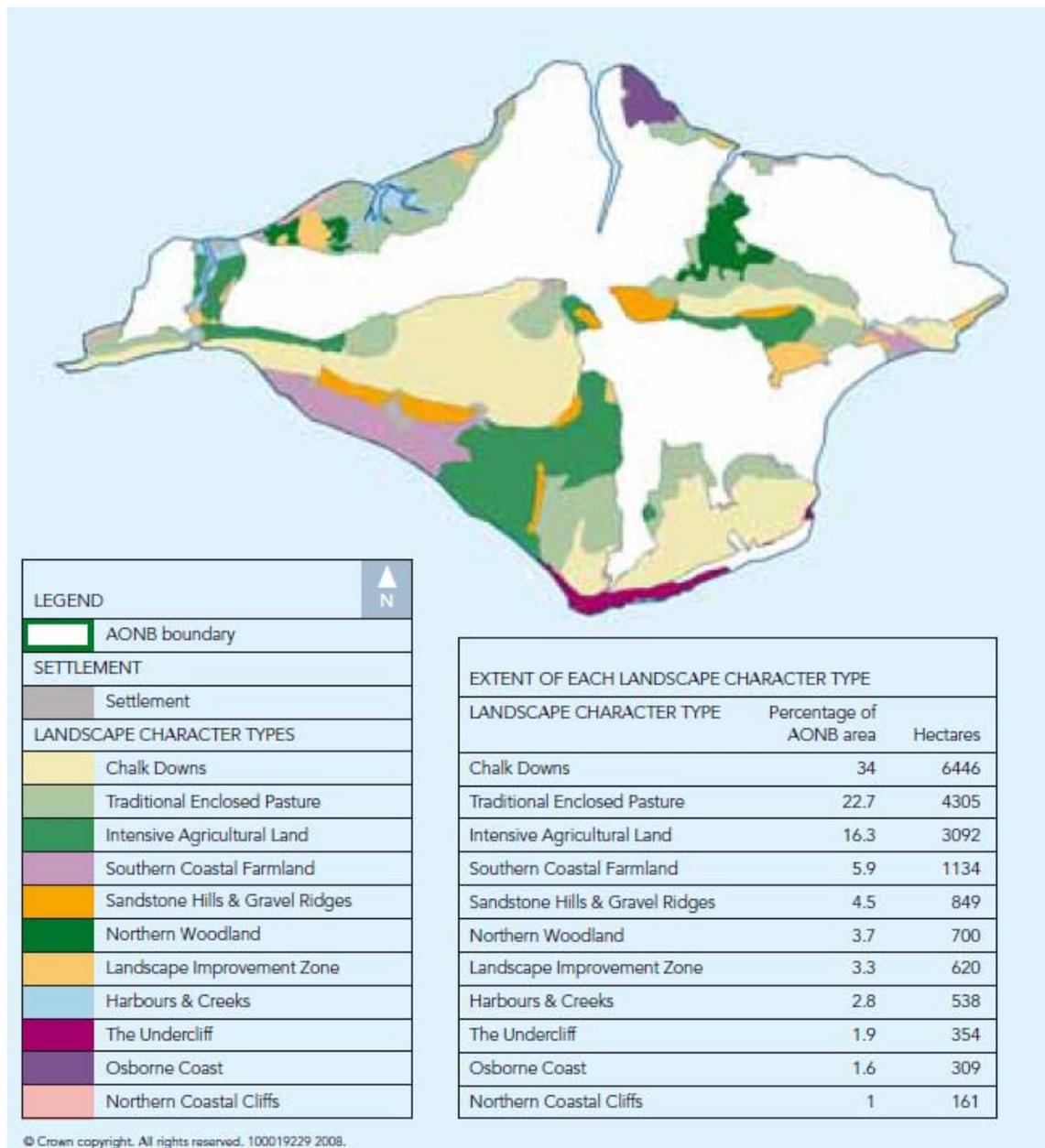
**Figure 16:** Area of the Isle of Wight covered by AONB status, and length of coastline covered by Heritage Coast designation

### 1.6.2 AONB Landscape character assessment

In 1994 a landscape character assessment was carried out for the AONB by the Countryside Commission, which identified eleven character types across the AONB which contribute to its overall character. This was further augmented by the Island-wide Historic Landscape Characterisation project, which was completed in 2006. **Section 1.6.4** highlights the findings of the Island-wide Historic Landscape Characterisation for the Isle of Wight.

The 1994 character types, and the parts of the AONB they cover, are presented in **Figure 17**. Appendix C of the of the Isle of Wight AONB Management Plan 2009-14 includes detailed descriptions of each of these landscape character areas.

<sup>43</sup> Isle of Wight AONB Partnership (2009) Isle of Wight AONB Management Plan 2009-2014



**Figure 17:** Landscape Character Types in the Isle of Wight AONB (Source: Isle of Wight AONB Management Plan 2009-2014)

### 1.6.3 Heritage Coasts

The Heritage Coast classification scheme was initiated in 1972 to protect coastline of special scenic and environmental value from inappropriate development. Heritage Coasts represent stretches of England and Wales’ most scenic coastline, which are managed to conserve their natural beauty and, where appropriate, to improve accessibility for visitors.

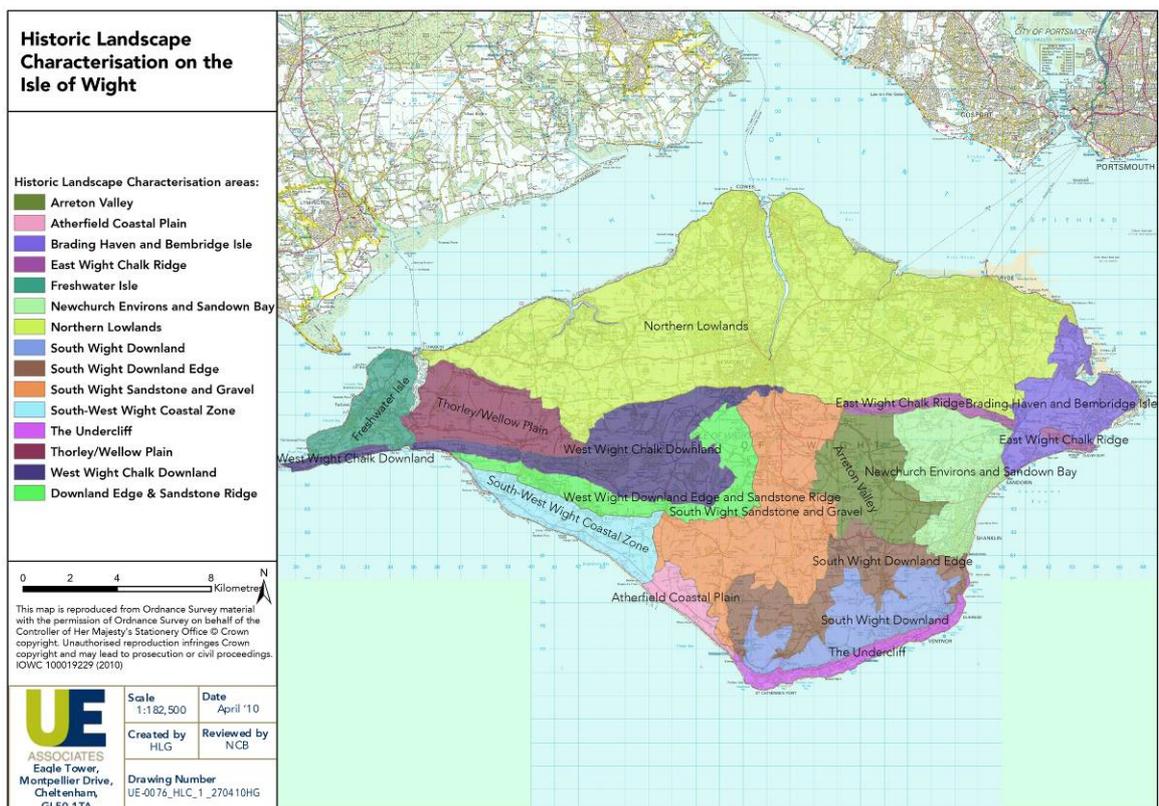
The Isle of Wight includes two of the South East’s four Heritage Coasts. Hamstead Heritage Coast runs for 11km, from Bouldnor through to Thorness Bay, and surrounds the drowned Estuary of the Newtown River. The Tennyson Heritage Coast runs for 34km, from Steephill Cove in Ventnor to Widdick Chine at Totland and includes the famous chalk stacks of The Needles, high chalk cliffs, deep wooded chines and landslip areas cut in the clay and sand

beds below the chalk<sup>44</sup>. Both coasts cover parts of the AONB. Although sharing many of the aims of AONB designation, Heritage Coasts are also defined for public enjoyment and appreciation, 'improving and extending appropriate recreational, educational, tourism and sporting opportunities where they do not conflict with the conservation of the resource', with an additional aim to, 'maintain and improve the environmental health of the inshore waters and beaches'<sup>45</sup>. **Figure 16** above highlights the coastline covered by Heritage Coast status on the Isle of Wight.

#### 1.6.4 Historic landscape characterisation

The landscape of Isle of Wight is determined by the interaction between natural and human influences, and the historic environment and landscape character on the Island are closely linked. Reflecting this, a Historic Landscape Characterisation (HLC) was carried out for Isle of Wight in 2006<sup>46</sup>. The HLC classified the Isle of Wight's landscape into historic landscape 'areas', based on a variety of factors including historic and present land use, morphology, landscape attributes, settlement patterns and a range of other factors.

**Figure 18** sets out the 15 Historic Landscape Characterisation areas determined for the Isle of Wight by the HLC. Appendix 1 of the HLC presents a detailed overview of each of these character areas.<sup>47</sup>



**Figure 18:** Historic Landscape Characterisation areas on the Isle of Wight (source: Isle of Wight Historic Environment Action Plan)

<sup>44</sup> Source: Natural England: <http://www.naturalengland.org.uk/ourwork/conservation/designatedareas/heritagecoasts/default.aspx>

<sup>45</sup> Countryside Commission (1995). Heritage Coasts: A Guide for Councillors and Officers, CCP 475.

<sup>46</sup> Isle of Wight Council and English Heritage (2008) Isle of Wight Historic Landscape Characterisation, Final Report, Volume 1: [http://www.iwight.com/living\\_here/planning/images/HLCFinalReport2008Vol1.pdf](http://www.iwight.com/living_here/planning/images/HLCFinalReport2008Vol1.pdf)

<sup>47</sup> Isle of Wight Council and English Heritage (2008) Isle of Wight Historic Landscape Characterisation, Final Report, Volume 1, Appendix 1: [http://www.iwight.com/living\\_here/planning/images/HLCFinalReport2008Vol1.pdf](http://www.iwight.com/living_here/planning/images/HLCFinalReport2008Vol1.pdf)

### 1.6.5 Tranquillity

Transport and transport-related infrastructure have significant effects on landscape quality, including through impacts on noise pollution, light pollution and broader effects on people's perceptions of tranquillity. For example, ambient noise pollution on the Isle of Wight is closely associated with noise generated by vehicle engines or vibration on the road surface; increased traffic flows have therefore had a significant effect on noise pollution in parts of the Island. Light pollution has also become an increasing issue: according to the CPRE, light pollution on the Isle of Wight increased by 11% between 1993 to 2000<sup>48</sup>.

Since 2004 CPRE have undertaken a study of tranquillity in England, which has examined a range of factors including topographical factors, light pollution, noise pollution, the location of man made features, people's perceptions of tranquillity and other influences. Based on these factors an appraisal of tranquillity has been carried out for the whole of England, which has mapped the country through 500m by 500m quadrants<sup>49</sup>.

As the findings of the study concluded, the Isle of Wight is ranked 25<sup>th</sup> out of 87 county and unitary authorities in England in terms of tranquillity scores (where 1 is the most tranquil)<sup>50</sup>. Within the Island there are significant variations in tranquillity and the areas around Cowes, Newport, Ryde, Sandown/Shanklin, Ventnor and Totland have been established as the least tranquil areas of the Island. The most tranquil areas are the Island's chalk ridges, the area around Newtown estuaries and the countryside south of Ryde.

**Figure 19** presents the findings of the CPRE assessment of tranquillity for the Isle of Wight:

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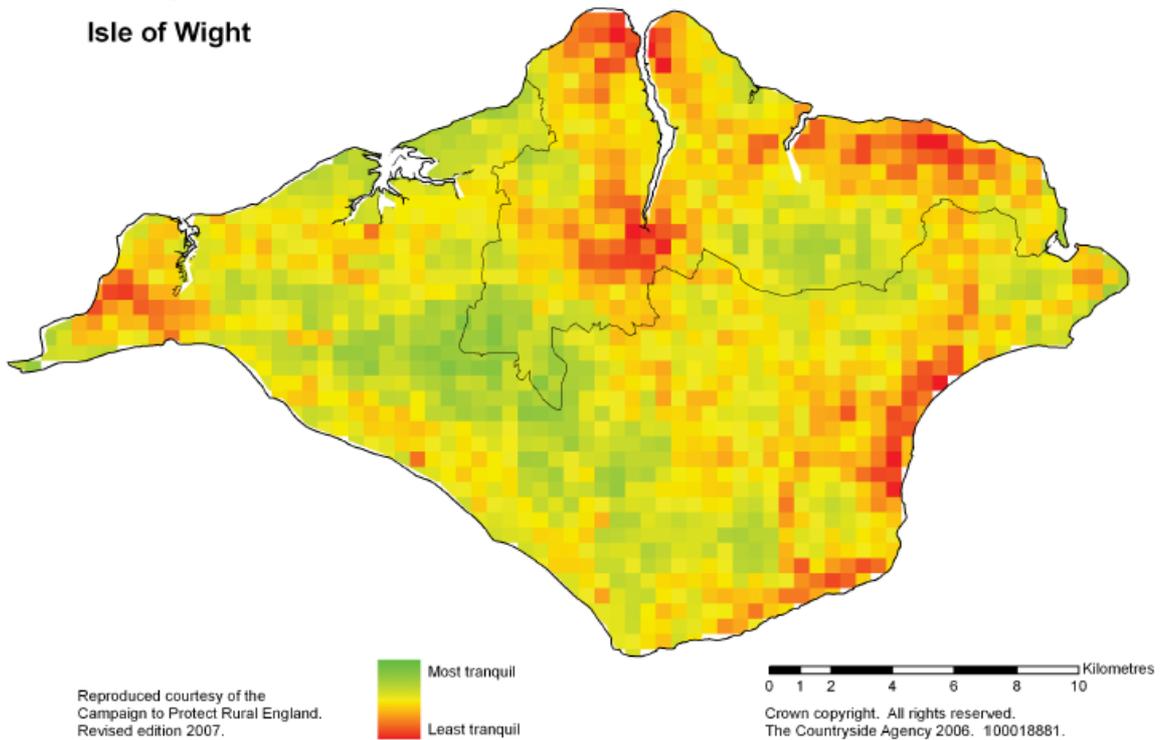
<sup>48</sup> CPRE: *How light polluted are you?*: <http://www.cpre.org.uk/campaigns/landscape/light-pollution/light-pollution-in-your-area>

<sup>49</sup> A more detailed description of the methodology used can be found on: CPRE, <http://www.cpre.org.uk/campaigns/landscape/tranquillity/our-tranquillity-map-explained>

<sup>50</sup> CPRE local tranquillity scores: <http://www.cpre.org.uk/campaigns/landscape/tranquillity/local-tranquillity-scores>



## Isle of Wight



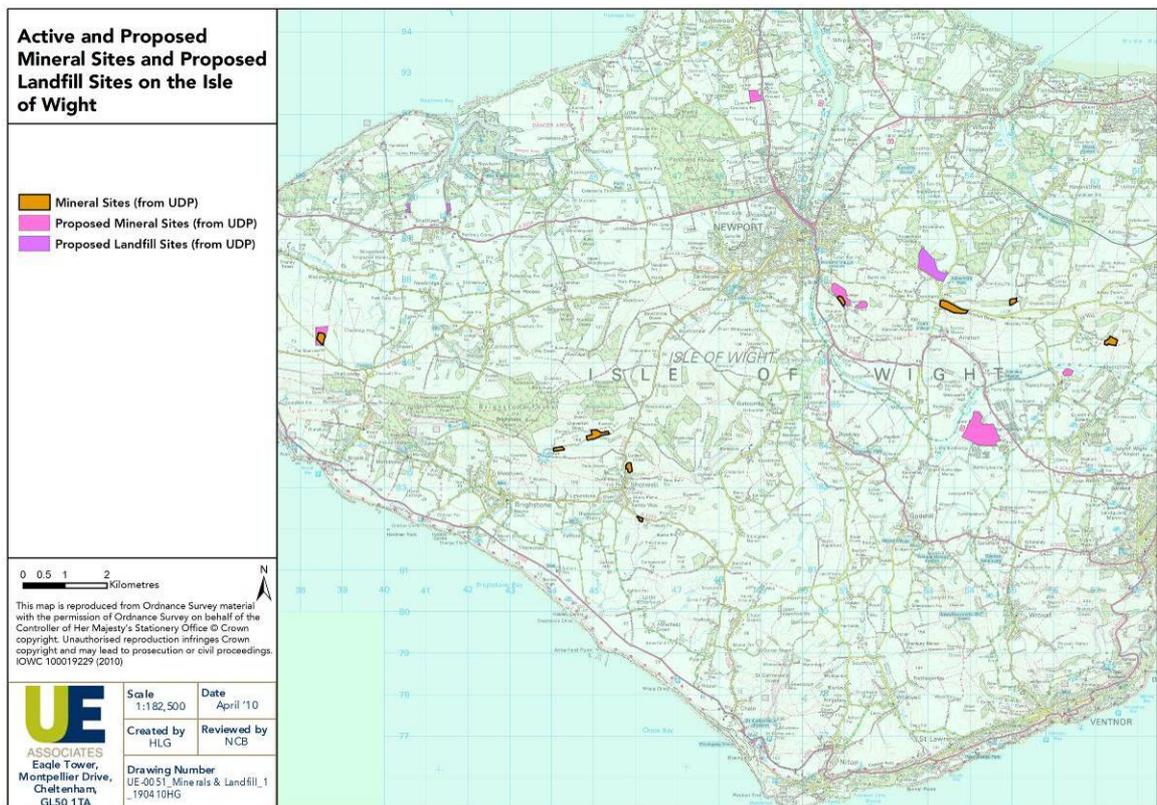
**Figure 19:** *Tranquillity on the Isle of Wight (source: CPRE)<sup>51</sup>*

## 1.7 Material assets

### 1.7.1 Minerals

The Isle of Wight has historically produced a range of minerals including chalk, gravel, clay and sand. The main economic deposits of minerals in the Isle of Wight are currently sands and gravels. Since sand and gravels are expensive to transport, they need to be produced close to their relevant markets, and the cost of transporting minerals produced on the Isle of Wight limits the export of minerals from the Island. The main use of sand and gravel is for aggregate in construction, and the demand is therefore primarily from development areas and infrastructure projects. Much of the Isle of Wight's land won minerals resource is located in the area of the Island covered by the AONB designation.

<sup>51</sup> CPRE: <http://www.cpre.org.uk/campaigns/landscape/tranquillity/national-and-regional-tranquillity-maps>



**Figure 20:** Active and proposed minerals workings and landfill sites on the Isle of Wight

In addition to land won material, the coastal areas around the Island also provide marine dredged sand and gravel. A significant proportion (approximately 50%) of the supply of gravel aggregates on the Island is from marine dredged material. This is unloaded at specific quays within the River Medina<sup>52</sup>. These depots also contain treatment plants for the grading and sorting of gravel and sand to meet specific orders.

### 1.7.2 Waste

In comparison with national and regional averages, recycling rates on the Isle of Wight are unfavourable. Whilst 38.4% of municipal waste was recycled or composted in 2008/9 regionally and 37.6% nationally, 31.96% was recycled or composted on the Isle of Wight during the same period. This is a decrease from 34.59% in 2006/07<sup>53</sup>. Alongside, household waste collected per head has increased since 2006/7, from 525kg to 585kg in 2008/9.

These rates are however based upon national recycling definitions and do not fully reflect local circumstances. Whilst many authorities undertake kerbside green waste collection (which contributes to this indicator) the Isle of Wight Council feel that composting is a more sustainable solution and run a number of local initiatives to promote and encourage home composting. Also national recycling figures do not include diverted waste from landfill. Between November 2008 and October 2009 the Council diverted 67% of the Island's waste to its gasification plant which provides electricity sufficient to power over 3000 homes<sup>54</sup>.

<sup>52</sup> Source Isle of Wight Unitary Development Plan

<sup>53</sup> Isle of Wight Annual Monitoring Report 2008/9 and 2007/8

<sup>54</sup> Source: Isle of Wight Council

**Table 9: Waste arisings and recycling rates in Isle of Wight 2006-2009<sup>55</sup>.**

Year	Kg of household waste collected per head in the Isle of Wight	Percentage of household waste sent for recycling or composting
2006/07	525.39	34.59%
2007/08	558.44	36.79%
2008/09	585.07	31.96%

There are three Household Waste Recycling Centres on the Island. These are located at: Briddlesford Road, Newport; Forest Road, Newport; and Afton Road, Freshwater. There are also 89 'mini-recycling' sites on the Island<sup>56</sup>.

### 1.7.3 Previously developed land

In relation to the reuse of brownfield land, completions of housing on previously developed land have been consistently high on the Island between 2001/2 and 2008/9. With the exception of 2006/7, over 80% of housing completions have taken place on previously developed land each year.

**Table 10: Housing completions on brownfield sites<sup>57</sup>.**

Year	Percent of new homes built on previously developed land
2001/02	84%
2002/03	86%
2003/04	95.80%
2004/05	96.52%
2005/06	80.05%
2006/07	74.78%
2007/08	93.40%
2008/09	86.10%

## 1.8 Population

### 1.8.1 Population size and migration

In November 2009, the population of the Isle of Wight was approximately 142,500<sup>58</sup>, the largest of any UK island. The two largest settlements on the Island are Newport, which is the Island's principal administrative and retail centre, and home to approximately 24,100 people,

<sup>55</sup> Isle of Wight Annual Monitoring Report 2008/9 and 2007/8

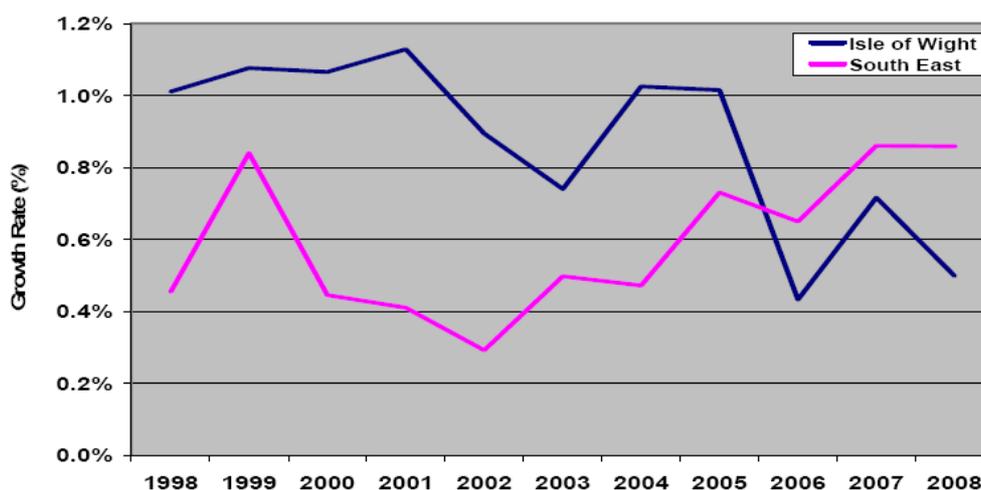
<sup>56</sup> Isle of Wight Refuse and recycling information: [http://www.iwight.com/council/departments/waste/Refuse\\_and\\_recycling/](http://www.iwight.com/council/departments/waste/Refuse_and_recycling/) [accessed 16<sup>th</sup> April 2010]

<sup>57</sup> Source: Audit Commission Area Profiles: <http://www.areaprofiles.audit-commission.gov.uk> and Isle of Wight Annual Monitoring Reports 2008-2009, 2007-2008 and 2006-2007

<sup>58</sup> IOWC (November 2009) Equality and Diversity document: [http://www.iwight.com/equality\\_and\\_diversity/documents/Diversity\\_on\\_the\\_Isle\\_of\\_Wight\\_Nov09.pdf](http://www.iwight.com/equality_and_diversity/documents/Diversity_on_the_Isle_of_Wight_Nov09.pdf)

and Ryde, a seaside town with a population of 23,900 people<sup>59</sup>. The other main settlements on the Island include Cowes, East Cowes, Sandown, Shanklin, Ventnor and Freshwater. Outside of these main settlements, the Isle of Wight has a low population density, and the Island as a whole has a population density of 3.5 people per hectare<sup>60</sup>.

Between the last two Census periods, the population of the island increased by 5.4%; a much higher rate of increase than the figure for England during the same period, which was 2.6%. Although the population has grown by 7,469 since the 2001 Census, there has been a general drop in the population growth rate since 2006, as demonstrated in the graph below.



**Figure 21:** Isle of Wight population growth rates in comparison to the South East, 1998-2008 (Source: IOWC (2009) Isle of Wight Town Centre Health Check Study)

Whilst a fall in population growth has occurred since 2006, it is predicted that the population of the Island will continue to grow in the next few decades, as shown in **Table 11**.

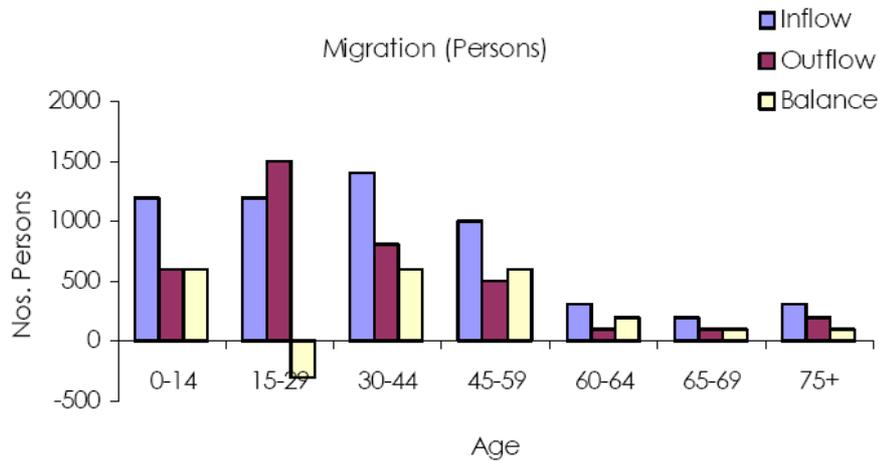
**Table 11:** Isle of Wight's predicted population changes (Source: ONS 2006-based subnational population projections, published June 2008, [www.statistics.gov.uk](http://www.statistics.gov.uk))

	2012	2015	2020	2025	2030
<b>Predicted Island Population</b>	146,600	150,800	158,200	165,700	172,500

Population growth on the Island is principally due to net in-migration, as deaths exceed births on the Island. **Figure 22**. demonstrates the lack of balance between flows of migration in and out of the Island, in particular the large outflow of people within the 15-29 age group.

<sup>59</sup> ONS 2007 Mid Year Estimates as quoted in IOWC (2009) Isle of Wight Town Centre Health Check Study

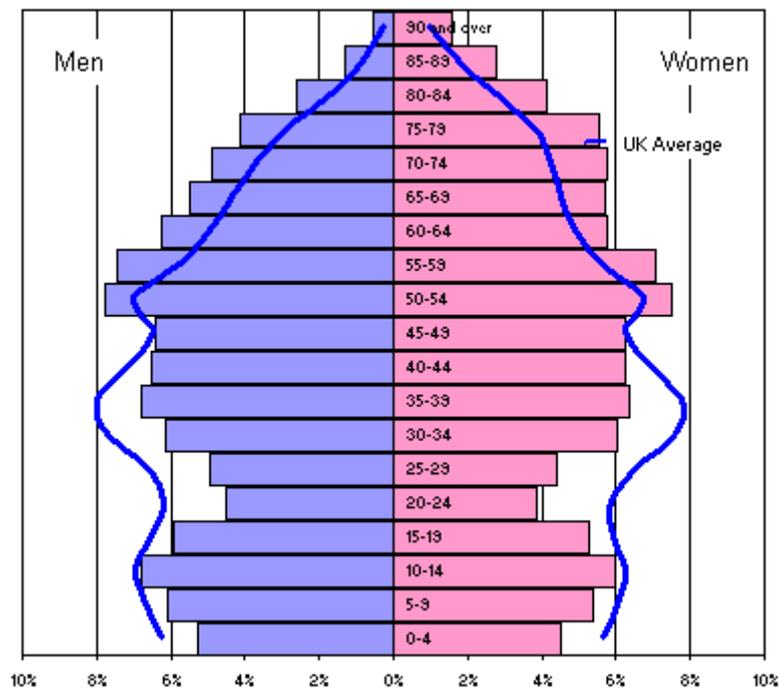
<sup>60</sup> IOWC Population statistics [www.iwight.com/living\\_here/stats/images/PopulationUpdate.pdf](http://www.iwight.com/living_here/stats/images/PopulationUpdate.pdf) [Accessed: 9<sup>th</sup> April 2010]



**Figure 22:** Migration flows by age group on the Isle of Wight (Source: 2001 Census)

### 1.8.2 Age Structure

The population pyramid in **Figure 23** shows the age profile of the Island's population from the 2001 Census against the national average. The Island has an ageing population, and is proportionately older than England's population profile<sup>61</sup>. Under 16 year olds formed 18.2% of the population, whilst people aged 65+ formed 22.4% of the population. Reflecting the older population structure of the Island, widows and widowers make up 11% of the population, which is over 2% higher than the national figure<sup>62</sup>.



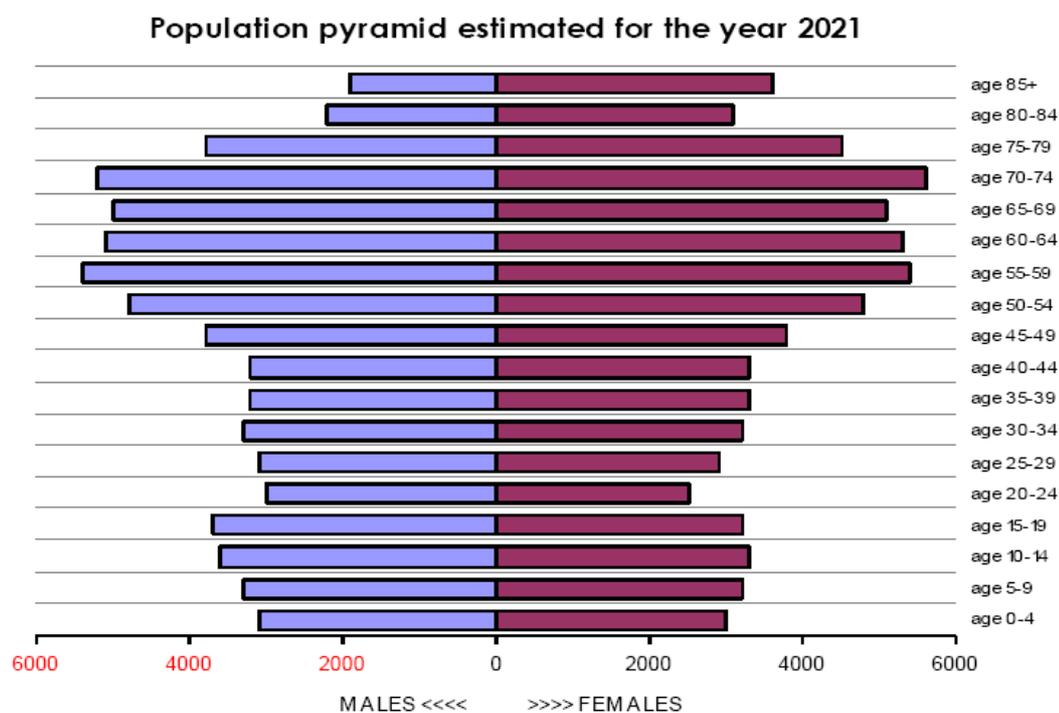
**Figure 23:** Isle of Wight population pyramid against the national average for 2001 (Source: ONS, 2001, <http://www.statistics.gov.uk/census2001/pyramids/pages/00mw.asp>).

<sup>61</sup> IOWC Population statistics [www.iowight.com/living\\_here/stats/images/PopulationUpdate.pdf](http://www.iowight.com/living_here/stats/images/PopulationUpdate.pdf) [Accessed: 9<sup>th</sup> April 2010]

<sup>62</sup> ONS 2001 Census data, <http://www.statistics.gov.uk/census2001/pyramids/pages/00mw.asp> [Accessed: 9<sup>th</sup> April 2010]

Life expectancy on the Isle of Wight is over four years longer among women (83.1 years) than among men (78.8 years)<sup>63</sup>. Accordingly women constitute a significantly larger proportion of the 65+ age group.

During the 2008-2026 time period, the number of people over retirement age is predicted to increase to 36% of the population. As highlighted in **Figure 24**, the dependency ratio on the Island is expected to significantly increase.



**Figure 24:** Isle of Wight estimated population pyramid for 2021 (Source: IOWC Annual Monitoring Report, 2008-2009)

### 1.8.3 Ethnicity

The 2001 Census remains the most up to date count of the Island’s population by ethnic group. The ethnic breakdown of the Island is shown in **Table 12**.

<sup>63</sup> IOWC Population statistics [www.iwight.com/living\\_here/stats/images/PopulationUpdate.pdf](http://www.iwight.com/living_here/stats/images/PopulationUpdate.pdf) [Accessed: 9<sup>th</sup> April 2010]

**Table 12: Population of ethnic groups (Source: ONS Census 2001 data)**

Ethnic Category	Ethnic Group	Total Population	% of Total Population
White	British	128,400	96.8%
	Irish	900	0.68%
	Other	1640	1.12%
Mixed	White and Black Caribbean	267	0.20%
	White and Black African	64	0.05%
	White and Asian	239	0.18%
	Other	152	0.11%
Asian or Asian British	Indian	186	0.14%
	Pakistani	93	0.07%
	Bangladeshi	81	0.06%
	Other	80	0.06%
Black or Black British	Black Caribbean	158	0.12%
	Black African	110	0.08%
	Other	38	0.03%
Other Ethnic Groups	Chinese	131	0.10%
	Other ethnic group	164	0.12%

As highlighted by the **Table 12** only 1.3% of the Island's population described themselves as 'non-white', whilst 3.2% of the population were 'non-white British'. The data demonstrates that the Isle of Wight has a significantly lower proportion of population in ethnic minority groups compared either with South East (4.9%) or England (9.1%) averages.

#### 1.8.4 Religion

The Isle of Wight also has a comparatively low level of religious diversity (**Table 13**). In 2001, 73.7% of residents stated they were of Christian religion, 0.3% Muslim, and 0.2% stated they were Buddhist.

**Table 13: Religious groups on the Isle of Wight in comparison to the national average (Source: ONS)<sup>64</sup>:**

	Percentage of the Isle of Wight's population	England and Wales average percentage
Christian	73.7%	71.7%
Buddhist	0.2%	0.3%
Hindu	0.1%	1.1%
Jewish	0.1%	0.5%
Muslim	0.3%	3.0%
Sikh	0.0%	0.6%
Other	0.5%	0.3%
No religion	17.3%	14.8%

<sup>64</sup> Neighbourhood Statistics – Census 2001 Ethnicity and Religion [online] <http://www.statistics.gov.uk/census2001/profiles/24-A.asp> [Accessed: 12th April 2010]

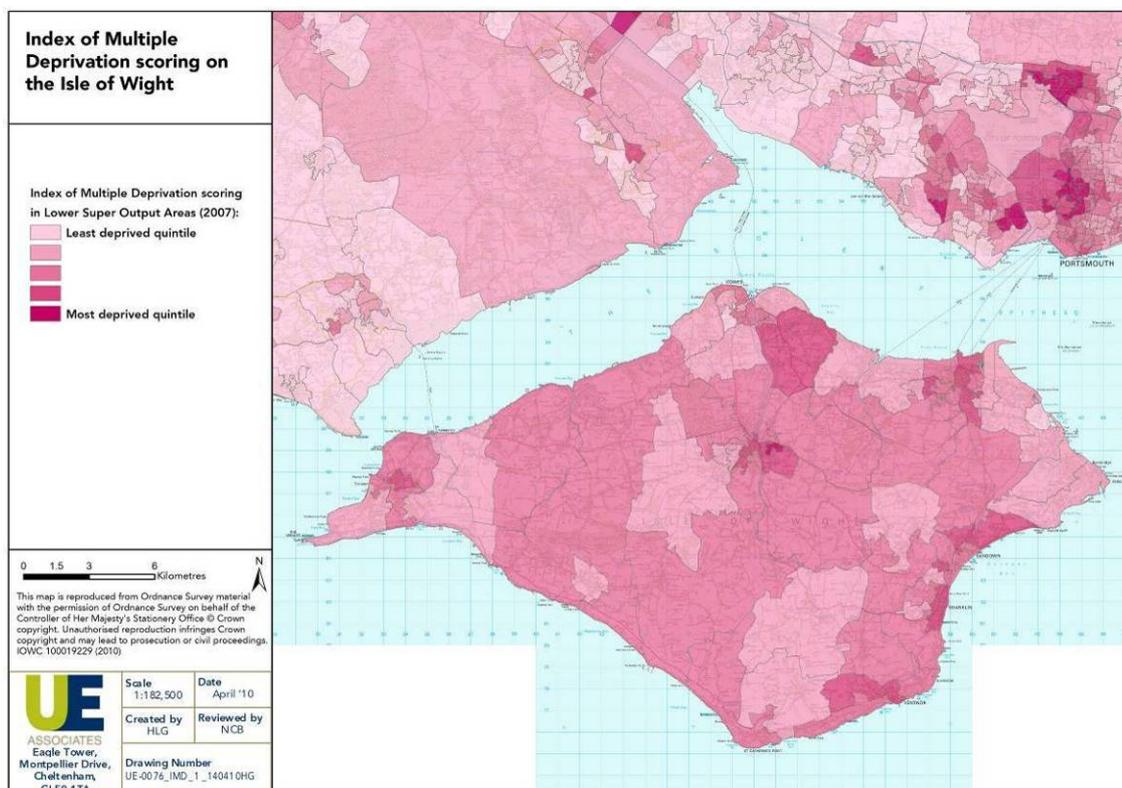
### 1.8.5 Deprivation

There are a number of deprivation issues which exist on the Isle of Wight. Based on the 2007 Indices of Multiple Deprivation (IMD), six out of 89 'Output Areas' on the Island are within the 20% most deprived nationally. The Isle of Wight ranks at 134 of all 354 authorities in England (1 = most deprived). In general however, deprivation levels have improved on the Island since the 2000 and 2004 Indices of Multiple Deprivation.

The Island has pockets of significant deprivation resulting from low wages, seasonal unemployment and high levels of long-term illness and disability (associated with the higher than average number of elderly households on the Island)<sup>65</sup>. 16 Output Areas fall into the most 20% deprived areas nationally for income and employment deprivation and four are in the most deprived wards nationally for older person's income.

The Island has the lowest average male earnings in the UK, with a heavy reliance on seasonal and part-time work in the tourism sector. Life expectancy for both men and women living in more deprived areas of the Isle of Wight is around five years lower than those living in less deprived areas.

As highlighted by **Figure 25**, which is shaded according to the SOA rankings for IMD, whilst large parts of the Island remain relatively unaffected by multiple deprivation, and deprivation is lower than parts of the mainland, there are some significant concentrations in Newport, Ryde, Totland and Ventnor, Shanklin and Sandown.



**Figure 25:** Index of Multiple Deprivation on the Isle of Wight: overall scores (source: ONS 2007)

<sup>65</sup> IOWC Homelessness Strategy 2003-8: <http://www.iowight.com/council/committees/Mod-Executive/30-7-03/Homelessness%20Strategy%202003-8.pdf>

### 1.8.6 Unemployment

Data from the latest ONS Annual Population Survey (2009) suggested that the number of unemployed people of working age on the Isle of Wight was 6.2%, higher than the South East average (5.0%), but lower than the national average (6.9%)<sup>66</sup>. Trends in unemployment data are presented in **Table 14**.

**Table 14:** Unemployment on the Isle of Wight in comparison to the South East and Great Britain (numbers and % are for those aged 16 and over, % is a proportion of economically active)<sup>67</sup>

Date	Isle of Wight	Isle of Wight (%)	South East (%)	Great Britain (%)
Jan 06-Dec 06	3,000	4.8	4.5	5.4
Apr 06-Mar 07	3,300	5.3	4.4	5.4
Jul 06-Jun 07	3,300	5.2	4.2	5.3
Oct 06-Sep 07	3,500	5.4	4.2	5.3
Jan 07-Dec 07	3,600	5.6	4.2	5.2
Apr 07-Mar 08	3,600	5.7	4.1	5.2
Jul 07-Jun 08	3,800	6.0	4.2	5.2
Oct 07-Sep 08	3,600	5.7	4.3	5.3
Jan 08-Dec 08	3,800	5.8	4.4	5.7
Apr 08-Mar 09	3,700	5.7	4.7	6.2
Jun 08-Jun 09	4,000	6.2	5.0	6.9

The number of Jobseekers Allowance claimants on the Island is higher than the South East and the UK. As of February 2010, 4.8% (3,813 people) of working age people were claiming Jobseekers Allowance. As shown in **Figure 26**, the percentage of JSA claimants has generally fallen over the past ten years from 6% in January 1999 to a low of 1.8% in July 2008<sup>68</sup>. The graph clearly demonstrates the seasonal nature of the Island's job market, due to its high dependency on the tourist and visitor trade.

<sup>66</sup> Official Labour Market Statistics, 2009

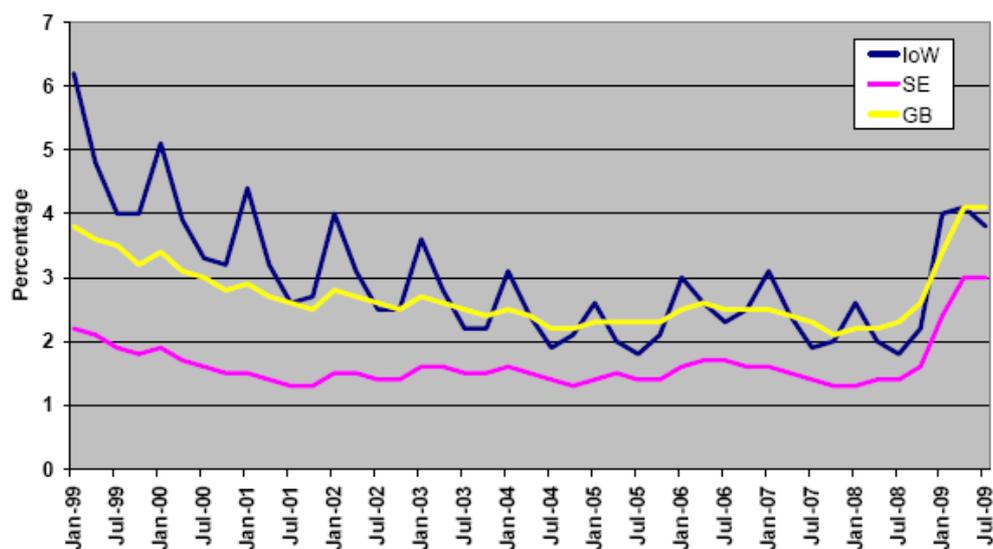
<https://www.nomisweb.co.uk/reports/lmp/la/2038431803/report.aspx?town=isle%20of%20wight#tabempunemp>

<sup>67</sup> Official Labour Market Statistics, 2009

<https://www.nomisweb.co.uk/reports/lmp/la/2038431803/report.aspx?town=isle%20of%20wight#tabempunemp>

<sup>68</sup> IOW Council, Town Centre Health Checks, October 2009

[http://www.iwight.com/living\\_here/planning/images/TownCentreHealthCheckStudyFinalReport151209.pdf](http://www.iwight.com/living_here/planning/images/TownCentreHealthCheckStudyFinalReport151209.pdf)



**Figure 26:** Jobseekers Allowance Claimants on the Isle of Wight 1999-2009 (Source: IOW Council, Town Centre Health Checks, October 2009)

There has been a significant loss of manufacturing employment on the Isle of Wight; manufacturing has declined from 15% of total employment in 1995 to 10% in 2007<sup>69</sup>. Tourism has remained an important source of employment opportunities, providing 15% of total employment in 2007<sup>70</sup>.

### 1.8.7 Crime

The Island is generally a safe place to live. Recorded crimes on the Island are below the rates for the Hampshire force area and national averages. Some residents, particularly older people, however report a significant fear of crime. Young people, too, are disproportionately at risk of being both victims and perpetrators of crime and there are growing concerns with drug and alcohol misuse<sup>71</sup>.

**Table 15** highlights that crime rates have recently fallen on the Island, and that ‘violence against a person’ is the most commonly reported crime.

**Table 15:** Crime Statistics for the Isle of Wight (April 2008-March 2009)<sup>72</sup>

Crime (April 2008-March 2009)			
Offence	Number	Per 1,000 population	Change % 06/07 – 07/08
Burglary dwelling	281	2.0	-0.4
Robbery	22	0.2	-46.3
Sexual offences	134	1.0	-21.2
Theft from a vehicle	462	3.3	-2.5
Theft of a motor vehicle	129	0.9	-27.1

<sup>69</sup> IOW Council, Town Centre Health Checks, October 2009  
[http://www.iwight.com/living\\_here/planning/images/TownCentreHealthCheckStudyFinalReport151209.pdf](http://www.iwight.com/living_here/planning/images/TownCentreHealthCheckStudyFinalReport151209.pdf)

<sup>70</sup> IOW Council, Town Centre Health Checks, October 2009  
[http://www.iwight.com/living\\_here/planning/images/TownCentreHealthCheckStudyFinalReport151209.pdf](http://www.iwight.com/living_here/planning/images/TownCentreHealthCheckStudyFinalReport151209.pdf)

<sup>71</sup> IOW Council, (<http://www.iwight.com/council/documents/docFiles/Housingstrategy2007-2012.pdf>)

<sup>72</sup> GOS, [http://www.gos.gov.uk/497648/docs/170192/179006/179015/Isle\\_of\\_Wight.pdf](http://www.gos.gov.uk/497648/docs/170192/179006/179015/Isle_of_Wight.pdf)

Crime (April 2008-March 2009)			
Offence	Number	Per 1,000 population	Change % 06/07 – 07/08
Violence against the person	2,587	18.5	-17.3

Survey results from the Isle of Wight Crime and Drugs Strategy (2005-2008) indicated the relative safety of the Island; 30% of residents stated they had been a victim of crime in the last two years. Offences tended to be closely linked to quality of life issues involving, most frequently, dog fouling, rubbish/litter and anti-social behaviour from drunk/rowdy youths.

### 1.8.8 Housing

The average house price on the Island, recorded by Land Registry for the period Oct-Dec 2009, is £198,020 compared to a south east average of £255,426, and a national average of £219,832. The annual change in house prices on the Island has been +3.5%. As a more rural authority, the Island is characterised by a higher proportion of detached and semi detached houses, as well as a large proportion of second homes.

The dwelling stock profile for the Island is demonstrated in **Table 16**.

**Table 16: Dwelling Stock on the Isle of Wight in 2009<sup>73</sup>**

Dwelling stock 2009			
	Isle of Wight	South East	England
Total dwelling stock	66,714	3,638,652	22,564,249
% of total dwelling stock owned by Local Authority	0.0	5.0	8.1
% of total dwelling stock owned by Registered Social Landlords	10.2	8.4	9.7
% of total dwelling stock that are 'other public sector	0.0	0.6	0.3
% of total dwelling stock that are owner occupied and private rented	89.8	86.0	81.9

There has been significant housing growth on the Island over recent years and this is set to continue. The South East Plan proposes a target of 520 new dwellings per year between 2006 and 2026, with the creation of 10,400 new homes in total between 2006 and by 2026.

Affordability of housing is a major issue on the Island. The ratio of house prices to incomes is high, with average house prices being more than seven times the average of wages on the Island. The affordability ratio compares the lower-quartile cost of buying a home to the lower-quartile income for a resident in that district. This ratio provides an indication of how accessible the housing market is on the Isle of Wight. Affordability ratios of four or more would suggest that the housing market is becoming inaccessible to many people, and that

<sup>73</sup> GOS, [http://www.gos.gov.uk/497648/docs/170192/179006/179015/Isle\\_of\\_Wight.pdf](http://www.gos.gov.uk/497648/docs/170192/179006/179015/Isle_of_Wight.pdf)

residents on an average income cannot expect to own the average home. The average house price ratio for the UK is 6.0, whilst for the Isle of Wight, this figure is 7.3<sup>74</sup>.

Demand continues to be high for buying properties on the Isle of Wight, for example for retirement homes, second homes and for commuters. The South East Plan highlights that the Isle of Wight has a relatively high backlog of unmet need. **Table 17** shows the 'actual need' of varying household sizes is not being met by the 'current provision' (data based on 2006 figures). Whilst the overall current provision of housing on the Island is 7% less than the estimated actual need, the provision of social rented housing is over 40% less than the actual need<sup>75</sup>.

**Table 17: Island Housing Stock – current provision, actual need and future need, based on the IOW Housing Market Assessment 2006** <sup>76</sup>

Island housing stock				
Household size	% of total	Current provision	Actual need	Need in 5 years
1 bed	15%	9,600	9,773	10,457
2 bed	37%	24,320	26,728	28,598
3 bed	41%	26,240	28,549	30,551
4 bed	5%	3,200	3,296	3,526
4+ beds	2%	1,280	1,331	2,262

The Housing Strategy (2007-2012) and 2003 Housing Needs survey indicates an annual shortfall of 1,263 affordable housing units. Between 1999-2004 the Island increased its stock of social housing by only 158 units<sup>77</sup>. The high number of second homes (3,293) and long-term empty properties (992) further reduce the number of accessible homes on the Island<sup>78</sup>. Homelessness also continues to be a problem, primarily in urban areas of the Island. For example, in 2007-2008, there were 218 homelessness applications, and 137 acceptances<sup>79</sup>.

## 1.9 Soil

As highlighted by the Soil Strategy for England<sup>80</sup>, soil is a vital natural resource, with a range of key functions. These include:

- ▶ Support of food, fuel and fibre production;
- ▶ Environmental interaction functions (e.g. regulating the flow of and filtering substances from water, emitting and removing atmospheric gases, storing carbon);

<sup>74</sup> IOW Council, <http://www.iwight.com/council/committees/Mod-Executive/15-12-04/Draft%20South%20East%20Plan%20-%20IW%20Special%20Policy%20Area.pdf>

<sup>75</sup> IOW Council Homelessness Strategy 2008-2013, <http://www.iwight.com/council/departments/housing/images/HomelessnessStrategyFinalVersion.pdf>

<sup>76</sup> IOW Council Housing Strategy, 2007-2012 <http://www.iwight.com/council/documents/docFiles/Housingstrategy2007-2012.pdf>

<sup>77</sup> IOW Council, <http://www.iwight.com/council/committees/Mod-Executive/15-12-04/Draft%20South%20East%20Plan%20-%20IW%20Special%20Policy%20Area.pdf>

<sup>78</sup> IOW Council, <http://www.iwight.com/council/committees/Mod-Executive/15-12-04/Draft%20South%20East%20Plan%20-%20IW%20Special%20Policy%20Area.pdf>

<sup>79</sup> IOW Council Homelessness Strategy 2008-2013, <http://www.iwight.com/council/departments/housing/images/HomelessnessStrategyFinalVersion.pdf>

<sup>80</sup> Defra (2009) Soil Strategy for England: <http://www.defra.gov.uk/environment/quality/land/soil/sap/>

- ▶ Support of habitats and biodiversity;
- ▶ Protection of cultural heritage and archaeology;
- ▶ Providing a platform for construction; and
- ▶ Providing raw materials.

The Isle of Wight has a diverse soil resource which has developed since the last ice age 10,000 years ago. These encompass a range of soils types which reflect complex interactions between underlying geology, landform, past and existing land use and climate.

Soil quality has a strong influence on the quality of agricultural land. The Agricultural Land Classification system provides a method for assessing the quality of farmland to enable informed choices to be made about its future use within the planning system. The Agricultural Land Classification system classifies land into five grades, with Grade 3 subdivided into Subgrades 3a and 3b. The best and most versatile land is defined as Grades 1, 2 and 3a, which is deemed to be the land which is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non food uses such as biomass, fibres and pharmaceuticals<sup>81</sup>.

**Figure 27** sets out the distribution of different grades of farmland on the Isle of Wight.

Approximately 75% of the Island's area is in agricultural use. Of this, approximately 46% is tillage, 46% pasture and 8% rough grazing<sup>82</sup>. The north of the island is dominated by dairy farms, where heavier soils are best suited to pastureland. The central chalk downs are better drained than the soils to the north. Whilst traditionally this area has been grazed, an increasing area is being utilised for arable farming.

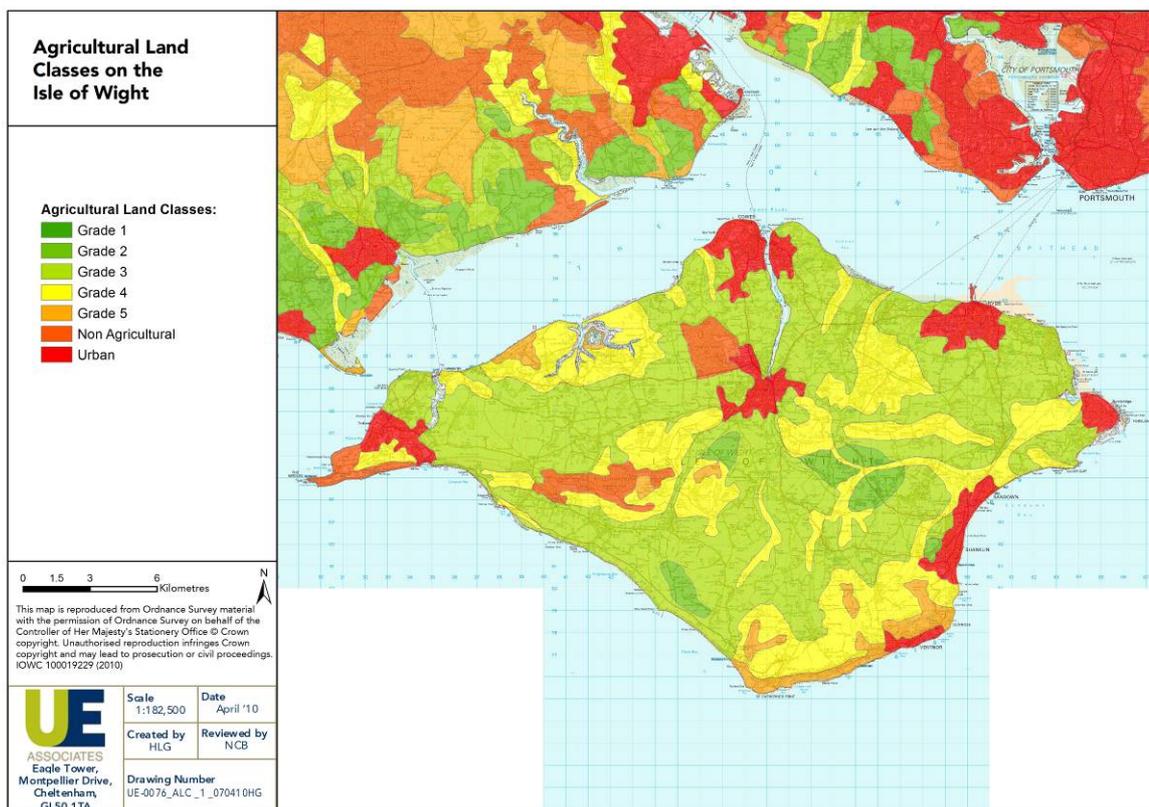
The southern half of the island is of higher-grade agricultural land, which is covered by light, friable soils that afford some of the best arable land on the island. The areas of best and most versatile land on the Island are located south west of Newport, north east of Atherfield, and west of Shanklin. It is also located in an area surrounding Arreton, which supports a significant horticultural and glasshouse industry<sup>83</sup>.

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<sup>81</sup> ODPM (2004) Planning Policy Statement 7: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/147402.pdf>

<sup>82</sup> IOWC (2001) Isle of Wight Contaminated Land Inspection Strategy: [http://www.iow.gov.uk/living\\_here/environment/pdfs/2.pdf](http://www.iow.gov.uk/living_here/environment/pdfs/2.pdf)

<sup>83</sup> IOWC (2001) Isle of Wight Contaminated Land Inspection Strategy: [http://www.iow.gov.uk/living\\_here/environment/pdfs/2.pdf](http://www.iow.gov.uk/living_here/environment/pdfs/2.pdf)



**Figure 27:** Quality of agricultural land on the Isle of Wight

## 1.10 Water

### 1.10.1 Rivers, streams and waterways

The Isle of Wight contains two main river systems, the Eastern Yar and Medina. The island also has a number of other streams, waterways and estuaries.

The Eastern Yar rises as a Chalk spring at Niton and flows 27km before joining the sea at Bembridge. It is joined by Wroxall Stream, Scotchells Brook and a number of small tributaries before cutting through the central Chalk ridge at Brading. Many sections of the main river and its tributaries have been dredged and straightened over the years and the channel engineered for land reclamation and agricultural drainage.

The Medina rises on Sandstone near Chale in the south of the Island and flows north 17km. Flowing north through the central chalk ridge, it is joined by the Merstone stream at Blackwater and flows through the river's tidal estuary into the Solent at Cowes. One of its major tributaries is the Lukely Brook which rises on the central Chalk west of Newport, and flows through Carisbrooke over Chalk before joining the head of the Medina Estuary.

In the south of the Island the Shorwell and Buddle streams both rise in the central Chalk ridge west of Newport before joining and flowing to the sea as the Brighstone Stream through Grange Chine. The two arms of the adjacent Atherfield Brook flow through Shepherds Chine to the sea.

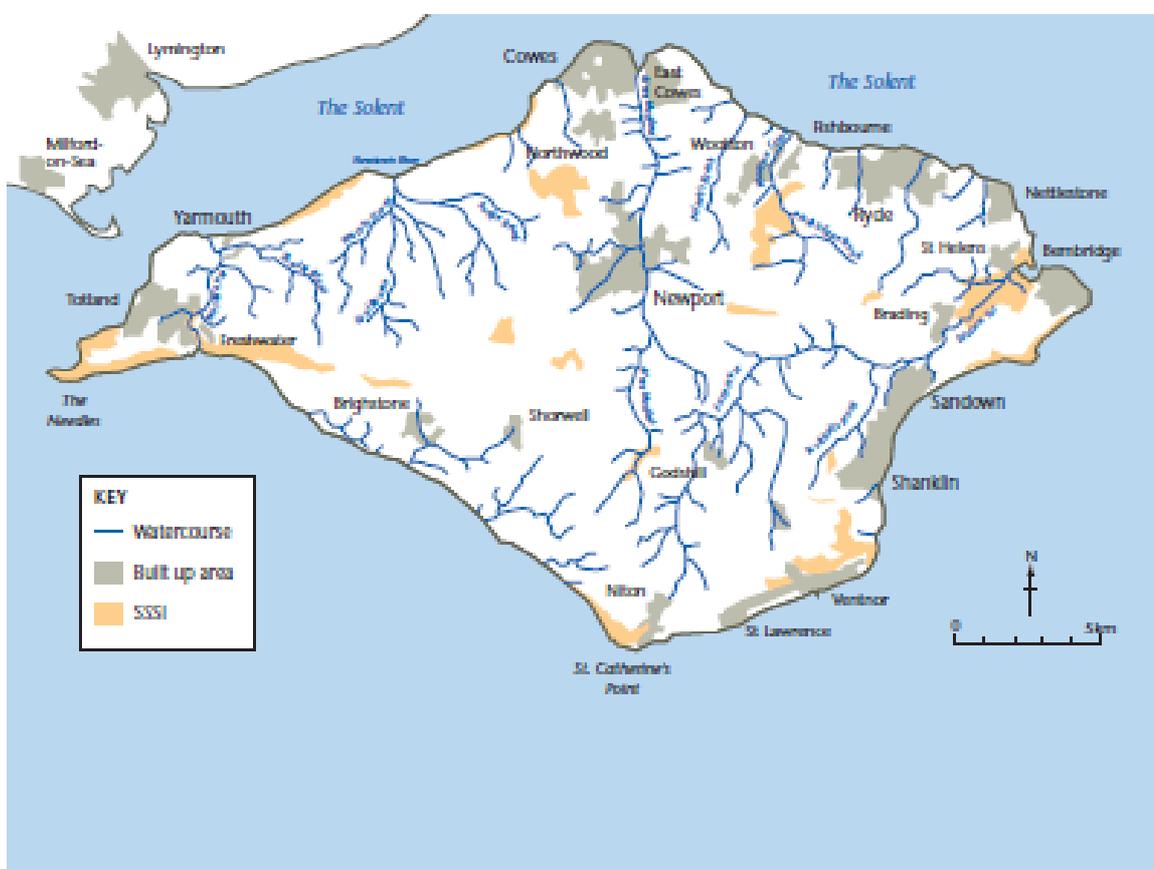
The Western Yar rises within the Freshwater Bay area and flows a short distance to the sea at Yarmouth. Whilst the river was once one of the largest on the Island, coastal erosion has

reduced its length significantly, and the river is now no more than a brook with a disproportionately large estuary. The Thorley brook also flows into the Western Yar's estuary.

In the north west of the Island the Caul Bourne, Western Haven and Rodge Brook all flow to the sea via Newtown Estuary. Significant streams in the north east of the Island includes Palmers Brook and Blackbridge Brook which flow into Wootton Pond. The pond is controlled by sluices and suffers from siltation problems<sup>84</sup>.

The five main estuary systems – the Eastern Yar, Western Yar, Newtown, Medina and Wootton Creek all share common features of tidal mudflats and shingle, saltmarsh and varying amounts of fringing woodlands. The Island's estuaries are the remnants of once large valley systems that carried rivers into the former Solent estuary.<sup>85</sup>

The location of the rivers and waterways on the Island are presented in **Figure 28**.



**Figure 28:** Waterways on the Isle of Wight (source: IOWC, Rivers of the Isle of Wight [http://www.iwight.com/living\\_here/environment/estuaries/images/isle\\_of\\_wightrivers.pdf](http://www.iwight.com/living_here/environment/estuaries/images/isle_of_wightrivers.pdf) )

### 1.10.2 Water resources and water quality

In terms of water resources, the Isle of Wight has a significance reliance on groundwater, and 75% of the Island's's public water supply comes from this source<sup>86</sup>. The major source of groundwater is the major aquifer which underlies the majority of the southern half of the

<sup>84</sup> Environment Agency (2004) Isle of Wight CAMS: <http://publications.environment-agency.gov.uk/pdf/GESO0304BNMS-e-e.pdf>

<sup>85</sup> Environment Agency Factfiles: Rivers of the Isle of Wight: [http://www.iwight.com/living\\_here/environment/estuaries/images/isle\\_of\\_wightrivers.pdf](http://www.iwight.com/living_here/environment/estuaries/images/isle_of_wightrivers.pdf)

<sup>86</sup> IOWC (2001) Isle of Wight Contaminated Land Inspection Strategy

Island.<sup>87</sup> This forms a significant aquifer for potable use, and provides baseflow to many of the Island's watercourses, which rely on groundwater to maintain flows.

In addition to groundwater, water supply is provided from surface water, including from the Eastern Yar and Medina. Water is also provided from the mainland, via the Cross-Solent Main, which pumps water from the Testwood Reservoir in Hampshire.

The vulnerability of groundwater to pollution is determined by the physical, chemical and biological properties of the soil and rocks, which control the ease with which an unprotected hazard can affect groundwater. Groundwater Source Protection Zones (SPZs) indicate the risk to groundwater supplies from potentially polluting activities and accidental releases of pollutants. Designed to protect individual groundwater sources, these zones show the risk of contamination from any activities that might cause pollution in the area. In this context they are used to inform pollution prevention measures in areas which are at a higher risk, and to monitor the activities of potential polluting activities nearby.

The Environment Agency has graded SPZs into four zones, as follows:

**Box 1: Categories of groundwater Source Protection Zones (source Environment Agency<sup>88</sup>)**

**Zone 1 (Inner protection zone):** Any pollution that can travel to the borehole within 50 days from any point within the zone is classified as being inside zone 1. This applies at and below the water table. This zone also has a minimum 50 metre protection radius around the borehole. These criteria are designed to protect against the transmission of toxic chemicals and water-borne disease.

**Zone 2 (Outer protection zone):** The outer zone covers pollution that takes up to 400 days to travel to the borehole, or 25% of the total catchment area – whichever area is the biggest. This travel time is the minimum amount of time that it has been established pollutants need to be diluted, reduced in strength or delayed by the time they reach the borehole.

**Zone 3 (Total catchment):** The total catchment is the total area needed to support removal of water from the borehole, and to support any discharge from the borehole.

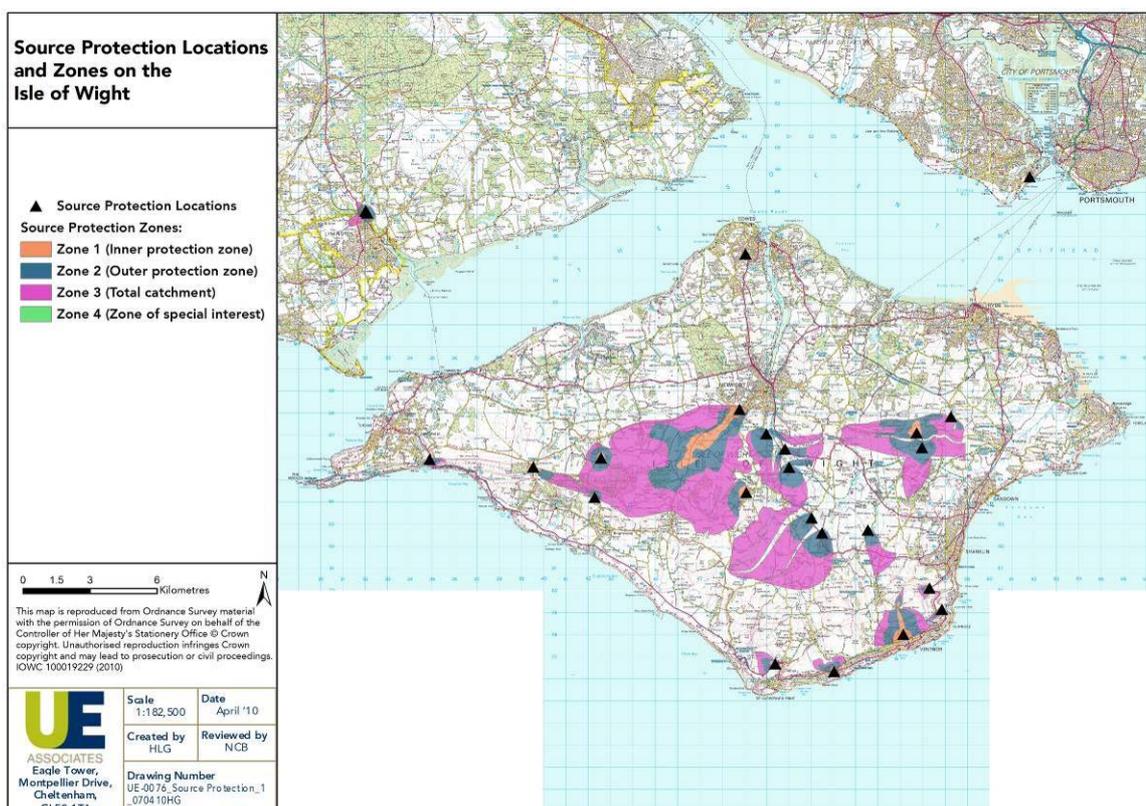
**Zone 4 (of special interest):** Where local conditions mean that industrial sites and other polluters could affect the groundwater source even though they are outside the normal catchment area.

As highlighted by **Figure 29**, a number of Source Protection Zones exist within the Isle of Wight:

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<sup>87</sup> Environment Agency and Entec (2008): Isle of Wight Lower Greensand Groundwater Body: Final Report

<sup>88</sup> Environment Agency website: <http://www.environment-agency.gov.uk/homeandleisure/37805.aspx>



**Figure 29:** Source Protection Zones on the Isle of Wight

CAMS are six year strategies developed by the Environment Agency for managing water resources at the local level. CAMS will be produced for every river catchment area in England and Wales. The Island is covered by the Isle of Wight CAMS.

The CAMS documents contain maps and descriptions of the local Water Management Units (WMUs), groundwater and surface water, and an assessment of water availability at times of low flow – normally mid to late summer. CAMS also classify each WMU into one of four categories: ‘over-abstracted’; ‘over-licensed’; ‘no water available’; or ‘water available’.

The Isle of Wight CAMS includes nine WMUs. The WMUs within the Island, and their status are presented in **Table 18**.

**Table 18:** Water Management Units in the Isle of Wight and their status

WMU Unit	Status
Eastern Yar (surface water)	Over-abstracted
Medina (surface water)	Over-licensed
Lukely Brook (surface water)	Over-abstracted
Brighstone Stream (surface water)	Water available
Atherfield Brook (surface Water)	Over-abstracted
Central Chalk West (groundwater)	Over-abstracted
Central Chalk East (groundwater)	Over-licensed
Southern Downs Chalk (groundwater)	No water available
Lower Greensand (groundwater)	Over-licensed

The chemical water quality of watercourses on the Isle of Wight has seen overall improvements since the 1990s<sup>89</sup> and a significant improvement in water quality has taken place since 1990. In 2006, 80% of rivers were classed as of 'good' chemical quality, 7% were deemed to be of 'fair' quality and 13% were deemed to be of 'poor' or 'bad' quality. Chemical water quality on the Island is therefore generally favourable compared to South East and England averages.

Whilst the Isle of Wight's biological water quality has significantly improved since 1990, quality has fluctuated since 2004. 61% of rivers were classed as 'good' quality in 2006, and this is below regional and England averages, where rivers determined to be of good biological quality represent 77% and 65% of the total respectively.

Improvements to water quality on the Island are therefore required to meet the target of all watercourses to reach 'good' biological and chemical water quality status by 2015, as required by the Water Framework Directive<sup>90</sup>.

**Table 19: Chemical Water quality of watercourses on the Isle of Wight**

Chemical water quality on the Isle of Wight					
Year	Type of water quality assessed	Watercourse Quality			
		GOOD %	FAIR %	POOR %	BAD %
1990	Chemical	34	46	10	10
1995	Chemical	64	17	7	12
2000	Chemical	61	31	8	0
2002	Chemical	60	34	6	0
2003	Chemical	60	32	8	0
2004	Chemical	65	24	11	0
2005	Chemical	71	16	13	0
2006	Chemical	80	7	7	6
Average for the South East					
2006	Chemical	65	29	6	<1
Average for England					
2006	Chemical	62	29	8	1

(source, Defra:

<http://www.defra.gov.uk/evidence/statistics/environment/inlwater/iwriverquality.htm> , accessed 19<sup>th</sup> April 2010)

<sup>89</sup> River Water Quality database for regional and local authority areas in England and Wales [online]. Available from: <http://www.defra.gov.uk/evidence/statistics/environment/inlwater/iwriverquality.htm> [Accessed 19th April 2010]

<sup>90</sup> The Water Framework Directive, which came into force in December 2000, requires all inland and coastal water bodies to reach at least "good status" by 2015. More information on the WFD can be found on: <http://www.defra.gov.uk/environment/water/wfd/index.htm>

**Table 20: Biological water quality of watercourses on the Isle of Wight**

Biological water quality on the Isle of Wight					
Year	Type of water quality assessed	Watercourse Quality			
		GOOD %	FAIR %	POOR %	BAD %
1990	Biological	12	63	11	14
1995	Biological	26	67	2	5
2000	Biological	24	64	12	0
2002	Biological	30	58	12	0
2003	Biological	46	50	4	0
2004	Biological	73	25	2	0
2005	Biological	68	30	2	0
2006	Biological	61	39	0	0
Average for the South East					
2006	Biological	77	21	2	0
Average for England					
2006	Biological	65	29	5	1

(source: Defra)

<http://www.defra.gov.uk/evidence/statistics/environment/inlwater/iwriverquality.htm> , accessed 19<sup>th</sup> April 2010)

### 1.10.3 Flooding

According to the Strategic Flood Risk Assessment which has been carried out for the Island<sup>91</sup>, the four main types of flood risk which exist on the Isle of Wight are as follows:

#### *Fluvial flooding*

Fluvial flooding, or river flooding, occurs when river levels increase to the extent that they burst their banks. Flood risk of this nature exists in Ryde due to Monkton Mead Brook, in Newtown from the River Medina, at Freshwater surrounding the River Yar, and adjacent to the lower reaches of the Eastern Yar at a number of locations.

#### *Coastal and tidal flooding*

Coastal and tidal flooding can be subdivided into two broad categories; 1) When the sea level is raised during a severe meteorological event resulting in a storm surge; or 2) When a mean high water coincides with high river flows, thus 'tide locking' the river discharge and instigating flooding. The tide locking of Monkton Mead Brook in Ryde caused some of the worst flooding on the Island during the significant Autumn 2000 flooding event. Newport is also deemed to be at risk from tide locking.

#### *Surface water flooding*

Surface water flooding takes place when the ground, rivers and drainage systems cannot absorb heavy rainfall. Typically this type of flooding is localised and occurs quickly after heavy rain. It is often a significant issue in areas where natural drainage has been heavily modified.

<sup>91</sup> Entec (November 2007) Isle of Wight Strategic Flood Risk Assessment

The more built up areas of the Island are deemed to be particular risk from this type of flooding.

#### *Groundwater flooding*

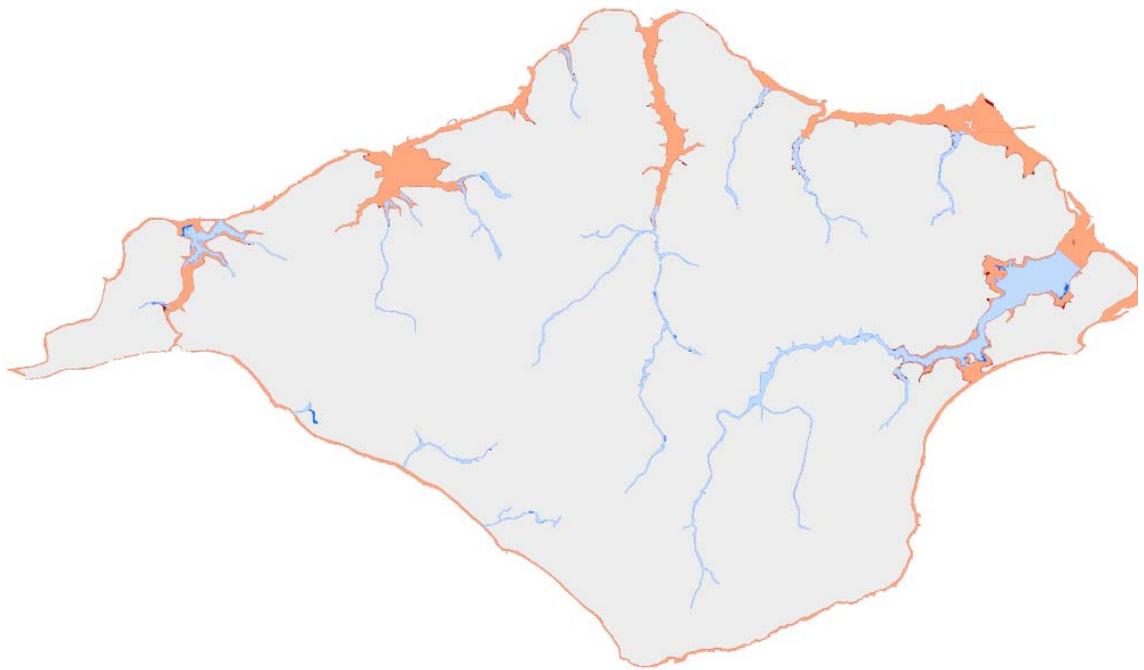
Flooding from groundwater takes place when prolonged rainfall over a long period raises the water table to above ground level. Whilst some areas of the Isle of Wight are deemed to be at risk from groundwater flooding, such as the site of the old railway works in Newport, groundwater flooding is not considered to be a significant issue on the Island in comparison to the other types of flood risk.

Climate change has the potential to increase the risk of fluvial, tidal and surface water flooding.

PPS25, Development and Flood Risk, provides a Sequential Test to enable Local Planning Authorities to apply a risk-based approach to site allocations within their authority boundary. The test classifies sites into one of four flood risk zones based on the annual probability of flooding. These zones are as follows:

- ▶ **Zone 1, Low Probability:** This zone comprises land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1%).
- ▶ **Zone 2, Medium Probability:** This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% – 0.1%) in any year.
- ▶ **Zone 3a, High Probability:** This zone comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%) or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.
- ▶ **Zone 3b, The Functional Floodplain:** This zone comprises land where water has to flow or be stored in times of flood. This is land assessed as having a 1 in 20 (5%) or greater annual probability of river flooding in any year or is designed to flood in an extreme (0.1%) flood, or at another probability to be agreed between the Local Planning Authority and the Environment Agency.

The location of flood risk zones on the Isle of Wight are presented in **Figure 30**.



**Flood Zones**

-  Tidal Flood Zone 3
-  Tidal Flood Zone 2
-  Fluvial Flood Zone 3
-  Fluvial Flood Zone 2

**Figure 30:** Flood risk zones on the Isle of Wight (source: Entec (2007) Isle of Wight Strategic Flood Risk Assessment)

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