



Medway Council Core Strategy

Update to Interim Sustainability Appraisal (incorporating SEA) - Medway Core Strategy Publication Draft

August 2011

prepared by

enfusion



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Medway Core Strategy Publication Draft

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APPENDICES

1. **Summary of Responses to SA Consultation**

1. Introduction

- 1.1 This report is the Interim Sustainability Appraisal of the Medway Core Strategy Publication Draft. It provides an update of previous SA work undertaken on the Core Strategy and should be read in conjunction with the Interim SA of the Pre-Publication Core Strategy (November 2010). Rather than duplicating existing information this report seeks to summarise the process and findings of the SA to date and update those findings to account for changes made between the Pre-Publication Core Strategy and the current Publication Draft Core Strategy. It also provides some additional information in relation to cumulative effects arising from the plan and responds to consultation comments received on the most recent SA of the Pre-Publication Core Strategy.
- 1.2 The Sustainability Appraisal process is an iterative one, assessing the Core Strategy at key stages as it evolves. In this way it also informs the policies in the Core Strategy. Previous SA work on the Core Strategy includes:
- In December 2008 a draft Scoping Report was published as a consultation draft. Taking account of all the responses received, a Final Scoping Report was published in April 2009.
 - An initial Sustainability Appraisal was published in July 2009. This assessed the Issues and Options report published at the same time and considered the matters to be covered in the Core Strategy and SA.
 - An Interim Sustainability Appraisal of the Pre-Publication Draft document was published in November 2010, appraising the first full draft of the DPD.
- 1.3 These past reports are available on Medway Council's website at:
<http://www.medway.gov.uk/environmentandplanning/developmentplan/localdevelopmentframework/sustainabilityappraisal.aspx>
- 1.4 Following the current appraisal of the Publication Draft, an appraisal will be undertaken of the draft submission document submitted for an independent Examination. This will be documented in a full SA Report that includes all information required to satisfy the requirements for Sustainability Appraisal and the European Strategic Environmental Assessment Directive.
- 1.5 This report is structured as follows:
- Section 1: Introduction.
 - Section 2: This short background section summarises the SA process and is included for ease of reference. Further detail is available in the previous SA documents.
 - Section 3: The methodology used throughout the process is summarised, including how this current SA has been undertaken.
 - Section 4: Summarises the approach taken to the assessment of alternatives.
 - Section 5: Provides an updated summary of the SA to account for recent changes to the publication draft Core Strategy.
 - Section 6-8: Provides a summary of the SA findings to date, considers changes made to the Publication draft and summarise the effects for

Environmental (section 6), Social (section 7) and Economic (Section 8) topics.

- Section 9: Includes a summary of transboundary effects and has been updated to include a section on the plan's cumulative effects.
- Section 10: Discusses the proposed monitoring of the Core Strategy.
- Section 11: Provides a summary and conclusions.

2. Background

Medway Core Strategy

- 2.1 Medway is located 30 miles outside London along the North Kent coast, formed of the five main town centres of Rainham, Gillingham, Chatham, Rochester and Strood, along with the rural Hoo Peninsula and Isle of Grain. It is located within the growth area of the Thames Gateway and also has a number of sites of nature conservation importance, as well as having sites of strategic importance for aggregate importation and power generation.
- 2.2 The Vision for Medway, as provided in the Medway Sustainable Community Strategy is 'City of Medway: rich heritage, great future'. This is underpinned by 4 principles: Sustainability, Narrowing the gap, Fairness and Self-help and a further 6 ambitions (these are detailed in Section 3 of the Core Strategy Publication Draft).
- 2.3 The Local Development Framework (LDF) is a suite of documents that will form the planning framework against which development applications will be assessed and other important decisions made. Medway's Core Strategy is the spatial expression of the Community Strategy vision and sets out how the Council sees Medway developing over the period up to 2028. When adopted it will guide all major development decisions and investment plans.

Sustainability Appraisal

- 2.4 Under the requirements of the Planning and Compulsory Purchase Act 2004 and Planning Policy Statement 12, the Local Planning Authority is required to carry out a Sustainability Appraisal of its LDF to fulfil the aim of contributing towards the achievement of sustainable development through preparation of its plans. The Sustainability Appraisal (SA) is required to incorporate the requirements of the European Strategic Environmental Directive (SEA). The SEA Directive, Environmental Assessment of Plans & Programmes Regulations and relevant SA Guidance^{1,2} set out the statutory process that must be followed.
- 2.5 The SA work has been undertaken alongside the development of the Local Development Document (LDD), allowing the SA process to be integrated into the plan-making process and improving the sustainability of the plan throughout the process. Stakeholders and experts are involved throughout the SA process, helping to develop a robust and fully integrated appraisal. This integration will ensure that future development meets the needs of people living and working in an area, whilst at the same time ensuring that it is sited in such a way as to protect the environment.

¹ ODPM 2005 A Practical Guide to the SEA Directive
<http://www.communities.gov.uk/publications/planningandbuilding/practicalguidesea>

² PAS 2010 Sustainability Appraisal Advice Note <http://www.pas.gov.uk/pas/aio/627078>

3. Appraisal methodology

SA Process

- 3.1 This section provides an overview of the SA process followed in the preparation of the Medway Core Strategy. A detailed Sustainability Appraisal Methodology is provided in the Interim Sustainability Appraisal of the Pre-Publication Core Strategy and should be referred to for further information. The final SA Report accompanying the Submission Draft of the Core Strategy will also provide a step-by-step summary of the SA process.
- 3.2 Following is a summary of the process undertaken to date:
- **SA Scoping:** Draft sustainability appraisal objectives were refined through consultation with Council Officers before a scoping report was issued for consultation with both the public and statutory agencies in 2008. This was finalised to take into account comments received during consultation.
 - **Alternatives assessment:** Alongside the Issues and Options Report, which was consulted on in July 2009, an Initial Sustainability Appraisal was undertaken that considered the sustainability of 5 strategic options.
 - **SA of Pre-Publication Draft Core Strategy:** The assessment of issues and options was followed by a Sustainability Appraisal of the Pre-Publication Draft Core Strategy in November 2010, which appraised the first full draft of the DPD.
 - **SA review:** Consultants, Enfusion were appointed to review the work undertaken to date and assist Council in the remaining stages of the Sustainability Appraisal.
 - **SA of Publication Core Strategy:** Enfusion has undertaken the current updated Sustainability Appraisal, including holding a workshop session with Council Officers that considered ways to improve the sustainability of the plan. This report considers the Publication draft Core Strategy and provides an updated appraisal where circumstances or policies have changed. It also considers in more detail the cumulative effects of the plan. The Council is consulting on this report alongside the Publication Draft Core Strategy.
 - **SA of draft Submission Core Strategy:** Further changes will be made to the Core Strategy (as a result of consultation and the SA process). A final SA report will be produced that documents the entire SA process. This will accompany the Submission version of the Core Strategy on consultation and will be submitted to the Planning Inspectorate as part of the evidence base for the Core Strategy.

Appraisal Methodology for this report

- 3.3 In undertaking this current appraisal of the Core Strategy, Enfusion has conformed with the appraisal style, definitions, assumptions and SA Framework as used in the previous SA work undertaken by Medway, and detailed in the Interim SA report. The process has involved the following steps:

SA Review

- 3.4 In June 2011 Enfusion prepared a Critical Friend/Compliance review of the previous SA work undertaken by Medway. The review found that overall the three SA Reports are well written and presented in an understandable style that is engaging for both the professional and public. The review included a number of suggestions for improvement that could be incorporated into the remainder of the SA work to ensure compliance with the SEA Directive and to uphold good SA practice. In particular it recommended a more detailed approach to the assessment of cumulative effects arising from the Core Strategy.

SA Workshop

- 3.5 On 29 June, Enfusion held a workshop with Officers of Council's Planning department to discuss the sustainability implications of the Medway Core Strategy. At the workshop, staff explored some of the key issues facing Medway including climate change/energy efficiency, health and transport and considered further opportunities for mitigation of the plan's negative effects. Following the workshop further follow-up advice was provided in relation to improving particular policies.

SA of Publication Draft

- 3.6 The emerging Core Strategy was subject to further appraisal; this focussed on the sustainability implications of any changes to the plan since the previous SA. A detailed Cumulative Effects appraisal was undertaken, considering both effects from within the plan (intra-plan) and in-combination with other plans (inter-plan). The appraisal summary (illustrated in Chapter 5) was based on the SA Framework, reproduced below:

1	Environment	Conserve and enhance the diversity and abundance of habitats and species
2	Air	Reduce air pollution and improve air quality, including reduction of greenhouse gas emissions
3	Water	Maintain and improve quality of ground and surface waters and security of supply
4	Flooding	Reduce risk of flooding and ensure flood resilience of buildings and minimise the effect on public services and infrastructure
5	Ecological Footprint	Reduce ecological footprint through prudent use of natural resources, reduction in waste and use of sustainable waste management practices

6	Housing	Provide opportunity for everyone to live in a decent, sustainably constructed, affordable home suitable to their needs
7	Previously developed Land	Maximise land use efficiency through appropriate use of previously developed land and existing buildings
8	Health	Improve the health and well-being of the population and reduce health inequalities
9	Poverty/Social Exclusion	Reduce inequalities in poverty and social exclusion
10	Crime	Reduce crime and the perception of crime
11	Accessibility	Improve accessibility to key services and facilities (inc. countryside, leisure/recreation and historic environment)
12	Material assets, heritage and culture	Conserve and enhance historic buildings, archaeological site and culturally important features and increase engagement by all sections of community
13	Renewable energy	Increase energy efficiency; the proportion of energy generated from renewable sources and the diversity and security of energy supplies
14	Transport	Reduce traffic and congestion by reducing need to travel and improving travel choice
15	Education and workforce	Raise educational achievements through developing opportunities to acquire skills, to develop and maintain workforce
16	Employment	Support and improve employment and economic competitiveness in town centres and deprived areas

3.7 The definitions used to categorise the impacts identified in the appraisal are explained in the following key:

✓	Significant benefits
+	Potentially some benefits
0	No effect; benefits/harm will be balanced
-	Potentially some benefits
x	Not compatible

3.8 In addition it was considered whether the potential impacts were likely to occur in the short, medium or long term. Due to the length of the plan period, at 15 years, these correlated to the following 5-year bandings:

- Short-term 0-5 years
- Medium term 5-10 years
- Long term 10-15 years

Assumptions, data gaps and uncertainties

3.9 Throughout the development of the Publication Draft and the SA process, data gaps and uncertainties were uncovered. It is not always possible to

accurately predict sustainability effects when considering plans at such a strategic scale. Impacts on biodiversity and cultural heritage, for example, will depend on more detailed information and studies at a site-level. And whilst climate change science is becoming more accurate, it is difficult to predict impacts likely to result from climate change, including synergistic effects. These uncertainties have been acknowledged where applicable.

Discussion Categories

- 3.10 Many of the sustainability issues identified are cross-cutting in nature. To take account of this they have been grouped under the following categories:

Environmental:

- Air quality
- Water and Soil
- Waste
- Biodiversity and open space
- Climate adaptation and mitigation

Social:

- Community (population, crime, deprivation, health)
- Cultural Heritage and Material Assets
- Transport and accessibility
- Housing

Economic:

- Economy and employment

Consultation

- 3.11 The Interim SA report details the consultation process that has been undertaken to date on the SA Scoping report, Issues and Options and Interim Report. Council have advised that few responses were received specifically in relation to the Sustainability Appraisal on the Issues and Options or the Interim SA Report, also some related equally to the SA and the plan itself (and have been dealt with through the responses to the plan).
- 3.12 The one comment (from CBRE on behalf of Land Securities) received on the issues and options was that it was felt the issues and options appraisal could be addressed in a greater level of detail in the sustainability appraisal to ensure statutory requirements are met. The SA review undertaken by Enfusion found that the reasoning for the final SA report should be as robust as possible and further detail will be provided in that report.
- 3.13 Council have also advised that one representation was received in relation to the Interim SA - a table outlining the SA response to the representation is provided in **Appendix 1**.

Compatibility of Core Strategy Spatial Vision and Strategic Objectives

- 3.14 A compatibility analysis of the Core Strategy vision and objectives was undertaken in the Interim SA. The Vision and each Core Strategy objective were considered for their compatibility with the full SA Framework of objectives. This has since been updated to account for the 2 new objectives added to the Publication Core Strategy:

New objective 7: To boost the range and quality of tourist accommodation and positively promote visitor destinations

New objective 16: To ensure the provision of necessary infrastructure to match the needs of development at the right time and in the right place.

- 3.15 The Core Strategy 'Spatial' Vision has been found to positively progress the majority of SA objectives, particularly against those relating to housing, communities and the economy. Given the level of development proposed (17,930 new homes), the 'Spatial' Vision is considered to not be compatible with SA objectives relating to biodiversity, air and water.
- 3.16 The matrix overleaf shows the updated compatibility matrices between the Core Strategy strategic objectives and the SA framework.

- 3.17 The majority of strategic objectives are assessed as either having no effect (neutral) or being compatible against SA objectives. Strategic objectives that propose the regeneration of Medway are compatible with SA objectives relating to housing, employment, communities and use of previously developed land. However these strategic objectives are also considered to not be compatible with SA objectives relating to biodiversity, air quality and water.

4. Appraisal of the alternatives

- 4.1 This section of the report summarises how alternatives have been considered in the preparation of the plan; a detailed commentary is provided in the Interim SA report of the Pre-Publication draft and will also be provided in the final SA Report. The original SA of the alternatives can be found in the SA of the Issues and Options Report (July 2009).
- 4.2 The appraisal of alternatives focused on the potential for 5 broad locations to accommodate growth outside of the existing urban boundaries. A 'Call for sites' was carried out from December 2008 till January 2009, as part of the Medway Strategic Land Availability Assessment (SLAA) and as a result of this a number of sites were put forward. These tended to fall within a number of broad locations and were considered accordingly. This also allowed an objective assessment to be made by comparison with the proposed settlement at Lodge Hill, Chattenden. This was both to see whether another location may be more suitable than Lodge Hill and also to test whether the same scale of development could be achieved elsewhere.
- 4.3 Consideration of options beyond this was considered to be limited due to the number of decisions on the location of development that had already been made, including planning permissions and where the way forward had been set in other plans. This includes the imperative for development on previously developed land, as set by Central government policy. The focus on regeneration of existing areas (outside of the development of one new major growth area at Lodge Hill) also reflects the area's location within the Thames Gateway and its associated regeneration strategy.
- 4.4 The key spatial alternatives are described below:

Option 1: New settlement at Lodge Hill, Chattenden

The new settlement at Lodge Hill would be freestanding and use mainly previously developed land with circa 5,000 homes and a full range of associated services being provided. This option would not require any extension to existing urban boundaries.

Option 2: Expanded Hoo

This option reflects the fact that a number of landowners/developers have proposed sites for development on the edge of each of the settlements referred to below. This option would effectively substitute Lodge Hill with further expansion at Hoo St. Werburgh and at the nearby villages of High Halstow and Cliffe Woods.

Option 3: Capstone Urban Extension

This option involves a major urban extension into the Capstone Valley between Hempstead and Lordswood. For this options appraisal an area wholly within the Medway boundary was considered, bridging the valley in a 'U' shaped configuration. This would generally be to the south of the Capstone Country Park. However, were it to proceed, development would be likely to extend further southwards into Maidstone, resulting in

development on a scale that would be substantially larger than that proposed at Lodge Hill.

Option 4: East of Rainham Urban Extension

This option would involve development between the existing urban boundary and the administrative boundary with Swale Borough. It envisages the majority of any development area being to the south of the A2 but with some development, around Moor Street, to the north.

Option 5: North of Rainham Urban Extension

This option envisages the release of land between the current urban boundary and the B2004 Lower Rainham Road. It would potentially extend from the Gillingham Link Road (A289) in the west to the administrative boundary with Swale in the east.

Reasons for selecting or rejecting the alternatives

- 4.5 The reasons for selecting or rejecting the alternatives are provided in the Interim SA of the Pre-Publication draft and will be detailed in the final SA report. In summary all of the options apart from Capstone were considered to make a reasonable contribution towards achieving the sustainability objectives at least in the short term. However, over the longer-term Lodge Hill would make the greatest contribution overall.

5. Appraisal Summary

- 5.1 This section includes the appraisal of individual policies within the Core Strategy. Originally undertaken for the SA of the pre-publication draft, the table has been updated to incorporate changes made to the policies for the current publication draft (highlighted in **RED**) and changes made as an update to the appraisal (e.g. resulting from further consideration of cumulative effects) (changes in **BLUE**).
- 5.2 As mentioned within the earlier section on methodology, the following symbols have been used within the matrices.

✓	Significant benefits
+	Potentially some benefits
0	No effect; benefits/harm will be balanced
-	Potentially some benefits
x	Not compatible

- 5.3 The matrices summarise the appraisal provided in chapters 6-8, where the effects of the plan are considered in detail against environmental, social and economic topics.

Cross-cutting Matrix

Policy	SA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	biodiversity	air	water	flooding	Ecological footprint	housing	Previously developed land	health	Poverty/social exclusion	crime	accessibility	Material assets and culture	Renewable energy	transport	Education and workforce	Economy
CS1: Regenerating Medway	0	-	-	0	0	✓	✓	+	+	0	+	0	0	-	✓	✓
CS2: Quality and Sustainable Design	0	0	+	0	+	✓	✓	0	+	0	0	+	0	+	✓	✓
CS3: Mitigation and Adaptation to Climate Change	+	0	+	0	✓	+	0	0	0	0	✓	0	0	0	0	0
CS4: Energy Efficiency and Renewable Energy	0	0	0	0	✓	0	0	0	+	0	+	0	✓	0	✓	✓
CS5: Development and Flood Risk	✓	0	0	✓	✓	+	0	0	+	0	+	0	+	0	0	0
CS6: Preservation and enhancement of Natural Assets	✓	0	0	+	✓	0	0	+	0	0	0	✓	0	0	0	0
CS7: Countryside and Landscape	+	0	0	0	0	0	0	+	0	0	+	+	0	+	0	0
CS8: Open Space, Green Grid and Public Realm	0	0	0	0	0	0	0	✓	✓	✓	✓	+	0	+	0	0
CS9: Health and Social Infrastructure	0	+	+	0	0	0	+	✓	✓	0	✓	✓	0	0	0	+
CS10: Sport and Recreation	-	0	0	0	0	0	✓	✓	0	0	✓	✓	0	0	+	+
CS11: Culture and Leisure	0	0	0	0	0	+	✓	0	+	0	0	✓	0	0	✓	✓
CS12: Heritage Assets	0	0	0	0	0	+	✓	0	+	0	0	✓	0	0	✓	✓

Housing Chapter Matrix

Policy	SA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	biodiversity	air	water	flooding	Ecological footprint	housing	Previously developed land	health	Poverty/social exclusion	crime	accessibility	Material assets and culture	Renewable energy	transport	Education and workforce	Economy
CS13: Housing Provision and Distribution	-	-	-	0	-	✓	✓	+	✓	+	✓	0	+	-	+	+
CS14: Affordable Housing	0	0	0	0	-	✓	✓	+	✓	+	✓	0	0	0	+	+
CS15: Housing and Other Housing Requirements	0	0	0	0	-	✓	✓	✓	✓	+	✓	0	✓	0	+	+
CS16: Gypsies, Travellers and Travelling Showpeople	0	0	0	0	-	✓	✓	0	✓	0	✓	0	0	0	+	+

Economy Chapter Matrix

Policy	SA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	biodiversity	air	water	flooding	Ecological footprint	housing	Previously developed land	health	Poverty/social exclusion	crime	accessibility	Material assets and culture	Renewable energy	transport	Education and workforce	Economy
CS17: Economic Strategy	-	-	-	0	-	✓	✓	✓	✓	0	✓	+	✓	-	✓	✓
CS18: Tourism	0	0	0	0	0	+	✓	0	+	0	0	+	+	-	✓	✓

Policy	SA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	biodiversity	air	water	flooding	Ecological footprint	housing	Previously developed land	health	Poverty/social exclusion	crime	accessibility	Material assets and culture	Renewable energy	transport	Education and workforce	Economy
CS19: Retail and Town Centres	0	0	0	0	0	+	✓	0	✓	0	✓	0	0	-	✓	✓
CS20: Education and Personal Development	+	0	0	0	0	+	✓	+	✓	0	0	+	+	-	✓	✓

Energy, Waste and Minerals Chapter Matrix

Policy	SA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	biodiversity	air	water	flooding	Ecological footprint	housing	Previously developed land	health	Poverty/social exclusion	crime	accessibility	Material assets and culture	Renewable energy	transport	Education and workforce	Economy
CS21: Conventional Energy	0	-	0	0	0	✓	✓	0	✓	0	✓	0	✓	-	✓	✓
CS22: Minerals Provision	-	0	-	0	0	+	0	0	✓	0	0	0	+	-	✓	✓
CS23: Waste Management	0	0	0	0	✓	+	✓	0	+	0	+	0	✓	-	✓	✓

Transport and Movement Chapter Matrix

Policy	SA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	biodiversity	air	water	flooding	Ecological footprint	housing	Previously developed land	health	Poverty/social exclusion	crime	accessibility	Material assets and culture	Renewable energy	transport	Education and workforce	Economy
CS24: The River Medway	-	-	0	0	0	+	✓	+	+	0	✓	+	0	✓	+	+

River Medway Chapter Matrix

Policy	SA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	biodiversity	air	water	flooding	Ecological footprint	housing	Previously developed land	health	Poverty/social exclusion	crime	accessibility	Material assets and culture	Renewable energy	transport	Education and workforce	Economy
CS25: The River Medway	✓	0	✓	0	✓	0	0	+	0	0	+	✓	0	+	+	+

Area Policies Chapter Matrix

Policy	SA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	biodiversity	air	water	flooding	Ecological footprint	housing	Previously developed land	health	Poverty/social exclusion	crime	accessibility	Material assets and culture	Renewable energy	transport	Education and workforce	Economy
CS26: Strood	-	-	-	0	-	✓	✓	0	+	+	0	+	0	0	✓	✓
CS 27: Rochester	-	-	-	0	0	+	✓	0	0	0	0	+	0	+	✓	✓
CS28: Chatham	-	-	-	0	+	+	✓	0	✓	✓	✓	0	0	0	✓	✓
CS29: Gillingham	-	-	-	0	+	0	✓	0	+	0	0	+	0	0	✓	✓
CS30: Rainham	-	-	-	0	+	0	✓	+	+	0	+	0	0	0	0	✓
CS31: Hoo Peninsula and the Isle of Grain	-	-	-	0	0	+	✓	+	+	+	✓	0	0	0	✓	✓
CS32: Medway Valley	-	-	-	0	0	+	✓	+	+	0	✓	+	0	0	+	✓
CS33: Lodge Hill	-	-	-	+	+	✓	✓	0	✓	0	+	✓	✓	+	✓	✓

Monitoring, Implementation and Review Chapter Matrix

Policy	SA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	biodiversity	air	water	flooding	Ecological footprint	housing	Previously developed land	health	Poverty/social exclusion	crime	accessibility	Material assets and culture	Renewable energy	transport	Education and workforce	Economy
CS34: Implementation of the Core Strategy	0	0	0	0	0	✓	0	0	0	0	✓	0	0	0	0	✓
CS35: Developer Contributions	0	0	0	0	0	0	0	0	0	0	✓	0	0	0	0	0

6. Appraisal of the Publication Draft Core Strategy policies against the Environmental Indicators

- 6.1 This section provides a summary of the SA findings presented in section 5, ordered in accordance with the environmental, social and economic topics used in the Interim SA Report. For each topic, the findings of previous SA work are summarised, followed by an appraisal of significant changes made since the Pre-Publication Draft. A commentary on the overall effects of the plan on each topic is then provided.

Air quality

- 6.2 The SA of the Pre-Publication Draft notes that the main areas likely to be affected by increased emissions will be the key areas for new development; i.e. the urban waterfront and in/around the town centres. The proposed development at Lodge Hill, alongside economic development at the Hoo Peninsula will also lead to increased traffic on the peninsula.

What has changed and how does this affect the SA?

- 6.3 There have been minor changes to Core Strategy Policies with regard to air quality, which includes some additional references with regard to minimising air pollution (e.g. in Policy CS 25: The River Medway) and increasing bus services which will help towards mitigation. Mitigation is proposed in CS policies, in particular CS 24: Transport and Movement, although it is recommended that the approach to lower parking standards could be strengthened, provision made for electric vehicles and a requirement for green travel plans included. The HRA will also look at the cumulative effects of possible increased emissions on designated biodiversity sites, which has been raised as a possible area of concern.

Updated overall assessment and cumulative effects

- 6.4 Overall, the growth proposed in the Core Strategy will lead to increased atmospheric pollution (local and regional) as a result of increased traffic, embodied energy in construction materials and increased energy use from new housing and employment development. This has the potential for cumulative negative effects on air quality; however, the Core Strategy contains mitigation measures - including Policies CS3, CS4 & CS24 - which will help to minimise this effect. Air quality will require ongoing monitoring, with aversive action required should acceptable standards be exceeded.

Water and Soil

- 6.5 The SA of the Pre-Publication Draft identified the potential for negative effects on soil through minerals workings, especially in the area to the east of Hoo St. Werburgh. Policy CS7: Countryside and Landscape seeks to protect the best and most versatile agricultural land on the Hoo Peninsula, outside of the Lodge Hill strategic allocation, in the Capstone and Medway Valleys and to the North and East of Rainham. The key sustainability issues relating to water

were identified by the Interim SA as the quality, amount and distribution of water supplies and the physical water environments.

What has changed and how does this affect the SA?

- 6.6 The changes made to the Publication Draft are not considered significant in terms of changing the overall appraisal for water and soils. The Publication Draft (Policy CS3) includes stronger targets for the Code for Sustainable Homes and BREEAM and also requires residential developments to seek to achieve water efficiency of no more than 80 litres per person per day. However this does not significantly change the findings of the Pre-Publication Draft SA.

Updated overall assessment and cumulative effects

- 6.7 On the whole, the cumulative effect of the CS on Water Resources and Quality is likely to be an adverse one, given the level of development proposed. The significance of this effect is likely to be exacerbated through the effects of climate change, which include a drier climate and higher temperatures. It is recommended that:
- The PPDCS contain a separate policy on the water environment that also incorporates the water-related aspects of Policy CS2 and CS3.
 - The policy includes wording to ensure that development proposals that pose unacceptable risk or harm to the quality and/or quantity of ground waters, surface waters, wetlands or coastal water systems will not be permitted.
 - It should also require that major proposals for new development should be able to demonstrate that there are, or will be, adequate water supply and waste-water treatment facilities in place to serve the whole development.
 - It is also recommended that more aspirational targets are set for the Code for Sustainable Homes and BREEAM.
 - The policy should require Sustainable Drainage Systems to be incorporated into all new development.
- 6.8 There is the potential for positive effects on soils as the CS maximises the efficient use of land through focussing re-investment/ development on underused, derelict and/ or previously developed land.

Waste

- 6.9 The SA work to date notes the key issues in terms of waste are in waste reduction, increased provision for treatment/processing and striving for waste self-sufficiency.

What has changed and how does this affect the SA?

- 6.10 The key relevant policy in this instance is Policy CS23: Waste Management, which aims to reduce waste through provision of facilities in new development and addressing the required provision (in an environmentally- sensitive way). The policy has been amended for the Publication Draft to consider the potential for a soil treatment facility, which has been identified as a need due

to the volumes of contaminated soil resulting from large-scale regeneration in the area. This change will help to further address the issues around waste self-sufficiency. The policy also now includes further references to rural landscape and character (addressed under heading: Biodiversity, Open Space and Landscape).

Updated overall assessment and cumulative effects

- 6.11 Due to the level of new housing and employment development proposed overall, the Core Strategy is likely to lead cumulatively to an increased level of waste production in Medway, however the measures proposed in Policy CS23, alongside a wider societal drive towards zero waste will help to minimise this impact, especially in the long term.

Biodiversity, open space and landscape

- 6.12 The Interim SA of the Pre-Publication Draft noted that the proposed level of growth will have negative effects on biodiversity, open space and landscape but that the protection provided by CS policies would be sufficient to ensure that these effects would not be significant.

What has changed and how does this affect the SA?

- 6.13 The SA of the Pre-Publication Draft did not identify increased recreational activity as potentially having a significant negative effect on biodiversity. This was primarily due to a lack of evidence, which has now been addressed through the North Kent Visitor and bird disturbance studies commissioned by the North Kent Environmental Planning Group (NKEPG). The appraisal of individual policies has been updated to reflect this. Early findings of this work suggest that there may be a correlation between recreational disturbance and a decline of designated bird populations in North Kent. Enfusion has recommended (and Officers have included) new policy wording (in Policy CS6: Preservation and Enhancement of Natural Assets) that seeks to support the findings and recommendations of the NKEPG work. This issue is considered in detail through the Habitats Regulations Assessment (HRA) of the Core Strategy - see separate report.
- 6.14 There have been no additional changes to the Publication Draft that significantly alter the findings of the Interim SA in relation to open space. With regard to landscape there have been a number of additions to the Publication Draft that will help to enhance the benefits of the Core Strategy. This includes the protection of the River Medway as a key landscape feature of natural beauty in its own right (Policy CS8) and encouraging opportunities for landscape enhancement in line with the objectives of the Kent Downs AONB designation (Policy CS32). The Publication Draft also ensures that waste management proposals take account of impacts on the rural landscape.

Updated overall assessment and cumulative effects

- 6.15 There is the potential for significant cumulative/ incremental negative effects for biodiversity across the region [particularly for sensitive estuarine environments]. The CS seeks to protect, maintain and enhance populations of wild species and other biodiversity features, however this will only help to minimise effects. The CS focuses development on underused, derelict and/ or previously developed land, which has the potential for significant positive effects on the townscape of settlements. Development at Lodge Hill will clearly have some adverse effects on landscape, however much of the site is previously developed land (a military training area) and the site is largely hidden within the landscape of the Hoo Peninsula. There is also the potential for the Core Strategy to have positive effects on open space through the use of previously developed land and the provision of open space as part of major regeneration proposals. The CS not only seeks to protect existing open spaces but also seeks to improve accessibility through the creation of footpaths, cycle routes, equestrian facilities and wildlife stepping stones to provide a multifunctional network of open space.

Climate adaptation and mitigation

- 6.16 The Interim SA of the Pre-Publication Draft noted the steps taken in the CS to mitigate climate change (through reduced emissions) and adapt to climate change (for example through better flood defences).

What has changed and how does this affect the SA?

- 6.17 Measures outlined in policies included requirements for meeting the Code for Sustainable Homes for residential buildings and BREEAM ratings for commercial buildings. These requirements reflected the national situation at the time, however changes have since occurred and Enfusion has recommended further changes to the policy to reflect this included within the current Publication Draft (Policy CS4: Energy Efficiency and Renewable Energy)- these changes have been incorporated.

Updated overall assessment and cumulative effects

- 6.18 As a cross-cutting issue, climate change is related to many of the policies in the plan; from CS4: Energy Efficiency and Renewable Energy to CS24: Transport and Movement. The area policies, retail and economic development policies also relate to climate change, as the location and nature of development can have a significant impact on emissions through reducing the need to travel.
- 6.19 On the whole, the cumulative effect of the CS on Climate Change (emissions) is likely to be an adverse one; mostly due to the sheer volume of new development proposed. However, with the inclusion of Policies CS2, CS3 and CS4, and the strategic approach to development and transport, the SA has found that the CS includes some good measures to mitigate this effect. The suggestions (made through the SA workshop and subsequent advice) for

amendments to Policy CS3 have been adopted in the current draft policy and are seen to be important in further mitigating greenhouse gas emissions in the Medway.

- 6.20 In terms of mitigation, the SA work to date has found that various mitigation measures, included in policies on flood risk (Policy CS5) and natural assets (Policy CS6) will help the Medway to adapt to the impacts of climate change (including increased flooding, habitat fragmentation and increased temperature extremes).

7. Appraisal of the Publication Draft Core Strategy policies Against the Social Indicators

Community (population, crime, deprivation, health)

- 7.1 SA work undertaken to date has shown that the overall effects of the CS on the community will be very positive, through enhanced prosperity, increased average earnings and much improved public spaces, community facilities and services. Other positive effects are likely through better transport services, safer neighbourhoods and centres and health benefits due to access to green spaces.

What has changed and how does this affect the SA?

- 7.2 Changes made to the Publication Draft that are relevant to this issue are as follows:
- Policy CS15 (Housing Design and other housing requirements): Strengthened policy on student accommodation to restrict Houses of Multiple Occupation.
 - Policy CS27 (Rochester) and CS28 (Chatham): Additional text to seek local employment opportunities.
 - Policy CS28: Includes retention and development of services and facilities at Upper Halling and encourages communities to plan for village needs.
- 7.3 These amendments to the plan will ensure that the already significant community benefits from the CS will be further enhanced, with positive effects for community cohesion, social inclusion and poverty reduction.

Updated overall assessment and cumulative effects

- 7.4 As a whole, the CS will have long-term positive cumulative effects on communities. The plan recognises the needs of Medway's disabled and ageing population and seeks to accommodate those needs. Policy CS15 ensures housing developments are well designed and are capable of adaptation to accommodate lifestyle changes and to achieve the Lifetime Homes Standard. The redevelopment of disused areas - including the provision of local employment and community services and facilities will have significant positive effects on community cohesion, social inclusion and poverty reduction.

Cultural Heritage and Material Assets

- 7.5 The SA of the Pre-Publication Draft found that the CS will give a high level of protection to heritage assets and will expand the existing cultural offer in Medway. It notes the high level of protection afforded to heritage and culture through Policies CS11: Culture and Leisure and CS12: Heritage assets. Other policies that contribute positively to heritage are CS18: Tourism and CS10: Sport and recreation.

What has changed and how does this affect the SA?

- 7.6 There have been no additional changes to the Publication Draft that enhance or detract from the benefits stated. However, one further observation is the overall cumulative effect of development on the maritime character of the Medway and the need to ensure this character is not lost to new development, but enhanced. Policy CS25: The River Medway partially recognises this, but it may be possible to expand to include reference to the distinct maritime heritage and character of the Medway.

Updated overall assessment and cumulative effects

- 7.7 Overall, the CS has the potential for positive effects through the preservation and enhancement of cultural heritage. This includes supporting World Heritage Site status for the Chatham Dockyard and its Defences and the development of the Great Lines Heritage Park.

Transport and accessibility

- 7.8 Previous SA work has found that the CS will help to facilitate significant rail improvements, park and ride facilities, and rationalisation of parking and junction improvements, whilst also increasing water-based transport. Policy CS24: Transport and Movement was seen to be of particular benefit. However the appraisal also cautioned that increased economic activity in the area may offset those benefits.

What has changed and how does this affect the SA?

- 7.9 Few amendments have been made to the CS that will affect transport. Those changes that have been made include amendments to Policy CS27: Rochester to state that the Council will work with bus operators to extend access to services in the south of the area. Further changes have been made to Policy CS33: Lodge Hill, with less specificity given as to which transport improvements will be provided by developers. Overall the effect of these changes is not of major significance.

Updated overall assessment and cumulative effects

- 7.10 The overall effect of the CS on transport and accessibility is difficult to predict at a strategic level of SA. The transportation effects of the proposed increased development in Medway will be difficult to mitigate; the CS policy mitigations will go some way, however this must be seen in conjunction with the Local Transport Plan (LTP 3) and closely monitored in the future, with averse action taken. The SA makes a number of further recommendations (see also Air Quality topic), in particular a policy in support of electric cars and electric car infrastructure would be a positive step.

Housing

- 7.11 The SA of the Pre-Publication Draft identified that the Core Strategy would have significant benefits for the delivery and accessibility of housing.

What has changed and how does this affect the SA?

- 7.12 There have been no significant changes to the Publication Draft to alter the findings of the Interim SA.

Updated overall assessment and cumulative effects

- 7.13 The effect of the Core Strategy on housing will be one of the most significant and long-lasting of the plan's effects on sustainability through meeting Medway's housing demand and increasing the stock of affordable housing.

8. Appraisal of the Publication Draft Core Strategy policies Against the Economic Indicators

Economy and employment

- 8.1 SA work undertaken to date has shown that the overall effects of the CS on the economy will be very positive, with significant improvement in overall economic performance and much more activity in and around the town centres and particular benefits for Chatham town centre through new retail development. Benefits would be distributed throughout Medway, however, with employment provision at Lodge Hill, Grain, Kingsnorth and Rochester Airfield. Policy CS17: Economic Development was seen as instrumental in achieving these benefits and this policy remains little changed.

What has changed and how does this affect the SA?

- 8.2 The key change to the Publication Draft relates to encouraging development of a business incubator and grow on space for new and expanding businesses - this will further enhance the economic benefits of the CS. Another change is a small drop in the provision of employment floorspace by approximately 60,000 sqm to reflect the current economic situation, which could be argued to be a more realistic scenario. A range of other policies (in particular the Area Policies) will all help to increase the economic benefits facilitated by the CS - this has been improved by the addition of wording to Policy CS27: Rochester and CS28: Chatham that further encourages local employment opportunities.

Updated overall assessment and cumulative effects

- 8.3 On the whole, the cumulative effect of the CS will have major significant effects for the economy and employment in Medway. A cautionary note from the previous SA still applies: that the employment provision at Lodge Hill should be carefully considered in terms of its linkages to existing businesses and to ensure that it does not draw people from the other nearby settlements on the Peninsula, which would be harmful to their vitality. Ongoing monitoring of economic and employment indicators will be important (especially in consideration of the current global financial situation), such that future planning can respond and adapt to any change in circumstances.

9. Appraisal of Cross-boundary Issues and Cumulative Effects

Cross-boundary Effects

- 9.1 The Interim SA outlines the potential cross-boundary effects of the plan on surrounding Boroughs. It was considered that the Core Strategy will have limited direct impact upon neighbouring areas due to the fact that no significant developments are proposed close to or straddling administrative boundaries.
- 9.2 Gravesham was the Borough seen as most likely to be affected by the Medway Core Strategy, primarily due to the location of Lodge Hill nearer to its administrative boundary. A noticeable impact will be an increased level of traffic across the Peninsula, including increased use of Higham station by commuters to London, bus services and a general increase in traffic and congestion from this area. However it is noted that mitigation measures are proposed for Lodge Hill to address this.
- 9.3 The other noticeable impact described in the SA was a draw of people from nearby settlements travelling to the shops and employment at Lodge Hill, however it is noted that a retail report prepared by Land Securities has shown that the quantum of retail floorspace proposed would not create an unacceptable impact.
- 9.4 The Interim SA has included further suggestions for how any impacts may be minimised, including through a continuation of good cross-boundary working that is already underway, for example on green infrastructure and biodiversity.

Cumulative Effects

- 9.5 In addition to the appraisal of individual policies undertaken in SA/SEA, the SEA Directive requires consideration of the overall effects of the plan, including the secondary, synergistic and cumulative effects of plan policies. This may include incremental effects that can have a small effect individually, but can accrue to have significant environmental effects.
- 9.6 In good practice SA/SEA, the analysis of cumulative effects should also consider the significant effects of the plan in-combination with the effects of other plans, policies and proposals.
- 9.7 This section summarises the key effects, including the cumulative effects of the plan policies (known as the intra-plan effects) and the combined effects with other relevant plans and projects (known as the inter-plan effects).

Cumulative Effect of Plan Policies (Intra-Plan Effects)

- 9.8 To assist in considering the overall effects of policies within the plan when assessed against the different SA Framework objectives, a summary has been prepared, illustrating how each policy has performed against each SA Objective. This is provided in the following table:

Intra-plan effects: Cumulative summary of Core Strategy policies.

Policy	SA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	biodiversity	air	water	flooding	Ecological footprint	housing	Previously developed land	health	Poverty/social exclusion	crime	accessibility	Material assets and culture	Renewable energy	transport	Education and workforce	Economy
CS1: Regenerating Medway	0	-	-	0	0	✓	✓	+	+	0	+	0	0	-	✓	✓
CS2: Quality and Sustainable Design	0	0	+	0	+	✓	✓	0	+	0	0	+	0	+	✓	✓
CS3: Mitigation and Adaptation to Climate Change	+	0	+	0	✓	+	0	0	0	0	✓	0	0	0	0	0
CS4: Energy Efficiency and Renewable Energy	0	0	0	0	✓	0	0	0	+	0	+	0	✓	0	✓	✓
CS5: Development and Flood Risk	✓	0	0	✓	✓	+	0	0	+	0	+	0	+	0	0	0
CS6: Preservation and enhancement of Natural Assets	✓	0	0	+	✓	0	0	+	0	0	0	✓	0	0	0	0
CS7: Countryside and Landscape	+	0	0	0	0	0	0	+	0	0	+	+	0	+	0	0
CS8: Open Space, Green Grid and Public Realm	0	0	0	0	0	0	0	✓	✓	✓	✓	+	0	+	0	0
CS9: Health and Social Infrastructure	0	+	+	0	0	0	+	✓	✓	0	✓	✓	0	0	0	+
CS10: Sport and Recreation	-	0	0	0	0	0	✓	✓	0	0	✓	✓	0	0	+	+
CS11: Culture and Leisure	0	0	0	0	0	+	✓	0	+	0	0	✓	0	0	✓	✓
CS12: Heritage Assets	0	0	0	0	0	+	✓	0	+	0	0	✓	0	0	✓	✓
CS13: Housing Provision and Distribution	-	-	-	0	-	✓	✓	+	✓	+	✓	0	+	-	+	+
CS14: Affordable Housing	0	0	0	0	-	✓	✓	+	✓	+	✓	0	0	0	+	+
CS15: Housing and Other Housing Requirements	0	0	0	0	-	✓	✓	✓	✓	+	✓	0	✓	0	+	+
CS16: Gypsies, Travellers and Travelling Showpeople	0	0	0	0	-	✓	✓	0	✓	0	✓	0	0	0	+	+
CS17: Economic Strategy	-	-	-	0	-	✓	✓	✓	✓	0	✓	+	✓	-	✓	✓

Policy	SA Objective															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	biodiversity	air	water	flooding	Ecological footprint	housing	Previously developed land	health	Poverty/social exclusion	crime	accessibility	Material assets and culture	Renewable energy	transport	Education and workforce	Economy
CS18:Tourism	0	0	0	0	0	+	✓	0	+	0	0	+	+	-	✓	✓
CS19:Retail and Town Centres	0	0	0	0	0	+	✓	0	✓	0	✓	0	0	-	✓	✓
CS20: Education and Personal Development	+	0	0	0	0	+	✓	+	✓	0	0	+	+	-	✓	✓
CS21: Conventional Energy	0	-	0	0	0	✓	✓	0	✓	0	✓	0	✓	-	✓	✓
CS22: Minerals Provision	-	0	-	0	0	+	0	0	✓	0	0	0	+	-	✓	✓
CS23: Waste Management	0	0	0	0	✓	+	✓	0	+	0	+	0	✓	-	✓	✓
CS25: The River Medway	✓	0	✓	0	✓	0	0	+	0	0	+	✓	0	+	+	+
CS26: Strood	-	-	-	0	-	✓	✓	0	+	+	0	+	0	0	✓	✓
CS 27: Rochester	-	-	-	0	0	+	✓	0	0	0	0	+	0	+	✓	✓
CS28: Chatham	-	-	-	0	+	+	✓	0	✓	✓	✓	0	0	0	✓	✓
CS29: Gillingham	-	-	-	0	+	0	✓	0	+	0	0	+	0	0	✓	✓
CS30: Rainham	-	-	-	0	+	0	✓	+	+	0	+	0	0	0	0	✓
CS31: Hoo Peninsula and the Isle of Grain	-	-	-	0	0	+	✓	+	+	+	✓	0	0	0	✓	✓
CS32: Medway Valley	-	-	-	0	0	+	✓	+	+	0	✓	+	0	0	+	✓
CS33: Lodge Hill	-	-	-	+	+	✓	✓	0	✓	0	+	✓	✓	+	✓	✓
CS34: Implementation of the Core Strategy	0	0	0	0	0	✓	0	0	0	0	✓	0	0	0	0	✓
CS35: Developer Contributions	0	0	0	0	0	0	0	0	0	0	✓	0	0	0	0	0

Significant Positive Cumulative Effects of Plan Policies (Intra-Plan Effects)

9.9 The SA found that the majority of policies were found to have significant positive sustainability benefits for Medway. The following table summarises the significant positive effects identified:

Significant positive effects of the emerging Core Strategy

Key relevant indicator:	Positive effects identified:
Housing	The plan will have significant positive effects through meeting the housing needs of Medway, particularly affordable housing needs, and in locations where housing is most needed.
Economy and employment	The plan will have positive effects for the economic regeneration of existing centres. Development at Lodge Hill will provide additional employment space for higher value jobs to be accommodated.
Water and Soil	The plan maximises the efficient use of land through focussing re-investment/ development on underused, derelict and/ or previously developed land.
Community (crime, income and deprivation)	The plan recognises the needs of Medway's disabled and ageing population and seeks to accommodate those needs, ensuring that housing developments are well designed and are capable of adaptation to accommodate lifestyle changes and to achieve the Lifetime Homes Standard.
Community (crime, income and deprivation)	The plan will have significant positive effects on community cohesion, social inclusion and poverty reduction through the redevelopment of disused areas, which includes the provision of local employment as well as community services and facilities.
Biodiversity, open space and landscape	Redevelopment of underused, derelict and/ or previously developed land will have positive effects on townscape. There is a string emphasis on the preservation and enhancement of natural assets and the provision of green infrastructure.

Significant negative cumulative effects of plan policies (Intra-plan effects)

9.10 Alongside the many positive effects of the plan, significant negative sustainability effects were also identified. These primarily relate to the increased residential and employment development proposed in the plan. Negative effects identified are summarised below:

Significant negative effects of the emerging Core Strategy

Key relevant SA Objective:	Negative Effects identified:
Air Quality; Biodiversity, open space and landscape; Water and soil and Waste	<p>The cumulative effects of increased development, including housing and employment development include:</p> <ul style="list-style-type: none"> ■ increased air pollution (local and regional); ■ direct land-take; ■ pressures on water resources and water quality; ■ increased noise and light pollution, particularly from traffic; ■ increased waste production; ■ loss of tranquillity ; ■ implications for human health (e.g. from increased pollution); and ■ incremental effects on landscape and townscapes.
Climate Change mitigation and adaptation	<p>An increase in Medway’s contribution to greenhouse gas production- this is inevitable given the amount of new development proposed, and includes factors such as increased transportation costs, embodied energy in construction materials and increased energy use from new housing and employment development.</p>

Interactions with other relevant plans and projects (Inter-plan effects)

- 9.11 In considering the in-combination effects of other plans and projects, priority has been given to key documents that affect planning and development in Medway and neighbouring authorities. Documents considered included neighbouring authorities LDFs, transport and waste and minerals plans. Projects considered included significant proposals such as the Thames Estuary 2100 Proposal. It is noted that this is not an exhaustive list of policies or projects; however its focus on the most influential documents has allowed a strategic level appraisal of Inter-Plan effects.
- 9.12 The results of this analysis illustrate a range of positive and negative effects for Medway and the wider environment. Positive effects relate primarily to social and economic benefits: an increase in affordable housing, enhanced infrastructure, including community facilities, enhanced employment and economic opportunities, and improved access to services, employment and facilities.
- 9.13 Negative effects identified from the inter-plan analysis relate to the cumulative and incremental effects of development: noise, air, light and water pollution, incremental effects on biodiversity, increased waste production and an increase in greenhouse gas emissions.

- 9.14 In preparing plan policies, Medway Council has already sought to mitigate many of these negative effects and is commended for the work undertaken to date. It is also recognised that some mitigation measures are more appropriately dealt with at lower tiers of plan-making, for example in Development Management Policies. Such matters should be addressed within other Development Plan Documents, through the development management process, or future iterations of the Core Strategy, as appropriate.

Significant Inter-Plan Cumulative Effects

Plans, programmes or projects	Significant combined effects of Medway's Core Strategy with other plans, projects or policies
Neighbouring LDFs (Dartford, Gravesham, Swale, Maidstone and Tonbridge and Malling).	Positive
	The housing allocations for Medway when combined with those in neighbouring authorities will have a positive cumulative effect in meeting housing demand, particularly for affordable housing. There is also the potential for positive cumulative effects for the economy and employment through regeneration of existing centres and provision of new employment space. This along with the provision of community services and facilities will have the potential for indirect positive cumulative effects on communities through increased employment opportunities and social inclusion.
	Negative
	When combined with that in neighbouring authorities the development proposed in Medway will have a negative cumulative effect on air quality and water through increased atmospheric emissions, water abstraction and water pollution (surface water runoff and consented discharges). These effects along with increased levels of disturbance (recreational activity, noise and light pollution) have the potential for cumulative negative effects on biodiversity. Given the level of development proposed, it is inevitable that there will also be cumulative negative effects on climate change through an increase in greenhouse gas emissions from increased transportation costs, embodied energy in construction materials and additional energy use from new housing and employment. The level of proposed development will also lead to increased production of household and commercial waste from demolition and construction.
Local Transport Plans (Kent County Council and Medway Council)	Positive
	Positive cumulative effects through enhancing accessibility in the area as a result of improvements to local roads and support for sustainable transport, walking and cycling.
Minerals and Waste Development Frameworks (Kent County Council)	Positive
	Potential for cumulative positive effects through increased use of sustainable waste management practices in the region, moving waste up the waste hierarchy.
Thames Estuary 2100	Positive

Plan (TE2100)	The Thames Estuary 2100 Plan proposes the creation of intertidal and freshwater habitats in Medway to compensate for the valuable habitats being lost elsewhere due to flood defences. This has the potential for positive effects on biodiversity within Medway and could help to mitigate the negative effects identified with regard to the Core Strategy. There is also the potential for positive effects on climate change, human health and the economy as the CS (Policy CS5) and TE2100 seek to reduce the risk of flooding in the area.
The Medway Estuary and Swale Shoreline Management Plan (SMP) and Isle of Grain to South Foreland SMP	<p>Positive</p> <p>Potential for positive effects on climate change, human health and the economy through managing flood risk in the area.</p>
	<p>Negative</p> <p>Potential for negative effects on biodiversity as a result of Managed Realignment and Hold the Line Policies, which will result in freshwater habitat displacement and intertidal habitat growth.</p>
Medway Draft Cultural Strategy	<p>Positive</p> <p>Together the CS combined with the Culture Strategy seek to protect and improve accessibility to cultural heritage as well as contribute to economic prosperity. Potential for positive effects on cultural heritage, accessibility and the economy.</p>

10. Monitoring of the Sustainability Objectives

- 10.1 The aim of SA monitoring is to set a framework to show whether progress is being made towards sustainable development throughout the Core Strategy's plan period.
- 10.2 The SA framework that was established through the Scoping Report as well as setting a number of objectives also set a number of indicators to be used to help in terms of assessing trends and most importantly to then form the basis for a monitoring framework. This was expanded on in the Interim SA report and will be updated and provided in the final SA report.

11. Conclusion and Summary

- 11.1 This SA report has sought to update previous SA work undertaken on the Core Strategy, in particular the Interim SA of the Pre-Publication Core Strategy. The report has summarised the process and findings of the SA to date and has updated those findings to account for changes made between the Pre-Publication Core Strategy and the current Publication Draft Core Strategy. It has also included additional information in relation to cumulative effects arising from the plan.
- 11.2 The SA has found that the Medway Core Strategy will make a significant contribution to sustainability in Medway, with a particularly strong focus on meeting housing, community and economic needs and on enhancing and preserving Medway's unique environment.
- 11.3 The key negative effects arising from the Core Strategy are due to the environmental effects resulting from the increased housing and employment development in Medway, including when considered alongside neighbouring plans and in the wider Gateway. Throughout the process the SA has made recommendations that have been incorporated within the plan to mitigate these negative effects and enhance the positive effects.
- 11.4 The final SA Report will detail the SA process in full and will form part of the evidence base during the Examination of the Core Strategy, accompanying the adopted DPD when it is published.

Appendix 1: Summary of Responses to SA Consultation

Comments received in response to the Pre-Publication Draft Core Strategy Consultation November 2010.

Interim SA	Consultee Comments	Response
CB Richard Ellis on behalf of Land Securities Group Plc (09/12/10)		
General	Land Securities seeks clarification on the status of the consultation document - is the intention for it to be a combined Sustainability Appraisal and Strategic Environmental Assessment? If so, the title of the document and its content should be amended as appropriate. Furthermore, it is considered that where relevant, compliance with the SEA Directive should be highlighted at appropriate points within the document so that it is clear that the requirements of the SEA Directive have been adequately addressed.	The title of this Report now identifies that the SA incorporates SEA. Paragraph 2.4 in this Report provides clarification on the incorporation of SEA. Compliance with requirements of the SEA Directive will be highlighted in the final SA Report that will accompany the draft submission Core Strategy.
Chapter 2	Chapter 2 of the ISA sets out, amongst other things, the consultation that has already taken place leading up to the publication of this iteration of the ISA for consultation. It is considered that, for reasons of best practice and transparency, the consultation process should be fully documented within the ISA, together with a summary of/commentary on the consultation comments that have been taken into account in producing this consultation document.	Consultation responses to the Interim SA are included in this Report and will be summarised in the final SA Report.
Para 3.1	The appraisal methodology in paragraph 3.1 identifies the guidance followed for the assessment. It is noted that the guidance referred to is the ODPM (2005) "A Practical Guide to the Strategic Assessment Directive". We understand more recent guidance has been prepared by the Planning Advisory Service on managing the SA process for Local Development Frameworks (LDFs) (available at www.pas.gov.uk), which may be useful as the ISA evolves (dependent on whether it is to be progressed as a joint SA/SEA and therefore which regulations the document must comply with).	The updated guidance is now referred to in this Report.
Para 3.32	Paragraph 3.32 of the ISA notes that many town centre areas and main urban routes are now covered by Air Quality Management Areas (AQMAs) and that as the town	Noted, good air quality should be aspiration for all new development.

	centres are to be the focus of much future development a higher proportion of the resident population could consequently be living within areas of poor air quality. The text then goes on to note that all development will therefore need to take this fully into account to avoid a worsening situation. Land Securities queries whether this is an issue for all [our emphasis] development, given that the spatial vision within the Core Strategy seeks, inter alia, to allocate land for development outside existing town centres (for example the creation of a new settlement at Lodge Hill).	
Para 3.38	The importance of the preservation and appropriate management of designated biodiversity sites is the subject of paragraph 3.38. Land Securities agrees with the principle of preserving and managing areas that are important for biodiversity, however considers that this paragraph would benefit from being amended to recognise the approach within Draft Core Strategy Policy CS6, which provides the caveat that where a negative impact on recognised wildlife habitats or other biodiversity features cannot be avoided, environmental compensation should be sought.	Noted.
Para 3.45	Paragraph 3.45 and Paragraph 3.46 note that consideration has not yet been given to whether the Core Strategy objectives and the SA objectives are compatible in the context of implementation. Land Securities considers that it would be worth clarifying that this is something that will be included in the next iteration of the ISA, and that this exercise should be undertaken at this time. This would be prudent given PPS12's emphasis on deliverability in the Plan-making process, and having regard to the comment within Paragraph 3.46 that because no consideration has been given so far to the exact implementation possibilities none of the strategic objectives are currently entirely complimentary in terms of the SA objectives. Land Securities is also of the view that it would be helpful to provide a full definition of "implementation possibilities" within the ISA, so that it is clear exactly what is meant by this term.	Disagree - Appraisal of strategic objectives is purposely high-level. Implementation is dealt with where appropriate in the policy appraisal.
Para 4.22	Paragraph 4.22 of the ISA confirms that the main emphasis in terms of any potential alternative locations is their ability to meet additional [housing] requirements, not to replace urban sites. Land Securities considers this text would benefit from being re-worded so that it is aligned with the spatial strategy the Council is pursuing within Medway, and the importance placed on the redevelopment of the Lodge Hill site as part of the Council's strategic vision to deliver the necessary level of growth.	Noted, further detail on alternatives will be provided in the Final SA Report.
Para 4.24	Paragraph 4.24 confirms that over the longer term, Lodge Hill would make the greatest contribution overall towards achieving the sustainability objectives. The text then goes on to note specific harmful impacts that "could be anticipated" from the Lodge Hill development to air quality through biomass boilers, and an increased demand on	Noted and amended.

	<p>water supplies. Land Securities does not consider that the text regarding the "anticipated" harmful effects is necessary, as it is based on assumptions rather than evidence. With regard to air quality, the text assumes that biomass boilers would be incorporated into homes, whereas this is not the preferred heat energy strategy. Furthermore, in response to the assumption that an increased demand on water supplies will constitute a harmful impact, it is worthy of note that any growth will incur increased demand but with the concentration of the growth in one location the ability to improve the delivery network and primary infrastructure would be both contained and manageable. It is considered that dispersed growth would be much harder to support.</p>	
Paras 4.27 and 4.30	<p>We note there are a number of references to Lodge Hill as Chattenden within the text of Paragraphs 4.27 and 4.30 of the ISA. Land Securities considers, for consistency, that the site should be referred to as Lodge Hill throughout the document.</p>	Noted and amended.
Chapter 5	<p>Land Securities welcomes the introduction of a summary matrix of the Core Strategy policies, and considers this to be a helpful aid. However, it is noted that the Transport and Movement Chapter Matrix (Policy CS24) is missing from the summary matrix. Furthermore, the title of the matrix on page 21 reads "River Medway Chapter Matrix" however the policies relate to the Area Policies Chapter (which is then duplicated on page 22).</p>	Noted and amended.
Chapter 5	<p>Within the Area Policies Chapter Matrix on page 22, it is noted that the numbering of the policies is inconsistent with the Draft Core Strategy. Most notably, Lodge Hill is referred to as Policy CS31, when in fact it is Policy CS33 within the Pre-Publication Draft Core Strategy to which this ISA relates. It is therefore not possible to accurately interpret the matrix "scores" in relation to the Lodge Hill site, as it is unclear whether reference should be made to where Lodge Hill is noted within the matrix, or to Policy CS33.</p>	Noted and amended.
Paras 6.5 & 6.8	<p>Paragraph 6.5 of the consultation document discusses the air quality situation without the Core Strategy, however references a number of initiatives in the Third Local Transport Plan "which the Core Strategy will help implement". It is considered that this text would benefit from being revised to ensure it refers to the situation without the Core Strategy only.</p> <p>Paragraph 6.8 states that "Though Lodge Hill is intended as an exemplar of sustainability, it will intensify the use of the existing site and could increase substantially the number of people and cars located on and attracted to the Peninsula." Land Securities considers that as currently drafted, this text provides an unbalanced view. To rectify this, it is considered that reference to the sustainable transport measures</p>	Noted, to be addressed in final SA Report.

	required by the Lodge Hill Core Strategy Policy (CS33) could usefully be made here, including commentary on the policy requirement within CS33 for early provision of high quality and high frequency bus services, and measures to actively promote sustainable transport.	
Para 6.56	It is noted that Paragraph 6.56 states that Lodge Hill would place “some pressure on biodiversity”, and that “recreational pressures from the new population will have an effect on biodiversity”. It is considered that these references should be omitted from the document on the basis that they are unsubstantiated. Paragraph 6.66 of the draft SA explicitly recognises that “there is no strong evidence to suggest that there will be significantly greater recreational pressures on the area”. In the context of LDFs having to be fundamentally underpinned by a robust and credible evidence base, it is considered that assumptions such as the ones made with regard to recreational pressures should be removed from the text of the ISA.	There have been reported declines in the numbers of important bird species in the three north Kent Special Protection Areas (Thames Estuary and Marshes SPA, Medway Estuary and Marshes SPA and The Swale SPA), in particular Medway Estuary and Marshes SPA. Studies have been commissioned by the North Kent Environmental Planning Group to identify the causes of these declines, which may include recreational disturbance. Early findings of this work suggest that there may be a correlation between recreational disturbance and bird decline and that recreational visitors tend to be from within the local area.
Chapter 6	<p>The first bullet point of Paragraph 6.58 confirms that protecting and conserving existing designated sites is one of a series of critical sustainability issues in terms of biodiversity, open space and landscape. It is considered that where reference is made to “existing designated sites” there is a need to define the level of designation, in recognition of the statement within Paragraph 5.67 of the Draft Core Strategy which confirms that “In PPS7, the Government no longer accepts the need for local designations that may unduly restrict development and economic activity”. Draft Core Strategy Policy CS7 is also consistent with this approach, insofar as it states that the highest degree of protection should be afforded to sites of national and international importance.</p> <p>Paragraph 6.66 of the ISA notes that within Policies CS7, CS30, CS32 and CS33 there is a “mention of the fact that relevant schemes with partners will only be allowed if they show that a balance will be reached between access and the other uses of the</p>	Noted, to be addressed in final SA Report.

	<p>countryside". Land Securities would like to understand the reference to "partners" within the text, as it is not clear who is meant by this as currently drafted. Furthermore, Land Securities is of the view that the reference to only being allowed if a balance can be reached does not take sufficient account of all the other policy requirements and criteria. Finally, with regard to Paragraph 6.66, Land Securities considers that there may be a discrepancy with the Core Strategy policy references quoted. As identified in representations to Chapter 5 (Appraisal Summary) of the ISA, Lodge Hill has been included within the appraisal summary matrix in the ISA as Core Strategy Policy CS31 (when in fact it is CS33 in the Pre-Publication Draft Core Strategy) and it appears that this has filtered into the accompanying explanatory text. Land Securities considers that the Core Strategy policy references should be updated accordingly.</p> <p>The recommendation for the climate change mitigation and adaptation section of Chapter 6, set out in Paragraph 6.81, seeks the potential "tightening up" of some of the policy wording so that firmer weight is given to these elements when they are applied. Land Securities considers it to be vital that an appropriate level of flexibility is maintained within the wording of Core Strategy policies, in line with guidance in PPS12. It is particularly important in the evolving world of new technologies that sufficient flexibility is maintained to enable appropriate responses to climate change issues over the 15 year+ time horizon of the Core Strategy Plan period, as well as to take account of site-specific circumstances.</p>	
<p>Chapter 7</p>	<p>Paragraph 7.15 of the ISA relates to the Area Policies covering the 5 towns (CS26, CS27, CS28, CS29 and CS30), stating, amongst other things, that the importance of these towns is for access to services within the local population. It is considered that reference should also be made to the Lodge Hill site in this context, in its role as a new settlement. Draft Core Strategy Policy CS33 confirms that design solutions for Lodge Hill should have due regard to, inter alia, the need to create a well-defined "town centre" and associated neighbourhood centres serving not only the needs of the resident and working community, but also existing smaller settlements on the Hoo Peninsula, and in particular the existing settlement of Chattenden.</p> <p>Paragraph 7.54 explicitly recognises that a large proportion of the expected housing delivery will come from the Lodge Hill development, and that "given its importance there would be substantial concerns if there were any hindrances to it coming forward". Furthermore, Paragraph 7.55 notes that Lodge Hill will "make up the single greatest proportion of the expected housing of the area in the future." Land Securities</p>	<p>Noted, to be addressed in final SA Report.</p>

	<p>welcomes this recognition of Lodge Hill's importance to the Council's growth agenda.</p> <p>The recommendation within the ISA for the housing section of Chapter 7 (as set out in Paragraph 7.57) is that confirmation should be sought as early as possible as to the number of dwellings that will be delivered on the Lodge Hill site during the whole Plan period. In response to this, we note that Draft Core Strategy Policy CS33 states that approximately 5,000 new homes will be developed at Lodge Hill, of which around 4,600 will be completed within the Plan period. Land Securities supports the inclusion of these quanta of development within Policy CS33, as they have been informed by a thorough evidence base. By way of context, Land Securities appointed a consultant team to prepare a comprehensive suite of site-specific technical reports in respect of the Lodge Hill site. This body of information was informed by (inter alia) site investigation works and engagement with key stakeholders, to inform the identification of Lodge Hill as a Strategic Allocation within the Core Strategy, and consequently forms a component part of the evidence base that underpins the Pre-Publication Draft Core Strategy.</p> <p>The Lodge Hill-specific information reports are the result of fact-finding/research undertaken by Land Securities and its consultant team, to establish the "baseline" position with regard to each specialist topic area, which has then been fed into and informed the indicative masterplan for the site. This transparent process has enabled a realistic and achievable quantum of development to be planned for the site (i.e. approximately 5,000 dwellings in total; around 4,600 of which are expected to be completed within the Core Strategy Plan period).</p>	
<p>Chapter 8</p>	<p>Paragraph 8.11 of the ISA refers to "some small convenience and district centre scale possibilities" at Lodge Hill. It is considered that, if reference is being made to the fact that Lodge Hill will be a district centre (in PPS4 terms), this phrase could more appropriately be re-worded to read "convenience and comparison retail floorspace of a scale appropriate to the district centre".</p> <p>Paragraph 8.19 notes that Core Strategy Policies CS31-CS33 refer to strong vibrant economies for local people being supported, and that these would be expected to be in the rural-based sectors, such as agriculture, horticulture and woodland management or farm diversification. Land Securities queries whether it is the Council's intention to refer to the Lodge Hill site (Draft Core Strategy Policy CS33) as part of the discussion on rural-based sectors, or whether the policy numbering discrepancy issue</p>	<p>Noted, to be addressed in final SA Report.</p>

	<p>previously identified in these representations has meant that the Lodge Hill site (Policy CS33 in the Pre-Publication Draft Core Strategy) has been erroneously included within this discussion. If it is the Council's intention to refer to Lodge Hill in this context, it is considered that Paragraph 8.19 of the ISA should also reflect Policy CS33's aspiration to create a new focus on the Lodge Hill site for higher value economic activity in a Medway context, in order to be consistent with the wording of Draft Policy CS33.</p> <p>Draft Core Strategy Policy CS19 is discussed in Paragraph 8.20 of the ISA. This paragraph makes reference to "two smaller scale food stores". Please refer to Land Securities' response to Policy CS19 of the Pre-Publication Draft Core Strategy for detailed comments on the scale of foodstores proposed (i.e. that they should be of a scale appropriate to their status in the retail hierarchy).</p> <p>Paragraph 8.25 of the ISA recommends that the employment provision at Lodge Hill should be carefully considered to, amongst other things, "ensure that it does not draw people from the other nearby settlements on the Peninsula, which would be harmful to their vitality." Land Securities is of the view that this phrase should be omitted from the ISA, on the basis that Draft Core Strategy Policy CS33 makes it clear that the employment opportunities sought on Lodge Hill are to create a new focus for higher value economic activity in a <i>Medway-wide</i> [our emphasis] context.</p>	
Chapter 9	<p>Chapter 9 of the ISA summarises that the main impacts will, to a greater and lesser extent, mainly affect Gravesham, due to the location of Lodge Hill nearer to its administrative boundary. Paragraph 9.2 speculates that an increased level of traffic and congestion (and an associated slight effect on air quality) may be expected. Land Securities considers that that these statements do not sufficiently take into account the sustainable transport initiatives embedded into the text of Draft Core Strategy Policy CS33, including the early provision of high quality and high frequency bus services including bus priority measures on the highway network, and considers that Paragraph 9.2 of the ISA should be amended to reflect these.</p>	Noted and amended.
Chapter 9	<p>Paragraph 9.3 states that the other noticeable impact "will be" a draw of people from nearby settlements travelling to the shops at Lodge Hill. In response to this, Land Securities firstly considers that "will be" should be replaced with "could" as there is no certainty this will happen. In addition, Land Securities notes that the wording of Draft Policy CS33 specifically includes a policy requirement that there is a need to create a well defined town centre and associated centres at Lodge Hill to serve not only the needs of the residents and workers, but also existing smaller settlements. In addition,</p>	Noted and amended.

	<p>one of the principles for delivering the vision of the site, as noted within Paragraph 11.94 of the Draft Core Strategy, is that it is “well-connected”, both within the new settlement and between Lodge Hill and surrounding communities. Furthermore, a Retail Report was undertaken as part of the comprehensive suite of draft site-specific information reports prepared by Land Securities and its consultant team to inform and underpin the emerging Core Strategy. This report confirms that the quantum of retail floorspace that has fed into the indicative masterplan for the site is a response to an identified leakage of expenditure from the catchment area, and demonstrates that the quantum tested would not create an unacceptable impact upon existing designated centres. Land Securities consequently considers that the level of retail floorspace identified is based on robust and credible evidence and is therefore appropriate. For all of these reasons, it is considered that the next iteration of the ISA should recognise the wider objectives for the Lodge Hill site, and deal with any potential impact in this context.</p>	
Chapter 9	<p>Paragraph 9.3 of the ISA goes on to note that the level of employment provision at Lodge Hill is only expected to accommodate workers from within the settlement and immediate locality, and that the employment opportunities it creates could draw people from elsewhere. As part of creating a sustainable community, Land Securities considers it is important to provide employment opportunities for local residents, however the text of Draft Core Strategy Policy CS33 seeks the use of the site for higher value economic activity for the whole of Medway. It is therefore considered that the employment opportunities at Lodge Hill are responding to an identified need for higher value economic activities and Paragraph 9.3 of the ISA should be amended to recognise this.</p>	Noted.
Chapter 9	<p>Land Securities welcomes the inclusion within Chapter 9 of the ISA of the written outline within Paragraphs 9.4-9.8 of the way the impacts identified may be minimised and lessened. With regard to Paragraph 9.6, which states that any impact (in a retail sense) should reduce if Lodge Hill develops as a new service centre, Land Securities notes that the inclusion of retail floorspace is critical to the proper functioning of the centre and the creation of a sustainable community, and is of the view that this should be incorporated within the text of Paragraph 9.6.</p>	Noted.
Chapter 9	<p>Paragraph 9.8 details a number of actions to minimise potential increases in traffic. It is considered that reference to the sustainable transport measures required by Draft Policy CS33 (Lodge Hill) could usefully be added here.</p>	Noted.
Chapter 10	<p>Paragraph 10.5 of the ISA confirms that the length of the Core Strategy’s post-adoption Plan period is 15 years. It is our understanding that it will be slightly longer, if the Core</p>	Noted.

	Strategy is adopted in 2012 (as currently planned) and the Plan period runs to 2028, and that this should be reflected within the text of Paragraph 10.5.	
Chapter 11	Paragraph 11.3 refers to the fact that "The Core Strategy will ensure that a reduction of demand occurs from physical building that would not occur elsewhere". The nature of the demand is not clear from this text, and therefore Land Securities considers Paragraph 11.3 should be updated to provide clarification.	Noted.
Chapter 11	In line with comments elsewhere within these representations, Land Securities is of the view that the ISA should not refer to the occurrence of an increase in recreational pressure without sufficient evidence to substantiate such comments. For this reason, Land Securities considers that the reference within Paragraph 11.4 to the increase in recreational pressure that "will occur" should be replaced by "may occur" until such time as robust evidence indicates to the contrary.	Refer to previous response on this issue.
Chapter 11	By way of a general observation on the ISA, it is noted that there is at present no section dealing with the cumulative effects of development. Land Securities considers that this should be included within the next iteration of the ISA.	Agreed and included within Chapter 9 of this Report.