



Medway Council Core Strategy



Sustainability Appraisal (incorporating SEA)



Medway Core Strategy Submission Draft



December 2011



Sustainability Appraisal (incorporating SEA) - Medway Core Strategy Submission Draft

Medway Council Core Strategy

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Non- Technical Summary

INTRODUCTION

- 0.1 This is the summary of the Sustainability Appraisal Report for Medway's Local Development Framework (LDF) Core Strategy (draft Submission Document). It describes how the Sustainability Appraisal (SA) process was used to assist in planning for the development and the use of land, as required by planning legislation and Government guidance. The SA assists sustainable development through an ongoing dialogue and assessment during the preparation of LDF Development Planning Documents (DPDs), and considers the implications of social, economic and environmental demands on land use planning.

THE LOCAL DEVELOPMENT FRAMEWORK

- 0.2 The LDF is the planning system introduced by the Planning & Compulsory Purchase Act (2004) and it takes the form of a portfolio of documents including DPDs (Core Strategy, Site Specific Allocations and Area Action Plans), the Statement of Community Involvement, and an Annual Monitoring Report. The Core Strategy sets the LDF's long-term Vision and Strategic Objectives for development planning and it considers the options available through the planning system to the Council and communities in the Medway area. The draft Submission Document sets out the Council's approach, intended to guide future change and development in the area. The Council is also preparing a Site Allocations and Development Management DPD, and a Development Brief for Lodge Hill, Chattendon.

SUSTAINABILITY APPRAISAL & STRATEGIC ENVIRONMENTAL ASSESSMENT

- 0.3 Planning legislation requires that the LDF is subject to a SA, a systematic process that is designed to evaluate the predicted social, economic and environmental effects of development planning. European and UK legislation require that the LDF is also subject to a Strategic Environmental Assessment (SEA), a process that considers the effects of development planning on the environment. Government guidance advises that these two processes should be carried out together and outlines a number of stages of SA work that need to be carried out as the LDF is being prepared:

Stage A: Setting Context & Scope

Stage B: Developing Options & Assessing Effects

Stage C: Preparing the SA Report

Stage D: Consulting on the Plan & the SA

Stage E: Monitoring Implementation of the Plan

- 0.4 The SA/SEA of the Medway Core Strategy Draft Submission Document has been prepared in accordance with these requirements for SA/SEA.

THE CHARACTER OF MEDWAY

- 0.5 Medway is located 30 miles outside of 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.

SA SCOPING & ISSUES FOR SUSTAINABILITY

- 0.6 During 2008 a scoping process for Medway was carried out by Council Officers to help ensure that the SA covered key sustainability issues relevant to Medway. Plans and programmes were reviewed and information was collated relating to the current and predicted social, environmental and economic characteristics of the areas. From these studies, the key sustainability issues and opportunities for the LDF and the SA were identified.

SA Framework

- 0.7 An SA Framework was compiled and included SA Objectives that aim to resolve the issues and problems identified; these are used to test the draft DPDs as they are being prepared. This was included in the SA Scoping Report that was sent to statutory consultees and was refined in accordance with comments received. The SA objectives are listed in the framework below:

Table 0.1: The SA Framework

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

SA OF THE CORE STRATEGY

- 0.8 Each stage of the preparation of the Core Strategy was appraised systematically using the SA Objectives. Where significant adverse effects, including environmental effects, have been predicted, the SA sought where possible to identify means of offsetting these effects. Where it was considered that there were opportunities to enhance the sustainability of the proposals, recommendations were made. The appraisal recognised 5 categories of predicted effects, as illustrated in the following key.

Table 0.2: The Appraisal key

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

Appraisal of the Options (SEA Alternatives)

- 0.9 The SEA Directive requires the plan-making body to identify, describe and evaluate the reasonable alternatives to the plan, taking into account the objectives and the geographical scope of the plan or programme. To accompany the July 2009 Core Strategy Issues and Options Report published by the Council, an Initial Sustainability Appraisal was undertaken by Council Officers that considered the sustainability of 5 strategic options.

Appraisal of the LDF Core Strategy Pre-Publication Document November 2010

- 0.10 The development of the Issues and Options, and the subsequent appraisals undertaken, informed the development of the Pre-Publication Core Strategy. This, in turn was subject to detailed SA by Council Officers, and an Interim SA Report was published for consultation in November 2010.

Appraisal of the LDF Core Strategy Publication Document October 2011

- 0.11 Enfusion was contracted to undertake and update the Interim Sustainability Appraisal to accompany the Publication Document on consultation in October 2010. This appraisal updated the previous Interim SA to account for changes made to the document as a result of consultation, the SA and the Habitats Regulations Assessment (HRA) being undertaken by Enfusion in consultation with the North Kent Environment and Planning Group.

Production of the SA Report to accompany the LDF Core Strategy Draft Submission Document

- 0.12 The emerging draft Submission Document was developed in late 2011 to account for changes as a result of consultation, Sustainability Appraisal and the HRA. This final SA report was produced to document the SA process and provide a summary of the SA findings.

Uncertainties

- 0.13 Throughout the development of the draft Submission Document and the Sustainability Appraisal 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 in the appraisal matrices, where applicable.

Significant effects identified

- 0.14 The majority of policies were found to have significant positive sustainability benefits. The following table summarises the key positive effects identified:

Table 0.3: 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 (equalities)	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 strong 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)

0.15 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:

Table 9.3: 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 biodiversity from increased recreational disturbance & urbanisation; ▪ 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	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.

Mitigation and enhancement recommendations

- 0.16 An important role of the SA process is to provide recommendations for the mitigation of negative effects and enhancement of the positive effects identified in the appraisal process. These can then be carried forward in the remainder of the plan-making process and can include further recommendations for other development plan documents (for example Area Action Plans) and for processes including development control and site master planning.
- 0.17 Medway Council has sought, throughout the plan-making process to mitigate the negative effects of development and maximise the opportunities presented, and the draft Submission DPD reflects that commitment. The SA and HRA processes made recommendations throughout the plan's development, which have been considered and where possible, incorporated by the Council.

Monitoring the Implementation of the LDF

- 0.18 Local planning authorities are required to produce Annual Monitoring Reports including indicators and targets against which the progress of the Local Development Framework can be measured. There is also a requirement to monitor the predictions made in the SA and Government advises Councils to prepare a Monitoring Strategy that incorporates the needs of the LDF and the SA. Medway Council is preparing a monitoring strategy that will incorporate the recommendations from this SA.

CONCLUSIONS AND NEXT STEPS

- 0.19 The SA of the Core Strategy Submission Document has appraised the effects of individual policies, as well as the overall effect of the plan, including cumulative and incremental effects. The SA has found that the emerging Medway LDF will make a significant contribution to sustainability in the District, with a particularly strong focus on regeneration to meet social and affordable housing needs, enhancing accessibility and protecting the natural environment. The key negative effects identified relate to increased housing and employment development overall, with uncertainty around effects on air quality and increased pressures on water resources and biodiversity. The SA has sought to make further recommendations to assist Council in mitigating the negative effects and enhancing the positive opportunities of this development for the Medway. These recommendations have been considered by the Council and incorporated in the final document, where possible.
- 0.20 This SA report, alongside consultation responses received will form part of the evidence base during the Examination of the Core Strategy and will accompany the adopted DPD when it is published. If any further significant changes are made to the plan the SA Report will be updated accordingly.

1. Introduction

Purpose of the SA and the SA Report

- 1.1 The purpose of Sustainability Appraisal (SA) is to promote sustainable development through the integration of environmental, social and economic considerations in the preparation of Local Development Documents (LDDs). This requirement is set out in Section 39 (2) of the Planning and Compulsory Purchase Act, 2004 and Planning Policy Statement 12: Local Spatial Planning. Local Development Documents must also be subject to Strategic Environmental Assessment¹² (SEA) and Government advises that an integrated approach is adopted so that the SA process incorporates the SEA requirements.
- 1.2 This is the SA Report that documents the Sustainability Appraisal/Strategic Environmental Assessment processes for the Medway Council Core Strategy Development Planning Document (DPD): Submission Document. The Sustainability Appraisal Framework discussed in Section 3 of this SA Report indicates the relationship between the SA and the SEA; and compliance with the SEA Regulations is signposted below in this section and detailed in Appendix I. This SA Report is being published for consultation with the Core Strategy DPD: Submission Document in accordance with SEA Regulations and SA Guidance.

Sustainability Appraisal

- 1.3 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.
- 1.4 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.
 - An Update to the Sustainability Appraisal was published in August 2011, alongside the Publication Draft Core Strategy.

¹ EU Directive 2001/42/EC

² Environmental Assessment of Plans and Programmes Regulations 2004

- 1.5 These past reports are available on Medway Council's website at:
<http://www.medway.gov.uk/environmentandplanning/developmentplan/localdevelopmentframework/sustainabilityappraisal.aspx>
- 1.6 This report is structured as follows:
- Section 1: Introduction.
 - Section 2: Short background section summarises the SA process.
 - Section 3: The methodology used throughout the process is described.
 - Section 4: Summarises the approach taken to the assessment of alternatives.
 - Section 5: Provides a summary of the SA findings, incorporating changes made since the publication draft Core Strategy.
 - Section 6-8: Provides a summary of the SA findings to date, considers changes made through the process and summarise the effects for Environmental (section 6), Social (section 7) and Economic (Section 8) topics.
 - Section 9: Includes a summary of transboundary and 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 of 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 Medway Core Strategy sets out how the Council sees Medway developing over the period up to 2028. When adopted, the Core Strategy will guide all major development decisions and investment plans. It sets out the overall vision and strategy for the area and will guide the development of further documents in Medway's Local Development Framework, including Allocations and Other Development Management Policies Development Plan Documents (DPDs) and Supplementary Planning Documents (SPDs).
- 2.3 The Core Strategy sets out the context, options considered, vision and objectives and draft policies based around the following themes:
- Cross Cutting Themes;
 - Housing;
 - Economic Development;
 - Energy Waste and Minerals;
 - Transport and Movement;
 - The River Medway, and
 - Area policies.
- 2.4 The spatial Vision for Medway, as set out in the Core Strategy is provided below:

Spatial Vision for Medway:

By 2028 Medway will have experienced major change. Chatham will be transformed into a city centre for Medway that is also of regional significance. It will be a focus for shopping, leisure and cultural activity and a growing employment location, founded on its first class accessibility, city scale services and associated Higher and Further Education Centre of Excellence. The urban waterfront (north bank: Temple Waterfront to Strood Waterfront; south bank: Rochester Riverside to Gillingham Waterfront) will have been similarly transformed, with mixed-use developments of the highest quality linking the town centres and capitalising on the exceptional setting provided by the river Medway. The established district centres will be the focus for local community life and services, noted for their friendly and high quality environments. Rochester will continue to be recognised as a tourist destination, linked to the many attractions along the urban waterfront. More widely Medway will be recognised as a year round tourist destination with a wide range of quality accommodation, facilities and attractions that celebrate its many historic and natural assets. Easy movement within the urban area will have been achieved through intelligent management of the highway network and parking provision, a network of quality bus corridors linked to park and ride services and high quality

interchange facilities. Movement into and out of the area will have benefited from radically improved rail stations at Strood, Rochester, Chatham and Gillingham. Medway's economy will have grown substantially through the provision of higher value activities and jobs. This will have been achieved by:

- a. Closely aligning skills with the needs of employers and improved levels of educational attainment
- b. Capitalising on the centre of excellence created by our four universities and further education college
- c. Being noted as a location for its communications infrastructure (high speed broadband etc.)
- d. The implementation of reinvestment strategies for each of the established employment areas
- e. Grain, Kingsnorth and Lodge Hill as locations for environmental technologies and building products/construction, amongst other activities and Rochester Airfield as a technology and knowledge hub
- f. Chatham, Gillingham and Strood, along with the major waterfront regeneration sites, as a focus for cultural industries and new office based employment opportunities.

Around 17,930 new homes will have been provided over the period since 2006 through the successful development of the identified waterfront and other urban area development opportunities, plus the new freestanding community at Lodge Hill. Medway will be noted for its high standards of design, fully reflecting sustainability principles and the challenge of climate change through active mitigation and adaptation strategies. This will include being recognised for the way in which its rich historic legacy, including the proposed World Heritage Site, founded on the former Dockyard and its defences, is valued and promoted. Our rural areas will be celebrated for their rich natural assets, contribution to food security and enhanced village environments. The new settlement at Lodge Hill will have been substantially completed and recognised as a beacon of best practice in terms of its design and sustainability. It will provide a new focus for services on the Hoo Peninsula, while retaining the essentially rural and locally distinctive character of the area and relating sensitively to nearby villages. The extensive and numerous inner urban and suburban communities will be noted for their greenspaces and thriving neighbourhood centres providing local access to services through community hubs. Deprivation will have been greatly reduced through effective intervention strategies for target neighbourhoods and the development of local opportunities in line with the development of sustainable neighbourhoods. The area will be recognised for the way in which everyone has benefited from the large-scale physical regeneration and the way in which change has reflected the social, economic and environmental needs of the area. Healthy lifestyles will have been actively promoted through intelligent design, enhanced opportunities for sport and recreation and the promotion of walking and cycling. The River will be celebrated as the dominant and unifying geographical feature of the area through enhanced riverside walks and sensitive balancing of its commercial, leisure and environmental potential. The area will be widely recognised for its contributions to the nation's energy infrastructure, its port capacity and its gateway function for the importation of minerals and other materials.

- 2.5 In taking this vision forward the Core Strategy outlines the following strategic objectives to guide development and other planning decisions:

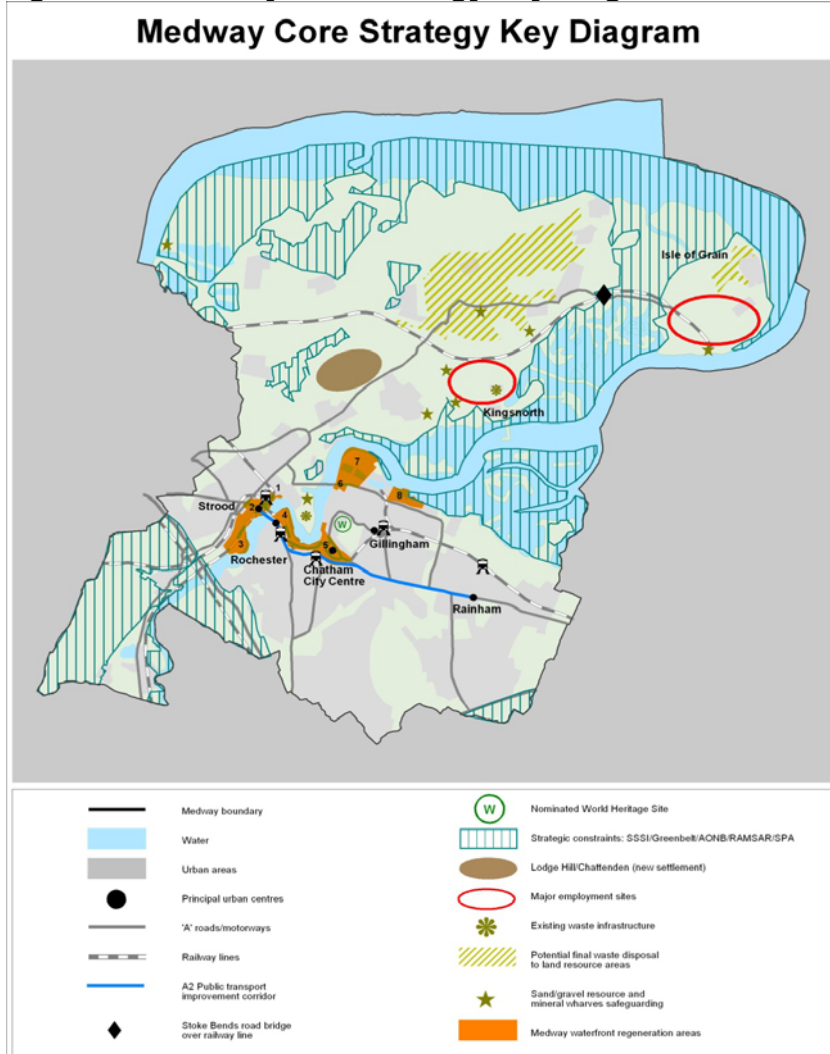
Core Strategy Strategic Objectives

1. To effectively realise Medway's role within the Thames Gateway and associated growth requirements primarily through effective physical regeneration, the reuse of previously developed land and the protection and enhancement of the area's many natural and heritage assets.
2. To develop Chatham as a city centre of regional significance with its role complemented by thriving and attractive traditional town centres in Strood, Rochester, Gillingham and Rainham together with a network of strong neighbourhood centres serving local communities.
3. To substantially improve the performance of the local economy, in particular by nurturing higher value activities and reducing the current reliance on out commuting.
4. To focus economic and employment growth in Chatham Centre, within the major mixed use regeneration sites, through re-investment within the established employment areas and at Rochester Airfield, Lodge Hill, Kingsnorth and Grain.
5. To maximise the development opportunities associated with the four Universities and Further Education College to create a centre of excellence of national significance.
6. To radically improve the quality of the townscape and public realm within the central urban area and along the urban waterfront.
7. To boost the range and quality of tourist accommodation and positively promote visitor destinations.
8. To significantly reduce deprivation in Medway, including through the implementation of tailored strategies for target neighbourhoods and the development of a network of strong neighbourhood centres, providing a range of local services and acting as community hubs.
9. To ensure that there is sufficient housing to meet people's needs by providing for a range, mix, type and affordability of housing in locations that contribute to the regeneration and sustainability of the area.
10. To provide for the transport needs of the population through the provision of enhanced public transport facilities, proactive management of the highway network and improved facilities for walking and cycling.
11. To enhance the quality of life of local people through the promotion of healthier lifestyles and the provision of improved cultural, sporting, leisure and tourism facilities, including along the river Medway.
12. To nurture Medway's rural areas and economy, including through village improvement projects, enhanced land management and local access strategies.
13. To make the new settlement at Lodge Hill a model for modern living, exhibiting the highest standards of design and sustainability and complementing existing villages on the Hoo Peninsula.
14. To work proactively to minimise the effects of climate change through efficient resource use, high quality buildings, improved biodiversity, the effective management of open land and other mechanisms.

15. To ensure that there is sufficient minerals and waste management/disposal capacity to meet local requirements and contribute to regional and national needs.
16. To ensure the provision of necessary infrastructure to match the needs of development at the right time and in the right place.

2.6 The Core Strategy proposes the construction of approximately 17,930 new homes and 935,995 sq m of employment floorspace (accommodating up to 21,500 additional jobs) up to the year 2028. A key component of housing supply will be the large waterfront regeneration sites within the main urban area and a new settlement at Lodge Hill. The development strategy is summarised in the Core Strategy Key Diagram provided below:

Figure 2.1: Medway Core Strategy Key Diagram



Summary of Compliance with the SEA Directive & Regulations

2.7 The SEA Regulations set out certain requirements for reporting the SEA process, and specify that if an integrated appraisal is undertaken (i.e. SEA is subsumed within the SA process, as for the SA of the Medway LDF), then the sections of the SA Report that meet the requirements set out for reporting the SEA process

must be clearly signposted. The requirements for reporting the SEA process are set out in Appendix I.

Habitats Regulations Assessment

- 2.8 The Conservation of Habitats and Species Regulations 2010 (as amended 2011) [the Habitats Regulations] require that HRA is applied to all statutory land use plans in England and Wales. The aim of the HRA process is to assess the potential effects arising from a plan against the nature conservation objectives of any site designated for its nature conservation importance.
- 2.9 There are three European sites with the plan area and three further sites in the surrounding area that lie within the potential influence of the plan.

European Sites within the Medway area

- Medway Estuary & Marshes SPA/Ramsar
- North Downs Woodlands SAC
- Thames Estuary & Marshes SPA/Ramsar

European Sites outside the Medway area

- Peters Pit SAC
- Queendown Warren SAC
- The Swale SPA/Ramsar

- 2.10 The first stage of the HRA process (screening) considered the likely significant effects of the Pre-Publication Draft Core Strategy on the six European sites. The screening concluded that the potential effects of the Plan on the six European sites was uncertain through reduced air quality; reduced water levels and quality; increased disturbance and habitat fragmentation and loss. Based on the precautionary approach these issues were progressed through to the Appropriate Assessment (AA) stage to be considered in more detail.
- 2.11 The AA considered the potential for the Core Strategy (both alone and in combination) to have adverse effects on the integrity of European sites through the issues identified above. The AA concluded that the Core Strategy would not have adverse effects on the integrity of European sites either alone or in combination provided that the recommendations made by the AA are incorporated into the Plan. The detailed findings of the assessment process, including recommendations for avoidance and mitigation measures are set out in the separate HRA (AA) Report for the Submission Draft Core Strategy.

3. Appraisal methodology

3.1 This section provides an explanation of the SA method followed in the preparation of the Medway Core Strategy. Government guidance outlines a number of stages of SA work that need to be carried out as the LDF is being prepared:

- Stage A: Setting Context & Scope (Scoping)
- Stage B: Developing Options & Assessing Effects
- Stage C: Preparing the SA Report
- Stage D: Consulting on the Plan & the SA
- Stage E: Monitoring Implementation of the Plan

SA Scoping

3.2 SA Scoping involves the following tasks:

- Task A1: Identifying other relevant plans, programmes and sustainability objectives;
- Task A2: Collecting baseline information;
- Task A3: Identifying sustainability issues;
- Task A4: Developing the SA framework; and
- Task A5: Consulting on the scope of the SA.

3.3 An SA Scoping process was undertaken by Medway Council Officers in 2008 to help ensure that the SA covers the key sustainability issues that are relevant to spatial and development planning in Medway. This included: the identification of relevant plans, programmes and sustainability objectives; the collation of relevant baseline information; the identification of sustainability issues and the development of an SA Framework of objectives (presented later in this section of the SA Report) to comprise the basis for appraisal. An SA Scoping Report was prepared to summarise the findings of the scoping process and this was published in 2008 for consultation. Responses to this scoping consultation, and how they were taken into account, are reported in this SA Report. The scoping report, provided at Appendix 3 includes a detailed summary of the methodology and results of this process.

3.4 The baseline information in the scoping report is arranged under the following topics:

- Community (population, crime, deprivation, health)
- Economy and employment
- Cultural Heritage and Material Assets
- Housing
- Biodiversity and open space
- Air quality
- Water and Soil
- Waste

- Transport and accessibility
 - Climate adaptation and mitigation
- 3.5 Additional information collected since then and an explanation of how development in the area would progress without the Core Strategy is provided in Sections 6, 7, and 8 of this SA report.

Alternatives assessment

- 3.6 Alongside the Issues and Options Report, which was consulted on in July 2009, an Initial Sustainability Appraisal was undertaken by Council Officers that considered the sustainability of 5 strategic options. This work meets the requirements of the following SA tasks:
- B1: Testing the DPD objectives against the SA framework; and
 - B2: Developing the DPD options.
- 3.7 The method and results of this assessment are explained in Section 4 of this report, with further information included at Appendix 4. The full Interim Sustainability Appraisal Report is available at:
<http://www.medway.gov.uk/environmentandplanning/developmentplan/localdevelopmentframework/sustainabilityappraisal.aspx>

SA of Pre-Publication Draft Core Strategy

- 3.8 The assessment of issues and options was followed by Council Officers undertaking a Sustainability Appraisal of the Pre-Publication Draft Core Strategy in November 2010, which appraised the first full draft of the DPD. The assessment of the SA of the Pre-publication Draft Core Strategy has contributed to the overall assessment included within sections 5-8 of this report. The full Sustainability Appraisal is available at:
<http://www.medway.gov.uk/environmentandplanning/developmentplan/localdevelopmentframework/sustainabilityappraisal.aspx>

SA Review

- 3.9 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

- 3.10 On 29 June, Enfusion held a workshop with Officers of Council's Planning Policy service 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 Core Strategy

- 3.11 Enfusion undertook an updated Sustainability Appraisal. This report considered the Publication draft Core Strategy, published in October 2010 and provided an updated appraisal where circumstances or policies have changed. A detailed Cumulative Effects appraisal was undertaken, considering both effects from within the plan (intra-plan) and in-combination with other plans (inter-plan). It also considers in more detail consultation responses received on the SA of the Pre-publication Draft Core Strategy. The appraisal is included in Sections 5-8 of this report, and updated, as appropriate to account for consultation comments and minor changes to Core Strategy policies since the SA was undertaken.

SA of draft Submission Core Strategy

- 3.12 Further minor changes were proposed to the Core Strategy (as a result of consultation and the SA and HRA processes). This final SA report updates the previous appraisal and documents the overall SA process. It 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 Methods:

The Sustainability Appraisal Framework

- 3.13 The appraisal was undertaken using professional judgement, supported by the baseline information contained in the SA Scoping report and additional information sources available. . The SA Framework used throughout the Sustainability Appraisal work is reproduced below:

Table 3.1: The SA Framework

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

The Appraisal Key:

3.14 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 negative effects
x	Not compatible

3.15 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

- 3.16 Throughout the development of the Core Strategy 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 through the appraisal.

Discussion Categories

- 3.17 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, education and employment

Consultation

- 3.18 Throughout the SA process, consultation with stakeholders and the wider public has helped to inform the appraisal.
- 3.19 The key sustainability issues were identified through the SA scoping process that was placed on consultation in 2008. The consultation comments received on the SA Scoping report then helped to inform the continuing appraisal work, including the Issues and Options, which in turn was published for consultation in July 2009.
- 3.20 The SA and the consultation helped to determine the preferred overall spatial strategy and preferred options, which were published in the Pre-Publication Draft Core Strategy, placed on public consultation with an Interim Sustainability Appraisal in November 2010. Responses received to both the

Core Strategy and SA consultation were then considered further in the Update to the Interim Sustainability Appraisal, which notably included an analysis of cumulative effects.

- 3.21 Further consultation comments received on the Update to the Interim Sustainability Appraisal were considered in the production of this current SA report. A detailed account of the consultation responses received throughout the process SA has been prepared, including how the SA has taken into consideration these comments. This can be found at Appendix 2.
- 3.22 This Sustainability Appraisal Report is being published alongside the Core Strategy Submission Document, in accordance with SEA Regulations and SA Guidance. It will be published on the Council's website www.medway.gov.uk and sent to statutory consultees and other relevant stakeholders.

Compatibility of Core Strategy Spatial Vision and Strategic Objectives

- 3.23 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 was then updated to account for the 2 new objectives added to the Core Strategy 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.
- 3.24 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, due to the potential for increasing pressure on these resources. The SA has made recommendations for changes to the more detailed policies to minimise the this pressure through appropriate mitigations.
- 3.25 The matrix overleaf shows the updated compatibility matrices between the Core Strategy strategic objectives and the SA framework.

- 3.26 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 The EU SEA Directive requires that a report shall be prepared "*...in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated*" (Article 5 (1)). Information to be included in the report includes "*an outline of the reasons for selecting the alternatives dealt with*" (Annex I (h)). Whilst the SEA Directive does not define what a reasonable alternative is, UK practical guidance on SEA³ and SA/SEA⁴ advises that "realistic" alternatives should be considered.
- 4.2 This section of the SA Report therefore seeks to provide a clear summary of the alternatives considered throughout the SA process and the reasons for selecting/rejecting those alternatives. The original SA of the alternatives can be found in the SA of the Issues and Options Report (July 2009) and is reproduced at Appendix 4.
- 4.3 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.
- 4.4 The key spatial alternatives in relation to the location of new development (primarily housing and employment development) 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.

³ ODPM 2005 A Practical Guide to the SEA Directive
<http://www.communities.gov.uk/publications/planningandbuilding/practicalguidesea>
⁴ PAS 2010 Sustainability Appraisal Advice Note <http://www.pas.gov.uk/pas/aio/627078>

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 & consideration of other alternatives

- 4.5 The reasons for selecting or rejecting the spatial alternatives are detailed in Appendix 4 and summarised as follows.
- 4.6 The new settlement at Lodge Hill, Chattenden was considered to be the most sustainable of the 5 options as it would make the greatest contribution overall to sustainability. Other reasons given by the Council for selecting this site are that it has been identified previously as an area with the potential for development (The Medway Local Plan, South East Plan), and that it is located on Previously Developed Land.
- 4.7 Whilst the other spatial options (apart from Capstone) were considered to make a reasonable contribution towards achieving the sustainability objectives (at least in the short term), Lodge Hill was considered to make the greatest contribution to sustainability in the long term.
- 4.8 Consideration of spatial options beyond those outlined above was considered to be limited due to the number of decisions on the location of development that had already been made, including planning permissions that have already been granted 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.

The Council considered that not proceeding with the development of a new settlement (or sizeable urban extension) outside of the earmarked regeneration sites was not a realistic or reasonable option. This is because the development of the new settlement is considered vital to the economic and social development of Medway through helping to meet affordable and market housing needs and providing housing choice, improving its 5 year land supply and providing opportunities for employment and economic development in the district. Again, the identification of the new settlement in the South East Plan and Local Plan and location on Previously Developed Land were driving factors.

- 4.9 It was identified that there were other alternatives available to Council in the consideration of plan options that relate to other non-residential development types: namely the location of waste and minerals development, retail and community facilities. The consideration of alternatives for these development types are detailed in Appendix 4.

Other alternatives considered and why they were discounted

- 4.10 In preparing the Core Strategy, the Council has considered the implications of both higher and lower targets than the 815 per annum proposed. The annual target of 815 completions (net) over the whole plan period (2006 – 2028) equates to 17,930 over the period, a figure that is in conformity to the SE Plan.
- 4.11 A small number of respondents to the Publication Draft Core Strategy and its SA have queried why the Council has not sought to undertake an appraisal of options relating to the level of growth proposed in the Core Strategy. The following text explains why neither a higher or lower target are considered to be reasonable or realistic options:
- The identified pipeline of sites is greater than the target (20,943 [19,439 up to 2028] v 17,930) but some key regeneration sites are difficult in terms of delivery. To meet the 815 dwellings per annum, as proposed will require a sustained level of delivery greatly exceeding the historic trend in Medway. Therefore a higher target is not realistic on delivery grounds, particularly given current economic conditions.
 - For similar reasons a lower target is also considered unrealistic. Apart from the sheer size of the pipeline a high proportion of this capacity already has planning permission or an adopted development brief in place. The only practical option for reducing housing figures would be to remove Lodge Hill from the Core Strategy. However, this development is of such a scale that it would, by itself result in a reduction in housing of around a third over the plan period. This is not considered reasonable given Government exhortations to increase house building and the fact that Lodge Hill has been endorsed in every plan prepared since 1995. It would also be contrary to the regeneration objectives for the Thames Gateway and would result in the delivery of less affordable and social homes and would mean that the plan would no longer be in conformity with the housing targets set out in the South East Plan.

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 Publication and Submission DPDs (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 harm
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 environmental, social and economic topics. For each topic, the findings of previous SA work are summarised, followed by an appraisal of significant changes made since the SA of the Pre-Publication Draft took place in November 2010. A commentary on the overall effects of the plan on each topic is then provided. This commentary helps to illustrate the iterative nature of plan-making and SA, and how the SA has assisted in improving the sustainability of the Core Strategy.

Air quality

Updated context & situation without the Core Strategy

- 6.2 Background air quality⁵, namely nitrogen dioxide (NO₂) concentrations have remained relatively stable in Kent since the mid-2000's. In 2010 the general trend at the background monitoring sites across the survey area was an overall reduction in NO₂ concentrations. A number of monitoring sites showed a slight increase at the end of 2010 reflecting an increase in NO₂ concentration seen during the cold weather experienced across the UK in December.
- 6.3 A proportion of the particulate matter present in Kent is from non-local sources, most significantly London and mainland Europe. This results in relatively high background and rural concentrations of particulate matter (PM₁₀) across Kent. The non-local origins of this particulate matter mean that it is difficult to achieve a significant reduction in ambient concentrations at a local level. The Annual report for the Kent and Medway Air Quality Monitoring Network identified that the PM₁₀ concentrations at the automatic monitoring sites remained relatively constant over the period 1998 to 2007. Between 2008 and 2010 there was some variation in the rolling annual mean concentration however there is a general downward trend in concentrations at almost all of the monitoring sites.
- 6.4 Locally, nitrogen dioxide (NO₂) is the only pollutant that exceeds national air quality objectives within Medway⁶. For Medway Local Authority, the SA Scoping report (Appendix 3) refers to 6 Air Quality Management Areas where exceedances occur; however these were revoked in 2010 and replaced with 3 consolidated AQMAs⁷. The new AQMAs are:

⁵ As reported in The Annual Report (2010) for the Kent and Medway Air Quality Monitoring Network

⁶ The Environment Act, 1995 places a statutory duty on local authorities to periodically undertake an air quality review and assessment of their area against health based air quality objectives set out in the Government's Air Quality Strategy. In areas where air quality objectives are not likely to be met, local authorities must declare an Air Quality Management Area (AQMA) and develop an action plan in pursuit of the air quality objectives.

⁷ For further information and maps refer to 2010 Air Quality Progress Report for Medway Council <http://www.medway.gov.uk/environmentandplanning/environmentalhealth/airquality.aspx>

- A large central Medway AQMA which includes the existing AQMAs of Frindsbury Road, Cuxton Road, Strood Centre, Rochester Centre and Chatham Centre but also includes the new areas of Luton Road, Chatham, High Street, Chatham and Chatham Hill, Chatham
- A smaller AQMA along High Street, Rainham
- A smaller AQMA at Pier Road, Gillingham

Findings of the SA (Pre-Publication Draft)

- 6.5 The SA of the Pre-Publication Draft noted 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?

- 6.6 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 has also considered 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

- 6.7 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. The construction of new development can also lead to direct effects on air quality (dust, equipment and vehicular emissions), although these are carefully regulated through development controls/ site management measures. The development of the Medway Waterfront Regeneration Areas and Lodge Hill has the potential for cumulative negative effects on air quality and consequently impacts on human health and biodiversity (although the HRA determined that significant effects on designated sites was unlikely). These developments are likely to increase traffic on key A- roads, including the A289 (which incorporates part of the Gillingham AQMA and the High Street Rainham AQMA), the A2 (incorporating the Central Medway AQMA) and through the District and into neighbouring Districts, especially Garvesham. The implications for these Air Quality Management Areas will need to be closely monitored.
- 6.8 The Core Strategy contains mitigation measures - including Policies CS3 (Mitigation and Adaptation to Climate Change), CS4 (Energy Efficiency and Renewable Energy) & CS24 (Transport and movement) - which will help to minimise this effect through balancing car travel with greater use of public

transport. This includes measures to proactively manage the highway system to minimise congestion, improving public transport services (fast track style services, improved transport interchanges and main line rail and real time transport information and integrated ticketing). Other measures include rationalisation of car parking, the introduction of park and ride facilities and the expansion of walking and cycling networks and water based transport). The area-based policies for Strood (CS26), the Hoo Peninsula (CS 31), the Medway Valley (CS 32) and Lodge Hill (CS 33) all seek to encourage public transport or walking/cycling- Lodge Hill has particularly strong requirements for minimising vehicular transport.

- 6.9 Notwithstanding these policy measures, the Council will need to maintain a firm approach to transport for new development throughout the preparation of further plans (Site Allocations and Development Management DPD, Development briefs) and in the assessment of individual development applications. Air quality will require ongoing monitoring, with aversive action required should acceptable standards be exceeded.

Water and Soil

Updated context & situation without the Core Strategy

- 6.10 At present 76% of the water to the Medway area is supplied from local groundwater sources with the remainder (24%) from surface water sources outside the area. There are 34 groundwater sources and 1 surface water source within the local area. Average annual demand within the Kent Medway Water Resource Zone⁸ (WRZ) will increase given the level of growth proposed within the Kent Medway WRZ itself and surrounding areas.
- 6.11 River water quality in Medway is currently assessed as having moderate ecological quality. Groundwater is assessed having good chemical quality with poor chemical quality in certain areas. The Medway and Thames Estuaries are both assessed as having moderate ecological quality and poor chemical quality.
- 6.12 The soil quality throughout the Medway area varies widely, with pollution on old industrial sites that are no longer in use and also areas of Grade I agricultural land.

Findings of the SA (Pre-Publication Draft)

- 6.13 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

⁸ According to Southern Water's figures average annual demand within the Kent Medway Water Resource Zone (WRZ) is 111.97 Megalitres per day (MI/d), which can rise to 148.95 MI/d during peak times in dry years. Source: Southern Water's Water Resources Management Plan (WRMP).

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?

- 6.14 The changes made to the Core Strategy are positive, though not considered significant in terms of changing the overall appraisal for water and soils.
- 6.15 The SA and HRA processes 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.
- 6.16 The Core Strategy has been updated to accommodate most of the above changes, although this has occurred by making additions to existing policies (rather than through a new policy). The Core Strategy also now makes reference to the Water Framework Directive.

Updated overall assessment and cumulative effects

- 6.17 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, however the Council has adopted strong policy mitigation to minimise this. The significance of this effect is likely to be exacerbated through the effects of climate change, which include a drier climate and higher temperatures. Increased abstraction has the potential to lead to reduced water levels, which can have adverse effects on the integrity of water dependent biodiversity. Changes to water levels can impact river flow and water quality, which can also adversely affect water dependent habitats and the species that rely upon them. Increased waste water discharges (consented) and surface water run-off (which can transfer pollutants to water bodies) have the potential to reduce water quality, which can also have adverse effects on habitats and species. Further stringent requirements should be included in Development Management policies to further minimise any adverse effects.
- 6.18 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. This may also include the remediation of contaminated sites. Negative effects are also likely (e.g.

through increased mineral workings and soil loss and disturbance from development). This could be further addressed through development management policies within the Site Allocations and Development Management DPD.

Waste

Updated context & situation without the Core Strategy

- 6.19 The new municipal waste contract for Medway means that no new provision will be required for treatment/processing of household municipal solid waste within the area, as it will be dealt with elsewhere. There is capacity to deal with most other waste streams at established facilities, at least in the short term.
- 6.20 Growth in the area will mean that there will be an increase in the amount of waste generated. However, a large proportion of this will be going out of the area due to the recent waste contract that will apply throughout the whole of the plan period. In addition, fiscal and national policy measures are strongly encouraging the reuse and recycling of materials, notably in construction. This will help to offset increases generated by growth in the area.
- 6.21 There is already significant capacity to deal with certain types, notably industrial and commercial materials but a complete lack of landfill capacity would be likely to cause increasing quantities of materials to be diverted elsewhere, contrary to the proximity principle that is intended to apply to waste. If this occurred there would be increasing negative impacts both within and beyond Medway as a result of the need to transport materials.

Findings of the SA (Pre-Publication Draft)

- 6.22 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?

- 6.23 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 was 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

- 6.24 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

Updated context & situation without the Core Strategy

- 6.25 Medway has a high proportion of internationally and nationally significant landscapes and nature conservation areas, including the Thames estuary and River Medway estuary marshes, the chalk grasslands of the Kent Downs and also its ancient woodlands.
- 6.26 Medway has played a major role in progressing key Green Infrastructure sites, such as the Great Lines Heritage Park and contributing to plans for 'Greening the Gateway' in north Kent. This includes a number of projects that have funded schemes to deliver specific elements of green infrastructure, such as the Cluster Study plans carried out by Greening the Gateway Kent and Medway, the Valley of Visions Landscape Partnership, and Kent Wildlife Trust's green infrastructure plans for the Hoo Peninsula and chalk grassland to the south of Medway, known as 'Living Landscapes'.
- 6.27 The findings of the first phase of a study commissioned by the North Kent Environment and Planning Group (NKEPG) on bird disturbance has suggested that there may be a correlation between recreational disturbance and a decline of designated bird populations in North Kent and that recreational visitors tend to be from within the local area. This has implications for European designated sites in and near to Medway and is further considered in the Habitats Regulations Assessment undertaken for the Core Strategy.

Findings of the SA (Pre-Publication Draft)

- 6.28 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?

- 6.29 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 NKEPG. The appraisal of individual policies has been updated to reflect this. 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.

- 6.30 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

- 6.31 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, which will 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.
- 6.32 The HRA of the Core Strategy concluded that the Plan would not have adverse effects on the integrity of European sites either alone or in combination, provided that the recommendations made by the AA are incorporated into the Plan. The detailed findings of the assessment process, including recommendations for avoidance and mitigation measures are set out in the separate HRA (AA) Report for the Submission Draft Core Strategy.
- 6.33 Concerns have been raised through the consultation on the Plan and SA in relation to the impacts of the Lodge Hill development on biodiversity. The proposed development is set within an area of sensitive ecological sites with Chattenden Woods SSSI partially within the development boundary; Tower Hill to Cockham Woods SSSI located approximately 500m to the south and Medway Estuary and Marshes SSSI, SPA and Ramsar Site within 2km. There are a number of protected species present on the site, which includes a nationally important population of nightingales supported by habitat within the site boundary and Chattenden Woods SSSI, part of the reason for its designation.
- 6.34 Development at Lodge Hill is likely to 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.
- 6.35 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

Updated context & situation without the Core Strategy

- 6.36 Climate change is a serious issue facing society, with global average temperatures having risen by nearly 0.8 °C since the late 19th century, and rising at about 0.2 °C/decade over the past 25 years. Current projections for the UK suggest that in addition to the temperature increases and changes in rainfall, with wetter winters and longer, drier summers, there is likely to be more flooding⁹ as dry soils are unable to absorb the heavier downpours.
- 6.37 Changing climate patterns have the potential to increase incidences of flooding, increase coastal squeeze and will increase the importance of wildlife corridors and buffers to allow species to migrate and adapt.
- 6.38 The introduction of zero carbon buildings and increasing use of renewables has the potential to offset these effects, however changes are not occurring at the level required to avoid what experts have termed 'dangerous climate change'¹⁰.

Findings of the SA (Pre-Publication Draft)

- 6.39 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?

- 6.40 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 that situation has now changed and Enfusion recommended further changes to the policy to reflect this (Policy CS4: Energy Efficiency and Renewable Energy)- these changes have been incorporated into the Submission Draft Core Strategy.

Updated overall assessment and cumulative effects

- 6.41 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

⁹ See Chapter 10 Water and Soil for further information on flooding

¹⁰ Dangerous Climate is commonly referred to as a 2 °C (3.6 °F) ceiling on global warming thought necessary to avoid the most serious effects of global warming.

nature of development can have a significant impact on emissions through reducing the need to travel.

- 6.42 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.
- 6.43 In terms of adaptation to climate change, the SA work 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)

Updated context & situation without the Core Strategy

- 7.1 The key change to the baseline since the Final Scoping Report has been in terms of population growth, which has been slightly less than that predicted. In the middle of 2009 the population estimate was 254,800. Population growth in Medway has grown at a slower rate than England & Wales since 2001. It is expected that under existing population growth estimations, growth would continue, increasing to 275,200 by 2026 and then potentially reaching a rounded figure of 280,000 in 2028.
- 7.2 It would be expected without the Core Strategy that although the population of the area is younger than both regional and national rates, there would be a growth in the older population through the plan period. This has been identified both through work nationally by the Office of National Statistics (ONS), regional work and most recently area profiles published in 2010. Currently the older population is concentrated around Rainham; adjoining parts of Gillingham; Rochester town centre and parts of Cuxton and Halling.
- 7.3 The largest proportion of population change has occurred in those areas where there has been significant regeneration and this would be expected to continue over the plan period. The changes in the demographic make up of the area are crucial to ensuring that the right services are accommodated in the right places, as well as being a key role in ensuring sustainable communities both in the present and future.
- 7.4 The recent trend of a falling average age in Rochester and Gillingham town centres would be expected to continue, as well as the reduced number of dependents as a result of the increased number of the working age population across the central arc of the towns from Chatham to Gillingham.

Findings of the SA (Pre-Publication Draft)

- 7.5 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?

- 7.6 Changes made to the Core Strategy 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 and inclusion of space standards.
- 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.

7.7 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

- 7.8 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 and should help to minimise crime.
- 7.9 The effects for health are overwhelmingly positive in the long term for the District's residents: indirectly through enhanced economy and employment opportunities, poverty reduction and increased social inclusion; but also directly through enhanced community and health facilities and increased recreational spaces and opportunities.
- 7.10 The area will be expected to be more prosperous with more people working locally and enjoying average earnings closer to the regional average of £33,500 in 2009. The town centres will have better quality open spaces and services and feel safer to transit through, particularly at night. There will be more cultural facilities and people will have greater access to a number of historic assets. The changes to the transport system and the town centres will allow greater access to services and facilities for the population as a whole.
- 7.11 There will be a greater number of multi-functional green spaces in a network across the area, especially connecting across the urban area. These will improve quality of life, as well as the cultural offering and provide greater access to the wider countryside.
- 7.12 However, potential negative effects on air quality, (as considered in section 6 under air quality) may have subsequent effects on resident's health, particularly those with respiratory conditions. As discussed in section 6, this is an area that will need ongoing monitoring.

Cultural Heritage and Material Assets

Updated context & situation without the Core Strategy

- 7.13 There are many heritage assets in the District, but often these lack visibility or are adversely affected by neighbouring development of low visual quality. The town centres are not as vibrant or welcoming as they could be and, excepting Rochester, have poorly developed night time economies.
- 7.14 Without the Core Strategy, it is not expected that there would be any substantial change to heritage and cultural assets in the District. With regard to material assets, some reinvestment could be expected in the town centres but not on the scale envisaged in the Core Strategy.

Findings of the SA (Pre-Publication Draft)

- 7.15 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?

- 7.16 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 include reference to the distinct maritime heritage and character of the Medway in the CS or in future DPDs.

Updated overall assessment and cumulative effects

- 7.17 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. Further reference to the distinct maritime heritage and character of the Medway and opportunities for development to enhance this character should be explored through the Development Management DPD.

Transport and accessibility

Updated context & situation without the Core Strategy

- 7.18 A combination of changes undertaken to the road system in and around Chatham and construction of the new Chatham waterfront bus interchange will result in an improvement to the traffic flow and bus services through

Chatham. This combined with the Urban Traffic Management Control (UTMC) system will help to reduce the levels of congestion and journey times in the urban area in the short term at least.

- 7.19 Without the Core Strategy, many of the planned schemes and measures would be expected to take place through the mechanism of the third Local Transport Plan (although there is some uncertainty around future funding). This is unlikely to apply to schemes requiring third party land or improvements associated with new built developments. Planned improvements to rail/bus interchanges, the introduction of park & ride sites and the development of a quality bus network should help create a shift to bus use for urban journeys. Schemes dealing with congestion 'hotspots' should also result in freer flowing traffic, with associated air quality benefits.

Findings of the SA (Pre-Publication Draft)

- 7.20 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, resulting in an overall increase in traffic.

What has changed and how does this affect the SA?

- 7.21 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

- 7.22 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 (congestion, noise and air quality effects) 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 aversive action taken as required. 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. Whilst this has not been taken up in the CS, it may be something that can be explored further by the Council in future planning documents and for particular developments.

Housing

Updated context & situation without the Core Strategy

- 7.23 Demographic trends point to a gradually ageing population and a continuing decline in the average size of households, plus a move towards net in-migration (out-migration has offset positive natural change over recent years). Though the recession has reduced house prices slightly in the area, a decline or stagnation of salaries and rising living costs mean that house prices are still unaffordable for many.
- 7.24 Without the Core Strategy, regeneration would continue but at a slower rate. However this would be likely to fall short of meeting local needs from new and smaller households over time and would not reflect Medway's location within the Thames Gateway growth area.

Findings of the SA (Pre-Publication Draft)

- 7.25 The SA of the Pre-Publication Draft identified that the Core Strategy would have significant benefits for the delivery and accessibility of housing. Housing development in general would continue to be driven by developers and the market. The general standards of housing would be expected to improve both in terms of flexibility and overall sustainability.
- 7.26 Sites in and around the town centres and along the urban waterfront are likely to have a high proportion of smaller units, with family sized units being located in the more suburban locations. Provision would be expected for students and people needing various forms of supported accommodation.
- 7.27 Beyond the urban area the new settlement at Lodge Hill would be expected to have a broad range of house types and tenures but with an overall bias towards family sized accommodation. The use of previously developed land and sustainable forms of construction should limit its impact and its good relationship with other settlements on the Hoo Peninsula should improve the sustainability of these rural settlements.
- 7.28 As such it would be expected that it would be easier for all sections of the community to find a suitable, affordable and sustainable home. The Core Strategy also allows for provision for Gypsy and Traveller communities housing needs through provisions outlined in Policy CS 16.

What has changed and how does this affect the SA?

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

Updated overall assessment and cumulative effects

- 7.30 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.

Through creating the policy framework for the development of a settlement at Lodge Hill, the Core Strategy will help to ensure that a mix of housing types and tenures are provided to meet housing demand in the Medway and wider Gateway.

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

Economy and employment

Updated context & situation without the Core Strategy

- 8.1 Medway is currently faring reasonably well in terms of the impact of the recession on the wider area. According to the latest data available, it has seen a significant fall in the overall unemployment rate, compared with the regional or national average. However overall Medway's unemployment rate is still slightly above the average at 4.2% rather than the GB average of 3.8%.
- 8.2 The number of Job Search Allowance claimants in Medway has increased by over 17% in the last year. This is the fifth highest increase compared to Kent's boroughs and districts with Gravesham experiencing a 21.9% increase. Youth unemployment has increased 18% compared to June, but again it is apparent that this is still low when compared against similar authorities in the South East and though below the regional average still marginally above the national average. The number of Medway's working population on 'out of work benefits' has remained static compared to small reductions at regional and national level.
- 8.3 In addition, the number of local residents in employment in Medway has risen markedly from 67.7% to 69.3% for the period April 2010 - March 2011. This compares to an unchanged national average. Therefore Medway's lag behind the national average has narrowed markedly.
- 8.4 The recession is clearly impacting on local businesses, with a decline in the number of PAYE and VAT registered businesses since 2008. This figure remains higher than the SE average and only fractionally below the national average. The proportion of the working age population with a degree qualification is increasing more rapidly than the regional and national average.

Findings of the SA (Pre-Publication Draft)

- 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 CS will have major significant cumulative 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 Medway Core Strategy has the potential to cause cross-boundary effects on surrounding Boroughs. Mostly it is considered that there will be limited direct impact upon neighbouring areas due to the fact that no significant developments are proposed close to or straddling administrative boundaries.
- 9.2 However there is the potential for indirect effects, both positive (through the increased regeneration and employment opportunities created in Medway), and negative effects, especially from increased traffic leading to congestion or air quality issues. 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.
- 9.3 The main developments (Lodge Hill and Riverside regeneration sites) are likely to increase traffic on key A- roads, including the A289 (which incorporates part of the Gillingham AQMA and the High Street Rainham AQMA), the A2 (incorporating the Central Medway AQMA) and through the District and into neighbouring Districts, especially Gravesham.
- 9.4 A noticeable impact will also 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.
- 9.5 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.
- 9.6 The 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

- 9.7 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.
- 9.8 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.

- 9.9 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)

- 9.10 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:

Table 9.1: 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)

9.11 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:

Table 9.2: 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 (equalities)	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 strong 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)

9.12 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:

Table 9.3: 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 biodiversity from increased recreational disturbance & urbanisation; ■ 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)

- 9.13 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.
- 9.14 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.
- 9.15 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.

- 9.16 In preparing plan polices, 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.

Table 9.4: 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).	<p>Positive</p> <p>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.</p>
	<p>Negative</p> <p>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.</p>
Local Transport Plans (Kent County Council and Medway Council)	<p>Positive</p> <p>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.</p>
Minerals and Waste Development Frameworks (Kent County Council)	<p>Positive</p> <p>Potential for cumulative positive effects through increased use of sustainable waste management practices in the region, moving waste up the waste hierarchy.</p>
Thames Estuary	<p>Positive</p>

2100 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	Positive Potential for positive effects on climate change, human health and the economy through managing flood risk in the area.
	Negative 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.
Medway Draft Cultural Strategy	Positive 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.

10. SA Monitoring

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. This section discusses indicators and targets to help monitor the sustainability effects of the LDF. Targets and/or indicators for each sustainability objective have been identified (from the SA Framework) to provide a suggested list for discussion, and considered further to ensure they measure the significant sustainability effects of the plan, as required by the SEA Directive.

10.2 Monitoring arrangements should be designed to:

- highlight significant effects;
- highlight effects which differ from those that were predicted; and
- provide a useful source of baseline information for the future.

SA monitoring proposals for the Medway Core Strategy

10.3 Government requires local planning authorities to produce Annual Monitoring Reports (AMRs). According to government these should include the findings of SA monitoring. Accordingly, the monitoring strategy for the SA should be integrated with the LDF AMR. When preparing the LDF AMR, Medway Council will consider this SA chapter to ensure recommended monitoring proposals are included, where practicable.

10.4 The proposed LDF monitoring strategy should:

- Clearly set out who is responsible for the monitoring, as well as its timing, frequency and format for presenting results;
- By collecting new information, update and strengthen original baseline data, rectifying any deficiencies, and thereby provide an improved basis for the formulation of future plans
- Establish a mechanism for action to enhance positive effects of the plan, mitigate any negative ones and assess any areas that were originally identified as containing uncertainty. The aim should be to keep the LDF working at maximum effectiveness for the benefit of the community; and
- Empower all of the community by providing a clear and easily understandable picture of how actual implementation of the LDF is affecting the District. Is it moving the area towards or away from the more sustainable future we intended? Are any significant effects identified actually happening? Are any unforeseen consequences being felt? Are any mitigation measures that were proposed operating effectively?

10.5 Indicators aim to measure all relevant aspects of life: social and economic as well as environmental. These are drawn from:

- Objectives and targets set out in the LDF - these will mostly be quantitative and may be expressed as maps, graphs, diagrams or percentages (e.g. Percentage of new housing built on brownfield land, target of 10% of energy on major new developments to be provided by renewables etc.);
- Indicators already identified and used in the SA process, again mostly likely to be quantitative;
- Measures drawn from the baseline data collected during the early stages of the LDF or from the previous Local Plan (e.g. air quality, extent of wildlife habitats, need for affordable housing); and,
- Any other measures suggested by the community. These might be more qualitative (e.g. quality of life) and could be useful in enriching understanding and giving people a sense of ownership of the LDF.

10.6 The table below contains a list of proposed SA indicators and targets to be incorporated into the AMR as considered appropriate by Council.

Figure 10.1: Monitoring Framework

	SA Objective	Framework Indicators
1	Conserve and enhance the diversity and abundance of habitats and species	<ul style="list-style-type: none"> • Extent and condition of key habitats • Condition of SSSI's • Reported levels of damage to designated sites • Achievement of Biodiversity Action Plan targets • Number/area of Local Nature Reserves • Population of wild birds and farmland birds • Area of land covered by agri-environment schemes
2	Reduce air pollution and improve air quality, including reduction of greenhouse gas emissions	<ul style="list-style-type: none"> • Achievement of Emission Limit Values • Population living in Air Quality Management Areas • Number of days of air pollution exceedances • Emission of greenhouse gases from energy consumption, transport, and land and sea waste management
3	Maintain an improve quality of ground water and surface waters and security of supply	<ul style="list-style-type: none"> • Quality (biology and chemistry) of rivers, canals and freshwater bodies • Rivers of good or fair chemical and biological water quality • Compliance with EC Bathing Waters Directive • Water use (by sector, including leakage) and availability • Per capita consumption of water • Incidents of major and significant water pollution
4	Reduce risk of flooding and ensure resilience of buildings and minimise the effect on public services and infrastructure	<ul style="list-style-type: none"> • Properties at risk from flooding • Number of additional houses where flood risk has been reduced • New development with sustainable drainage installed
5	Reduce ecological footprint through prudent use of natural resources, reduction in waste management and sustainable waste management practices	<ul style="list-style-type: none"> • Waste disposal in landfill. • Percentage of the total tonnage of all types of waste that has been recycled; composted; used to recover heat, power and other energy solutions; and land filled • Number of new buildings reaching Code for Sustainable Homes Level 4 or above by 2013.
6	Provide opportunity for everyone to live in a decent, sustainably constructed, affordable	<ul style="list-style-type: none"> • Percentage of new and retrofit homes reaching Sustainable Homes Level 4 or above

	home suitable to their needs	<ul style="list-style-type: none"> • Housing completions compared with regional guidance. • Affordable homes within the total housing stock. • Homelessness. • Number of unfit homes per 1,000 dwellings.
7	Maximise land use efficiency through appropriate use of previously developed land and existing buildings	<ul style="list-style-type: none"> • Housing density • Percentage of development on previously developed land
8	Improve the health and well-being of the population and reduce health inequalities	<ul style="list-style-type: none"> • Death rates from circulatory disease, cancer, and accidents, and suicide. • Infant mortality rates. • Conceptions among girls under 18. • Life expectancy. • Obesity
9	Reduce inequalities in poverty and social exclusion	<ul style="list-style-type: none"> • Proportion of children under 16 who live in low- income households. • Percentage of population of working age who are claiming key benefits. • Number of households in fuel poverty • Proportion of population who live in wards that rank within the most deprived 10% and/or 25% of wards in the country. • Access to services for disabled people
10	Reduce crime and the perception of crime	<ul style="list-style-type: none"> • Recorded crimes per 1,000 population • Fear of crime surveys • Number of transport accidents • Level of domestic burglaries, violent offences and vehicle crimes per 1,000 population
11	Improve accessibility to key services and facilities (inc. countryside, leisure/recreation and historic environment)	<ul style="list-style-type: none"> • Percentage of development within 10 minutes or 500m walk of a frequent bus route/rail service. • Access to services for disabled people • Distance to nearest leisure or cultural facility • Percentage of land designated for particular quality or amenity value, including publicly accessible land and greenways. • Proportion of population within 200m of parks and open space • The proportion of Medway residents meeting the Accessible Greenspace Standards: <ul style="list-style-type: none"> - live no further than 300m away from nearest area of natural green space

		<p>of 2ha in size</p> <ul style="list-style-type: none"> - at least one accessible 20ha site within 2km of home - one accessible 100ha site within 5km of home - one accessible 500ha site within 10km of home <ul style="list-style-type: none"> • Participation in sports, outdoor and volunteer activities
12	Conserve and enhance historic buildings, archaeological sites and culturally important features and increase engagement by all sections of community	<ul style="list-style-type: none"> • Percentage of Listed Buildings and archaeological sites 'at risk.' • Buildings of Grade I and Grade II* at risk of decay. • Additional listed building or conservation area designations per annum • Participation in Cultural activities
13	Increase energy efficiency; the proportion of energy generated from renewable sources and the diversity and security of energy supplies	<ul style="list-style-type: none"> • Electricity generated from renewable energy sources and CHP located in the area. • Energy consumption per building and per occupant. • CO² emissions. • Number of households in fuel poverty
14	Reduce traffic and congestion by reducing need to travel and improving travel choice	<ul style="list-style-type: none"> • Distances travelled per person per year by mode of transport. • Traffic volumes. • Growth in road traffic. • Average vehicle speeds. • Proportion of travel by car. • Investment in public transport, walking and cycling
15	Raise educational achievements through developing opportunities to acquire skills, to develop and maintain workforce	<ul style="list-style-type: none"> • Proportion of 19 year olds with Level 2 qualifications (% GCSEs A*-C or NVQ equivalent) • Percentage of population of working age qualified to NVQ Level 3 or equivalent. • Proportion of adults with above or below average literacy and numeracy skills.
16	Support and improve employment and economic competitiveness in town centres and deprived areas	<ul style="list-style-type: none"> • Business start-ups net of closures. • Inward investment. • Social and community enterprises. • GVA per capita

11. Conclusion and Summary

- 11.1 This SA report (including the accompanying appendices) has summarised the process and findings of the Sustainability Appraisal process to date, from the SA Scoping through to the identification of issues and options and various stages of policy refinement. This report updates the previous findings to account for changes made between the Pre-Publication Core Strategy and the current Submission 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 This SA Report will form part of the evidence base during the Examination of the Core Strategy, accompanying the adopted DPD when it is published.

APPENDICES:

- 1 Compliance with SEA Directive and Regulations**
- 2 Responses to Consultations**
- 3 SA Scoping Report (April 2009)**
- 4 SA of Alternatives (Medway Initial SA July 2009)**



Appendix 1



Appendix 1: Compliance and good practice review ¹ for SA/SEA of Medway LDF Pre-Publication Draft Core Strategy

		Requirements of SEA Directive	Compliance	Reference to Final SA Report, including appendices 3 (SA Scoping and 4 (SA of Alternatives) Commentary
	Objectives and Context			
1	The plan's or programme's purpose and objectives are made clear.	Directive 2001/42/EC Article 5(1)a	Yes	The purpose of the Core Strategy is set out at the beginning of Section 2 of the Scoping Report together with the vision and objectives for the plan.
2	Sustainability/environmental issues and constraints, including international and EC protection objectives, are considered in developing objectives and targets.	Directive 2001/42/EC Article 5(1)e	Yes	The sustainability/environmental protection objectives considered are listed in Appendix 3: The Scoping Report (in Table 2 and detailed in Appendix 1 of that report setting out key aims/objectives and implications for the SA; and relevant plans & programmes, including international and European. A topic-based approach to identifying sustainability issues is reported in s4 of the Scoping report e.g. for biodiversity 4.10.1; and considered in developing objectives and targets as reported in s5 and Table 10: SA Framework
3	SA/SEA objectives, where used, are		Yes	Each sustainability/environmental objective is clearly set out in

¹ Adapted from ODPM (2005) *A Practical Guide to the Strategic Environmental Assessment Directive* Appendix 9 Quality Assurance
<http://www.communities.gov.uk/publications/planningandbuilding/practicalguidesec>

	clearly set out and linked to indicators and targets where appropriate.			Scoping Report Table 10: SA Framework and linked clearly to suggested indicators; and targets where appropriate to this level of plan (Core Strategy) e.g. BAP targets, accessible greenspace standards. This is also included in the main body of the SA report at tables 3.1 and 10.1.
4	Links with other related plans, programmes and policies are identified and explained.	Directive 2001/42/EC Article 5(1)a	Yes	Section 2 of Appendix 3: The Scoping Report (explains the links with other plans, programmes and strategies. Appendix 1 of SA Scoping Report lists the implications for the SA (and thus the LDF) of related PPs demonstrating that links with other plans and programmes have been identified and explained. Links with other plans are also made in the cumulative effects analysis undertaken in section 9 of the SA Report.
5	Conflicts that exist between SA/SEA objectives, between SA/SEA and plan objectives, and between SA/SEA and other plan objectives are identified and described.		Yes	Introduced in 2.3 Scoping Report. Conflicts between the plan objectives and SA objectives are considered in section 3 of the SA report in the compatibility analysis undertaken.
Scoping				
6	Consultation bodies are consulted in appropriate ways and at appropriate times on the content and scope of the Environmental Report.	Directive 2001/42/EC Article 6.1 & 6.2	Yes	SA Scoping Report sent to the three statutory bodies – Environment Agency, English Heritage & Natural England –for SEA statutory period of 5 weeks until 23 Jan 2009. Also sent to key stakeholders of other LAs, SEERA and GOSE. Available on website for public consultation. Presentation to LSP in Dec 2008.
7	The assessment focuses on significant issues.		Yes	2.5 Scoping Report explains the assessment framework is focused on “the main local issues”; s3 & s4 explain how sustainability issues developed from PP review and baseline analyses are organised into topic areas that are significant.
8	Technical, procedural and other		Yes	Assumptions made (e.g. that potential options would receive all

	difficulties encountered are discussed; assumptions and uncertainties are made explicit.			relevant permissions from regulators) are well set out and explicitly recorded in the Initial SA Report – section on assumptions for each category of options. Further section on assumptions and un in section 3,16 of the SA report an 0.13 of the NTS.
9	Reasons are given for eliminating issues from further consideration.		N/A	No issues have been eliminated which is typical for SAs of spatial plans as all issues are generally considered to be relevant.
Alternatives				
10	Realistic alternatives are considered for key issues, and the reasons for choosing them are documented.	Directive 2001/42/EC Article 5(1)h	Yes	The approach take to alternatives, including reasons for choosing realistic alternatives is documented in section 4: Appraisal of alternatives and detailed appraisal is included in Appendix 4: SA of alternatives.
11	Alternatives include 'do minimum' and/or 'business as usual' scenarios wherever relevant.		Yes	Clearly documented in the SA Report with sections on "situation without the Core Strategy" and "situation with the Core Strategy" for each topic area.
12	The sustainability/ environmental effects (both adverse and beneficial) of each alternative are identified and compared.	Directive 2001/42/EC Article 5(1)b	Yes	Appendix 3: SA of alternatives describes effects (temporal, spatial and character) of each category of alternatives and in comparison, where relevant. Summary including comparative considerations clearly laid out in coloured boxes in report. Details for each alternative appraised against the SA objectives are presented in this appendix. Further discussion on how alternatives have been considered is presented in s4 of the SA Report. Limitations on realistic alternatives explained section 4.10-4.11.
13	Inconsistencies between the alternatives and other relevant plans, programmes or policies are identified and explained.		Yes	Para 4.10-4.11 discuss issues relating to the need for alternatives to be consistent with the wider policy context, including the Regional Spatial Strategy.
14	Reasons are given for selection or elimination of alternatives.	Directive 2001/42/EC	Yes	The reasoning for selection and elimination of strategic alternatives is explained in the text of s4 of the SA Report.

		Article 5(1)h		
Baseline information				
15	Relevant aspects of the current state of the environment/sustainability and their likely evolution without the plan are described.	Directive 2001/42/EC Article 5(1)b	Yes	Condition and character of relevant topics described in s4 of SA Scoping Report (attached at Appendix 3 of the SA report), including indirect and inter-relationships e.g. box SA Objective 1 biodiversity and recreation; 4.12.8 water and soils. Comparators cited e.g. 4.7.3 employment in Medway and SE/UK. Trends and evolution without the plan explained for each topic in the SA Report, Sections 6,7 and 8 under the heading: Updated context & situation without the Core Strategy.
16	Environmental/sustainability characteristics of areas likely to be significantly affected are described, including areas wider than the physical boundary of the plan area where it is likely to be affected by the plan.	Directive 2001/42/EC Article 5(1)c & Article 5(1)d	Yes	Characteristics of areas described in s3&4 of SA Scoping Report at Appendix 3, including e.g. wider environmental boundaries for water (4.12) and e.g. wider sustainability boundaries for employment (4.7) and transport (4.14.4). Significant issues with regard to wider administrative boundaries explicitly described in s9 of SA Report (para 9.1)
17	Difficulties such as deficiencies in information or methods are explained.		Yes	Difficulties of strategic assessment generally set out in 2.5 of Initial SA Report. Section 0.13 and 3.16 describe difficulties in relation to uncertainties and data. Other difficulties (e.g. in predicting air quality impacts are described in sections 6-8 of the SA Report.
Prediction and evaluation of likely significant environmental effects				
18	Effects identified include the types listed in the Directive (biodiversity, population, human health, fauna, flora, soil, water, air, climate factors, material assets, cultural heritage and landscape), as relevant; other likely environmental/sustainability effects are also covered, as appropriate.	Directive 2001/42/EC Article 5(1)f	Yes	Relevant sustainability topics addressed and clearly presented including correlation with SEA topics e.g. Table 10 SA Scoping Report; and these relevant SA topics carried through into the SA reports.

19	Both positive and negative effects are considered, the duration of effects (short, medium or long-term), and temporary/permanent effects are addressed.	Directive 2001/42/EC Article 5(1)f	Yes	Appropriate categories of effects are considered as set out in SA method Table 2 in 3.10 of SA Scoping Report, and subsequently in SA Report in para 3.14. Duration of effects is also considered e.g. short, medium and longer term (defined in 3.15)& in discussion on appraisals .
20	Likely secondary, cumulative and synergistic effects are identified where practicable.	Directive 2001/42/EC Article 5(1)f	Yes	<p>“Secondary” and “indirect” may be used interchangeably when describing effects. Where relevant, indirect effects are considered e.g. air quality & biodiversity with regard to waste alternatives and indirect effects of water on biodiversity (section 6).</p> <p>Cumulative effects (incorporating synergistic effects) are assessed and described in section 6-8 of the SA report under each topic and further described and summarised in section 9 of the SA report.</p>
21	Inter-relationships between effects are considered where practicable.	Directive 2001/42/EC Article 5(1)f	Yes	Interactions or inter-relationships between effects are reported throughout, e.g. between biodiversity and water (section 6).
22	The prediction and evaluation of effects makes use of relevant accepted standards, regulations, and thresholds.		Yes	The SA framework of objectives is specifically linked to quantitative indicators including relevant, accepted limits e.g. emission limit values for air quality, and thresholds e.g. accessible greenspace standards.
23	Methods used to evaluate the effects are described.		Yes	Methods are set out in s3of the Scoping Report (appendix 3 of SA report) and section 3 o f the SA report.
Mitigation measures				
24	Measures envisaged to prevent, reduce and offset any significant adverse effects of implementing the plan or programme are indicated.	Directive 2001/42/EC Article 5(1)g	Yes	Throughout the process, the SA has recommended measures to prevent, reduce and offset significant adverse effects. In particular these included recommendations for changes to policy (especially to mitigate the effects on water, climate change and biodiversity). This is explained in sections 6-8 of the SA Report.
25	Issues to be taken into account in		Yes	In the SA Report, recommendations were made from the SA findings

	project consents are identified.			to improve the sustainability of policies including taking into account project consents (as appropriate to this level of plan-making). CS policies address strategic issues and further details will be considered in subsequent DPD on Development Management policies.
The Environmental Report (SA Report)				
25	Is clear and concise in its layout and presentation.		Yes	The SA Report is clear and concise in layout and presentation.
26	Uses simple, clear language and avoids or explains technical terms.		Yes	The SA Report uses clear language and technical terms are explained.
27	Uses maps and other illustrations where appropriate.		Yes	Appropriate maps are presented in the Scoping Report (appendix 3) and the SA report (including tables and figures).
28	Explains the methodology used.		Yes	Methods clearly set out for scoping in s3 (appendix 3) and Section 3 of SA Report.
29	Explains who was consulted and what methods of consultation were used.		Yes	Scoping consultation clearly set out in s6 of Scoping Report and section 3 of the SA Report.
30	Identifies sources of information, including expert judgement and matters of opinion.	Directive 2001/42/EC Article 5.2	Yes	S5 of SA Scoping Report sets out the baseline information against which the appraisals have been made. Para 3.13 of SA Report explains how expert judgement was used.
31	Contains a non-technical summary (NTS) covering the overall approach to the SA/SEA, the objectives of the plan, the main options considered, and any changes to the plan resulting from the SEA.	Directive 2001/42/EC Article 5 (1) j	Yes	Provided at beginning of SA report.
Consultation				
32	The SA/SEA is consulted on as an integral part of the plan-making process.		Yes	The SA has been consulted on as an iterative and ongoing process – and integral to the plan-making process. Progression with the Draft Plan (the Core Strategy) has been consulted on at the same time as the SA findings.

33	Consultation Bodies and the public likely to be affected by, or having an interest in, the plan or programme are consulted in ways and at times which give them an early and effective opportunity within appropriate time frames to express their opinions on the draft plan and Environmental Report.	Directive 2001/42/EC Article 6.1 & 6.2	Yes	Statutory and public consultation has been undertaken according to statutory timeframes i.e. 5 weeks for SA scoping; 6 weeks for the I&O and pre-publication draft CS. Details provided in the SA Report (section 3).
Decision-making and information on the decision				
34	The environmental report and the opinions of those consulted are taken into account in finalising and adopting the plan or programme.	Directive 2001/42/EC Article 8	Yes	Summarised in Section 3 of the report (and where, relevant in Appendix 3: Scoping). Consultation reps on the SA are set out in a table explaining and with Council's response. This is provided at Appendix 2.
35	An explanation is given of how they have been taken into account.	Directive 2001/42/EC Article 9 (1) b	Yes	As above, refer Appendix 2.
36	Reasons are given for choosing the plan or programme as adopted, in the light of other reasonable alternatives considered.	Directive 2001/42/EC Article 9 (1) b	Yes	Refer section 4 of SA Report.
Monitoring measures				
37	Measures proposed for monitoring are clear, practicable and linked to the indicators and objectives used in the SEA.	Directive 2001/42/EC Article 5 (1) i	Yes	Monitoring proposals are clearly set out in the Scoping Report and in s10 of the SA Report. They are practicable (correlated with AMR where possible) and linked clearly to the SA objectives – as set out in the SA Framework.
38	Monitoring is used, where appropriate, during implementation of the plan or programme to make good deficiencies in baseline information in the SEA.	Directive 2001/42/EC Article 10	Yes	Possibilities are indicated e.g. monitoring impacts of water demand and supply.
39	Monitoring enables unforeseen adverse		Yes	The annual AMR monitoring (incorporating SA) will allow for

	effects to be identified at an early stage. (These effects may include predictions which prove to be incorrect.)			identification of any unforeseen adverse effects.
40	Proposals are made for action in response to significant adverse effects.		Yes	Throughout the SA report proposals are made for action in response to significant adverse effects (e.g. in sections 6-8).

Appendix 2



Appendix 2: Responses to Consultation

Scoping Report	Consultee Comments	Response
CB Richard Ellis on behalf of Land Securities Group Plc (23/01/09)		
General	Land Securities considers that the methodology set out in the draft Sustainability Appraisal Scoping Report should recognise the factors outlined in these representations so as to ensure that the Sustainability Appraisal reflects an approach which is consistent with National, Regional and Local policy, is sufficiently flexible and is cognisant of commercial and market imperatives and emerging methods of delivering energy to sites of the scale, mix and longevity of Lodge Hill/Chattenden.	The framework was based on the regional framework and had a large scope due to the lack of local data for monitoring purposes but were specifically tailored to try and address characteristics of the area
General	It is considered imperative that individual sustainability appraisals are wholly consistent with Government policies and do not seek to establish measures and parameters that are unique to a locality.	The framework was based on the regional framework and had a large scope due to the lack of local data for monitoring purposes but were specifically tailored to address issues specific to the area, recognising the need to take account of local characteristics
To accommodate physical differences between developments	Whilst there needs to be consistency of legislation and policy, they do need to recognize that every development has its own individual parameters where a rigid set of compliance requirements may not be suitable. It is considered necessary for a pragmatic approach to be established that enables 'best fit' solutions to be bespoke for each individual development, balancing possibly competing objectives.	The scoping report is outlining data on the area and producing a framework that is strategic and could be applied to all developments across the area.
To accommodate inconsistencies in legislation	It can be envisaged that inconsistencies between the legislation and statutory requirements that govern sustainability may not be resolved, particularly in their practical and commercial implications. Some flexibility will be required to the formal approval process to resolve such inconsistencies	Noted.

Scoping Report	Consultee Comments	Response
To accommodate phasing and timing	Lodge Hill/Chattenden and other large scale developments will be realized over a considerable period of time and it can be envisaged that the interim stages will require interim evaluation with the recognition that some required parameters will only be able to be achieved at full build out.	The framework set out within the scoping report is strategic and within the Interim Sustainability Appraisal the monitoring system is outlined
Market compatibility	Sustainability parameters are likely to lead to very different products to those which have historically been presented to the market. Whilst the parameters may be seen at a theoretical level to be beneficial to social, environmental and economic sustainability, if the products are not compatible with market demand, in practice the developments will not proceed	Noted but due to the national timescales laid out for zero carbon homes this is not considered to be an issue in terms of overall deliverability
Commercial Viability	Lodge Hill/Chattenden and other large scale developments will be delivered by the private sector where shareholder returns are a corporate mandate. If sustainability parameters cannot be delivered within a framework of commercial viability, developments again will not proceed. This applies equally to building product and utility provisions, water, power, heat, waste services, telecommunications etc	Noted but on balance not considered to be significant enough issue in terms of deliverability as there are more and more sustainably designed developments on the market
Code for Sustainable Homes	<p>Lodge Hill/Chattenden will see the introduction of the Code for Sustainable Homes (CfSH) as one of the key drivers for sustainability to residential developments. Whilst fully supporting the underlying drive for 'carbon responsibility' and actively addressing climate change it is acknowledged that there is a general industry concern on the practical and cost effective measures to achieve Code for Sustainable Homes Levels 5 and 6 targets on a mass scale.</p> <p>Our own analysis has concluded that the achievement of CfSH Level 6 (zero net emission of carbon dioxide from all energy uses in the home) with either existing statutory provision for energy or in any combination of micro solutions is not currently practical or economic. The conclusion Land Securities has reached is that a macro solution involving distributed energy (DE) and distributed heat (DH) holds the greatest potential for delivering the energy demands of the new settlement and achieving a low/zero carbon development by viable and practical means.</p>	Though the discussions within the industry are known the Scoping Report has made no suggestions as to what may be a preferred approach at 'Lodge Hill', it has simply outlined the main sustainability issues to the area and created a framework for all developments to be assessed in terms of their contribution to the sustainability of the area
Distributed Energy/District Heating	The possibility of DE/DH in conjunction with CfSH illustrates the challenges highlighted above, principally: Can the site accommodate a DE centre;	These issues are not for the scoping report to address.

Scoping Report	Consultee Comments	Response
	<p>Is the fuel supply available and deliverable to the site by acceptable means; Is the investment in DE/DH commercially viable; DE/DJ cannot be funded out of land value and requires secured sales of power and heat. How can this be delivered; How are 'private wire' legislative conflicts to be resolved; DE/DH requires heat use to comply with 'good quality' CHP. CfSH requires limitations on heat requirements which will detract from DE/DH viability and legislative compliance; Are the air permeability/circulation requirements and implied fenestration levels in CfSH acceptable to the market? Can these be relaxed where DE/DH can supply heat loads to support openable windows and higher fenestration levels</p>	
Environment Agency (23/01/2009)		
Links to other Plans, Programmes and Strategies	<p>In the Regional Legislation/Local Documents reference should be made to the Regional Biodiversity Strategy produced by the South East England Biodiversity Forum. This strategy aims to identify Biodiversity Opportunity Areas across the south east and streamline the regional Biodiversity Action Plan (BAP) targets for habitats. This strategy should also be considered for Sustainability Issue – Objective 1 (page 22).</p>	Noted
Relevant plans and programmes	<p>Other documents that will be of use to the Council in their production of the LDF include the following:</p> <ul style="list-style-type: none"> • Thames Draft River Basin Management Plan. • TE2100 reports <p>Stage One, 2006: Early Conceptual Options (ECO) Consultation. We consulted on our objectives and how the measures to reduce flood risk could affect people or their environment.</p> <p>Stage Two, 2007-08: This High Level Options (HLO) Consultation. We asked for peoples views on:</p> <ul style="list-style-type: none"> • the future direction for flood risk management in the Thames Estuary • what needs to be done to achieve this direction in their local area. <p>Stage Three, We will publish a draft TE2100 plan in spring 2009 with the final plan</p>	Noted

Scoping Report	Consultee Comments	Response
	<p>submitted to Government in 2010.</p> <ul style="list-style-type: none"> • The Eco Region Prospectus. See P13 for a summary of all the following issues. See P39 for a chapter on Eco Quarter: the Emerging Concept Thames Gateway. Eco Region: a prospectus, November 2008, Communities and Local Government http://www.communities.gov.uk/publications/thamesgateway/ecoregion • Towards Water Neutrality in the Thames Gateway, November 2007, The Environment Agency www.environment-agency.gov.uk/subjects/waterres/287169/1917628/?lang=_e • The Parklands Vision, October 2008, Communities and Local Government www.communities.gov.uk/publications/thamesgateway/parklandsvision • The Climate Change Bill, became law on 26th November 2008 (Climate Change Act 2008) www.defra.gov.uk/environment/climatechange/uk/legislation/ <p>It sets out targets for dramatic reductions in greenhouse gas emissions – by 80% by 2050 from a 1990 baseline</p> <ul style="list-style-type: none"> • Sustainable Energy, the 2007 Energy White Paper www.berr.gov.uk/whatwedo/energy/sources/renewables/strategy/page43356.html • In December 2008 the Government published Definition of Zero Carbon Homes and Non-Domestic Buildings: Consultation www.communities.gov.uk/planningandbuilding/theenvironment/zerocarbonhomes/ <p>The Government is consulting on the target for all new homes to be zero carbon from 2016</p> <ul style="list-style-type: none"> • Zero Waste Places, October 2008, DEFRA launched an initiative with local authorities to pilot the concept of Zero Waste Places. Objectives and visions set out in the emerging North Kent Multi Area Agreement should be considered as a supporting document for policies for Medway. Through this document there is the potential to address key transport and air quality challenges (section 4.11 of this document). <p>In addition Medway Council's "State of Medway Report: Water Supply" (November 2008) provides a good breakdown of the requirements relating specifically to water resources from several policy documents. This document</p>	<p>Noted</p>

Scoping Report	Consultee Comments	Response
13 & 7	<p>construction waste (commercial industrial waste) and hazardous waste. In terms of demolition and construction, we would wish to see a commitment to high rates of recycling of demolition materials and measures to incorporate recycled materials within the construction. Some developers and construction companies are already achieving levels of recycled material of 20% in their projects. It is noted that Medway has not considered Hazardous Waste within this scoping document.</p>	<p>the Final Version of the Scoping Report issued April 2009</p>
Prudent use of natural resources	<p>Further suggested indicators should be: The percentage of recycled material used in construction or the number of developments using over 20% recycled materials in construction.</p> <p>Within Objective 5 the Code for Sustainable Homes (CFSH) Indicator should be more ambitious. High Levels of the Code are readily achievable and Building to a high level will assist in demonstrating high standards of design and sustainability. Objective 5 should set the bar higher and record the Number of new buildings reaching CFSH 4 or above. Within the emerging LDF we would like to see that as a minimum, a commitment is made to the glide path specified in 'Building a Greener Future' (that is code level 4 by 2013 and code level 6 by 2016). Objective 5 could be expanded to measure percentage or number of commercial developments that meets BREEAM 'excellent'.</p> <p>Also within Objective 5 a further indicator would be the number of other waste treatment/recovery facilities.</p>	<p>Noted and the reference to the CfSH amended in the Final Version of the Scoping Report issued April 2009</p>
Water Resources	<p>Water resources are already under stress in the Thames Gateway and further growth in Medway Council could worsen this problem. The Southern Water final business plan application to OFWAT expected April 09 will not provide all of the answers alone. We recommend a water cycle strategy that will assess the capacity of the environment and existing infrastructure to respond to increased demand from new development, and identify a programme and timing of new water supply and waste water infrastructure measures. This will address concerns raised in Paragraph 4.12.2 that over abstraction is a problem and provide recommendations about how Medway can achieve Water Neutrality addressing section 4.15.</p> <p>The Thames Gateway Eco Region Prospectus November 2008 commits CLG and partners to the following action: As a next step towards water neutrality, we are conducting a follow on study to determine in more detail costs and benefits for</p>	<p>Noted & acknowledged in the SA</p>

Scoping Report	Consultee Comments	Response
	<p>achieving water neutrality in the eco-region. The Water Resources section of 4.15 would benefit from acknowledging the range of mechanisms to improve water efficiency. We would like to see a commitment to high levels of the Code for Sustainable Homes and BREEAM within the document.</p> <p>The Water Framework river basin classifications identified in the River Basin Management Plans should be incorporated into any assessment of river quality. Sustainability issue – Objective 3 (page 25) should make reference to the EU standards of the Water Framework Directive (WFD). The Water Framework Directive sets a target of aiming to achieve at least 'good status' in all waters by 2015 or, where justified, by 2021 or 2027.</p> <p>Further suggested indicators would be the number of properties retrofitted/No of businesses retrofitted and the number of new dwelling benefiting from rainwater harvesting.</p>	<p>Noted & acknowledged in the SA</p> <p>The suggestion is noted but it has not been included within the framework as currently there are no statistics collated on this or any intentions to</p>
Flood Risk	<p>The term "worst effects" is not defined. As such rather than use this term we would suggest that it is stated that "parts of Medway area vulnerable to flooding from a number of sources i.e. tidal, fluvial, surface water and sewer flooding".</p> <p>It isn't clear where these figures have come from. Assuming they are correct we would suggest to make it clearer the text should read "1551 properties at risk from a "in 1000 year event and 1363 properties at risk from a 1 in 100 year event". Is the Council absolutely certain that this flooding is just as a result of fluvial flooding? It should also be stated within this section that a sequential approach to building in the floodplain will be used and that areas of little or no risk of flooding will be developed in preference to those at highest risk.</p> <p>We support your proposed sustainable drainage (SUDS) indicator in objective 4. SUDS should be employed as primary means of managing surface water from all</p>	<p>Noted and para 14.5.7 amended within the Final Version of the Scoping Report issued April 2009</p> <p>Noted and amendment incorporated into text of the Final Version of the Scoping Report issued April 2009</p> <p>Noted</p>

Scoping Report	Consultee Comments	Response
	<p>new developments. This would not only ensure reduction in surface water run-off but would also improve the water quality. There may be biodiversity benefits as well, depending on the type of SUDS selected, e.g. swales and attenuation ponds.</p> <p>It should be stated within this Objective (3&4) that "A sequential approach will be applied to development and flood risk at all stages of the planning process. Where, exceptionally, development in flood risk areas does go ahead, the development itself must be made safe whilst making the most of all opportunities to reduce flood risk overall."</p>	<p>Noted and incorporated in suggested objectives on page 28 of Final Version of Scoping Report issued April 2009.</p>
Energy	<p>In order to ensure that energy use and carbon dioxide emissions are reduced, development should seek to reduce the inefficiencies in energy supply and use the lowest carbon producing energy technologies.</p> <p>Community energy systems for heating and cooling allow primary energy resources to be processed, distributed and used more efficiently than generation at either a centralised or micro scale. However it is possible that power may be most efficiently produced from a centralised location. Industrial symbiosis should be encouraged between neighbouring developments in order to improve resource efficiency. This may include the trade of materials, energy, heat, water and other by-products, maximising the embodied energy therein. E.g. Barking Riverside.</p>	<p>Noted</p>
Housing	<p>Requirements for new development will not purely be sufficient to reduce water and energy consumption in Medway. Retrofitting existing building is essential for future adaptation for both houses and businesses. Retrofitting could also decrease the costs of household and business bills and help to reduce the impact of the current economic strain. This should be included as part of the LDF.</p>	<p>Noted</p>
<p>John Sharkey on behalf of the University for the Creative Arts (23/01/2009)</p>		
Objective 15,16 & 9	The University looks forward to continuing to work with the Council, and others, to	Noted

Scoping Report	Consultee Comments	Response
	improve the skills of the area's residents, and to increase the level and value of jobs in the area, particularly in the creative and cultural industries.	
Objective 13, 5 & 2	The University looks forward to working with the local planning authority to ensure that emerging planning policy documents encourage the improvement of energy efficiency in existing and new buildings.	Noted
Sustainability Framework	It is disappointing that there is no Sustainable Development Principle dealing with (higher and further) education, particularly bearing in mind the importance attached to (higher and further) education in the emerging South East Plan, in the Kent and Medway Structure Plan 2006, in the Council's Community Plan 2007–2010, and in the Council's Medway Regeneration Framework.	Objective 15 includes suggested indicators covering the proportion of the working age population with qualifications
Appendix 1	It is disappointing that no regard has been had to the plans of the various higher and further education institutions referred to in the main body of the document.	Medway's Community Plan and its references to training for all ages are mentioned within this.
Natural England (20/01/2009)		
Section 4.10	Whilst many of the Ramsar Sites are of importance for their waterfowl, Ramsar sites are important wetlands for other species including their plant and invertebrate communities. The network of Natura 2000 sites across member states of the European Union comprises the Special Protection Areas and Special Areas of Conservation. Whilst Government Policy treats Ramsar Sites as if they were European sites in terms of their protection and management, they do not form part of the Natura 2000 network.	Noted and amended
Map 1	For ease of reference, it may be better to amend the shading of the various designated nature conservation sites on Map 1 as it is difficult to see the individual Sites of Special Scientific Interest, Ramsar Sites, Special Protection Areas and Special Areas of Conservation.	Noted and considered but unfortunately no alternate way found which was significantly clearer
Table 4	As the undertaking of condition assessments for Sites of Special Scientific Interest (SSSI) is a rolling programme, it would be sensible to insert the date at which the figures for the percentage of the SSSIs meeting the public service agreement target were downloaded.	Current at the time of the original publication and checked before the final version of the scoping report went out in April 2009
Other biodiversity features	In addition to the internationally, nationally and locally important nature conservation sites within Medway Unitary Authorities jurisdiction, the area supports a number of habitats of principal importance ¹ and Biodiversity Action Plan (BAP)	These other designations and non-designated sites in terms of biodiversity were mentioned within

Scoping Report	Consultee Comments	Response
	<p>priority habitats (both at the National and County level). Similarly, Medway supports populations of a number of protected species, species of principal importance¹ and BAP species (both at the National and County level). We are fortunate in Kent and Medway that significant amounts of baseline data are currently available without the need to undertake specific surveys. For example the Kent Habitat Survey data includes details of the various different habitats covering the County and the Kent and Medway Biological Records Centre² should be able to provide you with records for protected species, species of principal importance and BAP priority species. Consequently Natural England recommends the baseline data is amended to incorporate reference to these biodiversity assets within Medway.</p> <p>Natural England welcomes the inclusion of the condition of the key landscape characteristics of Kent landscape characters within Medway. However it is disappointing that more emphasis is not placed on the nationally important landscape of the Kent Downs Area of Outstanding Natural Beauty (AONB), part of which lies within the boundary of the Unitary Authority. Consequently we recommend the baseline is amended to incorporate further information on the Kent Downs AONB.</p>	<p>the original Scoping document and carried forward into the final version of the Scoping Report issued in April 2009</p> <p>Para 4.10.9 of the Scoping Report is specifically in relation to the Kent Downs AONB</p>
Objective 1	<p>We welcome the recognition that indirect pressures on biodiversity habitats need to be considered, but the direct effects also need to be fully considered. Natural England welcomes the need to consider biodiversity outside of international, national or local nature conservation or landscape designations in Objective 1. One additional challenge, however, that should be included within this section is the need to provide measures to allow biodiversity to adapt to the effects of climate change. We also recommend that Objective 1 is modified to include reference to the direct and indirect impacts upon the nationally important landscape within Medway.</p>	<p>Noted and amended within the Final Version of the Scoping Report issued April 2009</p>
Sustainability Framework – biodiversity, flora and fauna	<p>Protection of the Natural Environment – Biodiversity, Flora and Fauna Additional indicators that Natural England would recommend for inclusion in this section are as follows:</p> <ul style="list-style-type: none"> o The area of land within Medway covered by agri-environment schemes o Populations of protected species, species of principal importance and BAP priority species 	<p>Noted and indicator included in Final Version of the Scoping Report issued in April 2009</p>

Scoping Report	Consultee Comments	Response
	o The area of accessible natural greenspace within Medway	
Framework – climatic factors	Natural England recommends that the target for buildings to meet Level 3 of the Code for Sustainable Homes should apply to both new and retrofit homes (as is the case for Objective number 6)	Noted and incorporated in the Final Version of the Scoping Report issued in April 2009
Framework – material assets	Natural England generally welcomes the proposed indicators in this section but would recommend that an additional one is included relating to the provision of accessible natural greenspace. An example of such an indicator could be „The proportion of Medway residential properties meeting the Accessible Natural Greenspace Standards. These standards state that: o All residents should live no more than 300m from their nearest area of natural greenspace of at least 2ha in size. o That there should be at least one accessible 20ha site within 2km of home. o That there should be one accessible 100ha site within 5km of home o That there should be one accessible 500ha site within 10km of home.	Noted and indicator incorporated in framework of the Final Version of the Scoping Report issued in April 2009
Framework – culture, heritage and landscape	It is disappointing that no indicators have been included in this section regarding landscape, either at the local level or for nationally important areas such as the Kent Downs Area of Outstanding Natural Beauty (AONB). Consequently we recommend an indicator is included against which the effectiveness of the sustainability appraisal can be measured.	This objective within the framework was focused on the built heritage of the area
SEERA (20/01/2009)		
	The relevant regional plans, policies programmes and strategies are referenced in table 2. However you may wish to include the South East Plan Implementation Plan and the Regional Economic Strategy Implementation Plan in the table. Implementation/delivery may become more important during stage B and C of the appraisal.	Noted
	The use of the Regional Sustainability Framework as the basis for developing the SA objectives is commendable.	Noted
Theatres Trust (23/01/2009)		
General	The Theatres Trust wishes to be assured that the Local Development Documents are robust enough to include specific guidance on protecting and encouraging arts and cultural provision. We are therefore pleased to note that in Appendix 1	Noted; the importance of cultural and recreational activities is incorporated in the Core Strategy

Scoping Report	Consultee Comments	Response
	<p>on page 56 the Medway Regeneration Framework has been quoted for the provision of outstanding cultural facilities alongside celebrating existing heritage and identity.</p> <p>Increased and sustainable participation in cultural and recreational activities should be encouraged by local authorities, public agencies and their partners through Local Development Documents and other measures to improve the overall standard of fitness, enhance cultural diversity and enrich the overall quality of life.</p> <p>Likewise the Medway Economic Development Statement is quoted on page 58 to firmly establishing Chatham as a city centre of cultural and leisure activities....</p> <p>The encouragement of these facilities in town centres will help deliver sustainable development by promoting economic growth, improving accessibility and offering genuine choice for consumers through high density and mixed-use development that recognises the importance of high quality design. Planning Policy Statement : Delivering Sustainable Development (PPS1), repeats these themes for achieving sustainable development.</p>	

Initial SA	Consultee Comments	Response
CB Richard Ellis on behalf of Land Securities Group Plc (July 2009)		
General	General comment relates the need for the next version of the document to articulate in a greater level of detail – based on robust and credible evidence – the rigorous assessment of its spatial options for accommodating growth, to ensure that the statutory requirements of the Sustainability Appraisal process are met.	This was incorporated through the introduction of a chapter called Appraisal of Alternatives, within the Interim Sustainability Appraisal and also section 4 of the final document, which also covers this.
Lodge Hill, Chattenden	We also consider that the reference to 70,000 sqm of employment within the Sustainability Appraisal is arbitrary; the approach to the quantum of employment floorspace should be based on the approach expressed elsewhere within these representations	Noted.
Paragraph 4.456	Paragraph 4.456 relates to sustainability standards. We consider that the Core Strategy should reflect the Code for Sustainable Homes national timetable more fully, to include that relating to the period up to 2016 (i.e. 2010 onwards – Code 3, and 2013 onwards – Code 4).	The question being asked was to gauge whether these were applied or more ambitious targets were applied.
Question 90	Question 90 asks what headline sustainability principles should be applied in planning the settlement. We consider that the approach should reflect that set out in PPS1: Delivering Sustainable Development and Planning Policy Statement: Planning and Climate Change – Supplement to PPS1. We consider that given the anticipated 'life' of the Core Strategy, the emerging policies need to be sufficiently flexible to ensure delivery in the medium and long term, to respond to changing standards and emerging technologies.	The question being asked was to gauge whether these were applied or more ambitious targets were applied.
Paragraph 5.18	In the context of the parameters for assessing the alternative options for accommodating growth, the final bullet point of Paragraph 5.18 states that other than the base option, each option is of a size that could be a substitute for the proposed new settlement at Lodge Hill. We have significant reservations about the validity of this assumption. It would appear to us from a review of the relevant SLAA submissions that the scale (hectares) of the four alternative options for accommodating growth are not sufficient to substitute the scale of development that could be accommodated at Lodge Hill, and to accommodate Medway	Noted. The alternatives are considered strategically- issues around land acquisition are not entered into at this strategic level of appraisal.

Initial SA	Consultee Comments	Response
	Council's growth requirements. This also applies to Paragraph 5.23 , which states that around 200 hectares of land would be required to make up for the 'loss' of Lodge Hill, and other references made to substitution (e.g. Paragraph 5.36) within this section of the Issues and Options report, for the reasons set out above.	
Paragraph 5.26, 5.27 and 5.40	<p>We consider that the Council should liaise with Maidstone Borough Council to understand its position in terms of housing land supply (with reference to Paragraphs 5.26 and 5.27). With reference to paragraph 5.27, for the purpose of clarity, if a development at Capstone Valley was increased in size by virtue of extending further southwards into Maidstone, this would not contribute towards Medway Council's housing requirements.</p> <p>We assume that the numerical points set out under Paragraph 5.40 are in no order of preference. However, in the context of the requirement for the Core Strategy to be in general conformity with the RSS, and a number of key principles enshrined within national planning policy, in our view there are a number which should be afforded greater weight. These are 1 (general conformity with the SEP); 7 (greenfield or previously developed land); and 9 (impact on regeneration strategy for the urban area). It may also be appropriate for the Council to consider including a criterion relating to deliverability within the Plan period.</p>	<p>The Capstone option was assessed within the Initial SA Report on the basis of the area that was within Medway Authority's boundary.</p> <p>Additionally discussions were had with Maidstone Borough Council, where a submission had been made for one of their documents relating to the other side of the site. Their future plans and approach to the area was that they wished it to remain as a green lung to Maidstone and a strategic gap between the towns.</p>
Natural England (17/09/2009)		
HRA	We are not aware that any assessment under the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) has taken place for the Issues and Options consultation. The Habitats Regulations assessment of the Council's Core Strategy should be started as early as possible in the Core Strategy process and should be used to inform the Council's preferred options. Natural England would be happy to provide help and assistance to the Council in all stages of the assessment process.	Ongoing conversations have occurred during with Natural England through the production of the accompanying HRA report, as well as consultations with interested stakeholders.
Housing	Natural England would expect any housing or regeneration to be of the highest standards in environmental sustainability terms, appropriately located to avoid impacts on the natural environment (in particular, statutory nature conservation sites and the Kent Downs AONB), and contribute to the provision within Medway of multi-functional green infrastructure in accordance with the South East Green	The options appraised were prioritised to focus on those type of developments which were likely to have the greatest impact and where locational issues could be

Initial SA	Consultee Comments	Response
	Infrastructure Framework.	taken into account
Economy	Natural England would expect any economic development to be of the highest standards in environmental sustainability terms, appropriately located to avoid impacts on the natural environment (in particular, statutory nature conservation sites and the Kent Downs AONB), and contribute where possible to the provision of multi-functional green infrastructure in accordance with the South East Green Infrastructure Framework.	The options appraised were prioritised to focus on those type of developments which were likely to have the greatest impact and where locational issues could be taken into account
Leisure, Culture and Tourism	<p>Natural England is pleased to see the recognition of tourism opportunities afforded by environmental assets, including the internationally designated nature conservation sites of the Thames and Medway Estuary and Marshes. Although we are glad to see recognition of potential human pressures on designated nature conservation sites, we would like to see greater recognition of the potential sensitivity to disturbance of nature conservation interests and the consequent need for nature conservation sites to be well managed in order to ensure that their special interest is not damaged.</p> <p>Preservation and enhancements of landscapes (by reference to landscape character assessment) is important to promoting and sustaining tourism in Medway. Preservation and enhancement of landscape character and biodiversity resources in the Thames and Medway Estuary and Marshes could make a vital contribution to tourism in Medway as long as visitor pressure on these internationally important nature conservation resources is sensitively and sustainably managed.</p>	Noted. This is a matter that is given further attention in the HRA report accompanying the draft Core Strategy Submission.
Climate Change	Natural England would support an emphasis on designing in environmentally sustainable building techniques in new developments as a proportionate response to assist climate change adaptation strategies.	Noted, this is also a matter for the Development Management DPD.
Lodge Hill	<p>Development at lodge Hill, as presently envisaged, would involve the provision of 4,500 new dwellings in close proximity to the nearby internationally protected Thames and Medway Estuary and Marshes SPA and Ramsar Sites and the SSSI at Chattenden Woods. This number of dwellings could have the potential for significant recreational and other human pressures on the vulnerable nature conservation interests.</p> <p>Achievable delivery of this number of houses would need to show that there would not be an adverse effect on the conservation integrity of the nearby internationally protected sites and that the interest features of the Chattenden</p>	The impact of the development on international habitats is considered through the HRA of the Core Strategy and the capacity of the site specifically will be considered through the application process. The impact on biodiversity more generally are considered in the SA under the Biodiversity indicator and

Initial SA	Consultee Comments	Response
	<p>Woods would not be damaged.</p> <p>As the Issues and Options report indicates at paragraph 4.21, the projected total of houses for the South East Plan period is in excess of 3,000 over the plan period's required provision. We would request the Council give careful consideration to whether the proposed Lodge Hill redevelopment area can sustain the number of projected dwellings considering the nearby vulnerable nationally and internationally protected nature conservation sites.</p> <p>We would also request that the Council gives careful consideration as to whether the landscape could absorb a development of a size and scale that 4,500 dwellings would entail without a significant detrimental effect on the local landscape character and resource.</p>	<p>in section 5 of eth SA Report.</p>
	<p>The Council should use any Lodge Hill development as an exemplar for sustainable development considering its location in the Thames Gateway Eco region.</p> <p>In light of Natural England's concerns over the ability for species, habitats and landscapes to adapt to the effects of climate change, we would urge the Council to consider requiring energy saving and reduction technologies and measures incorporated to a standard over and above the usual required planning and building regulation control standards. We would also suggest that the Council requires a significant proportion of on-site renewable energy generation for the same reasons.</p> <p>In order to promote a sustainable balanced mixed community, Natural England would like to see sufficient retail and employment services provided on site to reduce use of the private car and thereby contribute to carbon reduction.</p> <p>With a development of anything like the scale proposed, Natural England would wish to see extensive on-site provision of high quality, multi-functional green infrastructure as a guiding sustainable development principle. We would refer the Council to the South East Green Infrastructure Framework for guiding principles.</p> <p>Considering the nearby designated nature conservation sites and their vulnerability to recreational and other human disturbance, the nature and extent of on-site green infrastructure planning and provision would be a vital tool in reducing the potential for significant effects to be caused to protected nature conservation interests.</p>	<p>Noted. The more detailed matters are also considered in Council's Development brief for Lodge Hill, which has been considered in undertaking this SA.</p>

Initial SA	Consultee Comments	Response
RSPB (17/09/2009)		
Housing	The RSPB considers that the economic downturn provides Medway Council with an opportunity to reconsider the environmental appropriateness of the current urban regeneration emphasis. We are particularly concerned with proposals to focus housing delivery within the Medway urban area at riverside sites. The number and scale of waterfront developments are likely to have a negative impact on the Medway Estuary and Marshes SPA. Of particular concern is the Chatham Docks site, which is located adjacent to Medway Estuary and Marshes SPA. The development has the potential to result in a number of impacts that could potential damage the SPA, including from land and/or water-based recreational activities. We strongly recommend that the riverside sites be thoroughly appraised in the AA of the Core Strategy and we would welcome the opportunity to comment further on this matter prior to the publication of that document.	Concerns noted, however the majority of the riverside regeneration sites within the Core Strategy have already been granted planning permission. Notwithstanding, these sites are considered in further detail in the HRA report.
Options	We recognise that the Sustainability Appraisal of the Core Strategy has evaluated the housing options and has concluded that "In terms of the spatial options being used to accommodate housing, there are similarities between Lodge Hill, Chattenden and the Extended Hoo options in that they would have a beneficial effect on social, economic and also environmental objectives". This statement is of significant concern given that Hoo is presently less than 500 metres from the Medway Estuary & Marshes SPA and the Lodge Hill, Chattenden site is potentially within 3km. The introduction of up to 5000 addition homes in either of these locations could significantly increase recreational pressure on the European Sites. Without having undertaken technical studies to investigate the existing and potential future recreational pressure on the European Sites, it is not clear how the conclusion of the SA/SEA has been reached. We recommend that as part of the appraisal of housing options, Medway should liaise with Natural England in respect of the specialist work that is being undertaken to investigate the existing and predicted recreational pressures on the internationally designated sites. We also strongly recommend that the above matters be thoroughly appraised in the AA of the Core Strategy and we would welcome the opportunity to comment further on this matter prior to the publication of that document.	Concerns noted. The HRA has considered in detail the effects of the Lodge Hill site on the European sites, considering potential air quality, water quality and recreational disturbance impacts. Consideration has also been given to the development brief for the site and the proposed master plan for the site. The HRA (in consultation with RSPB, Natural England and KWT) and the SA has sought to make recommendations to various policies with the Core Strategy to ensure there are no significant impacts on the European sites. Please refer to the HRA report for further detail.

Initial SA	Consultee Comments	Response
Scottish Power (17/09/2009)		
Economy - Question 30	The principle of this initiative is supported. However, where mixed uses are proposed they shouldn't prejudice existing or future expansion of industry. The scope of such an initiative should not only be concerned with raising capacity, it should also be needs based, properly focused and support employment uses at locations that are sustainable. It should also recognize that certain areas offer greater sustainability advantages than others.	Noted.
Economy - Question 31	The principle of this initiative is supported. However, the emphasis should not only be on raising capacity, it should also be needs based, properly focused and support employment uses at locations that are sustainable. It should also recognize that certain areas offer greater sustainability advantages than others.	Noted.
Barratt strategic (18/09/2009)		
	As indicated in our response to question 96, we feel there is an alternative option that should be tested. This would comprise a reduced scale of development at Chattenden, as we only believe it can deliver 3000 units maximum during the current plan period. The residual 2000 should be carried over to the next plan period. In addition to the above a reduced scale of development equivalent to a mini extended Hoo should be assessed. This could provide for 1500 units in and around Hoo, St Werburgh, High Halstow and Cliffe Woods.	Concerns noted. Please refer to section 4 of the SA report that explains why a lower level of development was not considered reasonable or realistic. To reduce the scale of the development at Lodge hill would reduce the viability of the site in terms of meeting the infrastructure requirements (especially public transport) needed to serve a sustainable development in this location. The dispersion of this development to other areas in the Hoo would also reduce the regeneration opportunities provided by 1 large strategic development.
Question 95	The initial sustainability appraisal (July 2009) also indicates that this solution would make a positive contribution to the economic competitiveness of the area,	Noted, however the Council has selected its preferred option in

Initial SA	Consultee Comments	Response
	<p>maintaining and developing the workforce, as well as improving educational achievements, beginning in the short term and continuing into the medium and longer term. There may also be some potential for some benefit from this solution to conserving and enhancing the historic environment and other material assets of the area. Furthermore we note that the initial sustainability appraisal indicates at para 3.51 that the development of an extended Hoo would still preserve the space between the villages that would make up the extended Hoo area. To conclude Barratt Strategic feel that the councils assessment of the extended Hoo site is flawed. We do not feel the impacts upon the area are as sever or negative as proposed by the council. Many of the issues are capable of being addressed during the course of design process and thus are capable of mitigation. The initial sustainability appraisal is a lot less critical of the effects of development in this area, and we would suggest the council review their position having regard to the above.</p>	<p>accordance with other factors, not only the results of the Sustainability Appraisal. Notwithstanding, the findings of the SA of alternatives hold.</p>
<p>Trenport (18/09/2009)</p>		
	<p>The right options have not all been considered. A further option which should be considered is the option of expansion of the village of Cliffe, as proposed by Trenport. This could be either on its own or as part of a strategy to locate additional housing at key rural service centres, such as Cliffe, to maintain the level of shops and other rural services in the villages and maintain their relative levels of sustainability (see comments on Question 52). This could possibly form part of a variation to Option 2 Expanded Hoo (village 'cluster') to include Cliffe. For the reasons set out in the response to Question 52 the option of effectively stopping any further development at village such as Cliffe would mean that the level of rural services will decline making them less sustainable.</p>	<p>This option is not considered to be a reasonable or realistic alternative to the development of Lodge Hill. Any significant expansion of the village of Cliffe would require development of greenbelt land and would overwhelm the existing village.</p>

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.	<p>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.</p> <p>Compliance with requirements of the SEA Directive will be highlighted in the final SA Report that will accompany the draft submission Core Strategy.</p>
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 centres are to be the focus of much future development a higher proportion of the resident population could consequently be living within areas of	Noted, good air quality should be aspiration for all new development. Further information is provided in section 5 of the SA report to give

Interim SA	Consultee Comments	Response
	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).	further attention to this issue.
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 is provided in the Final SA Report.
Para 4.24	Paragraph 4.24 confirms that over the longer term, Lodge Hill would make the	Noted and amended.

Interim SA	Consultee Comments	Response
	<p>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 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</p>	Noted, addressed in final SA Report.

Interim SA	Consultee Comments	Response
	<p>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 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.</p>	<p>Noted, however the development of Lodge Hill will undoubtedly increase the number of people and cars on the peninsula. The SA makes note of the mitigation measures proposed.</p>
Para 6.56	<p>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.</p> <p>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.</p>	<p>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. Please refer to the HRA for further information.</p>
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</p>	<p>Noted.</p>

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	<p>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 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>Noted, and references amended in the final SA Report.</p> <p>Noted- this is a matter for the plan, rather than the SA.</p>
Chapter 7	Paragraph 7.15 of the ISA relates to the Area Policies covering the 5 towns (CS26,	Noted, comment no longer

Interim SA	Consultee Comments	Response
	<p>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 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</p>	<p>relevant to final SA Report.</p> <p>Noted.</p> <p>Noted.</p> <p>Noted.</p>

Interim SA	Consultee Comments	Response
	<p>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>	
Chapter 8	<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 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</p>	<p>Noted, comment no longer relevant to final SA Report.</p> <p>Noted, comment no longer relevant to final SA Report.</p> <p>Noted.</p> <p>Noted, however existing comment still stands.</p>

Interim SA	Consultee Comments	Response
	<p>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 Medway-wide [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>	<p>Noted, however, as per previous comment, the scale of the development is likely to increase traffic and congestion and it would be remiss of the SA not to point this out. The situation should be closely monitored.</p>
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, 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</p>	<p>Noted and amended.</p>

Interim SA	Consultee Comments	Response
	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.	
Chapter 9	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.	Noted.
Chapter 9	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.	Noted.
Chapter 9	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.	Noted.
Chapter 10	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 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.	Noted.
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	Noted & updated.

Interim SA	Consultee Comments	Response
	clarification.	
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.

Update to Interim SA (incorporating SEA)	Consultee Comments	Response
CB Richard Ellis on behalf of Land Securities Group Plc (14/10/11)		
General	It is noted that this iteration of the ISA updates the findings of the previous version to account for any changes made to the Core Strategy between the Pre-Publication and Publication Drafts as well as including information in relation to cumulative effects. Therefore, the representations Land Securities submitted to the ISA that accompanied the Pre-Publication Draft Core Strategy remain valid.	Noted and addressed in Final SA Report
Introduction	The introductory text in paragraph 3.1 confirms that section 3 of the report provides an overview of the SA process followed. Given that the remit of the document is for an SA incorporating SEA, it is considered that detail on the process undertaken to date in respect of how the SEA Directive has been complied with should also be included.	Noted and included in Final SA Report
	The compatibility matrix following paragraph 3.16 shows the updated compatibility matrices between the Core Strategy strategic objectives and the SA framework. However, both these categories are not clearly defined. It would be helpful for text to be included alongside the table to confirm what the Core Strategy strategic objectives are, and to set out in detail the SA framework.	Noted, these are now explained in earlier sections of the SA Report.
Appraisal Summary	Land Securities welcomes the continued inclusion of a summary matrix of the Core Strategy policies, and considers this to be a helpful aid. Paragraph 5.2 sets out the key to the symbols used within the accompanying tables. It is noted that two of the categories are labelled "Potentially some benefits" and queries whether this should be amended.	Noted and corrected for Final SA Report.
Appraisal against the Environmental Indicators – Para 6.2 & 6.4	Paragraph 6.2 states that "The proposed development at Lodge Hill, alongside economic development at the Hoo Peninsula will also lead to increased traffic on 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 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. Reference to air	Refer previous comments on this matter.

Update to Interim SA (incorporating SEA)	Consultee Comments	Response
	quality mitigation measures within paragraph 6.4 could also therefore usefully make reference to Core Strategy Policy CS33.	
Appraisal against Environmental Indicators – Para 6.7	Paragraph 6.7 includes a recommendation that more aspirational targets are set within the Core Strategy for the Code for Sustainable Homes and BREEAM. It is considered that this approach is not justified, on the basis that these standards are national targets.	Noted, however there is still some uncertainty around national targets and suggestion provides some certainty for Medway.
Appraisal against Environmental Indicators – Para 6.15	Paragraph 6.15 explicitly states that “Development at Lodge Hill will clearly have some adverse effects on landscape...” Land Securities considers this statement should be removed from the text of the ISA on the basis that it is not qualified by any justification. As a minimum, ‘will clearly’ should be removed, and replaced with ‘could’ to reflect the subjectivity of this statement.	Amended to ‘likely to have some adverse effects’.
Appraisal against the Social Indicators – Para 7.9	Paragraph 7.9 of the draft ISA relates to transport and accessibility, and notes that ‘Further changes have been made to Policy CS33: Lodge Hill, with less specificity given as to which transport improvements will be provided by developers.’ It is noted that, for clarity, the text should confirm that the remainder of the necessary transport improvements will be provided by alternative parties.	Noted, however comments are based on policy text.
Appraisal against the Economic Indicators – Para 8.3	Paragraph 8.3 of the ISA states that ‘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.’ Land Securities remains of the view that this text should be omitted from the ISA, on the basis that Draft Core Strategy Policy CS33 makes it clear that the employment opportunities sought at Lodge Hill are to create a new focus for higher value economic activity in a Medway-wide [our emphasis] context.	Noted, however this is still considered to be a potential issue .
Appendix 1	Land Securities welcomes the detailed response provided to its previous representations submitted in respect of the ISA that accompanied the Pre-Publication Draft Core Strategy. The amendments made as a consequence are welcomed, and Land Securities looks forward to the opportunity to comment on the final SA report where Appendix 1 confirms a number of its previous representations will be addressed.	Noted.
Para 1.16 of	This paragraph recognizes that the latest iteration of the Sustainability Appraisal	Please refer to Appendix 1 in

Update to Interim SA (incorporating SEA)	Consultee Comments	Response
Publication Draft Core Strategy	(SA) is being published alongside this draft version of the Core Strategy, but that a final version will assess the Submission Draft. Guidance from the Planning Advisory Service in the Plan Making Manual (September 2009) advises that 'the sustainability appraisal is integral to the plan making process. It should perform a key role in providing a sound evidence base for the plan and form an integrated part of the plan preparation process. It should be transparent and open to public participation. The sustainability appraisal should inform the decision making process to facilitate the evaluation of alternatives. It should also help demonstrate that the plan is the most appropriate given the reasonable alternatives.' Given that a further iteration of the SA is expected to be published when the Core Strategy is submitted to the Secretary of State (which will not be subject to public consultation), it is considered that the Core Strategy is not 'justified' insofar as it will not be possible to comment on the extent to which the final SA has influenced the content of the DPD.	relation to the compliance of the SA report with regulations and legislation.
Barratt strategic (13/10/2011)		
General	The Sustainability Appraisal highlights the shortfall in affordable housing as a key sustainability issue in the district. It also indicates that the first SA objective is 'to ensure that the residents of Maidstone have the opportunity to live in a well designed , sustainable, decent and affordable home'	Believe this is a confusion due to the fact that Maidstone Borough Council also had a consultation on related to their LDF for part of the time and its closing date corresponded with that related to the Medway Core Strategy and accompanying documents.
Housing figures	Given the above (5 specific points) and having regard to the findings of the North Kent SHMA we are surprised that the SA does not assess the implications of alternative levels of housing growth	Noted. Please refer to section 4 of this SA Report.
Soundness of CS	Whilst we accept that the changes we are suggesting would require publication and consultation on a revised CS and associated changes to the Sustainability Appraisal, without these changes we believe the CS to be fundamentally unsound, and the only recourse for MC to be to withdraw the plan and for a full SA to be undertaken to test a higher level of growth	Noted. Please refer to section 4 of this SA Report as to why a higher level of growth is not considered to be a reasonable option.

Update to Interim SA (incorporating SEA)	Consultee Comments	Response
Deliverability of Lodge Hill Strategic Allocation	Whilst we accept.....(same as soundness)...and the only recourse for MC to be to withdraw the plan and for a full SA to be undertaken to a lower level of growth at Chattenden, a new strategic allocation (1500) dwellings on an extended Hoo site (encompassing Hoo, St Werburgh, and the nearby villages of High Halstow and Cliffe Woods)and/or identification of a series of reserve sites to be brought forward on a phased basis if Lodge Hill Chattenden does not deliver	Noted. Please refer to section 4 of this SA Report as to why a higher level of growth is not considered to be a reasonable option. Refer to earlier comments as to why an expanded Hoo is not considered to be a strategic option.
CS31 – Hoo Peninsula and Isle of Grain	Whilst the initial sustainability appraisal undertaken by the Council in July 2009 on the merits of the alternative strategic allocations being considered at that time indicated at Para 3.56 that the main impact of an extended Hoo would be in terms of encroachment onto greenfield land, this would, in our opinion be inevitable with any strategic development. This matter aside we note that as far as highway impact is concerned the initial sustainability appraisal indicates at Para 3.54 that an extended Hoo would have 'limited impact on traffic congestion and travel choice due to the proximity to the existing road network'. The initial sustainability appraisal also indicates that an extended Hoo "would make a positive contribution to the economic competitiveness of the area, maintaining and developing the workforce, as well as improving educational achievements, beginning in the short term and continuing into the medium and longer term. There may also be some potential for some benefit from this solution to conserving and enhancing the historic environment and other material assets of the area". Furthermore we note that the initial sustainability appraisal indicates at Para 3.51 that the development of an extended Hoo would still preserve the space between the villages that would make up the extended Hoo area. To date, despite our reps no SA has been undertaken of the effect of a reduced Chattenden and new strategic allocation of 1500 dwellings at an extended Hoo. We believe this should occur in order to demonstrate whether what is proposed in the CS is the most sound approach to development i.e. the most appropriate strategy when considered against the reasonable alternatives and thus sound.	Noted. Please refer to section 4 of this SA Report as to why a higher level of growth is not considered to be a reasonable option. Refer to earlier comments as to why an expanded Hoo is not considered to be a strategic option.
Church Commissioners (12/10/2011)		
General	It is inappropriate to fix the size of the new settlement at Lodge Hill until the	Noted, the figures are based on the

Update to Interim SA (incorporating SEA)	Consultee Comments	Response
	sustainability (including the balance of land uses) has been tested. The Church Commissioners therefore reiterate the need to take a flexible approach to the provision of sites to deliver sustainable development.	deliverability of the site and initial sustainability work, including work undertaken for the preparation of eth development brief for Lodge Hill. The sustainability of the site will also need to be proven through the application/Environmental assessment process.
Cliffe and Cliffe Woods Parish Council (14/10/2011)		
Housing figure	The impact of house building of this number is likely to be underestimated and only refers to a growth of c. 22,000 (increased to c. 24,000 due to additional factors). The sustainability of this figure (impact on services and infrastructure and provision of local employment) is, in our view, not adequately covered by proposed policies.	Refer to section 4 as to why a lower figure is not considered a reasonable or realistic option. The SA process has considered the overall sustainability of the chosen figure.
Campaign for the Protection of Rural England (14/10/2011)		
Environmental capacity	Given the proposed over provision we do not consider that 5,000 dwellings at Lodge Hill is as critical as is being made out. We consider that the development potential at Lodge Hill should be reduced, given its sensitive environmental setting.	Refer to section 4 as to why a lower figure is not considered a reasonable or realistic option. The SA process has considered the overall sustainability of the chosen figure.
Dickens Country Protection Society (25/09/2011)		
Housing figure	The impact of house building on this number is likely to be underestimated and only refers to a growth of c. 22,000 (increased to c. 24,000 due to additional factors. The sustainability of this figure (impact on services and infrastructure and provision of local employment) is, in our view, not adequately covered by proposed policies.	Refer to section 4 as to why a lower figure is not considered a reasonable or realistic option. The SA process has considered the overall sustainability of the chosen

Update to Interim SA (incorporating SEA)	Consultee Comments	Response
		figure.

Appendix 3





Medway Sustainability Appraisal Scoping Report (Final Version April 2009)



Amendments incorporated following the consultation period are identified in blue italics for ease of comparison with the consultation version

Sustainability Appraisal Scoping Report

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1. Introduction

- 1.1 Medway Council is undertaking production of its Local Development Framework (LDF), which is a series of Local Development Documents (LDDs) and Supplementary Planning Documents (SPDs). These will guide the development of the area until 2026, through a Core Strategy, an Area Action Plan for Chattenden, a Land Allocations and Development Control DPD and a variety of SPDs covering different areas and topics.
- 1.2 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.
- 1.3 European Directive 2001/42/EC 'on the Assessment of the Effects of Certain Plans and Programmes on the Environment' defines plans and programmes which require environmental assessment (article 3). It is clear from this definition that, given the scope of the proposed Local Development Documents (LDD's), an environmental assessment is required.
- 1.4 The government's approach is that these appraisals should also incorporate the requirements of and be in accordance with EU Directive 2001/42/EC on the 'assessment of the Effects of Certain Plans and Programmes on the Environment' (the 'Strategic Environmental Assessment' or SEA Directive). However, SA extends the concept of SEA to fully encompass all social and economic concerns as well.
- 1.5 There are many definitions of sustainable development, however the most commonly used and widely accepted is that within the Brundtland Report of 1987:

'Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.'

- 1.6 The aim of sustainable development is to fully integrate social, economic and environmental factors, so that we do not take resources that may be needed for future generations to survive. The UK Sustainable Development Strategy 'Securing a Better Future' (2005) and its accompanying strategic framework breaks down the definition into four key objectives, to be integrated and delivered simultaneously to achieve sustainable development:

- Social Progress which recognised the needs of everyone;
- Effective protection of the environment;
- Prudent use of natural resources; and
- Maintenance of high and stable levels of economic growth and employment.

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.

- 1.7 In addition, to be in accordance with the Habitats (92/43/EC) Directive, an Appropriate Assessment is required for any plan not related to management, that could affect, either on its own or in combination with any other plans or programmes, a European site. This will be considered in greater detail later during the assessment of options proposed for the Core Strategy.
- 1.8 The Scoping Report is a consultation document, the purpose of which is to describe the scope and timetable for the sustainability appraisal of the Medway Development Plan Documents.
- 1.9 The work on each appraisal runs simultaneously to the development of the LDD so it becomes integrated into the plan-making process as a way of improving the document as it develops and producing sustainable policies on the ground. By involving stakeholders and experts along the way, a robust and fully integrated appraisal should develop.
- 1.10 Consultation at this stage helps to ensure that the sustainability appraisal will be comprehensive and robust enough to support the Development Plan Documents during the later stages of full public consultation and examination. This allows stakeholders to verify that all the relevant plans have been reviewed, that the baseline information is the most up to date and that all the sustainability issues have been identified.
- 1.11 The SEA Directive and Environmental Assessment of Plans & Programmes Regulations set out a statutory process that must be followed. To show compliance with this, checklists are used. Table 1 shows which sections of this document cover the relevant requirements of the legislation, or where this is likely to be covered during the process.

Table 1: SEA Requirement Checklist

<i>Environmental Report Requirement</i>	<i>Section of Report</i>
<i>(a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes</i>	Section 1 & 2 and Appendix 1.
<i>(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme</i>	Section 4
<i>(c) the environmental characteristics of areas likely to be affected</i>	Section 4
<i>(d) 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 Directives 79/409/EEC and 92/43/EEC</i>	Section 2 & 4 and in the Appropriate Assessment to be carried out during appraisal of the options. ¹
<i>(e) the environmental 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</i>	Appendix 1 and through the appraisal and refinement of options during the process.

¹ This will be continually reviewed throughout the process and updated as necessary.

<i>(f) the likely significant effects² on the environment, including issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archeological heritage, landscape and the interrelationship between the above factors</i>	Section 4 and throughout the appraisal and refinement of options through the process to be reported in future documents.
<i>(g) 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</i>	To be considered during the process and reported in future documents.
<i>(h) 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</i>	Section 2 and in future documents.
<i>(i) a description of the measures envisaged concerning monitoring in accordance with Article 10</i>	Suggested within Section 8 and to be developed and refined during the process.
<i>(j) a non-technical summary of the information provided under the above headings</i>	Within future documents.

1.12 The report has been prepared for consultation, pursuant to:

- Regulation 25 of the Town and Country Planning (Local Development) (England) 2004 Regulations, and
- Regulation 12 (5) of the Environmental assessment of Plans and Programmes Regulations 2004.

² These effects should be secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

2. Links to other Plans, Programmes and Strategies

- 2.1 The Directive states that the environmental statement should take account of the environmental objectives of other plans by considering:

‘the plan’s ‘relationship with other plans and programmes’ and ‘the environmental protection objectives, established at international, [European] Community or national level, which are relevant to the plan.., and the ways those objectives and any environmental considerations have been taken into account during its preparation.’
(Annex 1(a), (e))

- 2.2 All Local Development Documents and the SA / SEA Scoping Report should be framed in the context of: national, regional and local objectives. Therefore a comprehensive review of all relevant Policies, Plans and Programmes (PPPs) was carried out as part of the SA / SEA process.
- 2.3 This ensures that the sustainability objectives in the Scoping Report are not in conflict with those in other PPPs and also highlights other areas of potential conflict which may need to be addressed, for example meeting development needs whilst achieving other objectives such as for biodiversity and heritage. The compatibility of the SA framework objectives are laid out within Table 9 in section 5, later in this report.
- 2.4 Table 2 below outlines the main plans and programmes of importance to the LDF. This has been expanded within Appendix 1 to show the main aims of the plans and their relevance to the SA. The identification of these plans was done through an internal process.
- 2.5 Initially this focused on higher level policies because all Development Plan Documents are bound by tests of soundness and one of these tests is to ensure general conformity and compliance with the Regional Spatial Strategy (RSS). This has also included as many local plans as possible to ensure that the framework is targeted towards and covers the main local issues.

Table 2: Relevant Plans and Programmes

International Legislation
EEC Landfill Directive
EU Waste Framework Directive
EU Water Framework Directive (2000/60/EC)
EU Habitats Directive (92/43/EEC)
EU Strategic Environmental Assessment Directive (2001/42/EC)
RAMSAR Convention
National Legislation
Securing the Future: delivering UK sustainable development strategy
Sustainable Communities: Building for the Future
Urban White Paper: our Towns & Cities: the Future
Rural White Paper: Our Countryside: the Future.
UK Biodiversity Action Plan (UK BAP)
Bringing Britain together: A national strategy for neighbourhood renewal
A new commitment to neighbourhood renewal — national strategy action

plan
Heritage White Paper: Heritage Protection for the 21 st Century (Consultation)
UK Waste Strategy
Future Water
PPS1: Delivering Sustainable Development
PPG2: Green Belts
PPS3: Housing
PPG4: Industrial & Commercial Development & small firms
Draft PPS4
PPS6: Planning for Town Centres
PPS7: Sustainable Development in Rural Areas
PPG8: Telecommunications
PPS9: Biodiversity and Geological Conservation
PPS10: Planning for Sustainable Waste Management
PPS12: Local Spatial Planning
PPG13: Transport
PPG15: Planning and the Historic Environment
PPG16: Archeology and Planning
PPG17: Planning for Open Space, Sport and Recreation
PPG20: Coastal Planning
PPS22: Renewable Energy
PPS23: Planning and Pollution Control
PPG24: Planning and Noise
PPS25: Development and Flood Risk
Good Practice Guide on Planning for Tourism (replaced PPG21)
Minerals Planning Statement (MPS) 1
Our Coasts and Seas – making space for people, industry <i>and</i> wildlife
Marine Programme Plan 08-09 (Defra)
Climate Change Act 2008
UK Renewable Energy Strategy (Consultation)
TE2100 Consultations (upto and including Draft TE2100 Strategy)
Definition of Zero Carbon Homes and Non-Domestic Buildings (Consultation)
Regional Legislation
RPG9a: Regional Planning Guidance for Thames Gateway
RPG9: Regional Planning Guidance for the South East
Draft South East Plan
The South East Regional Sustainability Framework
Creating Sustainable Communities: Greening the Gateway
Regional Economic Strategy
Regional Housing Strategy
Regional Transport Strategy
“The Cultural Conerstone” A strategy for the development of cultural activity and its benefits in the South East.
South East Region Social Inclusion Statement
A partnership framework for tourism in Kent & Medway:2005-2015

“Destination South East” Regional Spatial Planning Strategy for Tourism (Proposed Alterations to Regional Planning Guidance – Tourism and Related Sport and Recreation)
Climate Change Mitigation and Adaptation Implementation Plan for Draft South East Plan
Kent Biodiversity Action Plan
Catchment Abstraction Management Strategies (CAMS) in Southern Region: Medway CAMS
Medway and Swale Shoreline Management Plan
Thames River Basin Management Plan
Kent Downs AONB Management Plan
Kent Design Guide
Local Documents
“More to Medway” Medway’s Community Plan 2007-2010
Kent and Medway Structure Plan 2006
Medway Local Plan 2003
Local Transport Plan 2 (2005-2010)
Medway Regeneration Framework 2006-2016
Medway Wildlife, Countryside and Open Space Strategy 2008-2016
Medway Rural Action Plan
Medway Housing Strategy 2008-2011
Kent Minerals Local Plan
Kent Waste Local Plan
Medway Council’s Municipal Waste Management Strategy 2005-2020
Medway Economic Development Statement 2006
Draft Economic Development Strategy (Consultation)
Medway and Medway NHS: 2008 Joint Strategic Needs Assessment
Opportunity in the Third Age: Improving Life for Older People in Medway 2008-2011
Medway Children and Young People’s Plan 2006-2009
Medway Council’s Sports Development Strategy 2005-2010
Medway’s Community Safety Partnership Plan 2008-2011
Kent BAP
Kent AONB Management Plan SPD (& associated SA and AA)

3. Methodology

3.1 This Scoping Report documents Stage A of the SA process, as set out within 'A Practical Guide to the Strategic Environmental Assessment Directive' published by the ODPM in 2005. Stage A consists of a number of tasks, which include:

- Task A1: Identifying other relevant plans, programmes and sustainability objectives;
- Task A2: Collecting baseline information;
- Task A3: Identifying sustainability issues;
- Task A4: Developing the SA framework; and
- Task A5: Consulting on the scope of the SA.

3.2 The other relevant plans and programmes that relate to the Development Plan and need to be considered through the SA process have been outlined within the previous section of this report.

3.3 The baseline situation and identified sustainability issues are covered within the following sections that have been separated into the topic areas below. This is to make the consultation process easier and to ensure that the process is fully integrated into the production of the plan.

- Community (population, crime, deprivation, health)
- Economy and employment
- Cultural Heritage and Material Assets
- Housing
- Biodiversity and open space
- Air quality
- Water and Soil
- Waste
- Transport and accessibility
- Climate adaptation and mitigation

3.4 Section 4 lays out the baseline information in relation to the identified topic areas and highlights the sustainability issues that arise from these.

3.5 The framework objectives and indicators are then laid out within Section 5 along with modifications that were made to ensure they were of most relevance to the Medway area.

3.6 Section 6 then outlines the next steps in the consultation process, up until production of the final report to be submitted alongside the Core Strategy and the final section outlines issues in respect to a suggested regime for monitoring, as this needs to be considered throughout the plan production process.

4. Baseline Information and sustainability issues

- 4.1 The SEA Directive requires that *"the relevant aspects of the state of the environment and the likely evolution thereof without implementation of the plan or programme"* and *"the environmental characteristics of the areas likely to be significantly affected"* be included into the Environmental Report.

Furthermore, as stated within the government guidance on Sustainability Appraisals of Local Development Documents³ *"baseline information provides the basis for predicting and monitoring effects and helps to identify sustainability problems and alternative ways of dealing with them"*.

- 4.2 Collection of baseline information forms an essential part of the SA process. It is vital to obtain sufficient baseline information on the current and likely future state of the area in order to enable the LDF's effects to be adequately predicted and evaluated. This chapter provides a summary of the current situation in the Medway Area in relation to the sustainability topics listed in 3.3.
- 4.3 For each indicator, quantified baseline data was collected which was applicable to the issues to be assessed by the SEA/SA and at a relevant geographical scale. The main sources used were official websites on the Internet, Medway Council reports and data, Kent County Council Reports and the Census. These formed a number of detailed papers titled 'State of Medway Reports', which are to be published at the beginning of the regulation 25 stage of the Core Strategy production.
- 4.4 From this baseline data a number of sustainability issues arose which are detailed at the end of each section. As stated within the government guidance on Sustainability Appraisals of Local Development Documents *"the identification of sustainability problems is an opportunity to define key issues for the DPD and develop sustainable plan alternatives and options..."*
- 4.5 It should be noted that many of the issues are cross-cutting and could have been placed under a number of headings. However, for ease of discussion, and to link in with the sustainability objectives, they have been placed under one section only. This is by no means a full list of all the issues but it attempts to acknowledge those, which are priorities for Medway.

4.6 Community (population, health, crime and deprivation)

Population

- 4.6.1 Medway has the largest population of a unitary authority in the South East at 249,488 in 2001 and at this point 88% of the population lived within the urban area and 12% in the rural area. The mid-year estimates from the Office of National Statistics (ONS) for 2007 estimate the population of Medway at 252,200, which reflects a very slow upward trend. It is expected that the population will be 268,800 by 2021 and 275,000 by 2026.
- 4.6.2 Medway is considered a 'young' borough compared to the UK due to the large number of younger people, with the 25-44 age range being the highest

³ Sustainability Appraisals of Regional Spatial Strategies and Local Development Documents (2005), ODPM

across all wards. The average age in Medway has been calculated by the ONS as 36.5, which is the 7th youngest in the region and below the national average. The largest numbers of older people live within the areas of Chatham and Rainham.

- 4.6.3 The ethnic breakdown within Medway is predominantly white Christian (96.4%), with only 2% Asian, 1.1% from a mixed race background and 0.7% considering themselves black, Chinese or other. In addition to the white Christian group, Sikhs and Muslims form the two other largest religions in the area. The % of the population from the ethnic minority groups has steadily increased and this has mainly been based within the Asian sub-group.

Health

- 4.6.4 Overall, health in Medway is worse than the average for the South East. Life expectancy is lower for both sexes, although the gap with the regional average has narrowed over the last 5 years, particularly for males.
- 4.6.5 Birth and fertility rates for Medway were above both the regional and national averages and the teenage pregnancy rate has remained stubbornly high. The mortality rate was also above the national average.
- 4.6.6 Healthy eating and physical activity rates in children and adults are worse than the national average. Medway has the sixth highest percentage of people who are obese and the third lowest percentage of people who consume 5 or more fruit or vegetables per day.
- 4.6.7 Over the last 10 years the number of deaths from all causes has lowered but still remained above the national average. There has been a reduction in deaths from stroke and heart disease but this has not been as dramatic as the national fall. The highest number of deaths comes from smoking, with 400 deaths per year related to this.
- 4.6.8 Therefore the main sustainability issue in respect to health is improving the overall life expectancy.

Sustainability Issue – Objective 8

Health in Medway is average, following trends for increasing life expectancy, though this is not as dramatic as nationally. The biggest killer in Medway is smoking, it has the sixth highest percentage of obesity and is the third lowest of those consuming 5 fruit and vegetables a day. There are also high levels of teenage pregnancy.

(Medway's Joint Strategic Needs Assessment; Medway's Children and Young People's Plan; Medway Sports Development Plan)

Deprivation

- 4.6.9 Medway is included within the 43% most deprived areas in the country. However this masks the fact that there are areas of extreme deprivation sited close by areas that are considered to be 'well-off'. In particular income deprivation affects 37,000 people and employment deprivation affects 13,000 people.

4.6.10 There are 5 Super Output Areas that are within the 10% most deprived areas in the country and the River ward falls within the 4% of the most deprived areas. 16% of the population live in the 20% most deprived areas, with 22% of children and 17% of older people living in low-income households.

Sustainability Issue – Objective 9 & 16

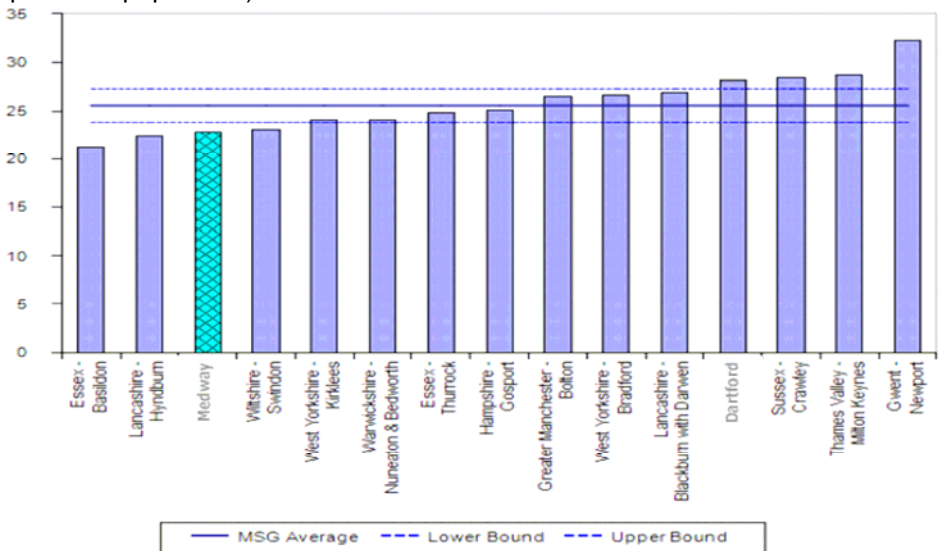
Though the area is not generally deprived, this masks areas of moderate and extreme deprivation. Deprivation occurs both in terms of income and employment. These have consequent impacts on other areas such as health.

(Medway Economic Development Statement; Medway Community Plan; SE Social Inclusion Plan; PPS1)

Crime

4.6.11 Medway has an average of 22.9 crimes per 1,000 people, which is below that for authorities with similar characteristics (e.g. population size) and is third lowest of similar authorities, as shown in the chart below.

Chart 1: Bar graph showing similar crime and disorder reduction partnerships (Crimes per 1000 population) 1 Jan - 31 Mar 2008



4.6.12 The Community Safety Plan has identified 4 key priorities in relation to crime. These are to reduce violence in the night-time economy, youth-related violence, incidents of serious violence and increasing feelings of safety within the Community.

Sustainability Issue – Objective 10

There are issues in relation to serious crimes and those related to youth-crime and the nighttime economy. These can be linked to a number of other areas within this and other sections.

(Medway Community Safety Plan; Medway Children and Young People’s Plan)

4.7 Economy and Employment

- 4.7.1 Medway's working age population is 157,500 with 126,200 in employment.
- 4.7.2 A higher proportion of the population is of working age than the national average.
- 4.7.3 In general employment has risen by 25% over the past 10yrs along with an increase in the number of business units, although the area has a lower growth rate than the South East or nationally.
- 4.7.4 There have also been a number of changes in the characteristics of the workforce with a decrease in the number of male workers and an increase in the number of female workers.
- 4.7.5 The levels in employment when broken down into the broad classifications of industry give the following proportions:
- 1.9% in the primary sector;
 - 23.3% in the construction and manufacturing sector; and
 - 74.8% in the service sector.
- 4.7.6 Though the number within the service sector is high, with 30% of people working in public services, administration education and health, this is still lower than the national and regional averages. However, a characteristic of the Medway labour market is the high proportion of unskilled and lower skilled workers.
- 4.7.7 Average earnings within the Medway area are higher than the national average but lower than that of the South East.
- 4.7.8 Within the South East, Medway has the 6th highest level of unemployed and the 9th highest level of long-term unemployed. 21,000 people are claiming key benefits, which equates to 13% of the working age population. This is higher than the national and regional averages. 15% of those claiming unemployment benefits are under 20.
- 4.7.9 There are 92 schools within Medway, comprising of 69 primary schools, 19 secondary schools and 4 special needs schools reflecting the young age of the population.
- 4.7.10 The level of passes in GCSE English recently exceeded the national rate and continues an upward trend. Maths GCSE passes have also improved but are still below the national average. The number of children passing 5 GCSEs or more has improved and exceeded the target for 2007-08. In addition, the level of truancy fell below the national and regional levels in 2006/07.
- 4.7.11 Just 12% of the working age population in Medway has a degree or higher-level qualification, which is much lower than the national average of 19.8%. Just under 30% of the workforce have no qualifications or qualifications concentrated at NVQ2+ (equivalent of GCSEs), which is higher than the national average.
- 4.7.12 There are however a higher proportion of young adults in full-time education within Medway than in the rest of Kent, although there are still fewer places available locally to accommodate these.

- 4.7.13 Medway does however have a growing presence of Universities with an alliance between Christ Church University, Canterbury; the University of Greenwich and the University of Kent plus Mid-Kent College on the Pembroke site. These are growing their own academic specialisms including Pharmacology and Sport, as well as student societies and art groups. In addition the University College for the Creative Arts has recently been awarded a university charter.
- 4.7.14 These universities have the potential to add £10 million pounds to the economy with 600 jobs and also increasing the potential for adult learners and retraining to occur locally.

Sustainability Issue – objective 15, 16 & 9

Medway has suffered economically since closure of the Dockyard and although it has followed the national trend with the largest employment sector being in services and administration, this still remains below other areas in the region. Furthermore there are a large number of jobs within lower paid sectors. There is a large working age population but also high levels of out-commuting to London and moderately high unemployment.

There is a need for skills to be improved and to increase the level and value of jobs in the area.

(Medway Economic Development Statement; Regional Economic Strategy; PPS6; PPG4 & Draft PPS4)

4.8 Cultural Heritage and Material Assets

- 4.8.1 Due to its location along the River and its estuary, Medway has a rich maritime and military history that has resulted in an extensive number of material assets, many of which have important cultural and historical ties. The most prominent, well known and large scale of these is Rochester Castle and Rochester Cathedral, dating from Roman times and the Rochester Bridge that was built later. Associated with the castle are the main castle grounds that are important as a large area of open space for recreation and also for the staging of various cultural and music events throughout the year.
- 4.8.2 Also sited within Rochester, is the private King's School, which is an important part of the cultural heritage of the town, with connections to the neighbouring Cathedral. The school itself provides a mix of public and private open space to the inhabitants of the town, that connect with an important area of open space at The Vines Park and to St Margaret's Street that links to a path by the river and the eastern rising valley of the Medway.
- 4.8.3 In addition, there are other remaining castles at both Cooling and Upnor that were originally built as part of a network of forts for defence of the towns, as well as the large area and structures that make up the Historic Dockyard. These are crucially important to the cultural heritage and subsequent development of the towns. The buildings of the Dockyard are in the process of being reused and where necessary restored back to their former state, as a 'Living Museum', for use by members of the public.
- 4.8.4 There are also a number of other buildings that are linked to the naval presence within the towns or their historic development, such as The Brook,

which is the old town hall and associated gardens. Overall there are 954 Listed Structures, of which 55 are classed as Grade I, 154 Grade II* and 744 Grade II.

- 4.8.5 There are also 77 Scheduled Ancient Monuments (SAMs) within the area, including the fortifications at Fort Amherst, Chatham Lines and the field of fire at the Great Lines. There are also 26 Conservation Areas. In addition, the area covering the Great Lines and others connected with the development of the dockyard are being put forward for consideration as a UNESCO world heritage site, which it is hoped will allow for greater management of these assets.
- 4.8.6 As well as the most prominent physical features mentioned above, Medway is known for buildings and features that had connections to Charles Dickens or influenced his writing. These links are celebrated each year in a 4 day festival based around Rochester.
- 4.8.7 Other important material assets include 3 hospitals and 81 GP practices including health centres; 92 schools; 24 community halls; 8 sport and leisure centres; 3 theatres; 16 libraries and 5 council contact points sited in the town centres or in close proximity.

Sustainability Issues – Objectives 11 & 12

Medway has a rich maritime and military history that has provided a number of assets (listed buildings and larger parks and open spaces) of cultural significance.

There are also a wide range of assets for the community that in general are well-positioned, though there are some smaller rural areas which are not served as well.

There may be the potential for conservation of historic and culturally important buildings and sites to conflict with other objectives, such as housing or energy.

(PPS1; PPG15; PPG16; Heritage White Paper Consultation; SEA Directive)

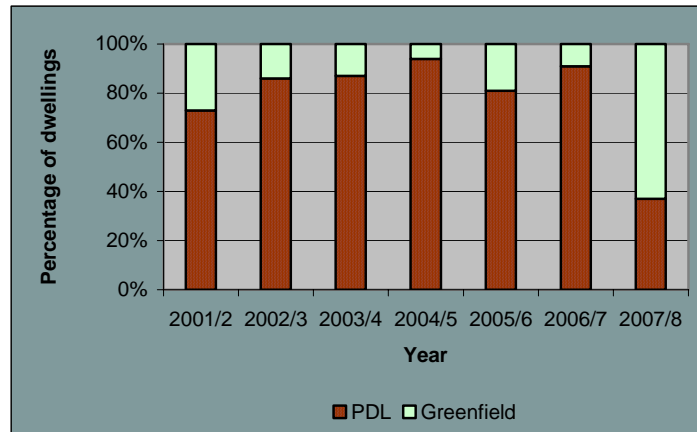
4.9 Housing

- 4.9.1 Medway along with the other North Kent authorities has a relatively self-contained local market, exhibiting limited connectivity to its surrounding districts. Nevertheless there is in-migration, particularly from Gravesham to the west and the highest levels of out-migration are to Swale, showing a clear movement from west to east. There are also movements from Maidstone and Tonbridge and Malling, although little reverse movement. This is likely to be down to the a higher level of affordable housing in Medway compared to areas to the south of the A2.
- 4.9.2 Medway's 2006 Housing Strategy Statistical Appendix states that at April 2006, there were an estimated 106,394 dwellings in Medway, of which 3161 were in Council ownership. Of the overall stock, 76% are owner-occupied and the greatest proportion (42%) are terraced properties, which is higher than either the regional or national averages.
- 4.9.3 A third of households privately rent and there are also a high number of households in caravans or temporary accommodation. The age of the building stock is younger in Rainham and the rural areas and the oldest is in the Gillingham area, which has an impact on housing conditions with older

buildings generally being connected to worst conditions. The overall household size is 2.48, which is larger than the national average.

- 4.9.4 Within the 2008 survey year, there were 45.7% of new and converted dwellings on previously developed land (gross). This is shown against previous years completions in the bar graph below. This was due to a higher number of Greenfield developments occurring and the commencement of larger regeneration schemes on previously developed land, not having started. This is expected to be a short term trend.

Chart 2: Bar graph showing proportion of completions on previously developed land



- 4.9.5 During the 2008 survey period, 230 affordable homes were completed. This equates to just over a quarter of gross completions (892) being affordable units.
- 4.9.6 The Annual Monitoring Report, 2007, found that while house prices in the Medway Towns have doubled since 1999, resident earnings have increased by less than 50%. The consequence has been that overall affordability as measured by the ratio of average resident earnings to house prices has fallen by 50%. Table 3 below shows the average house prices by type using 2008 prices. This trend is however less pronounced than in other parts of the region.

Table 3: Average house price by type, March 2008

	Medway	Kent	South East	Eng & Wales
Flats/Maisonettes	113,175	120,144	140,935	172,282
Terraced	135,317	159,171	177,983	144,589
Semi-detached	190,157	205,977	225,720	172,713
Detached	317,646	353,371	397,009	278,168

- 4.9.7 Access to the housing market is restricted by price. 42.6% of all new forming households can afford to pay no more than £300 pcm rent. Access rents are £353 pcm. The ability of concealed households to access the market is very limited. Only 29.8% of concealed households have incomes above £27,500; only 15.9% have incomes above £40,000. The cheapest 2 bed terraced property in the District require an income threshold of £28,000
- 4.9.8 The latest figures for empty properties in Medway, recorded in April 2007, for the Housing Strategy Statistical Appendix show that the percentage of empty

properties in the private sector in Medway is currently 1.6%. This percentage is lower than the national overall position of around 3.0%.

- 4.9.9 The conclusion of the Stock Condition Survey regarding empty homes was that it did not identify a serious problem with vacant dwellings in Medway but did recognise that it is an issue that the Council may wish to address, due to clusters in some areas.

Sustainability Issues – objective 6 & 7

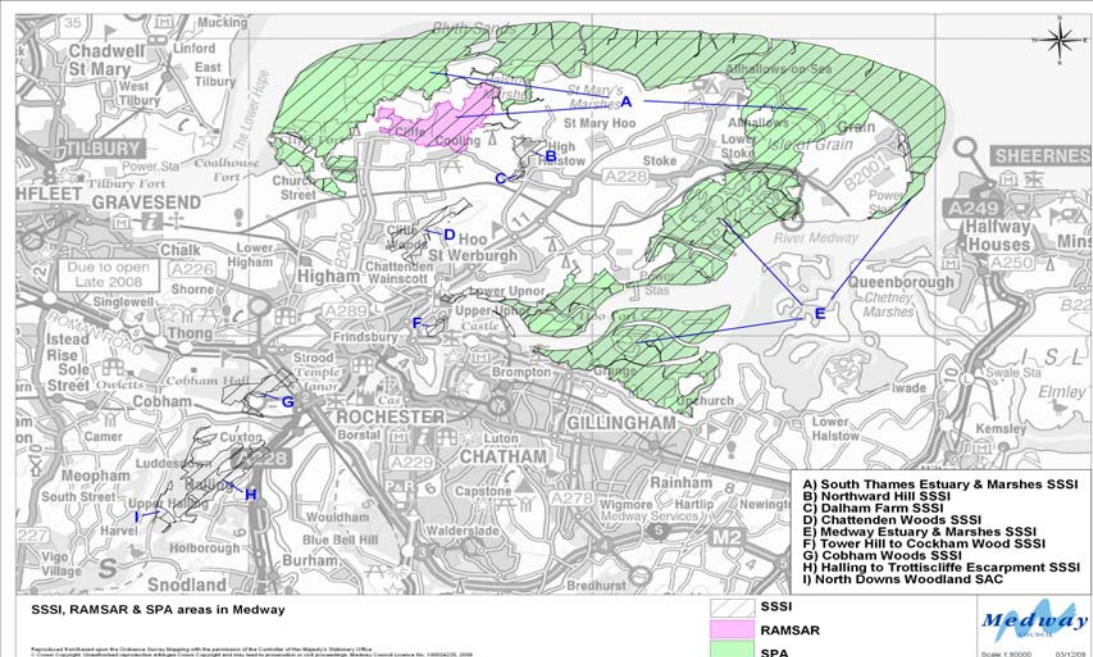
The majority of properties are owner-occupied and household sizes are above the national average. This and the gap between house price increases and wage increases means that more affordable housing provision will be required. Furthermore the Draft SE Plan requires 16,300 houses to be accommodated in the area during the Plan period. This should be accommodated as far as possible within existing or previously developed sites to minimise possible conflicts with other objectives, such as biodiversity.

(Medway Community Plan; Medway Housing Strategy; Regional Housing Plan; PPS1; PPS3; PPS7; Sustainable Communities; Urban and Rural White Papers)

4.10 Biodiversity and Open Space

- 4.10.1 The position of Medway on the North Kent Coast and the large open areas on the Peninsula, mean that it has a wide variety of habitats and a rich diversity of species. Many of these have been recognized nationally and internationally, mainly through being designated as Special Protection Areas (SPAs) under the Habitats Directive (79/409/EEC). In coincidence with this, through membership of the European Union, Britain is also a signatory of the RAMSAR Convention that is a voluntary agreement to protect areas that are particularly important for migrating wildfowl. Together these areas are collectively known as ‘Natura 2000’ sites and form part of an overall network across Europe of areas important for their conservation importance. Map 1 shows the different designations within the Medway area.

Map 1: Showing the different designated areas within Medway.



- 4.10.2 As shown on the map there are a number of areas where Special Protection Areas (SPAs) are overlaid by Sites of Special Scientific Interest (SSSIs) designations.
- 4.10.3 There is one Special Area of Conservation (SAC) near Upper Halling, which is a small part of the North Downs SAC that is important for its beech and yew forest, as it is one of the best in the country. In close proximity to this there are a number of semi-natural dry grasslands, other woodlands and scrubland.
- 4.10.4 There are also 8 SSSIs in the area. Table 4 below outlines the reasons for their designations and their current condition. DEFRA within it's Public Service Agreement has set a target for all SSSIs to achieve 95% by area to be in a favourable or recovering condition by 2010.

Table 4: Description and Condition of SSSIs

Name of SSSI	Description	Condition	Required Action
South Thames Estuary and Marshes	Wetlands of international importance comprising intertidal habitats, saltmarsh, coastal grazing marshes, and saline lagoons and lagoon type habitats, providing wintering and breeding habitats for important groups of wetland bird species, particularly wildfowl and waders as well as supporting migratory birds in passage. Each regularly support over 20,000 waterfowl birds respectively, including over 30 different species of national or international importance.	96% favourable or recovering. 3% unfavourable because of inappropriate weed control, effects of undergrazing, agricultural practices, inappropriate ditch management, scrubland control and coastal squeeze.	Agricultural operations before mid-June should be avoided. Careful management of existing ditches and drains should be introduced and maintained. This should include periodic removal of sediment and vegetation, and should be done on a rotational basis, including the creation of shelving margins rather than steep sides.
Medway Estuary and Marshes	Wetlands of international importance comprising intertidal habitats, saltmarsh, coastal grazing marshes, and saline lagoons and lagoon type habitats, providing wintering and breeding habitats for important groups of wetland bird species, particularly wildfowl and waders as well as supporting migratory birds in passage. Each regularly support over 20,000 waterfowl birds respectively, including over 30 different species of national or international importance.	Over 99% is in a favourable or recovering condition. Remaining small area is unfavourable due to inappropriate ditch management and cutting or moving and undergrazing.	Careful management of existing ditches and drains should be introduced and maintained. This should include periodic removal of sediment and vegetation, and should be done on a rotational basis, including the creation of shelving margins rather than steep sides.
Cobham Woods	Woodland and old parkland representative of woods in North Kent that occur in part on acidic Thanet Sands and in part on chalk soils. One nationally rare plant species occurs in the arable land close to the woods and an outstanding assemblage of plants is present. The site is also important for its breeding birds.	Only 67% favourable or recovering. Remaining 33% unfavourable/no change is due to lack of appropriate forestry and woodland management.	Felling, thinning or coppicing can help to create or maintain variation and at the same time non-native trees and shrubs be removed. This should be spread throughout the woodland and done at beginning of Aug or end Feb.
Northward Hill	This contains a heronry with over 200 pairs and is the largest in Britain. There is a diverse breeding bird community and the insect fauna is of interest, particularly moths and butterflies. The site consists of mixed	100% favourable or recovering.	

	<p>deciduous woodland and scrub with some areas of open grassland and bracken. A number of small ponds are present and a few open ditches.</p> <p>Overall, the wood has a diverse flora with over 200 plants recorded, including the trees and shrubs.</p> <p>The site has been a National Nature Reserve since 1951 and is managed by the RSPB.</p>		
Dalham Farm	<p>One of the very few undisturbed areas which show mass movement on low-angled, inland slopes of London Clay. The effects of landslipping are visible as a series of ridges and small scarps crossing the slope. The site illustrates what is possibly the lowest angled slope failure in Great Britain and is important in demonstrating slope degradation in the absence of coastal erosion and removal of material from the base.</p>	<p>100% unfavourable or no change due to inappropriate scrub control.</p>	
Chattenden Woods	<p>Woodland is representative of coppice with standards woodland on the London Clay, which is a scarce habitat in Kent away from the Blean Woods. The site is also of importance for its breeding birds. Rough Shaw, which is an area of neutral grassland with scattered scrub forms a valuable addition to the woodland and contains several uncommon plant species which are not found in more improved grassland.</p>	<p>100% favourable or recovering.</p>	
Towerhill to Cockham Wood	<p>Contains woodland representative of that on Tertiary deposits in Kent and supports a rich insect fauna. About a third of all British species of bees and wasps are found here, including seven nationally rare species. In addition, Upnor Quarry exposes a complete tertiary stratigraphic sequence and is a vital site to be viewed in comparison with other Palaeogene localities in the eastern London Basin.</p>	<p>100% favourable or recovering.</p>	
Halling to Trottscliffe Escarpment	<p>Consists of an extensive area of the North Downs west of the Medway Gap. It is representative of chalk grassland in west Kent and beech woodlands on the chalk. Outstanding assemblages of plant and invertebrates are present. It is the only location in Britain for one type of moth and several other very scarce moths, beetles and grasshoppers also occur. The site supports a wide variety of birds, particularly woodland birds.</p>	<p>80% favourable or recovering.</p> <p>Rest unfavourable due to undergrazing, inappropriate scrub control, game management, inappropriate woodland and forestry management and some limited overgrazing.</p>	<p>The best way of managing scrub is through rotational cutting, as well as cutting in small patches.</p>

4.10.5 In addition to these designated sites there are also a number of other important features in respect to biodiversity and open space in Medway. The first of these are Regionally Important Geological and Geomorphological Sites (RIGS). These are selected in accordance with the following criteria:

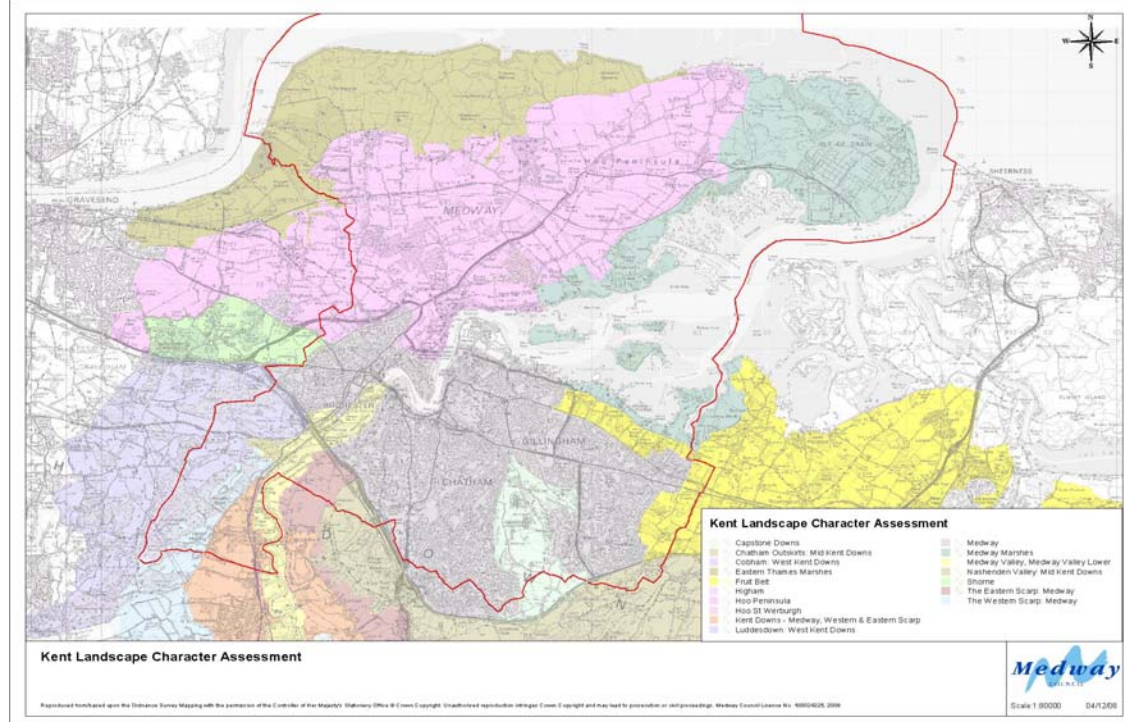
- The value of the site for educational purposes in life long learning.
- The value of a site for study by both amateur and professional earth scientists.
- The historical value of a site from an earth science perspective.
- The aesthetic value of a site from an earth science perspective.

Although these sites do not have the same official protection as those mentioned before, they are recognised in PPS9, which states that tests should be fulfilled to ensure that policies or development will not affect them.

- 4.10.6 There are also 8 Local Nature Reserves that help contribute towards conserving and increasing the levels of biodiversity in Medway. These, similarly to RIGS, should have an element of educational, teaching or learning associated with them. Alongside these there are also a number of voluntary organisations, such as the RSPB who own and run reserves, as well as two Country Parks.
- 4.10.7 In addition to the above, sites may be designated as Local Wildlife Sites outside the network of those statutorily protected. The purpose of these sites is to help secure the protection of nationally and locally threatened habitats and species, identify sites of substantive nature conservation value which should be protected from damaging development, provide a framework for the targeting of management work, advice, grant aid and other activities; and provide a clearer understanding of the nature and importance of Kent's wildlife habitats. These sites are generally recognised by local authorities and given protection through policies in local development plans.
- 4.10.8 As well as the designated habitats forming part of the Natura 2000 Network and local wildlife sites, there are a number of important landscape areas in Medway and the surrounding areas that are important for both wildlife and as an important resource for helping to improve human health.
- 4.10.9 The Kent Downs Area of Outstanding Natural Beauty lies mainly in the South West corner of the Medway area, although there is also a small area in the extreme southeastern corner, just below junction 4 of the M2. Additionally, Kent County Council commissioned a landscape character assessment⁴ in 2004 that identified nine character areas in Medway, some of which have been sub-divided, as shown in Map 2 below.

⁴ [http://extranet7.kent.gov.uk/klis/resources/landscape-assessment/Landscape Assessment of Kent October 2004.pdf](http://extranet7.kent.gov.uk/klis/resources/landscape-assessment/Landscape%20Assessment%20of%20Kent%20October%202004.pdf)

Map 2: Kent Landscape Character Assessments within Medway



4.10.10 Within this study are descriptions of the landscapes and a landscape strategy reflecting the condition and sensitivity of each. The key characteristics of these landscape areas are outlined within Table 5 below.

4.10.11 Finally, *two cluster studies have been produced by Greening the Gateway Kent & Medway in conjunction with Communities and Local Government covering the Hoo Peninsula and Capstone-Bredhurst. As well as this* there are a large number of protected open spaces that are spread throughout the urban areas.

Table 5: Condition and Key characteristics of Kent Landscape Characters within Medway

Site name	Condition and Key characteristics
<i>Eastern Thames Marshes</i>	<p>The area forms part of the wider North Kent Marshes area of international importance for nature conservation which is designated as a Special Protection Area and RAMSAR site. Part of the area is also an Environmentally Sensitive Area.</p> <p>The area is considered to be in moderate condition. The ditches are of varying condition and there are many visual detractors ranging from small structures such as tipping, post and wire fences and bird hides, to urban and industrial developments.</p>
<i>Medway Marshes</i>	<p>This area is typically low lying and flat with huge open skies and extensive views. To the north of the river, the massive industrial complexes of Grain and Kingsnorth dominate the marshes. The southern marshes are much smaller and fragmented and have a much less coherent character. The majority of the marshland is reclaimed and protected from tidal inundation by coastal walls, although fragments of saltmarsh persist within the estuary and as islands. The traditional land cover is coastal grazing marsh and low lying pasture with a characteristic patterning of creeks and dykes still remaining to the west of the Isle of Grain.</p>

	<p>The condition of the area is considered to be poor. The industrial complexes cause fragmentation and there are many visual detractors, including industrial lighting and residential development. The potential for semi-natural habitats is reduced in areas of arable cultivation and the ecological integrity is therefore thought to be moderate.</p>
<p><i>Hoo Peninsula</i></p>	<p>The most important features of nature conservation importance are the areas of broadleaved woodlands, which include four SSSIs at Chattenden, Northward Hill, Beacon Hill and Tower Hill.</p>
	<p>Overall the condition of the area is considered to be poor. There is very little consistent landscape pattern, and visual detractors occur on both a large and detailed scale. Isolated patches of woodland provide clusters of semi-natural habitat but there is very little opportunity for ecological interest within the open arable fields.</p>
<p><i>Fruit Belt</i></p>	<p>Woodlands are the main ecological resource. Yaugher Woods and Fox Burrow Woods are listed in the Ancient Woodlands Inventory. Other elements of potential ecological and wildlife value are the shelterbelts that provide a more consistent framework of wildlife corridors than the patchy hedgerow cover.</p>
	<p>Overall, the condition of the area is very poor. There is an incoherent landscape pattern which has many detracting suburban and industrial influences and transport corridors. There are isolated shelterbelts and remnants of old orchards. Woodland cover is limited and the ecological integrity of the area is considered to be weak.</p>
<p><i>Mid Kent Downs – A: Outskirts of Chatham</i></p>	<p>Overall the condition of the area is poor. There are many detracting features, which are associated with unsympathetic land uses. The areas of intense arable farming reduce the ecological interest of the area. There is a strong influence from the urban area, built form has a negative impact on views and the condition of heritage features is poor.</p>
<p><i>Mid Kent Downs – B: Nashenden Valley</i></p>	<p>This area lies within the wider character area of the Mid Kent Downs. the lack of hedges or shaws to provide screening, makes it vulnerable to the visual impact of development.</p>
<p><i>Capstone Valley</i></p>	<p>The overall condition is considered to be good, although wooded edges to arable areas are felt to be vulnerable.</p> <p>The majority of the existing woodland is listed in the Ancient Woodlands Inventory and has considerable ecological value. Darland Banks is a local nature reserve and a local wildlife site (LWS). South Wood is a candidate for LNR designation and is also a LWS, as are Ambley, Hook and Holt Woods. The remnant chalk grasslands are also of ecological value.</p>
	<p>The condition of the landscape is considered to be very poor due to visual detractors such as urban and industrial development and busy traffic routes. Only fragments of hedged field boundaries are occasionally visible in the areas of intense arable cultivation and semi-natural habitats are limited to woodland areas, often close to the urban edges. The ecological integrity is therefore considered to be weak.</p>
<p><i>West Kent Downs</i></p>	<p>Large areas of mixed woodland dominate the skyline and form thick walls around fields, giving them a strong definition. Extensive hedgerow removal, for arable cultivation, has increased the importance of these woodlands, giving structure to the landscape.</p>
<p><i>Kent Downs Medway</i></p>	<p>The condition of the area is considered to be good. There are very few visual detractors, and the woodlands provide a strong and extensive ecological base.</p> <p>The eastern scarp is considered to be in very poor condition. Field boundaries have declined, there are many visual detractors and longer views are interrupted by industrial development in the lower valley. The ecological interest is very weak and built development has a negative impact. The western scarp, which is more extensive within the Medway administrative area, is considered to be of moderate condition although visual detractors include tipping, quarries and views of the motorway and industry beyond. Intensive arable cultivation and the few and variable field boundaries limit the ecological integrity of the area.</p>

<i>Medway Valley</i>	<p>On the lower slopes, the condition is considered to be very poor due to visual detractors, a weak network of semi-natural habitats, intensive arable coverage, fragmented hedgerows and limited tree cover. Characteristic historic settlements on the river are mostly overwhelmed by 19th and 20th century development.</p> <p>Within Medway the river forms part of a Site of Nature Conservation Interest, which extends into the Wouldham Marshes, which lie within Tonbridge and Malling. At the river's margins areas of reeds, other common emergents, mudflats and wading birds at low tide, contrast strongly with the more industrialised areas to the south. The overall condition of the area is considered to be poor due to fragmentation of the landscape and ecological interest by industrial works, floodplain management structures, new riverside residential developments and valley side quarries.</p>
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Sustainability Issue – Objective 1

Overall, Medway has a rich and diverse range of habitats and species, which are important to biodiversity and connections between habitats. The majority of SSSIs are favourable although some sites need better management. All sites and connections between them need to be conserved.

It is important for indirect pressures on biodiversity and habitats to be considered, such as fragmentation of habitats, impacts of recreational use and water usage and loss of non-designated wildlife and landscape areas.

(Medway Wildlife, Open Space and Countryside Plan 2008-16; Kent BAP; Kent Environment Strategy; Kent Landscape Character Assessment, Draft SE Plan; PPS1; PPS7; PPS9; PPG20; SEA Directive; Habitats Directive)

4.11 Air Quality

4.11.1 The Environment Act 1995 placed a statutory duty on Local Authorities to undertake periodic reviews and assessments of air quality within their boundaries. This should give consideration to the current and future air quality against health based objectives set out in the Government's Air Quality Strategy. Where objectives are not likely to be met by the relevant date Local Authorities must declare an Air Quality Management Area (AQMA) and develop an action plan.

4.11.2 Medway has declared six AQMAs, originally in 2002 and then updated in 2004. These are:

- Chatham Centre;
- Cuxton Road;
- Frindsbury Road;
- Maidstone Road (between Greenway and the Asda store traffic lights);
- Rochester Centre; and
- Strood Centre

These have been specifically identified in relation to missing the NO₂ objectives.

4.11.3 Within tables 6 & 7 below there are monitoring results for 2007 and the beginning half of 2008 for comparison.

Table 6: Monitoring results from NO2 diffusion tubes for 2007-08

Site Location	AQMA	2007	Jan to Aug 2008
	Air Quality Objective	40	40
High Street, Strood (Southern Heating)	Strood Centre	53	60
Star Hill No 18	Rochester Centre Star Hill	59	57
Corporation Street	Rochester Centre Corporation St	36	36
Cuxton road No 92	Cuxton Road, Strood	45	45
Railway Street	Chatham Centre	49	50
Highview Road No 2	Maidstone Road, Chatham	28	26
Frindsbury Road No 28	Frindsbury Road, Strood	45	45

Table 7: Additional monitoring NO2 diffusion tube results

Site Location	AQMA	2007	Jan to Aug 2008
	Air Quality Objective	40	40
High Street, Rainham K	Rainham Centre NEW	53	49
High Street, Strood (Tanning Shop)	Strood Centre (extension)	50	48
Luton Road (Funeral Directors)	Luton Road NEW	43	44
Luton High Street No 27	Luton Road NEW	40	37
Gibraltar Hill	Chatham Centre (extension)	45	42
Chatham High Street (Orbit Housing)	Chatham High Street NEW	47	49
Pier Road	Pier Road NEW	48	49

All monitoring results are bias corrected

As can be seen from these results some areas are a long way from the target and others are only just over the required levels. These results also reflect changes proposed for next year, such as the removal of the Maidstone Road AQMA and the extension of other areas such as Chatham Centre.

- 4.11.4 Revisions are expected early next year following a more detailed study for the inclusion of 4 new testing areas and some adjustments to existing areas. Although, the NO2 targets have been missed, those for sulphur dioxide, carbon monoxide and PM10 have not been exceeded.

Sustainability Issue – Objective 2

Although there is not a significant risk to human health, 6 AQMAs have been declared due to the impact of NO2 levels and 4 more are going to be included. NO2 is generally associated with transport, therefore journey times need to be reduced, through traffic needs to be moved away from the town centres and there needs to be greater incorporation of other forms of transport. However, improving accessibility of services is likely to create an increase in road traffic.

(Medway Air Quality Action Plan; LTP2; UK Air Quality Strategy; SEA Directive)

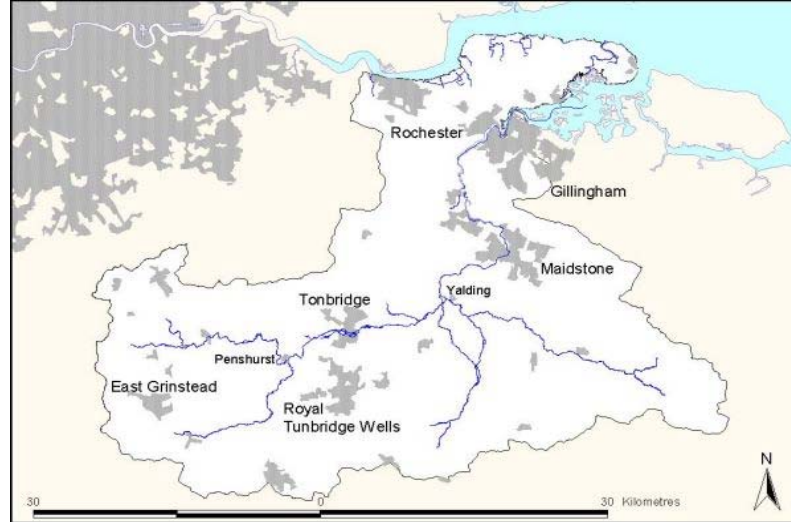
4.12 Water and Soil

- 4.12.1 There has always been a close link between the River, water quality and the towns in Medway. In general Medway has always had a supply of water, however during the recent drought periods of 2005/6, some water restrictions were applied and the water companies applied for drought orders, although due to improvements on the supply side these were not required.

- 4.12.2 Medway, along with the South East, is classed as an area where there is an over abstraction of water; meaning abstraction is causing unacceptable

damage to the environment at low flows. The map below shows the rivers contained within the Medway Catchment Abstraction Management System, which provides strategic direction as to the amount of water that should be taken across the catchment, outlining where greater or lesser abstraction would be possible to maintain existing stocks.

Map 3: Rivers within the Medway Catchment Abstraction Management System



4.12.3 Water quality within the South East has been improving since 1990, mainly due to better control of potentially polluting activities and also significant investment by the water companies in treatment. This rate of improvement has however slowed in recent years.

4.12.4 The Environment Agency classifies river quality into 5 groups ranging from A (very good) to F (bad). None of the streams within the Medway area are tested so no direct comparisons can be made on water quality. However, testing in the River Medway at the Allington Lock in 2007 gave the following results.

Table 8: Water quality recorded on River Medway at Allington Lock

River: R. Medway				
Chemistry: C	Biology: C	Nitrates: 4	Phosphates: 5	Year: 2007
Chemistry: C	Biology: C	Nitrates: 4	Phosphates: 5	Year: 2007
Chemistry: B	Biology: C	Nitrates: 4	Phosphates: 5	Year: 2007
Chemistry: B	Biology: C	Nitrates: 4	Phosphates: 5	Year: 2007
Chemistry: B	Biology: C	Nitrates: 4	Phosphates: 5	Year: 2007
Chemistry: C	Biology: A	Nitrates: 4	Phosphates: 6	Year: 2007
Chemistry: C	Biology: A	Nitrates: 3	Phosphates: 5	Year: 2007

4.12.5 As can be seen from these results the general water quality is good, although there is some room for improvement across both the chemical and biological results, as well as higher levels of both nitrates and phosphates present within the water content.

4.12.6 Groundwater quality needs to be protected from pollution and the Environment Agency set Groundwater Source Protection Zones, containing both Inner and Outer Zones. The impact on water quality needs to be

considered and addressed through both the SA process and production of the LDF. Diffuse and point source pollution are possible in Medway with a number of commercial businesses located along or in close proximity to the river.

- 4.12.7 The soil quality throughout the Medway area varies widely, with pollution on old industrial sites that are no longer in use and also areas of Grade I agricultural land. However, the Council are generally aware of those polluted sites and where there has been containment.
- 4.12.8 In addition, it is also recognised that water abstraction and water quality can affect designated sites, through potentially decreasing water levels and flows and affecting soil quality.

Sustainability Issue – objective 3 & 7

Medway is largely supplied from local groundwater or surface water from outside the area, therefore protection of groundwater is essential. In general water quality is reasonable although there is room for improvement of both biological and chemical indicators, as well as a need to reduce levels of pollutants. Furthermore water flows can be important for designated sites and soil quality. Water usage and efficiency need to be considered and incorporated, to ensure development is sited so as not to affect or strain supplies.

(Southern Water, Water Resource Management Plan; Draft SE Plan; PPS1; PPS9; SEA Directive; Habitats Directive, Water Framework Directive)

4.13 Waste

- 4.13.1 Medway has a variety of waste streams that need to be treated, from traditional household Municipal Solid Waste through to Hazardous and Agricultural waste. Organic, or putrescible wastes, are the largest fraction at some 40%, paper at 28% and plastics are some 10% of the total according to a Medway analysis carried out in 2000. At Civic Amenity sites, the volumes are significantly smaller at only 22% putrescibles, 6% paper, 2-3% plastics and combustibles of mixed origins being largest at 40%.
- 4.13.2 In 1999 MEL Research Ltd carried out an audit of Medway's waste streams and found that 117,300 tonnes of Municipal Solid Waste was being produced per year. At this point the majority was in kerbside collections, some through civic amenity sites, with the residual left over from recycling activity amounting to 23,000 tonnes.
- 4.13.3 The total municipal waste arisings, including all sectors of collection and treatment, in Medway for 2007/8 were 138,364 tonnes and 41,587 tonnes of this were recycled, equating to 30%. In England as a whole the aim is to achieve a combined recycling and composting rate of 33% of household waste by 2010 (Statutory Recycling and Composting Standards). Against this target it can be seen that Medway is doing well and this would be expected to increase with a recent planning approval for an in-vessel composting facility.
- 4.13.4 Hazardous waste due to its nature and economic market constraints mean it needs to be dealt with at a regional scale. In addition to this due to changes

in terms of classification of waste, the information in relation to trends is maturing. As yet it is still to be determined what role Medway might need in relation to hazardous waste.

Sustainability Issue – objective 5, 13 & 7

Medway currently meets the target for recycling, with 30% municipal waste being recycled and there have been recent approvals that should increase capacity. There are a number of other waste streams in the area and there is little data for these. However provision needs to be made for increasing all forms of treatment, recovery and reuse of waste materials.

(Medway Municipal Waste Strategy; Kent Waste Plan; Draft SE Plan; PPS10; UK Waste Strategy)

4.14 Transport and Accessibility

- 4.14.1 Medway is only 30 miles from London to the west and 40 miles from Dover to the east, with the five historic towns of Strood, Rochester, Chatham, Gillingham and Rainham forming the urban core. Larger villages in the more rural parts of Medway include Cuxton, Halling and the Isle of Grain. This combined with the young age demographic of the area and the higher number of older people living longer and more independently, mean there are a wide variety of needs to be catered for.
- 4.14.2 The area has excellent transport links to the national motorway and rail networks, as well as those throughout Kent. Access to the Channel Tunnel Rail Link is also in close proximity and faster services will be introduced serving Rochester from 2009 onwards.
- 4.14.3 The main issues for the road system around Medway are related to congestion and a resultant perception of inaccessibility. Though there are good links to the main road network, there are particular problems on the M25 around the A2 junction, junctions 3-5 of the M20 and its knock-on effects on the A228 and junction 5 of the M2. There is currently little distinction between the role of town centres and the crossroad functions of the main towns of Chatham and Strood.
- 4.14.4 It should not be forgotten that the River Medway is also an important transport link for the area. However, there is a need to ensure adequate landside capacity for onward movement of freight from deepwater ports and local berths. The exact amount of expansion and increase in transport here will depend on the impacts of other regional ports, such as Shell Haven and where proposals can be linked to tourism and urban renewal strategies. Environmental impacts on the river system also need to be considered.

Sustainability Issue – objective 14, 11 & 16

There are severe congestion issues in the town centres making them unwelcoming to both road users and pedestrians, as well as impacting on air quality. Transport routes need to be moved away from the town centres to help reduce congestion and help improve air quality. However transport will be necessary for improving economic performance and ensuring services are accessible.

(Medway Community Plan; LTP2; SE Plan; PPS1; PPG13; Sustainable Communities)

4.15 Climate adaptation and mitigation

4.15.1 Although there is uncertainty in climate change predictions, some climatic changes where there is greater agreement of predicted effects in the South East include:

- An increase in annual average daily temperature of 4.5 degrees;
- A 30-40% decrease in summer precipitation;
- A 15-20% increase in winter precipitation; and
- Sea level rise of 36cm.

4.15.2 This means that the South East is likely to experience, in the future, a warmer climate, with drier summers and wetter winters, which means that extreme events such as floods and droughts are likely to become less predictable and possibly more frequent. In addition, there is concern about sea-level changes leading to inundation of low-lying coastal areas.

Water Resources

4.15.3 The South East is the driest region in the country. The combination of low rainfall and growing demand has resulted in high demand for water resources. There are very few reservoirs and 76% of water comes from local groundwater sources and 24% from surface water sources outside the area.

4.15.4 In the South East metered and un-metered household per capita consumption of water increased on average by 9% between the early 1990s to 2003/04. But there are signs that average consumption is now decreasing. The average annual demand within Medway is 119.5MI/d, rising to a maximum of 151.8MI/d during dry periods. Taking the higher amount this is slightly above the national average of 148 litres per person per day in 2006. There is no underlying trend of increasing water usage, so it should be expected that this will remain about the same and then reduce over time as efficiency measures take effect.

4.15.5 Good quality data is available for the domestic use of water in Medway but only a very limited amount is available for non-domestic use. However, both industry and agriculture can demand large quantities of water and both can have an impact on the quality of the water supply due to the potential for pollution.

4.15.6 Commercial development (offices etc.,) and leisure facilities (particularly swimming pools) can be substantial water users. There are various technologies available to improve water efficiency but significant benefits will only be achieved if these are retrofitted in existing developments on a large scale, in addition to efficiency measures in new buildings.

Flood Risk

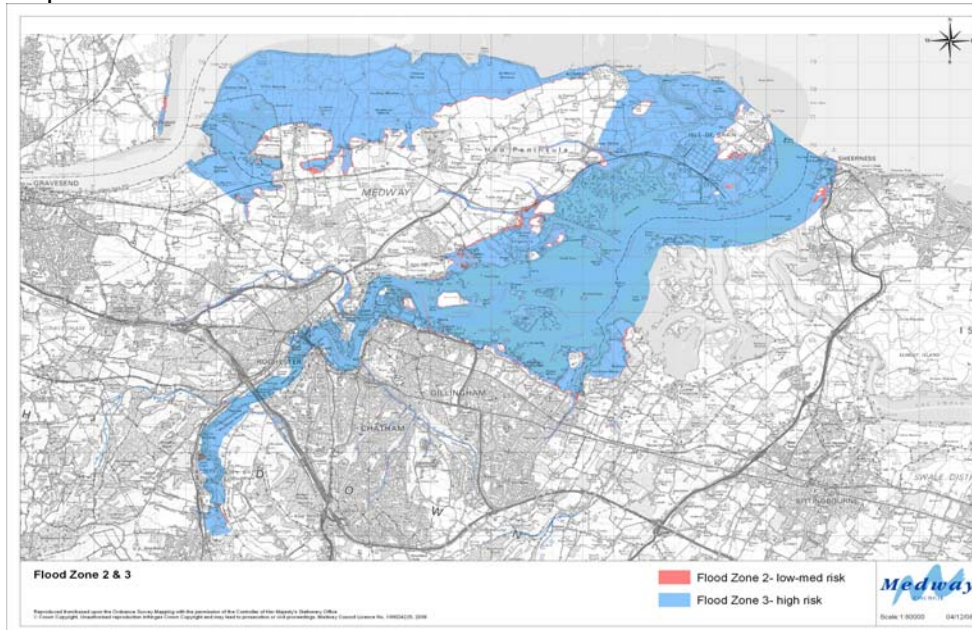
4.15.7 Flooding impacts can be both direct and indirect, with the worst effects often coming from surface water flooding flowing into inland streams higher up the catchment and flows into sewers, causing systems to be overwhelmed.

4.15.8 There have been a number of flooding incidents in Medway within the last century where water levels rose to a maximum of 4.6m AoD. The most recent event was in December 2005 when a tidal surge caused low level

flooding of Strood affecting Cuxton Marina, Janes Creek and Canal Road. The recorded level at Strood pier some 200m downstream of the A2 bridge was 4.22m AoD.

4.15.9 Within the Medway area there are 1551 properties at risk from the likelihood of fluvial flooding at some point during 1000 years and 1363 properties at risk of a flooding in a 100 year timescale. Buildings can be made more resilient through their design, positioning and the choice of materials used. A common practice in respect to the external areas is through soft landscaping or choosing a material for driveways that allows percolation. Map 4 below shows that there is a reasonable area of Medway within Flood Zone 3 and a smaller amount within Flood Zone 2.

Maps 4: Areas within Flood Zones 2 & 3



Sustainability Issue – objective 3 & 4

Water quality is not currently an issue, however this needs to be monitored both due to the requirements of the WFD and also to see whether it is affected by climate changes, such as increased incursion of saline water. Flood risk is a pertinent risk to particular areas and a considerable constraint to be considered for some developments. A sequential approach and all design aspects, including indirect impacts as well as mitigation with multiple benefits, should be considered for all proposals.

(Medway & Swale SFRA; Medway Shoreline Management Plan; Draft SE Plan; PPS25; PPS20; PPS1 Supplement; Climate Change Bill; Making Space for Water)

Energy

4.15.10 The release of greenhouse gases into the atmosphere through the combustion of fossil fuels from anthropogenic causes, results in an enhanced warming effect. There are a number of indicators related to energy consumption, efficiency and the levels of greenhouse gases being emitted.

- 4.15.11 Carbon Dioxide emissions for the Medway area have decreased slightly, falling from 1,231kt CO₂ in 2005 to 1,223kt CO₂ in 2006. However, due to rounding of the figures involved and a minimal increase in population, the per capita emissions have stayed the same at 4.9t CO₂.
- 4.15.12 Interestingly Medway's highest sector for emissions is from the domestic market, with the Industrial and Commercial sector contributing a large amount and the lowest emissions coming from the road transport sector. This reflects the larger proportion of older buildings within the housing stock.
- 4.15.13 Currently Medway creates a significant amount of energy for the National Grid through the Kingsnorth Power Station and some other smaller installations located nearby and at the Isle of Grain. It is expected that there will be a coal-fired carbon capture and storage (CCS) plant to be sited near to the existing E.ON station and Medway Council raised no objection to a combined cycle gas turbine (CCGT) power station to be sited not far from the existing gas power station. Both these technologies would fall within the definition of renewable resources, defined by the government⁵. Due to the area of land on the Peninsula there may be scope for a low carbon research and development hub to be created.
- 4.15.14 However, greater emphasis is being placed on how and where renewable technologies can be achieved both at the macro and micro scale. The 2006 and 2007 Annual Monitoring Reports, report that permission has been granted for the developments described above and also for six wind developments of varying scales; a couple of smaller scale CHP schemes; and four smaller scale photovoltaic schemes. The provision of a stand alone settlement to be sited at Chattenden allows for the potential of including sustainability principles and renewable technologies on a larger scale.
- 4.15.15 Medway's Stock Condition Survey in 2007 highlighted that the average SAP rating for Medway (56) was higher than the national average of 51.8 (taken from the English House Condition Survey update report 2004). The energy efficiency of a property is an important factor in both home energy conservation and fuel poverty.
- 4.15.16 12,343 of the properties in Medway have a SAP rating of less than 40 and the lower the rating the less energy efficient a property is. Energy inefficient properties are more expensive to heat adequately therefore household income is also an important factor to consider in determining what impact fuel poverty is having on the residents of Medway. The average fuel bill in Medway is £804 per annum and 8% of households have no central heating.

Sustainability Issue – objective 13, 5, & 2

There is a pertinent need for energy efficiency in the existing building stock to be increased as well as all new developments needing to include low carbon solutions. Medway is in a reasonable position in respect to energy generation from renewable or low carbon technologies, due to recently raising no objection to 2 new power stations including carbon capture processes. However, it must be recognised that renewable technologies can be intermittent and supplies must be ensured to ensure people come out of fuel poverty. Due to binding targets set by government and the acknowledged impacts on supply and climate of current generation, there is an ever growing need for renewable technologies.

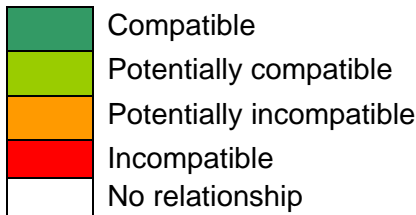
(Sustainable Communities; PPS1 Supplement; PPS22; Energy Paper; UK Renewable Energy Strategy Consultation)

5. Framework, objectives and indicators

- 5.1 The Sustainability Appraisal Framework provides a way in which sustainability effects can be described, analysed and compared. The starting point for determining the objectives for the sustainability framework came from those within the Regional Sustainability Framework for the South East, adopted in June 2008. This was established to help ensure plans are in conformity with the higher level Regional Spatial Strategy (RSS).
- 5.2 To make the process more manageable the aim was to limit the number of objectives to no more than 18. These were identified by reviewing relevant policy documents at international, national, regional, county and local level and those put forward in the SEA Guidance and from the baseline information. The draft objectives have been refined through subsequent consultation with internal officers. The achievement of these objectives should be measurable using identified indicators.
- 5.3 The indicators were identified through a scoping of indicators already collected by officers in the Local Authority. As this scoping was very broad, the objectives were used to focus and refine the range of indicators. The following framework consists of draft indicators for comment and will need to be developed into a well-defined and cost effective monitoring programme in the next stage of the SEA.
- 5.4 The objectives and indicators are sometimes considered to cover more than one SEA topic. As such the list of objectives and indicators set out in Table 10, beginning on page 32, also shows these against the aims of the Sustainable Development Strategy.
- 5.5 The Medway Council objectives were tested for internal compatibility. This is a subjective exercise and the outcomes are shown in Table 9. These highlight where there may be the potential for conflicts with what they aim to achieve. For example, the objectives associated with providing housing and those aiming to conserve biodiversity and the natural and cultural environment may not be compatible. There is also potential conflict between ensuring high and stable economic growth and the issues associated with traffic, specifically air quality, health and climate change.
- 5.6 The objectives should not be removed because of this potential conflict but highlighting this at an early stage allows the framework to be aware of and therefore balance these issues. Simply because the objectives are compatible or incompatible, does not mean that the outcomes also have to be. This exercise has therefore identified the areas where the objectives need to be carefully balanced to ensure the outcomes are consistent and where possible achieve a win-win situation.

Table 9: SA Compatibility Matrix

Objective Number	15																	Compatible				
	14																Potentially incompatible	Potentially compatible				
	13																	Potentially compatible	Compatible			
	12																Potentially incompatible	Potentially incompatible	Compatible	Potentially compatible		
	11																Potentially incompatible		Incompatible	Compatible	Compatible	
	10																		Compatible	Compatible	Compatible	
	9																		Compatible	Compatible	Compatible	
	8																		Compatible	Incompatible	Compatible	Compatible
	7																		Compatible	Compatible	Compatible	Compatible
	6																		Compatible	Compatible	Compatible	Compatible
	5																		Potentially incompatible	Compatible	Potentially incompatible	Potentially compatible
	4																		Potentially incompatible	Potentially incompatible	Potentially incompatible	Potentially compatible
	3																		Potentially incompatible	Potentially incompatible	Potentially incompatible	Potentially compatible
	2																		Potentially incompatible	Potentially incompatible	Potentially incompatible	Potentially compatible
	1																		Potentially incompatible	Potentially incompatible	Potentially incompatible	Potentially compatible
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16						



Note: All potentials are subject to implementation and a cautious approach has been taken in terms of expected impacts.

Table 10: Sustainability framework – objectives and indicators

Sustainable Development Principle	Directive Topic	Number	Objective	Suggested Indicators
Protection of the Environment	Biodiversity, Flora and Fauna	1	Conserve and enhance the diversity and abundance of habitats and species	<ul style="list-style-type: none"> • Extent and condition of key habitats. • Condition of SSSI's • Reported levels of damage to designated sites. • Achievement of Biodiversity Action Plan targets. • Number/area of Local Nature Reserves • Population of wild birds <i>and farmland birds</i> • <i>Area of land covered by agri-environment schemes</i>
Protection of the Environment	Air	2	Reduce air pollution and improve air quality, including reduction of greenhouse gas emissions	<ul style="list-style-type: none"> • Achievement of Emission Limit Values. • Population living in Air Quality Management Area • Number of days of air pollution. • Emissions of greenhouse gases from energy consumption, transport and land and sea waste management.
Protection of the environment; and Prudent use of Natural Resources	Water and Soil	3	Maintain and improve quality of ground and surface waters and security of supply	<ul style="list-style-type: none"> • Quality (biology and chemistry) of rivers, canals and freshwater bodies. • Quality and quantity of groundwater. • Rivers of good or fair chemical and biological water quality. • Compliance with EC Bathing Waters Directive. • Water use (by sector, including leakage) and availability. • Per capita consumption of water. • Incidents of major and significant water pollution

Sustainable Development Principle	Directive Topic	Number	Objective	Suggested Indicators
				<ul style="list-style-type: none"> Water availability of water-dependent habitats, especially designated wetlands
Protection of the environment; and Social Progress	Climatic Factors	4	Reduce risk of flooding and ensure flood resilience of buildings and minimise the effect on public services and infrastructure	<ul style="list-style-type: none"> Flood risk. Properties at risk from flooding Number of additional houses where flood risk has been reduced New development with sustainable drainage installed
Protection of the environment; Prudent use of Natural Resources and Social Progress	Climatic Factors	5	Reduce ecological footprint through prudent use of natural resources, reduction in waste management and sustainable waste management practices	<ul style="list-style-type: none"> Waste disposal in landfill. Percentage of the total tonnage of all types of waste that has been recycled; composted; used to recover heat, power and other energy solutions; and landfilled Number of new buildings reaching Code for Sustainable Homes Level 4 or above by 2013.
Prudent use of natural resources; and Social Progress		6	Provide opportunity for everyone to live in a decent, sustainably constructed, affordable home suitable to their needs	<ul style="list-style-type: none"> Percentage of new and retrofit homes reaching Sustainable Homes Level 4 or above Housing completions compared with regional guidance. Affordable homes within the total housing stock. Homelessness. Number of unfit homes per 1,000 dwellings.
Prudent use of natural resources		7	Maximise land use efficiency through appropriate use of previously developed land and existing buildings	<ul style="list-style-type: none"> Housing density Percentage of development on previously developed land

Sustainable Development Principle	Directive Topic	Number	Objective	Suggested Indicators
Social progress	Human Health	8	Improve the health and well-being of the population and reduce health inequalities	<ul style="list-style-type: none"> • Years of healthy life expectancy • Mortality by cause • Death rates from circulatory disease, cancer, and accidents, and suicide. • Infant mortality rates. • Conceptions among girls under 18. • Life expectancy. • Obesity
Social Progress	Population	9	Reduce inequalities in poverty and social exclusion	<ul style="list-style-type: none"> • Proportion of children under 16 who live in low income households. • Percentage of population of working age who are claiming key benefits. • Number of households in fuel poverty • Proportion of population who live in wards that rank within the most deprived 10% and/or 25% of wards in the country. • Access to services for disabled people
Social Progress	Population	10	Reduce crime and the perception of crime	<ul style="list-style-type: none"> • Recorded crimes per 1,000 population • Fear of crime surveys • Number of transport accidents • Level of domestic burglaries, violent offences and vehicle crimes per 1,000 population

Sustainable Development Principle	Directive Topic	Number	Objective	Suggested Indicators
Social Progress	Material Assets	11	Improve accessibility to key services and facilities (inc. countryside, leisure/recreation and historic environment)	<ul style="list-style-type: none"> Percentage of development within 10 minutes or 500m walk of a frequent bus route/rail service. Access to services for disabled people Distance to nearest leisure or cultural facility Percentage of land designated for particular quality or amenity value, including publicly accessible land and greenways. Proportion of population within 200m of parks and open space <i>The proportion of Medway residents meeting the Accessible Greenspace Standards:</i> <ul style="list-style-type: none"> - live no further than 300m away from nearest area of natural green space of 2ha in size - at least one accessible 20ha site within 2km of home - one accessible 100ha site within 5km of home - one accessible 500ha site within 10km of home Participation in sports, outdoor and volunteer activities
Protection of the environment	Cultural Heritage & Landscape	12	Conserve and enhance historic buildings, archaeological sites and culturally important features and increase engagement by all sections of community	<ul style="list-style-type: none"> Percentage of Listed Buildings and archaeological sites 'at risk.' Buildings of Grade I and Grade II* at risk of decay. Additional listed building or conservation area designations per annum

Sustainable Development Principle	Directive Topic	Number	Objective	Suggested Indicators
				<ul style="list-style-type: none"> Participation in Cultural activities
Prudent use of Natural Resources; and Protection of the Environment	Material Assets & Climatic	13	Increase energy efficiency; the proportion of energy generated from renewable sources and the diversity and security of energy supplies	<ul style="list-style-type: none"> Electricity generated from renewable energy sources and CHP located in the area. Energy consumption per building and per occupant. CO² emissions. Number of households in fuel poverty
Protection of the environment; and Social Progress		14	Reduce traffic and congestion by reducing need to travel and improving travel choice	<ul style="list-style-type: none"> Distances travelled per person per year by mode of transport. Traffic volumes. Growth in road traffic. Average vehicle speeds. Proportion of travel by car. Investment in public transport, walking and cycling
Economic growth and employment		15	Raise educational achievements through developing opportunities to acquire skills, to develop and maintain workforce	<ul style="list-style-type: none"> Proportion of 19 year olds with Level 2 qualifications (% GCSEs A*-C or NVQ equivalent) Percentage of population of working age qualified to NVQ Level 3 or equivalent. Proportion of adults with above or below average literacy and numeracy skills.

Sustainable Development Principle	Directive Topic	Number	Objective	Suggested Indicators
Economic growth and employment		16	Support and improve employment and economic competitiveness in town centres and deprived areas	<ul style="list-style-type: none"> • Business start-ups net of closures. • Inward investment. • Social and community enterprises. • GVA per capita • Labour productivity performance of the South East against other high performing regions in Europe and the world.

6. Next Steps/Consultation

- 6.1 This is considered to be stage A5 following the government guidance⁶, which involves the consultation on the scope of the SA. This first statutory consultation period *ran* for 5 weeks until the 23rd JANUARY 2009.
- 6.2 This report *was* been sent to the 3 statutory stakeholders (the Environment Agency, English Heritage and Natural England), as well as being published on the Council's website and sent separately to the following stakeholders:
- Neighbouring Authorities – Kent County Council, Gravesham, Swale, Maidstone and Tonbridge and Malling Borough Councils
 - Regional Assembly – SEERA
 - Government Office for the South East (GOSE)
- 6.3 In addition, to the above consultations there *was* also a presentation to the Local Strategic Partnership in December 2008.
- 6.4 At this Scoping Stage the broad options for the Core Strategy *were* not yet available, so these will be produced in tandem with the Initial Sustainability Report (Stage B of the SA process). Therefore at Stage B the SA framework will help identify appropriate options by assessing then highlighting the sustainability implications of each and suggesting recommendations for improvement.
- 6.5 The relative merits of the objectives, policies and proposals put forward will be considered against the SEA/SA objectives and associated baseline information at each appropriate stage, where there are significant changes.
- 6.6 In accordance with the Directive, in assessing the alternatives, the likely significant effects on the environment should include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects.
- 6.7 It is the Council's intention that following this report, an Initial Sustainability Appraisal will be published alongside an Issues and Options paper in April 2009 and then subsequent documents at each appropriate stage, most likely to be called an Interim Sustainability Appraisal and Final Sustainability Appraisal.
- 6.8 If you wish to discuss this report call 01634 334321 or make representation please use the details below. All responses should make reference to the section/paragraph number to which the representation is being made.

Development Plans & Research
Medway Council
Gun Wharf
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Chatham, Kent
ME4 4TR
localdevelopmentframework@medway.gov.uk

⁶ A practical guide to the Strategic Environmental Assessment Directive (2005), ODPM

Appendix 1: List of the relevant plans and programmes, expanded to show their main aims and relationship to the SA framework

Plan	Key aims and objectives	Implications for SA
International		
European directives, including the Birds, Habitats and the RAMSAR Convention	<p>The Birds Directive requires Member States to take measures to preserve a sufficient diversity of habitats for all species of wild birds and that special measures are taken to conserve the habitat of certain particularly rare species and of migratory birds.</p> <p>The Habitats Directive requires Member States to take measures to maintain or restore natural habitats and wild species at a favourable conservation status.</p> <p>RAMSAR requires the conservation of wetlands.</p>	SA should aim to protect and enhance the diversity and abundance of species and to monitor the condition and any loss or gain of habitats.
EU Water Framework Directive	The WFD requires member states to protect aquatic ecology, unique and valuable habitats, quality of drinking water and bathing waters	SA should aim to protect aquatic ecology and habitats, drinking water quality and if applicable, bathing water quality, then monitor there is no deterioration
EEC Waste Framework Directive	This laid out the principle of moving from the traditional disposal to landfill towards increased resource use and recovery.	<p>The SA objectives should refer to waste minimisation and management and several promote this e.g. to minimise pollution levels and to maximise land use efficiency.</p> <p>This should be monitored to ensure that the levels of waste going to landfill are reduced and there is an increase in reuse and recovery.</p>
EC Landfill Directive	<p>This sets out the following targets for amounts of waste to be diverted from landfill:</p> <ul style="list-style-type: none"> • 40% by 2010 • 45% by 2015 and • 50% by 2020. 	The SA objectives should refer to waste minimisation and practice.

Plan	Key aims and objectives	Implications for SA
National		
<p>Securing the Future: delivering the UK Sustainable Development Strategy</p>	<p>This sets out 4 principles of sustainable development to be used as a basis for integrating sustainable development into plans and strategies. These are:</p> <ul style="list-style-type: none"> • Social Progress which recognised the needs of everyone; • Effective protection of the environment; • Prudent use of natural resources; and • Maintenance of high and stable levels of economic growth and employment 	<p>Policies aimed at sustainable development should meet all of the SA objectives.</p>
<p>Sustainable Communities: Building for the Future</p>	<ul style="list-style-type: none"> • To ensure all social tenants have a decent home by 2010. • To improve conditions for vulnerable people in private accommodation. • To ensure all tenants get an excellent service from their landlord. • To ensure all communities have a clean, safe and attractive environment. • To bring back into use, homes which have been abandoned. • To recreate sustainable communities and ensure high quality design. • To tackle the housing shortage. • To create a better balance in the housing market. • To promote development, whilst protecting and enhancing the countryside. • To ensure economic competitiveness. 	<p>A key objective for the SA must be to provide the opportunity for people to meet their housing needs. The SA should aim to maintain and enhance the character of the townscape and landscape.</p>

Plan	Key aims and objectives	Implications for SA
Draft Climate Change Bill	<p>Commits the UK to cutting CO2 emissions by 60% from 1990 levels by 2050, with significant change to be achieved by 2010. This is accompanied by the Climate Change Programme setting out a timetable as to how to achieve this.</p> <p>This 60% target is likely to be revised up to 'at least 80%' to include commercial shipping and aviation, which are currently excluded.</p>	<p>An SA objective should be included that considers the effects of climate change and the environment is a key theme of the SA.</p>
UK Renewable Energy Strategy (Consultation)	<p>This lays out a suggested framework of how and where renewable energy technologies could help to provide energy in the future. This sets an overall target of 15% of total energy demand to come from renewable sources by 2020, with a suggested breakdown of 10% being in the transport sector; 14% in the heat sector and 32% in terms of electricity generation.</p>	<p>An SA objective is required in relation to renewable energy and renewable energy covers all SA themes.</p>
Urban White Paper: our Towns & Cities: The Future	<ul style="list-style-type: none"> • People shaping the future of their community. • People living in attractive, well-kept towns and cities. • Good design and planning which makes it practical to live in more environmentally sustainable way. • Towns and cities able to create and share prosperity. • Good quality services. 	<p>Policies aimed at sustainable development should meet all of the SA objectives.</p>

Plan	Key aims and objectives	Implications for SA
Rural White Paper: Our Countryside: the Future	<ul style="list-style-type: none"> • To facilitate the development of dynamic, competitive and sustainable economies in the countryside, tackling poverty in rural areas. • To maintain and stimulate communities, and secure access to services which is equitable in all circumstances, for those who live or work in the countryside. • To conserve and enhance rural landscapes and the diversity and abundance of wildlife. • To increase opportunities for people to get enjoyment from the countryside. • To promote government responsiveness to rural communities through better working together between departments. 	Policies aimed at sustainable development should meet all of the SA objectives.
Bringing Britain Together: A national strategy for neighbourhood renewal	<p>This strategy is to be built on the concepts of: -</p> <ul style="list-style-type: none"> • investing in people, not just buildings; • involving communities, not parachuting in solutions; • developing integrated approaches with clear leadership; • ensuring mainstream policies really work for the poorest neighbourhoods; • making a long-term commitment with sustained political priority. 	Policies aimed at sustainable development should meet all of the SA objectives.
A New Commitment to Neighbourhood Renewal — national strategy action plan	<p>The vision is reflected in two long-term goals:</p> <ul style="list-style-type: none"> • In all the poorest neighbourhoods, to have common goals of lower worklessness and crime, and better health, skills, housing and physical environment; • To narrow the gap on these measures between the most deprived neighbourhoods and the rest of the country. 	Accessibility and equality are key themes of the SA and policies aimed at sustainable development should meet all SA objectives.

Plan	Key aims and objectives	Implications for SA
Heritage White Paper: Heritage Protection for the 21st Century (Consultation)	Sets out intentions to include Scheduled Ancient Monuments (SAMs) and their management and protection within the planning system, as well as Conservation Areas and World Heritage Sites.	SA should have an objective in relation to the historic environment and accessibility is a key theme of the SA.
UK Waste Strategy	<p>Promotes best practicable environmental option (BPEO), the waste hierarchy and the proximity principle. Sets the following targets for amounts of the waste stream to be composted and recycled:</p> <ul style="list-style-type: none"> • 40% by 2010 • 45% by 2015 and • 50% by 2020 <p>and for the following proportions to be recovered from the remaining waste stream:</p> <ul style="list-style-type: none"> • 53% by 2010 • 67% by 2015 • 75% by 2020 	The SA objectives should refer to waste minimisation and practice.
Future Water	Sets out a vision for how the water sector should look by 2030. Rivers, canals, lakes and seas are improved for people and wildlife and where excellent quality drinking water is provided. A sector where water resources are valued and protected, water is delivered to customers through fair, affordable and cost-reflective charges, flood risk is addressed with greater understanding and good surface water management and the water industry has cut its greenhouse gas emissions.	The SA should include objectives covering water resources and both water resources and impacts from climate change are key themes in the SA

Plan	Key aims and objectives	Implications for SA
PPS1: Creating Sustainable Communities	<p>Promote sustainable patterns of urban and rural development by:</p> <ul style="list-style-type: none"> • Making suitable land available for development to improve the quality of life. • Contributing to sustainable economic growth. • Protecting and enhancing the natural and historic environment and the quality and character of the countryside, and existing communities. • Ensuring high quality development through good design. • Ensuring development supports existing communities. 	Policies aimed at sustainable development should meet all of the SA objectives.
Planning and Climate Change – Supplement to PPS1	<p>Sets out how planning should minimise impacts on climate change through increased resource and energy efficiency, sustainable transportation and maximises resilience to the effects of climate change. This document is currently in draft form. Key objective is trying to ensure all new house building moves towards the highest level of sustainability.</p>	Policies aimed at sustainable development should meet all of the SA objectives.
PPG2: Green Belts	<p>Aim to prevent urban sprawl by keeping land permanently open. To assist in safeguarding the countryside from encroachment and to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.</p>	SA objectives need to incorporate natural environment and landscape protection and protection of the environment is a key aim of sustainability.

Plan	Key aims and objectives	Implications for SA
PPS3: Housing	<p>Local planning authorities should</p> <ul style="list-style-type: none"> • Meet the housing needs of the whole community; • Provide a wider choice of housing and seek to create mixed communities; • Prioritise previously-developed land for development, bringing empty homes back into use and convert existing buildings, over development of greenfield sites; • Sustainable patterns of development; • Efficient use of land; • Reduce car dependence; • Promote good design. • Where appropriate, include a policy seeking affordable housing in suitable locations. 	<p>The requirement to meet the housing needs of the entire community should be reflected in an SA objective, as housing will be a key focus of the SA.</p>
PPG4: Industrial & Commercial Development & small firms	<p>Encourage continued economic development in a way that is compatible with its stated environmental objectives.</p>	<p>SA/SEA objectives should include measures to encourage economic competitiveness, to promote the vitality of urban centres, to reduce health inequalities and reduce the need to travel by private car.</p>
Draft PPS4	<p>Anticipated that a greater use of market, economic, environmental and social information will be required to support planning applications.</p>	<p>SA/SEA objectives should include measures to encourage economic competitiveness, to promote the vitality of urban centres, to reduce health inequalities and reduce the need to travel by private car.</p>
PPS6: Planning for Town Centres	<p>Promote vital and viable city, town and other centres.</p>	<p>SA should take account of the sequential approach.</p>

Plan	Key aims and objectives	Implications for SA
PPS7: Sustainable Development in Rural Areas	<ul style="list-style-type: none"> • To raise the quality of life and the environment in rural areas. • To promote more sustainable patterns of development. • Promoting the development of the English regions by improving their economic performance so that all are able to reach their full potential. • To promote sustainable, diverse and adaptable agricultural centres. 	SA objectives should reflect the need to protect and enhance rural areas.
PPG8: Telecommunications	To facilitate growth of new and exciting telecommunications systems whilst keeping the environmental impact to a minimum and protecting public health.	Encouraging telecommunication can be met through the SA objective to improve accessibility to services. However conflict may arise from SA objectives relating to health and conserving biodiversity and protecting the quality of the landscape unless clear restrictions are included.
PPS9: Biodiversity and Geological Conservation	Promote sustainable development by <ul style="list-style-type: none"> • Conserving and enhancing biodiversity as an integral part of economic, social and environmental development; • Improving the quality and extent of natural habitats and geological sites; • Contributing to urban renaissance by enhancing biodiversity in green spaces and on urban development sites; and • Contributing to rural renewal by taking account of biodiversity in supporting economic development and contributing to a high quality environment. 	SA includes an objective to conserve and enhance biodiversity and habitats in Medway. This is a key theme for the SA/SEA.

Plan	Key aims and objectives	Implications for SA
<p>PPS10: Planning for Sustainable Waste Management</p>	<ul style="list-style-type: none"> • Delivering of sustainable development through driving waste up the hierarchy with final disposal as the last option. • Enable a timely provision of waste management facilities to meet the needs of the community. • Help implement the national waste strategy to be consistent with the European legislation namely the Landfill Directive. • Respect the proximity principle for waste management without endangering human health or the wider environment. • Reflect the concerns and interests of local communities and the needs of waste collection, waste disposal authorities and business and encourage competitiveness. • While there is a need to protect green belt designation land there will need to be recognition of the particular locational needs of certain types of waste management systems. • Layout and design of new development supports sustainable waste management 	<p>Several SA objectives promote this e.g. to minimise pollution levels and to maximise land use efficiency.</p>
<p>PPG13: Transport</p>	<ul style="list-style-type: none"> • Promote more sustainable transport choices. • Promote accessibility. • Reduce the need to travel, especially by car. <p>Provides an opportunity for managing social inclusion by ensuring services and accessible by public transport.</p>	<p>Reducing the need to travel by private car will promote social inclusion and help achieve sustainability objectives.</p>
<p>PPG15: Planning & the Historic Environment</p>	<p>Effective protection for all aspects of the historic environment. To reconcile the need for economic growth with the need to protect the natural and historic environment and ensure the conservation of the natural beauty and amenity of the land.</p>	<p>An SA/SEA objective should aim to protect or enhance the historic environment.</p>

Plan	Key aims and objectives	Implications for SA
PPG16: Archaeology & Planning	The protection, enhancement and preservation of sites or archaeological interest and of their settings.	The SA/SEA objectives should aim to protect or enhance the historic environment.
PPG17: Planning for Open Space, sport & recreation	<ul style="list-style-type: none"> • Support urban renaissance; • Support rural renewal; • Promotion of social inclusion and community cohesion; • Promote health and well-being; • Promote sustainable development. 	SA objectives could include conserve and enhance biodiversity, to improve health and well being, to improve accessibility to services and to maintain or enhance the character of the landscape.
PPG20: Coastal Planning	Protect, conserve and, where appropriate, improve the landscape, environmental quality, wildlife habitats and recreational opportunities of the coast.	Objectives relating to flooding and biodiversity will be applicable.
PPS22: Renewable Energy	Increase development of renewable energy and contribute to sustainable development.	SA objectives should reflect the need for energy efficiency.
PPS23: Planning and Pollution Control	Guidance on determining the location of development that may result in pollution, and ensure that other developments are not affected by major or existing sources of pollution.	SA objectives should reflect the need to minimise pollution, and maintain and enhance air and water quality.
PPS25: Development & Flood Risk.	Ensure that new development is safe and not exposed unnecessarily to flooding. Where possible reduce and certainly not increase flood risk and ensure that flood plains are used for their natural purposes, continue to function effectively and are protected from inappropriate development.	SA objectives may include reference to reducing the flooding risk.

Plan	Key aims and objectives	Implications for SA
Regional		
<p>Creating Sustainable Communities: Greening the Gateway</p>	<p>Key principles:</p> <ul style="list-style-type: none"> • Planning in advance • Developing an environmental evidence base • Encouraging inclusiveness and integration • Protecting local character and distinctiveness • Protecting designated sites • Habitat restoration and creation • A dynamic landscape • Community involvement 	<p>The synergies between the two strategies should be incorporated in the SA objectives.</p>
<p>South East Regional Spatial Strategy (draft)</p>	<p>This sets out the Regional Policy framework in relation to the economy, tourism, housing, transport, communications and natural resources.</p>	<p>The level of housing, economic growth and resource use, such as water will be key issue for the SA.</p>
<p>Regional Transport Plan</p>	<ul style="list-style-type: none"> • Facilitate urban renaissance and foster social inclusion. • Reduce the wider environment, health and community impact associated with the transport system. • To improve strategic road and rail links. • To take forward transport infrastructure proposals required to support development in the growth areas. • To develop road and rail links that improve inter and intra-regional connectivity. • To improve and develop more sustainable transport connections to the region's key ports, airports and international rail stations. 	<p>SA objectives could include reference to reducing need to travel, sustainable transport and improved accessibility.</p> <p>Could also help to tackle air quality</p>

Plan	Key aims and objectives	Implications for SA
Regional Housing Strategy 2008-2011	<p>This sets out the framework for how housing will be provided and funded across the South East until 2011. Development, except in extreme cases, should include 35% affordable properties to rent or part rent/part buy.</p> <p>There should be greater choice, more sustainable patterns of development and more efficient use of land, focusing on existing towns and cities, ensuring that all housing is well-designed to improved quality of life and promoting urban revival and prosperity.</p> <p>Ensure affordable homes come in a range of sizes to suit families, couples and singles and meet high levels of energy efficiency and building standards in new and existing stock</p>	<p>The objective that there should be a mix of housing with good efficiencies and design, which meet the need of communities and are affordable should be reflected in the SA.</p>
Regional Economic Strategy 2006-2016	<p>Set out the framework for achieving sustainable economic growth across the South East until 2016.</p> <p>This emphasises principles of smart growth and increasing enterprise, innovation and skills to achieve higher productivity and bring more of the resident population into economic activity.</p>	<p>Economic objectives form a core of the SA framework and the importance of combating economic issues should be a key theme.</p>
South East Region Social Inclusion Statement	<p>A region in which we achieve social progress which recognises the need of everyone with strong communities free from high levels of crime and discrimination; with ready access to jobs, education, homes, services and amenities; diverse opportunities for everyone to live fulfilled and health lives and to realise their full potential.</p>	<p>Social objectives form a core of the SA and the importance of combating social exclusion should be a key theme.</p>

Plan	Key aims and objectives	Implications for SA
"The Cultural Cornerstone" A strategy for the development of cultural activity and its benefits in the South East	Despite its substantial achievements much of the region's cultural potential goes untapped. This report seeks to point the way towards unlocking some of those unrealised possibilities, in the interests of greater health, happiness and prosperity for all.	An SA objective should be the improvement of accessibility of key services and facilities to local communities.
"Destination South East" Regional Spatial Planning Strategy for Tourism (Proposed Alterations to Regional Planning Guidance - Tourism and Related Sport and Recreation	<ul style="list-style-type: none"> • Deliver a high quality and rewarding experience for all visitors. • Provide a greater variety of jobs over a wide range of skills levels. • Provide stronger support for urban renaissance and regeneration, especially in the priority sub-regions. • Help to diversify and develop further the rural economy. • Underpin and promote environmental quality and local distinctiveness in town and country. • Generate community benefits to enhance quality of life. 	The promotion of tourism should inform the appraisal.
Kent Biodiversity Action Plan (BAP)	<p>To maintain and where practicable, to enhance:</p> <ul style="list-style-type: none"> • The overall populations and natural ranges of native species and the quality and range of wildlife habitats and ecosystems; • Internationally and nationally important species, habitats and ecosystems; • Species, habitats and natural and managed ecosystems that are characteristic of Kent; • The biodiversity of natural and semi-natural habitats, where this has diminished over recent decades. • To increase public awareness of, and involvement in, conserving biodiversity. • To identify priorities for habitat and species conservation in Kent and set realistic targets and time-scales for these. 	The SA/SEA should include objectives relating to the conservation and enhancement of biodiversity and habitats with a range of species indicators.

Plan	Key aims and objectives	Implications for SA
Catchment Abstraction Management Strategies (CAMS) in Southern Region: Medway CAMS	The CAMS gives more information on the current status of water resource availability in the catchment and proposes a management/licensing policy to improve the sustainability of water for the future.	The SA should include objectives covering water resources and both water resources and impacts from climate change are key themes in the SA
Medway and Swale Shoreline Management Plan	This lays out the overall strategic defence of the coastline to ensure movement towards sustainable development	The SA should include objectives covering water resources and both water resources and impacts from climate change are key themes in the SA
Kent Downs AONB Management Plan	<ul style="list-style-type: none"> • Protect, enhance and managed the diversity of landscape character to the highest standards; • Priority habitats and sites of biodiversity will be managed in favourable condition and target species will flourish; • Conserve and enhance the network of ancient and new woodland; • Maintain and enhance the historic and cultural fabric in favourable conditions to reflect local character; • Manage the natural resources of the environment; • Promotion of sustainable development and transport; • To promote access for all. 	SA objectives should include the protection of habitats, biodiversity and the landscape. Potential us of AONB as an indicator.
Kent Design Guide	Promote sustainable and good design to encourage development which safeguards what is of value whilst enriching the environment for future generations.	The SA objectives should reflect the aims of the Kent Design Guide.

Plan	Key aims and objectives	Implications for SA
Local		
Medway Local Plan 2003	<ul style="list-style-type: none"> • New development should follow sustainable development principles. • Urban renaissance. • Upgrade the environmental quality and image of the area. • Enhance the economic base. • Widen transport choices and accessibility. • Develop Chatham as the 'city centre'. • Invest in the River Medway. • Protection of the greenbelt. • Identifying the built heritage as an important asset. • Reduce social deficiencies. 	
Kent & Medway Structure Plan 2006	<ul style="list-style-type: none"> • Strong cohesive communities. • Excellence in learning opportunities and in skills development. • Centre of excellence for high quality leisure and tourism. • High standards of health and social care. • Helping people to become more independent. • Safe environment where people live free from the fear of crime. • Business growth builds on existing strengths and grasps new opportunities. 	The SA should take in consideration the regeneration of the waterfront sites, housing development and the expansion of the higher and Further Education sectors.
Kent Minerals Local Plan	<p>This sets the framework for future mineral extractions in Kent. The main sections relating to Medway are</p> <ul style="list-style-type: none"> • Construction Aggregates • Chalk & Clay/Oil & Gas 	SA objectives relating to minerals can include transport, protection of landscape, job creation and sustainable development.

Plan	Key aims and objectives	Implications for SA
Kent Waste Local Plan	This details policies in respect of development, which involves disposal of refuse, or waste and its treatment. It identified specific sites for waste management and disposal facilities.	The SA objectives should refer to waste minimisation and management.
Medway Council's Municipal Waste Management Strategy 2005-2020	This sets out a framework for the management of Medway's municipal waste over the next 15 years, through an integrated action plan focusing on minimisation, recycling and composting.	The SA objectives should refer to waste minimisation and management.
Local Transport Plan 2	<p>This sets out an overview of policies with the following aims:</p> <ul style="list-style-type: none"> • To tackle congestion; • To deliver improved accessibility; • To make our roads safer; • To improve air quality; • To deliver sustainable regeneration; • To contribute to improving the health of Medway's residents. 	SA objective required that relates to travel and the need to reduce need to travel and traffic and congestion

Plan	Key aims and objectives	Implications for SA
<p>Medway Regeneration Framework 2006-2016</p>	<p>This lays out the framework for developing Medway into a city of learning, culture, tourism and enterprise. This means:</p> <ul style="list-style-type: none"> • A quality, accessible service of learning and skills provision for all sectors of community, to allow local people and the economy to flourish • Provision of outstanding cultural facilities alongside celebrating existing heritage and identity • Exciting and varied choice of destinations and facilities, focusing on assets such as the castles, cathedral and historic dockyard and area of outstanding natural beauty • Growth and success of specialist manufacturing sectors, the knowledge economy based around Higher and further education, environmental technologies, creative industries, and innovation and growth within existing businesses. Allowing local people to secure better-paid jobs locally and unemployed people getting back into the workforce 	<p>The synergies between the two strategies should be incorporated in the SA objectives.</p>

Plan	Key aims and objectives	Implications for SA
<p>"More to Medway": Medway's Community Plan 2007-2010</p>	<p>This sets out the Local Strategic Partnerships key priorities for the area incorporating sustainability issues throughout. These wish to ensure the safety of children, reduce the fear of crime through reducing anti-social behaviour, increase and improve employment opportunities for local people through vocational training for all ages and realising Medway's cultural ambitions. It wishes to do this through delivery of accessible and integrated transport system supporting regeneration, enabling people to remain healthy and independent (particularly the old and vulnerable groups), cherishing and enhancing Medway's urban and rural heritage and it's important resources. It is intended that this will be done by improving the quality of life for existing and new communities by ensuring development and regeneration are matched to the natural resources and infrastructure available and empowering local people to have greater participation and influence.</p>	<p>The synergies between the two strategies should be fostered and promoted in the SA objectives.</p>
<p>Medway Community Safety Plan</p>	<p>To reduce crime, improve the quality of life of communities and help young people, in particular, who may have drifted into a life of crime and involvement with the criminal justice system, lead useful and satisfying lives.</p>	<p>An SA objective is needed in terms of crime and social objectives are key to the SA.</p>

Plan	Key aims and objectives	Implications for SA
Medway Economic Development Statement	This gives an overview of the strategic direction of Medway's economy, setting out key aims and objectives. This includes a target growth rate of twice the national average and aims to create 40,000 jobs by 2026, planning for long-term growth and opportunities, such as the 2012 Olympics with flexibility and targeted actions. Also a short-term aim of 26,710 jobs by 2016. These will be achieved through firmly establishing Chatham as a city centre of cultural and leisure activities, work with partners to develop up-skilling, re-skilling and preparing a flexible workforce, to create suitable new employment space bringing forward brownfield sites and establishing a programme of development and support activity.	The SA should have objectives reflecting the need for improving skills and economics are a key theme of the SA.
Medway Housing Strategy 2008-2011	This is intended to maximise the supply of suitable and affordable housing to meet housing need, enable vulnerable people to live independent lives, improve the quality and energy efficiency of housing, develop sustainable communities and promote neighbourhood renewal and promote better and fairer access to housing services.	An SA objective is needed relating to good access to decent quality housing and is a theme of the SA.
Medway and Medway NHS: 2008 Joint Strategic Needs Assessment	This highlights the key priorities to improving health and wellbeing within Medway and reducing inequalities. This is intended to be followed by an implementation plan.	An SA objective is needed in relation to health and reducing health inequalities.
Medway Rural Action Plan	People should be able to look forward with confidence to a positive and sustainable future for rural Medway. Our villages should have vibrant communities that feel safe and supported and who are pleased with the quality and choice of services and facilities available to them. Medway's countryside should be more widely valued and enjoyed as an important natural asset to build positive relationships between rural and urban Medway.	SA objective needed in respect to landscape and accessibility is key theme of the SA.

Plan	Key aims and objectives	Implications for SA
Medway Wildlife, Countryside and Open Space Strategy 2008-2016	<p>Aims to improve year on year the residents opinion poll ratings, address the findings of the open space quality and quantity audits, celebrate the strengths of the countryside and open space resources and secure internal and external funding, through the following:</p> <ul style="list-style-type: none"> • Providing more high quality facilities; • Improved monitoring and management; • Prioritised investments; • Improved protection and conservation; • More open spaces contributing directly to regeneration; and • Greater celebration and engagement. 	<p>An SA objective is needed in relation to landscape areas and accessibility is a key theme of the SA.</p>
Opportunities in the Third Age: Improving the Life of Older People in Medway	<p>This focuses on the steps needed to enhance and maintain the contribution of older people to the community, with the main aim being to assist older people to live independently and be active and healthy.</p>	
“Making Life Better for Children in Medway” Medway’s Children and Young People’s Plan 2006-2009	<p>Main aims are to:</p> <ul style="list-style-type: none"> • Safeguard children and young people who are vulnerable or at risk • Raise achievement of children in schools • Improve services for children with disabilities • Improve services for vulnerable children and their families • Reduce rate of childhood obesity and • Improve employability of young people. 	

Plan	Key aims and objectives	Implications for SA
<p>Medway's Sports Development Strategy 2005-2010</p>	<p>This is intended to guide sports development over the next 5 years. Medway will be a place where all young people get a good start in sport and recreation, people of all ages will have the opportunity to stay involved in sports and recreation throughout their lives, people will be encouraged to adopt a healthy lifestyle through active living and enable socially disadvantaged to feel included and all participants have the opportunity to improve and achieve their own personal sports goals.</p>	

Glossary

SEA	Strategic Environmental Assessment
SA	Sustainability Appraisal
EA	Environment Agency
LDF	Local Development Framework
LDD	Local Development Documents
DPD	Development Plan Document
SPD	Supplementary Planning Document
RSS	Regional Spatial Strategy
PPP	Policies, Plans & Programmes
SPA	Special Protection Area
SAC	Special Area of Conservation
SSSI	Site of Special Scientific Interest
RAMSAR	Wetland site covered by the Ramsar Convention
AONB	Area of Outstanding Natural Beauty
RIGS	Regionally Important Geological and Geomorphological Sites
SAM	Scheduled Ancient Monuments
UNESCO	United Nations Education Scientific and Cultural Organisation
AQMA	Air Quality Management Areas
CCS	Carbon Capture and Storage
CCGT	Combined Cycle Gas Turbine
CHP	Combined Heat & Power
RSPB	Royal Society for Protection of Birds
ONS	Office for National Statistics
NVQ	National Vocational Qualification
MI/d	Million litres per day
AoD	Above Ordnance Datum
LTP2	Local Transport Plan 2
WFD	Water Framework Directive

Appendix 4

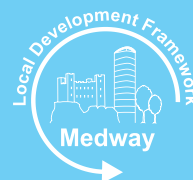


Medway Local Development Framework



Medway Initial Sustainability Appraisal

July 2009



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Glossary

Glossary

SA	Sustainability Appraisal
SEA	Strategic Environmental Assessment
EA	Environment Agency
DPD	Development Plan Document

Non - Technical Summary



Non - Technical Summary

1. This Sustainability Appraisal assesses the implications of various options raised in the separate 'Issues and Options' report, which will inform the preparation of a Local Development Framework Core Strategy for Medway. It has been prepared in accordance with the relevant guidance, including Planning Policy Statement 12. This states, *"Sustainability assessment should inform the evaluation of alternatives. It should provide a powerful means of proving to decision makers, and the public, that the plan is the most appropriate given the reasonable alternatives."*

2. This document has been produced independently from the 'Issues and Options' report and it can be used to assess and compare the options within the main document, by considering the sustainability implications of each one.

3. The potential options have been assessed against the framework set out in the Medway Sustainability Appraisal Scoping Final Report (April 2009) ⁽¹⁾. However when considering the assessment it should be borne in mind that:

- There is often considerable natural variability in sustainability issues, for example small changes in either climate or people's actions can have a large impact while other changes will have a lower impact.
- Environmental, social and economic issues can be difficult to quantify or measure with a high degree of accuracy. At this stage the general trends have been focused on, or where necessary, previous trends taken into account, to help address this issue.
- Uncertainty about exact implementation – with a 'broad-brush' strategy it is difficult to assess this in detail.

4. There are many issues outlined within the 'Issues and Options' Report. Many of these have not been assessed in this report due to the fact that they are likely to be addressed with a locationally specific remedy, such as focusing retailing within Chatham Town Centre. In this respect they are considered to be either given in terms of the strategy or of an insufficient scale to require a separate appraisal.

5. In respect to land-won aggregates, there are 3 solutions that have been appraised. 6 solutions have been appraised in terms of provision for treatment, processing and disposal of waste. Finally the spatial options have been appraised in terms of housing and employment.

Overall conclusions

6. Of the three solutions appraised for creating provision for land-won aggregates, extensions to the existing sites around Hoo would be the most sustainable. It would have a neutral impact in terms of the natural environment, with the slight potential for improvement over the longer term, and is the closest to the existing road network.

7. The most sustainable of the solutions for waste treatment, processing and disposal would be an extension to the existing Viridor site as it has good access to the existing road network, would benefit the local economy and community more directly and have the least impact on the environment. However due to location this is only slightly better

1 http://www.medway.gov.uk/final_scoping_report.pdf

Non - Technical Summary

than a treatment/processing hub at Kingsnorth. The disposal options would be the least sustainable, however these may be needed to fully deal with all waste.

8. In terms of the spatial options being used to accommodate housing, there are similarities between Lodge Hill, Chattenden and the Extended Hoo options in that they would have a beneficial effect on social, economic and also environmental objectives.

9. Though development near to Rainham would have advantages for the immediate area, it would also have detrimental impacts on the immediate and wider context. Of the solutions assessed Capstone would be the least sustainable as it would have a number of detrimental effects.

10. When employment land is accommodated within the spatial options, the most sustainable solutions would again be either within Lodge Hill or Extended Hoo and therefore focused to the north. These are closer to existing infrastructure, with Lodge Hill likely to provide the greatest mix of employment opportunities.

11. When located in Rainham, there would also be a number of benefits if properly integrated with the existing town centre. However these would not be as well located for transport links and accessibility of services.

12. Capstone would have the most detrimental impacts. As such this would be the least sustainable location.

1. Introduction



1. Introduction

1.1 Officers within the Development Plans & Research team at Medway Council are drawing up the Core Strategy. The Senior Planner (Environmental Policy) completed this SA, incorporating the SEA, independently from the team.

1.2 The 'Issues and Options' consultation document sets out the main issues and evidence surrounding particular topics and put forward a range of options to tackle these issues.

1.3 This report accompanies the 'Issues and Options' report. It fully assesses each of the broad spatial options considered and includes a preliminary assessment of options for land won aggregates and waste treatment and disposal facilities. The latter will inform subsequent work as the Core Strategy is drawn up. The assessment corresponds to Stage 2 within the guidance ⁽²⁾, developing and refining options, particularly Tasks B1 and B2, described as follows:

B1: Testing the DPD objectives against the SA framework; and

B2: Developing the DPD options.

1.4 This stage (Stage B) of the SA / SEA highlights the sustainability implications of each option, and where necessary, suggests recommendations for improvement. The results of the appraisal will inform the decision making process on the options, but it will not determine which should be chosen.

1.5 The SEA Directive requires that the Environmental Report should consider 'reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme' and it should 'give an outline of the reasons for selecting the alternatives dealt with'.

1.6 Given the strategic nature of the Core Strategy, and consequently the objectives and various approaches, the assessment is inevitably very broad brush. It has not, at this stage, taken into account the detailed implications of different policy approaches.

1.7 Further Sustainability Appraisal work will be undertaken in conjunction with the development of the next stage of the Core Strategy and a full assessment of the final Core Strategy will be carried out.

2 Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents (2005); ODPM

2. Methodology



2. Methodology

2. Methodology

2.1 An initial Scoping Report for Medway's SA/SEA was published in December 2008 and a Sustainability Appraisal Scoping Final Report in April 2009 ⁽³⁾.

2.2 The final report sets out 16 objectives that will be used to assess proposals throughout the preparation of the Core Strategy. These are reproduced in Table 1 below.

Table 1: Sustainability Appraisal Objectives

1	Biodiversity, Flora and fauna	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 and Soil	Maintain and improve quality of ground and surface waters and security of supply
4	Climatic factors	Reduce risk of flooding and ensure flood resilience of buildings and minimise the effect on public services and infrastructure
5	Climatic factors	Reduce ecological footprint through prudent use of natural resources, reduction in waste and use of sustainable waste management practices
6		Provide opportunity for everyone to live in a decent, sustainably constructed, affordable home suitable to their needs
7		Maximise land use efficiency through appropriate use of previously developed land and existing buildings
8	Human Health	Improve the health and well-being of the population and reduce health inequalities
9	Population	Reduce inequalities in poverty and social exclusion
10	Population	Reduce crime and the perception of crime
11	Material assets	Improve accessibility to key services and facilities (inc. countryside, leisure/recreation and historic environment)
12	Cultural Heritage & Landscape	Conserve and enhance historic buildings, archaeological site and culturally important features and increase engagement by all sections of community
13	Material assets & climatic factors	Increase energy efficiency; the proportion of energy generated from renewable sources and the diversity and security of energy supplies
14		Reduce traffic and congestion by reducing need to travel and improving

3 www.medway.gov.uk/final_scoping_report.pdf

		travel choice
15		Raise educational achievements through developing opportunities to acquire skills, to develop and maintain workforce
16		Support and improve employment and economic competitiveness in town centres and deprived areas

2.3 The tables in the appendix show the assessment of the main options considered within the Issues & Options document and also some that, due to the outcome of the appraisal process, were not considered any further. These tables show the ratings of each option against the sustainability criteria above.

2.4 The appraisal of these options was primarily carried out by the Senior Planner (Environmental Policy) Officer but with support, where necessary, from colleagues within the Development Plans and Research Team and other sections of the Council.

2.5 When looking at the results summarised in the next section and those within the Appendix the following points should be taken into account.

- There is often considerable natural variability in sustainability issues, for example small changes in either climate or people's actions can have a large impact while others can have a small impact.
- Lack of precision – environmental, social and economic issues can be difficult to quantify or measure with a high degree of accuracy. At this stage the general trends have been focused on, or where necessary, previous trends taken into account, to help address this issue.
- Uncertainty about exact implementation – with a 'broad-brush' strategy it is difficult to assess in detail. Nevertheless the conclusions reached are considered to be robust.

2.6 Each option was appraised in terms of its potential impacts and its contribution to the realisation of the SA objectives over the short, medium and long-term. Though cumulative impacts need to be considered at this stage, to minimise the many possible permutations, it was assumed that the option under assessment would be implemented in isolation.

2.7 At this stage the appraisal highlights broad impacts and trends to identify the most sustainable options. Each option was considered in terms of its potential effects on the current baseline information and taking account of previous, existing and expected trends, to assess the likelihood of future impacts. This approach will help in the development of potential monitoring measures during the next stages of developing the Core Strategy.

2.8 The options and the result of the appraisal are discussed in the next section. The detailed results of the appraisals are then shown in the Appendix.

2.9 In the appendix tables, where applicable, there is an accompanying commentary to explain any assumptions made. However if there are assumptions that have been applied across all options, these have been outlined in the preceding text. These importantly include any mitigation measures that will need to be considered during the

2. Methodology

next stage of the SA.

3.10 The scoring system shown below was used to compare each of the options against the framework.

xx	Very negative
x	Slightly negative
-	Approximately constant (neutral)
✓	Slightly positive
✓ ✓	Very positive

Table 2: Scoring system

3. Summarised Results



3. Summarised Results

3.1 There are many issues outlined within the 'Issues and Options' Report. Many of these have not been assessed in this report due to the fact that they are likely to be addressed with a locationally specific remedy, such as focusing retailing within Chatham Town Centre. In this respect they are considered to be either given in terms of the strategy or of an insufficient scale to require a separate appraisal.

3.2 The main issues that have been focused on are as set out below.

Table 3: Main sustainability issues

Land won aggregates	
1A	Cliffe Deep Buried Channel Deposits
1B	Hoo Terraces
1C	Grain Terraces
Waste Treatment and disposal facilities	
2A	Focus reuse and recycling/processing facilities in and around Kingsnorth
2B	Extension of Viridor's existing site at Medway City Estate
2C	Use of unused land at Chatham Port
2D	Halling Coal Yard and Wharf
2E	Void Creation within London Clay on Hoo Peninsula
2F	Landraising on Hoo Peninsula
New Housing	
3A	Within Urban area and CHATTENDEN (LODGE HILL)
3B	Within Urban area and EXTENDED HOO
3C	Within Urban area and CAPSTONE
3D	Within Urban area and NORTH RAINHAM
3E	Within Urban area and EAST RAINHAM
Employment Land	
4A	Rochester Airfield; Kingsnorth; Grain and CHATTENDEN (LODGE HILL)
4B	Rochester Airfield; Kingsnorth; Grain and GREATER HOO

3. Summarised Results

4C	Rochester Airfield; Kingsnorth; Grain and CAPSTONE
4D	Rochester Airfield; Kingsnorth; Grain and NORTH RAINHAM
4E	Rochester Airfield; Kingsnorth; Grain and EAST RAINHAM

Land-won aggregates solutions

3.3 There are 3 solutions that might address this issue that have been assessed. Due to their locations they have been termed Cliffe Deep Buried Channels, Hoo Terraces and Grain Terraces.

Assumptions

3.4 The assumption applying to all of these solutions is that all relevant permissions required from the Environment Agency (EA) would be allowed with their own strict conditions. All are producing materials that would be used within some type of construction and as such, they are all considered to contribute towards the objective of allowing everyone the opportunity to live in a decent, sustainably constructed, affordable home suitable to their needs.

3.5 In addition, it has been assumed that due to the site characteristics with respect to absorption, all solutions would have a neutral impact in terms of flood risk.

3.6 In terms of the social objectives, it is considered that none of the solutions would improve accessibility to key services or facilities. In addition, there are likely to be no additional buildings and due to the locations, there would be no impact on conserving or enhancing the historic environment.

3.7 1A: Cliffe Deep Buried Channels – A potential solution to providing land-won aggregates needed to meet the requirements of the South East Plan would be through the creation and extraction of material from a set of deep buried channels on the Hoo Peninsula. This would be expected to be located near to Cliffe and so has been appraised on this basis.

3.8 Due to its proximity and the level of work required for the extraction and liberation of materials this solution is considered to have a detrimental impact on the integrity and abundance of species located in the Special Protection Area (SPA). It is also considered that a significant by-product would be the release of gases and particles into the air, so having an effect on the relatively pristine air quality of the location and place a greater level of stress on water supplies than the other potential solutions, due to the amount of over-burden that would need washing and treating.

3.9 The location of this solution means that it would result in a negative impact on the objective of trying to reduce traffic congestion. This is because there are no wharves on this part of the river and it would be uneconomical to introduce one. The result of this is that movements to and from the site would be reliant on the road network and this solution is located furthest from the existing main road network.

3.10 1B: Hoo Terraces – another solution would be through allowing up to three extensions to an existing consented site to the South East of Hoo St. Werburgh. The

main assumption made with this option is that as the main site already has permission, existing conditions would be applied across the whole of the new site areas.

3.11 On the basis of the above assumptions it is considered that there would be a neutral impact over the short and medium term on biodiversity, flora and fauna, with the potential for slightly improving the environment over the longer-term, due to a condition expecting the site to be returned to its natural state. This option is the closest to the existing road network, meaning that it would have a neutral impact on traffic congestion. Due to the proximity of the sites to Hoo, this solution would maintain and develop the workforce, with the potential to improve educational achievements.

3.12 However as with the other solutions there would be a slight increase in the ecological footprint of the area into the medium-term, a slight detrimental impact on air quality and potentially place pressure on water supplies.

3.13 1C: Grain Terraces – a third solution would be to recommission an existing site extracting sand and gravel within the Grain terraces.

3.14 This solution, similarly to Hoo, would mean that the workforce would be maintained and potentially developed, along with the possibility of raising educational achievements. In addition, it is considered that due to its location this site would have a neutral impact on biodiversity, flora and fauna.

3.15 However, it is considered that as this would mean recommissioning, crime or at least the perception of crime, would be likely to increase over the short and medium term. Also similarly to the other solutions it is expected that there would be some impact on air quality and that it would contribute towards additional pressures on water supplies.

Sustainability of aggregate solutions

Of the three solutions, extensions to the existing sites around Hoo would be the most sustainable as it would have a neutral impact in terms of the natural environment, with the slight potential for improving it over the longer term, and it is the closest to the existing road network.

Waste treatment and/ or disposal solutions

3.16 There are 6 potential solutions to address this, which can broadly be split into treatment/processing and then disposal. The majority cover the first area. These are: focusing in and/or around Kingsnorth; Viridor's existing site at Medway City Estate; Chatham Port and Halling Coal Yard. Two others were considered for possible waste disposal. These would both be within the London Clay on the Hoo Peninsula. These would be void creation and land raising.

Assumptions

3.17 The main assumption for the assessment of these options is that the disposal solutions would only address those residuals left, following as much treatment or processing as possible in the higher part of the waste hierarchy.

3. Summarised Results

3.18 It is also assumed that as with aggregates, all the relevant permissions would have been gained from the EA and meet its strict controls.

3.19 2A: Treatment/processing technologies hub in/or around Kingsnorth – this solution would involve the creation of a hub or cluster of technologies for processing or treating waste that would be located in and/or around Kingsnorth. The main assumption applied is that it would be located within the area designated in the local plan for employment.

3.20 This solution would contribute towards a reduction in the ecological footprint of the area and sustainable waste management practices significantly. It would also significantly contribute towards maintaining and developing the workforce, as well as educational achievements and the economic competitiveness of the area.

3.21 There would also be the potential for contributing towards energy efficiency and addressing diversity and security of supply issues. Use of land would be mainly on previously developed land and this option could also help to reduce poverty and social exclusion.

3.22 However, as the area is bounded around the majority of the south and east by a RAMSAR site and SPA, it is considered that however strong the controls are, there would still be indirect impacts on this site, such as additional materials, which would also affect air quality. Being slightly further from the main road network it is also considered that this solution would increase traffic congestion.

3.23 There would be no impact on water supply, the flooding situation, conservation or enhancement of the historic environment, the accessibility of key services and facilities or crime or the perception of crime. As many of these technologies are still evolving there is insufficient information to make an accurate assessment in terms of human health, so is currently assessed as remaining constant, given the assumption of licences from the EA.

3.24 2B: Viridor's Medway City Estate site – this solution would involve an extension to the existing site that Viridor have on the Medway City Estate.

3.25 Due to the site's location it is considered that it would positively contribute towards reducing the ecological footprint of the area, as well as contributing to increasing diversity of energy supplies and use of previously developed land.

3.26 Furthermore, as with the Kingsnorth solution, this would maintain and develop the existing workforce, as well as contributing to the economic competitiveness of the area. Its location would also mean that it would have a neutral impact on biodiversity, flora and fauna.

3.27 In general, this solution would have a neutral impact on the environmental objectives of water supply and flooding, as well as housing provision, human health and the other social objectives.

3.28 2C: Chatham Port – this solution would involve a reorganisation of an existing site at Chatham Port that both transfers and processes waste, to allow for greater provision of processing to occur.

3.29 This solution would make a significant contribution towards reducing the ecological footprint of the area and sustainable waste management practices, appropriate use of previously developed land and improving the economic competitiveness of the area. There would also be a slight improvement in the short to medium term, in terms of maintaining and developing the workforce, reducing traffic in the long term and increasing diversity of energy supply in the medium and longer term.

3.30 It is expected that either no contribution would be made towards the other objectives, both environmental and social or that they would have a neutral impact.

3.31 2D: Halling Coal Yard – this would involve the current coal yard site, at Halling, receiving a change of use to a waste use.

3.32 The main advantages of this solution are that it would make a substantial contribution towards reducing the ecological footprint of the area and sustainable waste management practices, as well as making an appropriate use of previously developed land. In addition, it would potentially help to maintain and develop the workforce over the medium and longer term, as well as potentially in the medium and longer term affecting diversity of energy supplies. Water quality may improve in the medium and longer term due to the reduced run off from the site. The site would have to be land raised to avoid the effects of flooding and this would have a negative impact on flora and fauna due to changes in river flows.

3.33 In general the majority of objectives are either unlikely to be affected or there would be a neutral impact. The only detrimental impact from this solution would be increasing congestion, due to increased traffic.

3.34 2E: Void creation – this solution would involve the creation of a new void space within which residual waste left over after all processing and treatment possible has occurred could be deposited. This would be done through the excavation of London Clay along a strip on the Hoo Peninsula.

3.35 The main issue in terms of appraising this solution was the lack of an identified market for the clay that would be excavated in order to create the void.

3.36 This solution would contribute to maintaining and developing the workforce, as well as over the medium and longer term contributing to reducing the area's ecological footprint and improving sustainable waste management practices.

3.37 This solution would be unlikely to have an effect on biodiversity, flora and fauna; water supplies; flood risk; human health or the other social objectives of reducing crime and the perception of crime and accessibility to key services and facilities.

3.38 However, in the short and medium term there would be an impact on air quality, a detrimental impact in the short term on the ecological footprint, through the excavation of the clay without a full market for it. It would also be detrimental while operational by reducing access to the countryside. Furthermore energy efficiency would be detrimental in the short term due to the machinery needed to carry out the excavation and it would have a detrimental impact over all timescales on traffic congestion due to increased movements, particularly on minor roads.

3.39 2F: Land raising – again this solution would be intended to deal with the residual

3. Summarised Results

element and would occur within the London Clay on the Hoo Peninsula.

3.40 As with the void creation solution, this would not affect or have a neutral impact on biodiversity, flora and fauna; water supplies; flood risk; human health or the other social objectives of reducing crime and the perception of crime and the accessibility to key services and facilities.

3.41 The benefits of this solution would be through contributing to sustainable waste management practices over the medium and longer term. There would also be the advantage of maintaining and developing the workforce, although it would not help any town centres or deprived areas in terms of their competitiveness in the short or medium term.

3.42 It would also be expected that in the short and medium term, accessibility, cultural features and energy supplies would all be affected detrimentally. Additionally due to the location, as for the void creation solution, there would be a detrimental impact on traffic congestion over all timescales due to increased movements, particularly on minor roads.

Sustainability of waste solutions

The most sustainable of these solutions would be an extension to the existing Viridor site as it has good access to the existing road network, would benefit the local economy and community more directly and have the least impact on the environment. However this is only slightly better than a treatment/processing hub at Kingsnorth due to location. The disposal options would be the least sustainable, however these may be needed to fully deal with all waste.

Housing Solutions

3.43 The potential alternative solutions for addressing this issue reflect those in the Issues & Options document. The first to be considered is development at Lodge Hill, Chattenden. The others are alternatives if this were not to come forward. They would involve development in the following areas: - Hoo and nearby villages; Capstone, from the administrative boundary to the edge of the Country Park; North of Rainham to the edge of the authority's area and East of Rainham to the authority's boundary.

3.44 3A: Lodge Hill, Chattenden – this solution would involve the construction of approximately 5,000 houses to be located on the ex-MoD site of the Lodge Hill training camp, as outlined by Thames Gateway Policy Documents. This would be located to the north of the existing urban area, on the edge of the existing settlement at Chattenden.

3.45 This solution would make a significant contribution to the objectives of providing a decent, sustainably constructed, affordable home and an appropriate use of land through using previously developed land over all time periods. It would also be expected that energy efficiency would be increased, as well as increasing the amount of energy produced from renewable sources, due to the fact that this development will be delivered

later in the plan period and so will have to achieve the highest levels of the Code for Sustainable Homes or be zero carbon. As such, they would consequently make a significant contribution to reducing the ecological footprint of the area.

3.46 The location of this solution would mean that it is further away from existing facilities. However, as this would essentially be a blank canvas, a number of facilities or services could be factored in at the design stage. If this is done then this could improve access to key services and facilities.

3.47 Locating housing on this site would make a substantial contribution towards increasing the economic competitiveness of the area, as well as maintaining and developing the workforce and increasing educational achievements. Particularly if an expected fast track bus service were introduced to relieve pressure on the road network then this would allow good access to Medway City Estate and town centres, as well as there being easy access to existing connections across the Peninsula. The impact on employment, skills and economic competitiveness is expected to begin in the short term and continue into the long term due to increased accessibility of services and housing provision driving retention of higher skilled workers within the area.

3.48 If new facilities and transport links were included then it would also be expected that this solution would contribute towards many of the social objectives by improving health equalities, poverty and social exclusion. Similarly to the expected benefits discussed above these would have an immediate effect that would increase through the long term. However it is not expected that there would be any impact on the level of crime or the perception of crime.

3.49 It is considered that the scale of the proposal means it would have a detrimental impact on air quality and water resources. It is expected that the impacts will be greatest during the construction phase of development and so detrimental in the short term. However due to their nature it is expected that associated issues will remain into the medium and long term to a lesser extent as a result of by-products being released from processes, such as energy generation. Both due to the location of Chattenden Woods SSSI next door to the site and its scale there will undoubtedly be both direct and indirect impacts on biodiversity, flora and fauna. However it is expected that these could be addressed through the introduction of mitigation measures.

3.50 This solution would be expected to result in some negative impacts although it is expected that these should be relatively limited and that mitigating measures could be put in place to address these. Though the site is slightly further away from the main urban area if service facilities and transport are integrated from the beginning of the process, it is believed that this would make a positive contribution to the area with the least harmful impacts.

3.51 3B: Extended Hoo – this alternative would involve a similar number of dwellings (circa 5,000) being spread throughout the existing settlement of Hoo St Werburgh and also the neighbouring villages of High Halstow and Cliffe Woods to create a village cluster. Therefore this would again focus development to the north of the existing urban area and although stretching the villages still preserve the space between them. The scale of this solution would be much smaller on an individual basis but still form a similar provision overall.

3. Summarised Results

3.52 Similarly to the Lodge Hill solution, this would substantially contribute to appropriate use of land; providing decent, sustainably constructed dwellings, and consequently reduce the ecological footprint of the area, throughout all time periods.

3.53 This solution would make a positive contribution to the economic competitiveness of the area, maintaining and developing the workforce, as well as improving educational achievements, beginning in the short term and continuing into the medium and longer term. There may also be some potential for some benefit from this solution to conserving and enhancing the historic environment and other material assets of the area.

3.54 It is considered that there would be limited impact on traffic congestion and travel choice due to the proximity to the existing road network. There would be no significant impact on crime or the perception of crime.

3.55 At present the main facilities serving this area are located within the main centre of Hoo. The addition of housing throughout the villages would increase the pressure placed on these and as such could result in a reduction in accessibility of these services and facilities. This is compounded by the distance of the villages from the main urban area.

3.56 The main impacts from this solution on the natural environment would be in terms of encroachment onto green field land. Where inevitably development is not on previously developed land there would also be direct harmful impacts on biodiversity, flora and fauna. Additionally in the short term, during construction, there would be some impact on air quality and water supplies.

3.57 **3C: Capstone** – this solution would involve development to the south of the existing Capstone Country Park, bridging the valley in a U shaped configuration. This would go across the boundary with Maidstone and overall provide substantially more housing, although for the purposes of this appraisal only the area of the site within Medway has been appraised. This would be located to the south of the existing urban area.

3.58 Though this solution could have the potential to improve poverty and social exclusion in the short and medium term, as well as increasing the diversity of energy supplies and providing decent, sustainably constructed homes, these benefits are heavily outweighed by the detrimental impacts that would result from this solution.

3.59 This solution is assessed in general as having a neutral effect on the social objectives as more information is required for a judgement to be made. For many factors the potential impact would be very dependent on implementation.

3.60 However, this solution would result in the direct loss of a substantial green field site that currently acts as a green lung. As such it would be detrimental to the biodiversity, flora and fauna of both the immediate and wider area. The introduction of a development in this area would also impact on air quality and put additional pressure on the existing water supply and treatment network.

3.61 Furthermore, the loss of this open space for development may increase the potential of flood risk in the area and there would be increased pressure on the road network. These impacts would all occur from the short term through to the longer term and even with mitigation would still have at best a neutral impact. As a result this solution

would substantially increase the ecological footprint of the area and essentially be unsustainable.

3.62 3D: North Rainham – this solution would accommodate a development of a similar scale to that proposed for Lodge Hill. It would be envisaged that this would extend across from the Gillingham Link Road (A289) in the west across to the boundary with Swale to the east, extending the existing urban area to the Lower Rainham Road.

3.63 The main benefits of this solution come due to the relative proximity to the existing urban area and town centre of Rainham. It would have the advantages of providing housing, as well as over the short and medium term improving health and reducing poverty and social exclusion as access to services are improved. It would also have the potential of increasing energy generated from renewable sources and the diversity of supplies, as well as improving educational achievements through the proximity of services. This would have a knock on effect of helping the economic competitiveness of Rainham town centre and those deprived areas nearby.

3.64 There are many social benefits to this solution, however this would again mean an incursion into green field land, which is important for biodiversity, flora and fauna within both the immediate and wider area. Recent trends suggest that the loss of this type of land is likely to have a greater impact over time. The loss of this land and the work involved in construction would mean that in the short term air quality, flood risk and water stress is likely to result. However it would be expected that mitigation could be put in place to lessen these over the longer term. Another direct impact would be on traffic congestion and the road network with the introduction of a substantially larger quantity of traffic along minor roads.

3.65 3E: East Rainham – this solution would also be of a sufficient scale to act as a replacement for Lodge Hill. This would extend development from the edge of the existing urban boundary across to the Authority's boundary with Swale, being located to the south of the A2 with some development to the north of Moor Street.

3.66 The impact of this solution, similar to that for North Rainham, would be reliant on the relative proximity of the urban area and Rainham town centre. Again it is likely that the main benefits from this solution would be social, through providing housing and improving accessibility to key facilities and services, resulting in an improvement in health and social exclusion.

3.67 The detrimental impacts of this solution are again similar with the site being green field land and its loss affecting biodiversity, flora and fauna. In the short term through the loss of this habitat and through construction there would be likely to be some impact on air quality and flood risk, although over the medium and longer term these are likely to be mitigated against and so have a neutral impact.

3.68 However development on this site rather than to the north would be expected to put a greater strain on linking to the existing water supplies and treatment facilities in the short and medium term. There would also be a substantial increase in traffic along minor parts of the road network and so would be expected to cause a greater strain than if located to the north.

3. Summarised Results

Sustainability of housing solutions

There are similarities between Lodge Hill, Chattenden and the Extended Hoo options in that they would have a beneficial effect on social, economic and also environmental objectives. Though development near to Rainham would have advantages for the immediate area, it would also have detrimental impacts on the immediate and wider context. Of the solutions assessed Capstone would be the least sustainable as it would have a number of detrimental effects.

Employment Land Solutions

3.69 As with housing there are five solutions for addressing this issue. These reflect those for housing, in addition to a set of assumed givens of employment land designations at Kingsnorth; Grain and Rochester Airfield from the strong existing policy direction. Assessments for these solutions have therefore been done in terms of the potential impact of the spatial options combined with these sites.

Assumptions

3.70 Within the assessment of all of these solutions the employment areas considered are as defined in the local plan, to help to quantify potential impacts.

3.71 4A: Kingsnorth; Grain; Rochester Airfield and LODGE HILL, Chattenden – this solution would involve approximately 70,000 sq m of employment being provided within the new settlement. Due to its location this would inevitably focus employment to the north, with only the town centres and the Airfield accommodating employment elsewhere.

3.72 There would be many social benefits to siting new employment land within the new settlement as well as those existing areas. The most obvious and immediate of these would be the appropriate use of previously developed land; maintaining and developing the workforce, as well as improving the educational achievement slightly in the short term and this increasing through the medium and longer term. This would also make a substantial contribution to energy supplies from renewables and energy efficiency, because the expected time this would be delivered means it would have to be low carbon or carbon neutral.

3.73 In addition, there are many other social benefits and also some environmental ones. An overall benefit from additionally siting employment in this area would be an improvement of accessibility to key facilities and services, which would also mean that there would be a resultant improvement in health equalities, reduction in poverty and social exclusion, as well as crime and the perception of crime.

3.74 Furthermore an employment area could conserve and enhance the existing historic environment directly and indirectly. Siting of employment in this area would also mean that there would be a shorter distance from housing to employment and good access from the town centres, meaning that it would substantially improve traffic congestion and travel choice.

3.75 However, it would be likely that in the short term siting employment in this area will affect biodiversity, flora and fauna; air quality and soil condition and water supplies. There would be a neutral impact on flood risk, the ecological footprint of the area and housing provision.

3.76 4B: Kingsnorth; Grain; Rochester Airfield and Extended Hoo – this solution would focus more employment within Hoo and the neighbouring villages. This solution, as with that for Lodge Hill, would focus employment in the north of the Authority's area.

3.77 The main benefits from locating employment land within Hoo and the neighbouring villages are mainly social with a few immediate impacts on the environment in the short term.

3.78 This solution would make a substantial improvement to the economic competitiveness of town centres; the appropriate use of previously developed land (at Grain, Rochester Airfield and Kingsnorth); conserving and enhancing the historic environment from the short term through to the longer term. In addition it would be expected that locating employment within Hoo and the neighbouring villages would allow for an increase in energy efficiency and energy from renewable sources. However this would not be as encompassing or as immediate as being located within the Lodge Hill settlement as these would be developed throughout the plan period and so could only be expected to be within the national timescales for creating a low carbon economy (which outlines non domestic buildings as being zero carbon by 2019).

3.79 Addressing employment land with this solution would increase the accessibility to key facilities and services, meaning that there would be an improvement in health equalities, through being near to existing facilities and increasing provision in this area. The combination of increased accessibility and increased employment within the area should result in a reduction in poverty and social exclusion, as well as crime and the perception of crime from the short term through to the longer term. Furthermore, this solution would allow for employment nearer to existing housing and town centres, meaning that traffic congestion should be reduced and travel choice increased.

3.80 By locating employment within this area the impact on the environment would be lessened. There would be an impact on air quality, water supplies and treatment and flood risk over the short term, although from the medium term onwards the impact would become neutral. There would be no benefit to but also no detrimental impact from this solution on biodiversity, flora and fauna, decent sustainably constructed homes or the ecological footprint of the area.

3.81 4C: Kingsnorth; Grain; Rochester Airfield and Capstone – this solution would mean that in addition to the given sites, employment land should be provided on the site between the urban area and the existing Capstone Country Park. This solution would result in employment land being spread more evenly across both the north and south of the Authority's area.

3.82 This solution would have the main benefit of providing a route for maintaining and developing the workforce and in so doing reducing poverty and social exclusion.

3.83 As this solution would be involve a green field site and one located next to the Country Park, there would be a detrimental impact on biodiversity, flora and fauna, as well as flood risk, water supply and treatment and air quality. Furthermore the results

3. Summarised Results

of all these impacts mean that it would be an inappropriate use of land and would increase the ecological footprint of the area.

3.84 4D: Kingsnorth; Grain; Rochester Airfield and North of Rainham – this solution would mean that employment land was accommodated within an extension to the urban area to the north of Rainham up to the edge of the Riverside Country Park and over to the Authority's boundary. This would result in employment land having a greater focus in the east of the area.

3.85 As with many of the other solutions for addressing this issue the main benefits from siting employment land within North Rainham are social and economic. It would also be closer to existing housing. As such, it would mean that although in the short term there would be an increase in traffic congestion, this would become neutral in the medium term and would in the long term improve travel choice.

3.86 The other main benefits as with all the solutions is maintaining and developing the workforce and improving the educational achievements of the area. Though this would have an immediate impact this would increase into the medium and long term. Linked to this, siting employment in this area would mean that there should be a reduction of poverty and social exclusion. In addition, health equalities should improve in the long term once extra services and access to them are established.

3.87 This solution would mean that conservation and enhancement of the historic environment and cultural heritage would benefit, as well as energy efficiency and energy from renewable sources having greater potential than some of the other alternatives.

3.88 However, this solution would mean an incursion into green field land affecting biodiversity, flora and fauna. Furthermore, in the short term air, soil and water supplies and flood risk would be detrimentally affected. The combination of these facts means that this solution would increase the ecological footprint of the area.

3.89 4E: Kingsnorth; Grain; Rochester Airfield and East of Rainham – this solution would involve employment land being accommodated within an urban extension to the east of Rainham. It would mean that employment land would be focused in the east of the area.

3.90 This solution would maintain and develop the workforce and improve the educational achievement of the area. It would, as with the other solutions, improve the economic competitiveness of the area. Along with the relative proximity of Rainham town centre and housing, it would be expected that siting employment within this area would improve accessibility to key facilities and services. On this basis, the introduction of employment to the area, should improve health equalities in the long term, as well as poverty and social exclusion and crime and the perception of crime.

3.91 This solution, due to its location, would not result in any improvement to the conservation and enhancement of the historic environment. It would mean that as with locating employment to the north of Rainham, there would be a detrimental impact in the short term on traffic congestion, although this should become neutral in the medium term and improve in the long term as employment is closer to the existing town centre and housing.

3.92 Even taking these benefits into account there would be detrimental impacts on

the natural environment and natural resources from this solution. This would mean an encroachment onto green field land, which would have impacts, both on the immediate and wider context on biodiversity, flora and fauna. In the short term, there would also be an impact from this solution on air quality; water supply and flood risk, although this is likely to become neutral over the medium and longer term. Industry in general is a higher user of water, although it would be expected that all water saving measures would be put in place, meaning that there would be a neutral impact. These results would mean that there would be an increase in the use of natural resources and the ecological footprint of the area.

3.93 In addition, this option would introduce more traffic onto minor roads, which will then feed onto roads where there are already identified hot spots within the network, so increasing traffic congestion.

Sustainability of employment solutions

The most sustainable of the solutions outlined would again be either within Lodge Hill or Extended Hoo and therefore focused to the north. These are closer to existing infrastructure and provide a mix of employment opportunities. The solutions around Rainham would also give a number of benefits if properly integrated with the existing town centre. However these would not be as well located for transport links or other existing infrastructure. Capstone would have the most detrimental impacts. As such this would be the least sustainable location.

Appendix 1

Appendix 1

Appendix 1

Appendix 1: Detailed Assessment of Potential Options

Land-Won Aggregate options

Option A: Cliffe Deep Buried Channel Deposits

Option B: Hoo Terraces

Option C: Grain Terraces

Issue: Provision for land-won primary aggregates

Sustainability Objectives	Option A			Option B			Option C		
	S	M	L	S	M	L	S	M	L
1	XX	XX	XX	-	-	✓	-	-	-
2	XX	XX	XX	X	X	X	X	X	X
3	XX	XX	XX	X	X	X	X	X	X
4	-	-	-	-	-	-	-	-	-
5	XX	XX	-	X	X	-	X	X	-
6	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-
10	X	X	-	X	X	-	X	X	-
11	-	-	✓	-	-	-	-	-	-
12	X	X	-	X	X	-	X	X	-
13	-	-	-	-	-	-	-	-	-
14	X	X	-	-	-	-	X	X	-
15	-	✓	-	✓	✓	-	✓	✓	-
16	-	-	-	-	-	-	-	-	-

Table 4

Waste Treatment and/or Disposal Options

Option A: Focus reuse and recycling/processing facilities in and around Kingsnorth

Option B: Extension of Viridor's existing site at Medway City Estate

Option C: Void creation within London Clay on Hoo Peninsula

Appendix 1

Option D: Landraise within London Clay on Hoo Peninsula

Option E: Chatham Port

Option F: Halling Coal Yard

Sustainability Objectives		Issue: Provision for waste treatment and/or disposal facilities																	
		Option A			Option B			Option C			Option D			Option E			Option F		
		S	M	L	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L
1	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	X	X	X	X	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	X	X	-	X	X	-	X	X	-	X	X	-
12	-	-	-	-	-	-	-	X	X	-	X	X	-	X	X	-	X	X	-
13	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓
14	X	X	-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X
15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	✓	✓	✓	✓	✓	✓	✓	X	X	-	X	X	-	X	X	-	X	X	-

Table 5

Housing options

Option A: Urban area and Chattenden (Lodge Hill)

Option B: Urban area and Greater Hoo

Option C: Urban area and Capstone

Option D: Urban area and North Rainham

Option E: Urban area and East Rainham

Appendix 1

Issue: Provision for new housing

Sustainability Objectives	Option A			Option B			Option C			Option D			Option E		
	S	M	L	S	M	L	S	M	L	S	M	L	S	M	L
1	-	-	X	-	X	X	X	X	X	X	XX	XX	X	X	X
2	XX	X	X	X	-	-	XX	XX	X	X	-	-	X	-	-
3	X	X	X	X	X	X	XX	XX	XX	X	X	-	X	X	-
4	-	-	✓	-	-	✓	XX	XX	X	X	X	-	-	-	-
5	✓	✓	✓	-	✓	✓	X	X	X	-	-	-	-	-	-
6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	✓	✓	✓	✓	✓	✓	XX	X	X	X	X	-	X	X	-
8	-	✓	✓	-	✓	✓	-	-	-	-	✓	✓	-	✓	✓
9	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	-	✓	✓
10	-	-	-	-	-	-	-	-	-	X	-	-	X	-	-
11	✓	✓	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	✓	✓
12	✓	✓	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	✓	✓
13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14	-	-	✓	-	-	-	X	X	X	X	X	X	X	X	-
15	✓	✓	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	✓	✓
16	✓	✓	✓	✓	✓	✓	-	-	-	✓	✓	✓	✓	✓	✓

Table 6