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Seascape Character Assessment for the Dover Strait

Final Report **(summary version)**
Prepared by LUC for Kent County Council as part of the NOSTRA (Network Of STRAits) Project
July 2015

Project Title: Seascape Character Assessment for the Dover Strait

Client: Kent County Council as part of the NOSTRA (Network Of STRAits) Project

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Design
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Contents

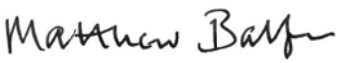
Foreword

Kent County Council and Pas-de-Calais Council have a long history of cooperation. Through the European Straits Initiative and Interreg IVC NOSTRA project (Network Of STRAits), we have been working together to realise the opportunities for our shared coastal and maritime space; the world famous Dover Strait. Our cooperation has resulted in a partnership Dover Strait Implementation Plan, "highlighting our priorities to deliver our joint vision to ensure that by 2034 the Dover Strait becomes recognised as a "cohesive maritime and coastal area, with a rich natural environment combined with a long and fascinating cultural history" and that "the features representing this strong identity will be part of innovative economic activities, including a recognised tourism offer."

To support delivery of our vision, this Seascape Character Assessment presents a detailed picture of the Dover Strait, capturing the unique natural and cultural character of the area. We have worked with stakeholders and undertaken detailed research to identify our valued seascape features and key issues as well as putting forward guidelines for future management, decision making and policy development. We hope you will agree that the study makes for fascinating reading and brings out the similarities between our two shorelines.

In the UK the assessment will form part of the evidence base for marine planning by the Marine Management Organisation (MMO) and will complement the strategic-scale Seascape Assessment completed by the MMO for the South Marine Plan. The assessment can be used for terrestrial planning too, as Seascape Character Assessment has parallels with the long-established tool of Landscape Character Assessment. We hope that this therefore provides a very useful resource for coastal authorities in ensuring that the value of our seascapes is an important consideration in planning their future coastlines.

Seascapes are an important part of our national identities and help to support our economies and quality of life; we hope you find this Seascape Character Assessment for the Dover Strait a relevant and engaging document to support you in your work.



Matthew Balfour
Cabinet Member for Environment & Transport,
Kent County Council

1
Background and context

1 Background and context

Background

1.1 This study, to complete a Seascape Character Assessment for the Dover Strait, follows on from previous work undertaken in March 2013 to pilot an approach for the Strait[1]. The project forms part of the wider Interreg-funded NOSTRA (Network Of STRAits) project, which is seeking to share ideas and best practice in marine spatial planning as applied to strait seascapes across Europe.

1.2 This study seeks to demonstrate how an assessment of the seascape covering the marine, intertidal and coastal zones can provide an evidence base to contribute to sound marine planning and management. This study follows the principles of the European Landscape Convention (ELC), which confirms the importance of 'seascape'.

The international importance of the Dover Strait

1.3 The Dover Strait is a unique seascape resource – the strait links an integrated landscape of soaring chalk cliffs – the iconic White Cliffs of Dover and South Foreland and the distinctive Caps of the Opal Coast at Cap Blanc Nez and Cap Gris Nez, with strong cultural and visual links between France and England. The strait is a shallow, narrow (less than 30km) channel linking the North Sea, English Channel and Atlantic – and is of enormous strategic significance – seeing successive cycles of invasion and defence from earliest times.

1.4 Despite fierce tidal currents, and the presence of shifting and unstable sandbanks such as the Goodwin Sands, the Strait is one of the busiest shipping lanes in the world with more than 500 ship movements a day; by contrast it is also a migration route of international importance, with over 250 bird species recorded in any one year. The shallow waters are also important for the

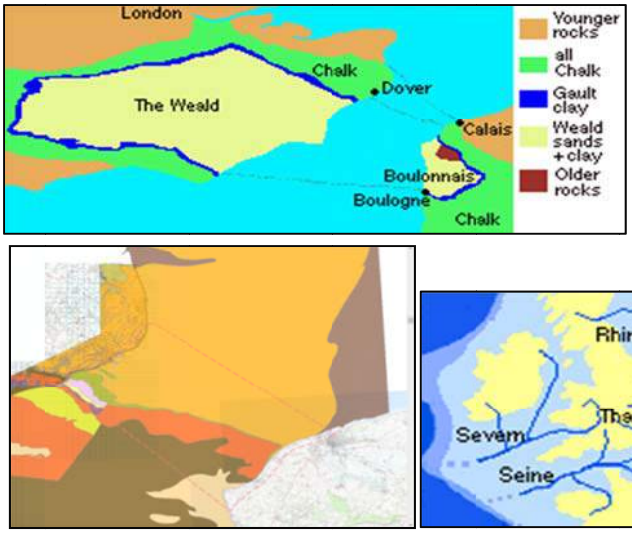
[1] Pilot report available at http://www.nostraproject.eu/News/NOSTRA-Workshop-n-1-Seascapes-Report-Available

migration of fish and some cetaceans. Here, internationally and nationally important biodiversity co-exists with maritime transport and shipping. The hundreds of wrecks which litter the bed of the channel are not only of great historic interest, but also create important spawning sites for marine wildlife and popular sites for scuba diving.

Figure1.1: The natural assets of the Dover Strait

1.5 On the English side of the channel the White Cliffs form part of our national identity; forming a soaring seascape of vast horizons of sea and sky extending westwards to the subtle crumbling greensand and clay cliffs of Folkestone. These are seascapes of great diversity and contrast united by their coastal edge and relationship with the sea. The maritime towns of Dover and Folkestone are a focus for the main channel crossing points by ferry and tunnel. In France the Opal Coast is an exhilarating, windswept, remote seascape, with the busy ports of Calais and Boulogne and seaside towns of Wissant and Wimereux, punctuated by areas of wetland and rugged sand dunes.

Figure1.2: The physical influences that have shaped the Dover Strait



1.6 Defence and invasion is one of the long-standing themes of the Strait and today forms an important reference in the cultural landscape – features include the Tudor coastal defences of Henry VIII at Deal and Walmer Castle with their Tudor counterpart in Calais, when this part of France was ruled by England. The 7 days war and Napoleonic defences such as the string of

Martello Towers and notably the World War II frontline fortifications, defences and anti-tank devices along the whole coast and exemplified at Dover Castle. Communication is a further important theme, with Marconi's first experiments in radio. In March 1899 the first international wireless transmission was sent from Wimereux, France and received at South Foreland lighthouse, near Dover - "Greetings from France across the ether". Today, this landscape and seascape is one nationally designated as Heritage Coast and Area of Outstanding Natural Beauty (England) and Regional Nature Park and Grand Site (France) – and greatly valued for tourism and recreation.

Figure1.3: The rich cultural heritage of the Dover Strait

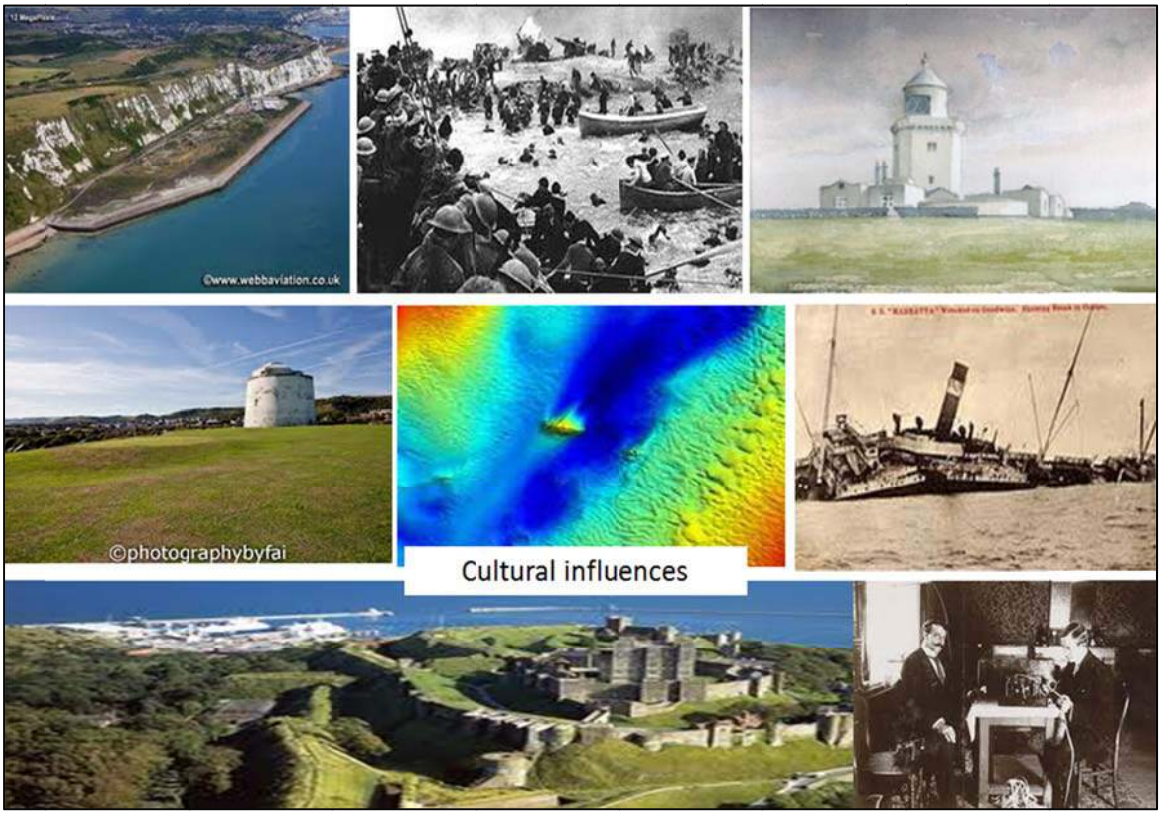


Figure 1.4: One of the busiest shipping areas in the world[2]

[2] http://www.marinetraffic.com/ais/

1.7 The Dover Strait is a cohesive seascape unified by geology, socio-economic functions, biodiversity, history and culture, and intervisibility. It is any area of multiple interests and values which requires sensitive and integrated management.

Figure 1.5: The Dover Strait: a major contributor to the local economy

Figure 1.6: A popular area for recreation (a visit by French Interreg partners in 2009)

1.8 This seascape character assessment will provide an important spatial tool for marine and coastal management, protection and planning.

Structure of this report

1.9 The remainder of this report is set out as follows:

- **Chapter 2** summarises the method undertaken for this study and presents the full classification of the Dover Strait into Seascape Character Types (SCTs) and Areas (SCAs);
- **Chapter 3** sets out seascape guidelines and actions for a selection of Seascape Character Types, and provides an overview for the Dover Strait as a whole;
- **Chapter 4** discusses the applications and uses of this work; and
- **Chapter 5** sets out character descriptions for a selection of Seascape Character Areas found on the English and French sides of the Strait.
- **Appendix 1** sets out a table showing the classification of Seascape Character Areas and Types, linking back to the pilot study and explaining decisions relating to their boundaries.
- **Appendix 2** lists the people and organisations that have inputted into this study.

2
Method for undertaking a Seascape Character Assessment for the Strait

2 Method for undertaking a complete Seascape Character Assessment for the Strait

Seascape classification produced for the Dover Strait

2.1 **Figures 2.1 to 2.3** present the spatial classification of Seascape Character Types (SCTs) and Seascape Character Areas (SCAs) identified for the Dover Strait. This chapter explains the method that was followed to complete the assessment.

'Seascape' and Seascape Character Assessment

2.2 The term 'seascape' for the purposes of this study followed a definition compatible with the European Landscape Convention's (ELC) definition for 'landscape':

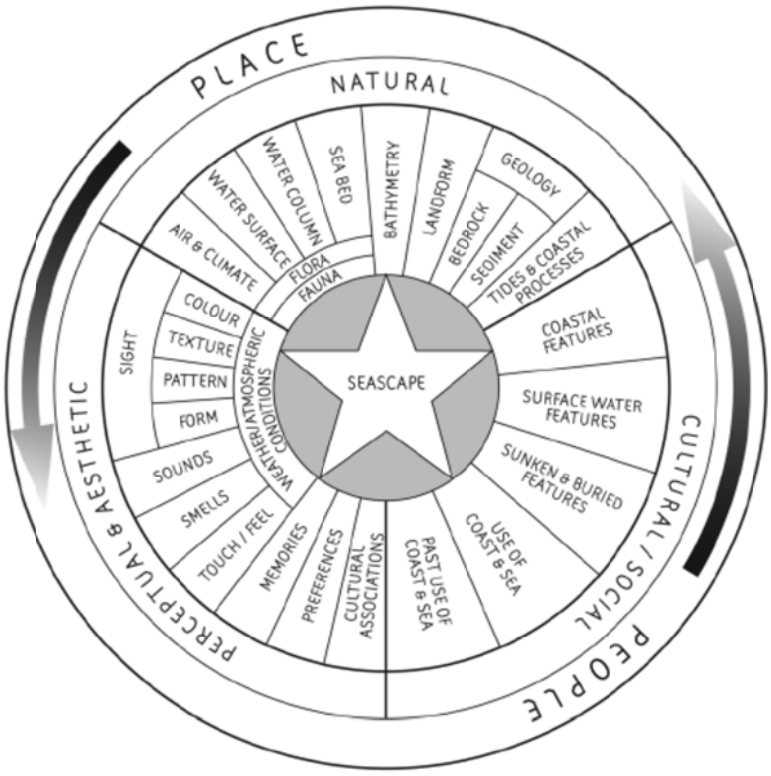
"An area of sea, coastline and land, as perceived by people, whose character results from the actions and interactions of land with sea, by natural and/or human factors"

2.3 To ensure compatibility with national marine planning in England, the study is also consistent with the Marine Policy Statement's own definition for seascape, which states that:

"…references to seascape should be taken as meaning landscapes with views of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other".

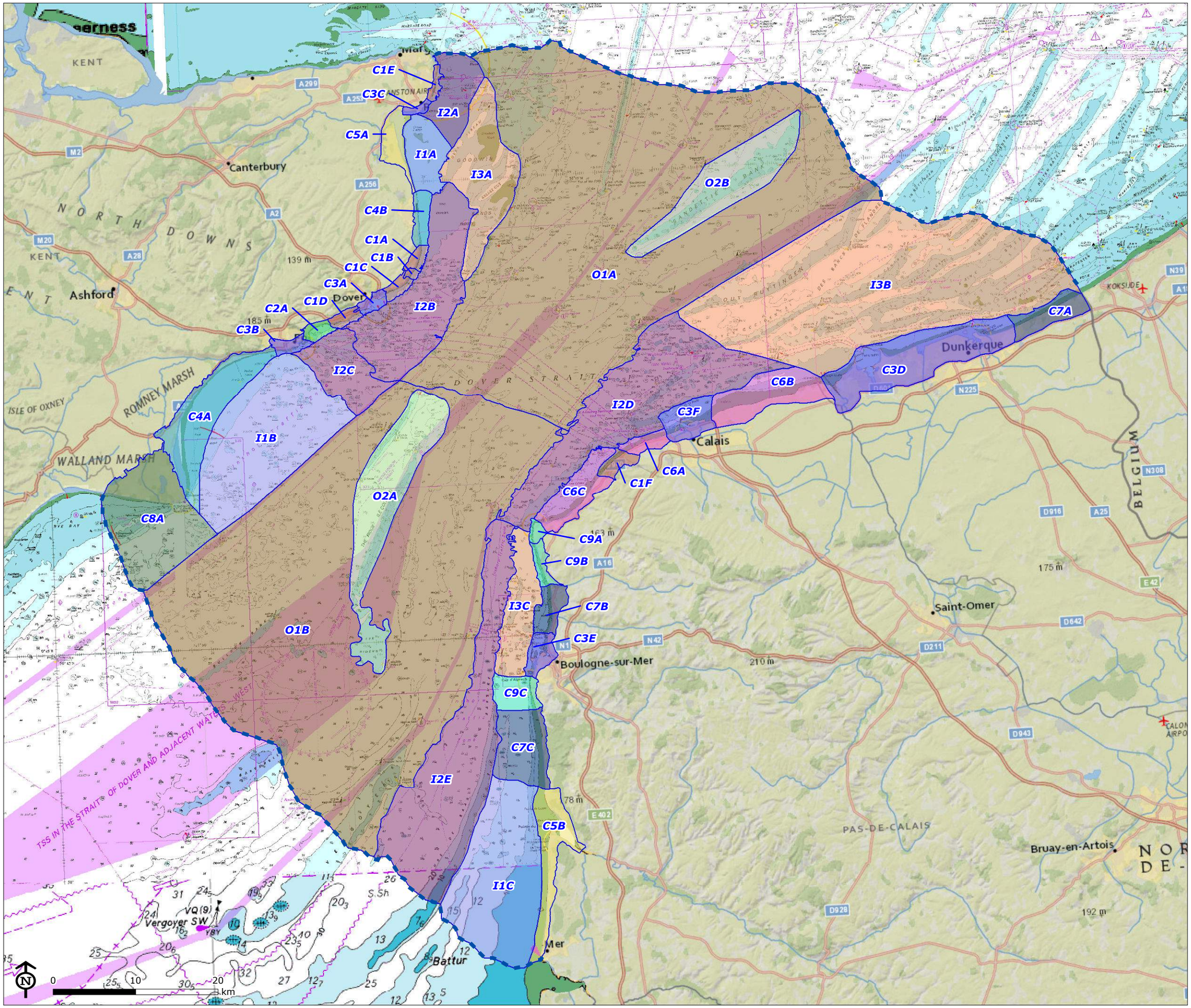
2.4 The 'Seascape Wheel' (see **Figure 2.4** below) provides a helpful illustration of all the different factors that interact to produce **seascape character**. The interactions between 'people' and 'place' are fundamental to an appreciation of seascape.

Figure 2.4: The Seascape Wheel (Natural England, 2012)



Dover Strait Seascape Assessment

Figure 2.1: Classification for Whole Dover Strait



Seascape Character Types and Areas

- **C1: Chalk Cliffs and Reefs/Coastal Waters**
  - C1A - Kingsdown Chalk Cliffs
  - C1B - St Margaret's Bay
  - C1C - White Cliffs of Dover
  - C1D - Shakespeare and Abbot's Cliffs
  - C1E - Broadstairs to North Foreland
  - C1F - Les Deux Caps
- **C2: Greensand Cliffs and Reefs/Coastal Waters**
  - C2A - East Wear Bay and The Warren
- **C3: Ports, Harbours and Seafront Development**
  - C3A - Dover Port, Harbour and Historic Defences
  - C3B - Folkestone Harbour & Seafront
  - C3C - Ramsgate Harbour
  - C3D - Ports de Dunkerque et Gravelines et côte urbanisée
  - C3E - Port de Boulogne
  - C3F - Port de Calais
- **C4: Shingle Beaches and Coastal Waters**
  - C4A - Romney Coast, Hythe Flats & Roar Bank
  - C4B - Deal Seafront & Deal Bank
- **C5: Tidal Estuaries and Flats**
  - C5A - Sandwich & Pegwell Bays
  - C5B - Baie de Canche et littoral dunaire d'Opale
- **C6: Sand Dunes, Wetlands and Coastal Waters**
  - C6A - Dunes du Fort Mahon et littoral de Sangatte
  - C6B - Platier d'Oye et littoral dunaire de Calais
  - C6C - Les Deux Caps
- **C7: Sand Dunes, Beaches and Coastal Waters**
  - C7A - Littoral dunaire de Bray Dunes
  - C7B - Littoral des falaises d'Opale
  - C7C - Littoral dunaire d'Opale
- **C8: Shingle Headlands and Coastal Waters**
  - C8A - Dungeness, Denge Marsh & Eastern Rye Bay
- **C9: Sandstone, Mudstone and Limestone Cliffs & Coastal Waters**
  - C9A - Les Deux Caps
  - C9B - Littoral des falaises d'Opale
  - C9C - Littoral dunaire d'Opale
- **I1: Inshore Bays**
  - I1A - Sandwich & Pegwell Bays
  - I1B - Hythe Bay
  - I1C - Baie de Canche et littoral dunaire d'Opale
- **I2: Active Inshore Waters**
  - I2A - Broadstairs Knolls & Ramsgate Road
  - I2B - Inshore Dover Strait. The Downs & Trinity Bay
  - I2C - Folkestone Pomerania
  - I2D - Zone d'approche de Calais
  - I2E - Bassure de Baas
- **I3: Inshore Sandbanks and Shoals**
  - I3A - Goodwin Sands, Gull Stream & North Sand Head
  - I3B - Bancs Des Flandres
  - I3C - Rade d'Ambleteuse
- **O1: Offshore Shipping Channels**
  - O1A - Dover Strait Channel (North)
  - O1B - Dover Strait Channel (South)
- **O2: Offshore Sandbanks and Shoals**
  - O2A - The Varne - Le Colbart Ridge and Les Ridens
  - O2B - Sandette Bank

Map Scale @ A3: 1:450,000

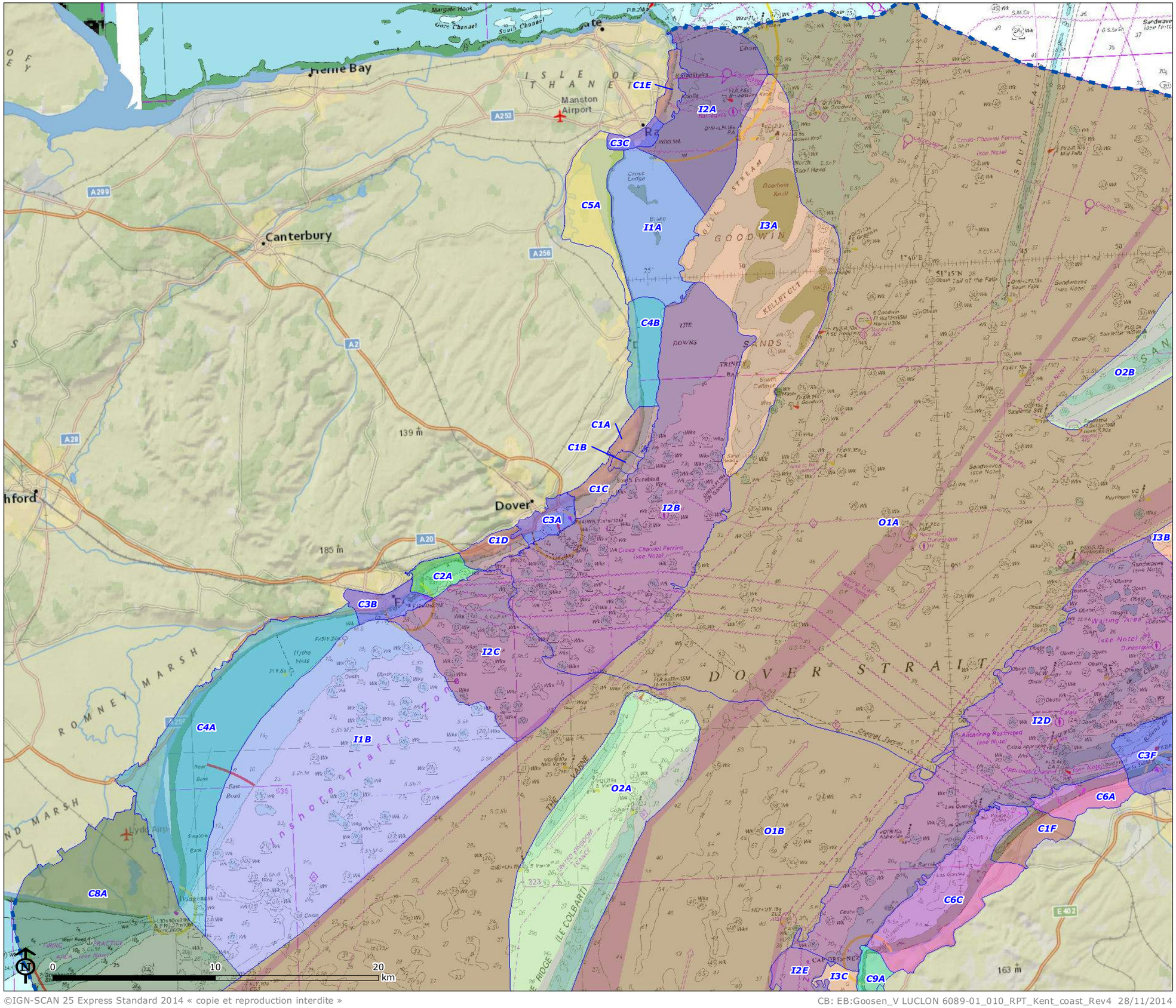
LUC

CB: EB:Johnny_H LUCLON 6089-01_009_RPT_whole_strait_Rev6 09/03/2015

Source:

Dover Strait Seascape Assessment

Figure 2.2: Classification for the Kent Coast



Seascape Character Types and Areas
Kent Coast

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  - C5A - Sandwich & Pegwell Bays
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  - C6A - Dunes du Fort Mahon et littoral de Sangatte
  - C6C - Les Deux Caps
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  - I2B - Inshore Dover Strait. The Downs & Trinity Bay
  - I2C - Folkestone Pomerania
  - I2D - Zone d'approche de Calais
- **I3: Inshore Sandbanks and Shoals**
  - I3A - Goodwin Sands, Gull Stream & North Sand Head
  - I3B - Bancs Des Flandres
- **O1: Offshore Shipping Channels**
  - O1A - Dover Strait Channel (North)
  - O1B - Dover Strait Channel (South)
- **O2: Offshore Sandbanks and Shoals**
  - O2A - The Varne - Le Colbart Ridge and Les Ridens
  - O2B - Sandette Bank

Map Scale @ A3:1:225,000

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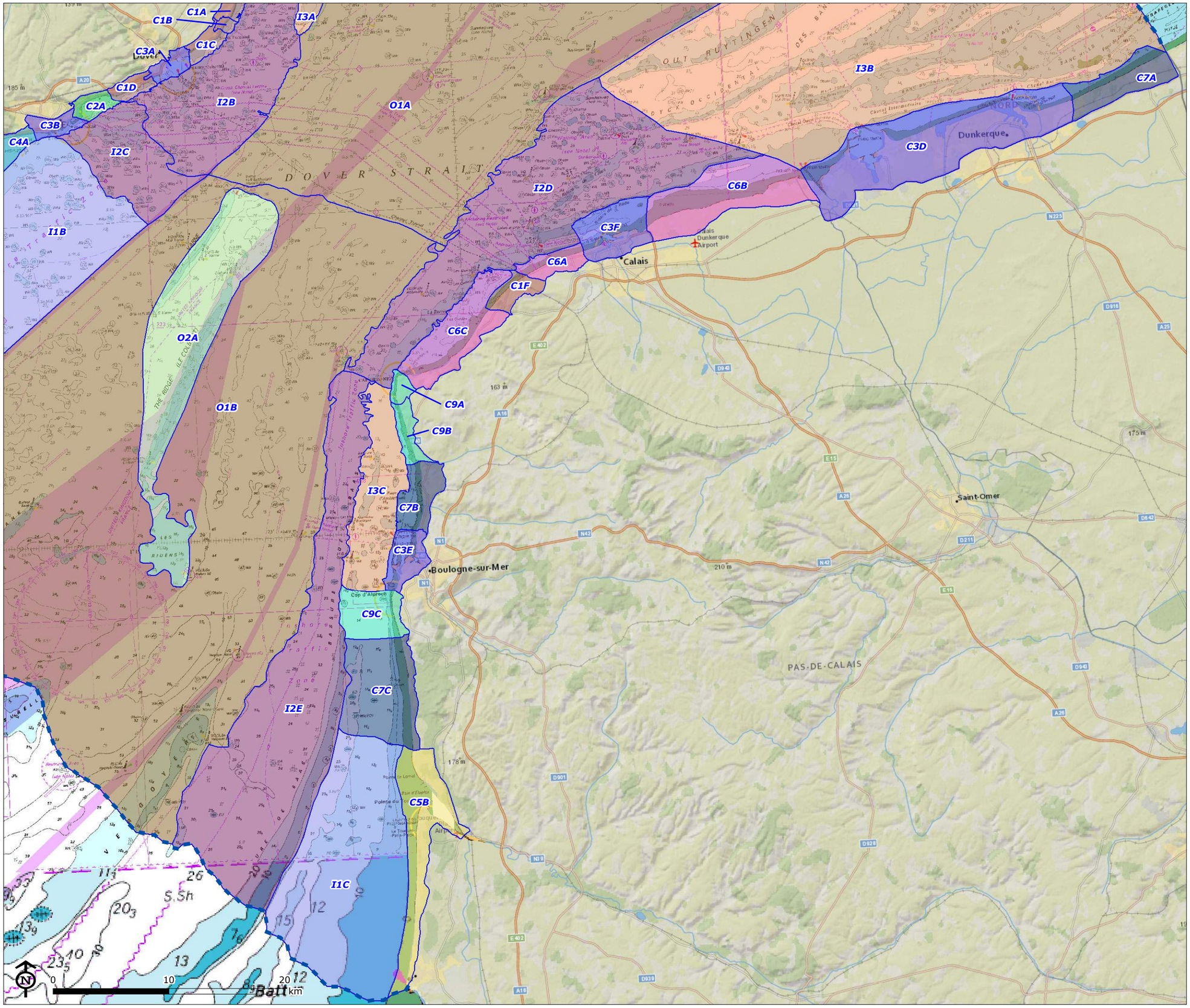
CB: EB:Goosen_V LUCLON 6089-01_010_RPT_Kent_coast_Rev4 28/11/2014

Source:

Dover Strait Seascape Assessment

Figure 2.3: Classification for the French Coast



Seascape Character Types and Areas

- **C1: Chalk Cliffs and Reefs/Coastal Waters**
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  - C4B - Deal Seafront & Deal Bank
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  - I1B - Hythe Bay
  - I1C - Baie de Canche et littoral dunaire d'Opale
- **I2: Active Inshore Waters**
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  - I2B - Inshore Dover Strait. The Downs & Trinity Bay
  - I2C - Folkestone Pomerania
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  - I3C - Rade d'Ambleteuse
- **O1: Offshore Shipping Channels**
  - O1A - Dover Strait Channel (North)
  - O1B - Dover Strait Channel (South)
- **O2: Offshore Sandbanks and Shoals**
  - O2A - The Varne - Le Colbart Ridge and Les Ridens
  - O2B - Sandette Bank

Map Scale @ A3: 1:320,000

LUC

CB: EB:Johnny_H LUCLON 6089-01_011_RPT_French_coast_Rev6 09/03/2015

Source:

2.5 Seascape Character Assessments provide a spatial classification of Seascape Character Types (SCTs) and Seascape Character Areas (SCAs), as has been produced for the Dover Strait. Definitions of both types of unit are provided below:

2.6 Definitions of SCTs and SCAs are provided below, explaining their relative uses in this type of study.

Seascape Character Types

These are distinct types of seascape that are relatively homogeneous in character. They are generic in nature in that they may occur in different locations but wherever they occur they share broadly similar combinations of geology, bathymetry, ecology, human influences and perceptual and aesthetic attributes. For example, sheltered bays, rocky coves, sandy beaches or harbours are recognisable and distinct seascape character types.

Seascape Character Types provide a good framework for analysing seascape change since many influences and pressures affect seascapes with similar character in similar ways. Analysis of SCTs can provide a foundation upon which to develop coastal or marine planning or management strategies.

Seascape Character Areas

These are single unique areas which are the discrete geographical areas comprising one or more component Seascape Character Types. Each has its own individual character and identity, even though it can share the same generic characteristics with other SCAs that are formed of the same SCT(s). Whilst sharing the same generic characteristics, each SCA has its own identity.

Seascape Character Areas provide a good framework within which to draw out patterns of local distinctiveness and those factors influencing sense of place. They can be used to develop more tailored policies or strategies, reflecting the things that make a particular area of seascape different, distinctive or special. SCAs may also be more recognisable and identifiable for non-specialists (e.g. local communities).

2.7 Natural England has recently published a national approach document in the method of Seascape Character Assessment[3], and English Heritage has its own a method statement for Historic Seascape Characterisation[4]. This work is in line with the approach recommended by Natural England.

Key steps in the approach

2.8 The approach taken to completing this Seascape Character Assessment built on the method that was developed for the pilot study, described in the accompanying project report (March 2013). This method is set out again in this section, including additional steps that were taken to complete the study for the whole of the Strait, including the French coastal and inshore areas.

2.9 This study followed a five-stage process, in line with national best practice and LUC's experience in undertaking similar landscape and seascape studies in the UK:

- Confirming the scope of the study
- Desk study (including data collection and GIS analysis)
- Stakeholder engagement

3 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/366847/An_Approach_to_Landscape_Character_Assessment.pdf

4 http://www.seazone.com/uploads/event-HSC_Method_Statement_2008R024.pdf

- Field and boat survey
- Classification and description

2.10 A short summary of each of the above steps, as applied to this study, is included below.

Step 1: Confirming the scope of the assessment

2.11 This relates to a) the 'need' or 'purpose' of the seascape character assessment; and b) the geographic scope of the Study Area. The purpose this study was to build on the pilot project to complete a full Seascape Character Assessment for the Dover Strait, using a hierarchy of Seascape Character Areas and Seascape Character Types. Further information on its applications is set out in Chapter 4.

2.12 Whilst the pilot study considered a selected part of the Strait to test the approach (with a focus on the Kent side), this study considered a larger area designed to represent the full Dover Strait. This followed the recommendations set out in the pilot report, as summarised below:

- Include a larger area of the Strait as recognised in maritime/navigation terms but be based around its narrowest part;
- Include the full extent of chalk seascape, plus the main areas of sand banks – Goodwin, Sandette, Varne, Colbart – which are key to character of navigation, historic seascape and biodiversity;
- Include the extent of existing designated landscapes in England and France on the seascape edge; and
- Include main cross channel ports – Dover, Folkestone, Boulogne, Calais.

2.13 **Figure 2.5** shows the full study area boundary in the context of the protected landscapes and seascapes.

2.14 The inland (terrestrial) study area limits were defined by considering an appropriate coastal hinterland that represents areas where land-sea interactions are greatest. In Kent, this was often contiguous with the boundary of the Heritage Coast designation or the county Landscape Character Areas; whilst elsewhere, topography and features with a strong relationship with the sea (e.g. navigation marks, prominent headlands) formed a guide to where the terrestrial boundary lines were drawn. Either contours or roads were chosen to draw inland boundaries against in the absence of existing appropriate boundaries reflecting character.

Step 2: Desk study

2.15 Available information was collected and organised in a logical sequence to help inform this stage of the study, building on the resources available from the pilot study. This included digital [GIS] data and mapping, as well as any written information (e.g. from navigational publications such as coastal pilots).

2.16 GIS information was organised by the key themes of the seascape wheel (Figure 2.6) and queried in an interactive map – see **Figure 2.3**.

2.17 The desk-based study sought to extend the SCT and SCA classification trialled for the pilot assessment to provide full coverage for the Dover Strait. This involved the extension or modification of some boundaries from the pilot study, as well as the identification of new SCAs and SCTs. The table in **Appendix 1** sets out the results of this task, explaining links back to the pilot study classification of Seascape Character Areas, and summarising the key information that informed the classification of the units and drawing of boundaries. The results of the final classification are explained and shown at the end of this chapter.

Figure 2.5: National Landscape and Seascape Designations

- Study area
- Local Authority boundary
- Dover - Folkestone and South Foreland Heritage Coasts
- Kent Downs Area of Outstanding Natural Beauty
- Parc Naturel Regional des Caps et Marais d'Opale
- Parc Naturel Marin Estuaires picards Mer d'Opale

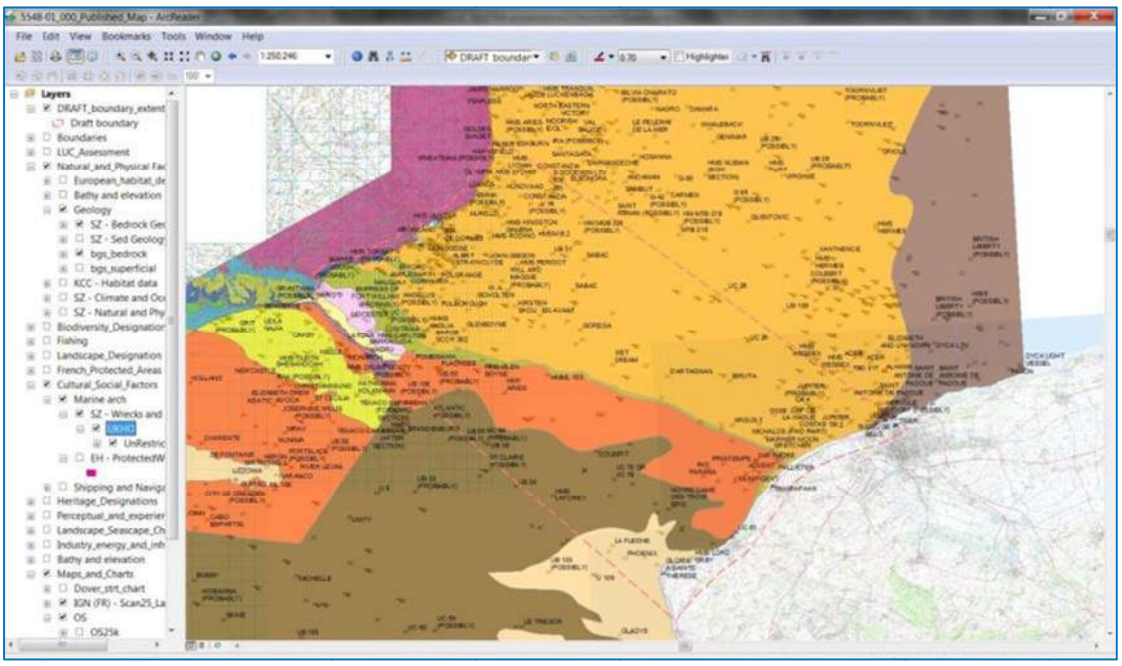
Map Scale @ A3:1:435,000

LUC

LC:]EB:Goosen_V LUCLON 6089-01_008_Context_map_Rev1 28/11/2014

Source: Protected Planet, Natural England

Figure 2.6: Interactive GIS mapping used to inform the desk study



Step 2: Stakeholder consultation

2.18 In addition to guidance and input provided by the project steering group[5] throughout the course of the project, views were sought from a range of stakeholders at key points in the study. These were to gauge information on the following aspects in particular:

- The mapped boundaries and names given to the SCTs and SCAs;
- The key characteristics of the SCAs written up for this study; and
- Forces for change and issues impacting on the SCTs written up for this study, as well as the Dover Strait as a whole.

2.19 A workshop event was held to gauge views on the above at the newly opened education shelter at Samphire Hoe on September 2nd 2014. Comments were also welcomed from people attending the Kent Downs AONB Countryside Day on 3 October 2014, where information on the project was available. Details of the study were also presented at a joint NOSTRA meeting of UK/French stakeholders on 10 September in Calais. A list of all stakeholders who have provided input into this study is included at Appendix 2.

Step 3: Field and boat survey

2.20 Boat and field survey observations are an extremely helpful means of verifying the desk-based assessment, as was also found in the pilot. Boat and field survey exercises were conducted on both the Kent and French sides of the Strait for this study. The Kent & Essex IFCA provided assistance for a day's boat survey off the Kent coast in August 2014, while a private charter was arranged to survey the French coastline and inshore waters in September. Observations were also made on the central Strait and approaches to both shores from the Dover-Calais ferry crossing.

2.21 The field and boat surveys helped incorporate further information not available from data alone (e.g. perceptions of different parts of the seascape; information on condition and/or sensitivity).

[5] The Steering Group comprised Chris Drake and Ruth Childs, Kent County Council; Nick Johannsen, Kent Downs AONB; and Stéphane Louhaur and Antoine Surget, Pas-de-Calais County Council.

Figure 2.7: IFCA (Kent and Essex Inshore Fisheries Conservation Authority) boat used to survey the Kent side of the study area

Step 4: Classification and description

2.22 The full classification of Seascape Character Types (SCTs) and Seascape Character Areas (SCAs) is shown at the beginning of this chapter (**Figures 2.1 to 2.3**) and set out in **Table 2.1** below**.** These have been coded according to their location in the 'coastal' (C), 'inshore' (I) and 'offshore' (O) parts of the Dover Strait.

2.23 This divides the Strait into a total of nine Coastal SCTs (with 27 component SCAs), three Inshore SCTs (with 11 component SCAs) and two Offshore SCTs (with four component SCAs). It is important to note that some SCAs fall within more than one SCT. Combined coding is used to reflect this for reporting purposes – an example is C1F_C6C_C9A: Les Deux Caps. The majority of SCAs, however, fall within just one SCT, and therefore only have one code. This is also shown in the table at **Appendix 1**.

2.24 Character descriptions are provided in **Chapter 5** for a large selection of SCAs found in the study area. In addition, the next chapter presents seascape guidelines and actions for a selection of SCTs found across the Strait. Those SCAs and SCTs selected for write-ups are shaded in purple in Table 2.1. They were chosen to reflect a balanced selection of different types of seascape, as well as a good geographic spread across the coastal, inshore and offshore parts of the Strait.

2.25 It is hoped that further funding can be secured at a future to complete the descriptive work for the 11 remaining SCAs and seven SCTs identified for the Strait through this study.

Table 2.1: Classification of the Dover Strait into SCTs and component SCAs (colour shading indicates those written up in this report)

Seascape Character Type	Seascape Character Area[6]
COASTAL	
C1: Chalk Cliffs and Reefs/Coastal Waters	C1A: Kingsdown Chalk Cliffs
	C1B: St Margaret's Bay
	C1C: White Cliffs of Dover
	C1D: Shakespeare and Abbot's Cliffs
	C1E: Broadstairs to North Foreland
	C1F: Les Deux Caps
C2: Greensand Cliffs and Reefs/Coastal Waters *(unique SCT)*	C2A: East Wear Bay and The Warren
C3: Ports, Harbours and Seafront Development	C3A: Dover Port, Harbour and Historic Defences
	C3B: Folkestone Harbour and Seafront
	C3C: Ramsgate Harbour
	C3D: Ports de Dunkerque et Gravelines et côte urbanisée
	C3E: Port de Boulogne
	C3F: Port de Calais
C4: Shingle Beaches and Coastal Waters	C4A: Romney Coast, Hythe Flats and Roar Bank

[6] Please note that a small number of SCAs fall within more than one SCT. In these cases, the codes are combined on the maps and the descriptions to create one SCA record.

Seascape Character Type	Seascape Character Area[6]
	C4B: Deal Seafront and Deal Bank
C5: Tidal Estuaries and Flats	C5A: Sandwich and Pegwell Bays
	C5B: Baie de Canche et littoral dunaire d'Opale
C6: Sand Dunes, Wetlands and Coastal Waters	C6A: Dunes du Fort Mahon et littoral de Sangatte
	C6B: Platier d'Oye et littoral dunaire de Calais
	C6C: Les Deux Caps
C7: Sand Dunes, Beaches and Coastal Waters	C7A: Littoral dunaire de Bray Dunes
	C7B: Littoral des falaises d'Opale
	C7C: Littoral dunaire d'Opale
C8: Shingle Headlands and Coastal Waters *(unique SCT)*	C8A: Dungeness, Denge Marsh and Eastern Rye Bay
C9: Sandstone, Mudstone and Limestone Cliffs & Coastal Waters	C9A: Les Deux Caps
	C9B: Littoral des falaises d'Opale
	C9C: Littoral dunaire d'Opale
INSHORE	
I1: Inshore Bays	I1A: Sandwich and Pegwell Bays
	I1B: Hythe Bay
	11C: Baie de Canche et littoral dunaire d'Opale

Seascape Character Type	Seascape Character Area[6]
I2: Active Inshore Waters	I2A: Broadstairs Knolls and Ramsgate Road
	I2B: Inshore Dover Strait, The Downs and Trinity Bay
	I2C: Folkestone Pomerania
	I2D: Zone d'approche de Calais
	I2E: Bassure de Baas
I3: Inshore Sandbanks and Shoals	I3A: Goodwin Sands, Gull Stream and North Sand Head
	I3B: Bancs des Flandres
	I3C: Rade d'Ambleteuse
OFFSHORE	
O1: Offshore Shipping Channels	O1A: Dover Strait Channel (North)
	O1B: Dover Strait Channel (South)
O2: Offshore Sandbanks and Shoals	O2A: The Varne-Le Colbart Ridge and Les Ridens
	O2B: Sandette Bank

3 Seascapes Guidelines and Actions for the Dover Strait (selected SCTs)

3 Seascapes Guidelines and Actions for the Dover Strait (selected SCTs)

Introduction

3.1 This chapter considers the key issues that are affecting the natural, cultural and perceptual qualities of the Dover Strait, as described in the SCA descriptions in Chapter 5. It uses the framework of Seascape Character Types to present the information, but begins with an overview of the findings for the Dover Strait as a whole.

3.2 The SCT-specific information that follows has been prepared for a selection of SCTs, chosen to reflect a good geographic spread (including all of the Kent coastline) and range of seascapes in the Dover Strait. These are as follows:

1. C1: Chalk Cliffs and Reefs/Coastal Waters
2. C2: Greensand Cliffs and Reefs/Coastal Waters
3. C3: Ports, Harbours and Seafront Development
4. C4: Shingle Beaches and Coastal Waters
5. C5: Tidal Estuaries and Flats
6. C8: Shingle Headlands and Coastal Waters
7. I1: Inshore Bays
8. I2: Active Inshore Waters
9. I3 and O2: Inshore and Offshore Sandbanks and Shoals (combined document)

3.3 For each SCT, the following information is provided:

- An overview map showing the location of the SCT in the context of the Dover Strait
- A list of component SCAs
- A summary list of the 'valued seascape attributes' that would be sensitive to change
- A list of the key issues affecting the seascape's valued attributes
- A 'shaping the future seascape' section, setting out guidelines and actions to help address the key issues identified by this study.

3.4 As for the SCA descriptions, it is hoped that future funding can be secured to complete this exercise for all of the SCTs in the Strait. In addition, it is envisaged that further information will be added to this section as a result of ongoing research and dialogue. As such, it is hoped that this chapter sets a strong foundation for further work to address, in partnership, the range of issues that are affecting the seascapes of the Dover Strait.

3.5 Before presenting the information by SCT, an overview of the information for the Dover Strait as a whole is provided, showing the common themes that have emerged.

Overview of the key issues affecting the Dover Strait as a whole

Transport and development

3.6 Under this theme, the following forces for change have been identified as affecting many of the seascapes within the Dover Strait:

- Views to development behind the coastal edge (e.g. wind turbines near Calais which are visible from the Kent coast) can impact on the rural backdrop and setting of the Strait.
- Current and future port developments impacting on the levels of tranquillity and dark night skies of surrounding seascapes.
- Sulphur emissions from shipping currently causing pollution (smog and deposition, including on valued chalk grassland habitats on the cliff-tops adjacent to the main ports).
- North Sea Sulphur Control Area legislation will in future limit sulphur emissions from shipping, but conversely will make the shorter Dover-Calais crossing more economically viable than longer shipping routes elsewhere.
- The predicted increase in shipping (as above) is likely to result in a linked increase in road freight – resulting in traffic congestion, pollution from road transport, and need for further infrastructure (e.g. lorry parks).
- Limited recognition of international natural and cultural importance of the area leading to inappropriate management and development proposals which may have a negative impact on the area's special qualities.

Coastal land and marine resource management

3.7 Under this theme, the following forces for change have been identified as affecting many of the seascapes within the Dover Strait:

- Scrub encroachment and a spread of invasive species are affecting areas of open coastal habitat due to a decline in traditional grazing management. This includes the symbolic swathes of chalk grassland topping the white cliffs on both sides of the Strait.
- Diffuse pollution from intensively farmed land backing the coast affecting the quality of some water courses and drainage ditches feeding into the estuaries and surrounding bays, then into the wider Strait.
- This issue is compounded by the disposal of industrial effluent into watercourses, leading to increased pollution of rivers and eutrophication of estuaries.
- Lack of understanding of the undersea environment makes conveying a conservation and enhancement message to different audiences difficult.
- Impacts of fishing activity (particularly benthic trawling) on fragile marine habitats, contributing to sites being put forward and designated as marine protected areas.

Tourism and recreation

3.8 Under this theme, the following forces for change have been identified as affecting many of the seascapes within the Dover Strait:

- Future growth plans and housing developments within the surrounding landscapes may lead to further pressure on valued recreational green spaces along the coast (and accessible, sheltered stretches of water).
- Harbour re-development proposals (e.g. Folkestone) may see a resurgence in marine tourism, particularly sailing and cruising activities.
- The popularity of accessible sections of coastline and adjacent waters for a range of recreational activities can cause conflicts with nature and heritage conservation aims (terrestrial and marine), as well as the use of the waters for commercial activities such as fishing.
- Dover and Calais seen by many as entry/exit ports rather than visitor destinations in their own right. Dover in particular is not recognised by many passing through as a gateway to an adjacent seascape of significant natural and cultural heritage value.

Aquaculture and fishing

3.9 Under this theme, the following forces for change have been identified as affecting many of the seascapes within the Dover Strait:

- Uncertain economic viability for community fishing fleets and individual fishermen operating from the historically important small ports and harbours of the Strait (e.g. Folkestone, Deal, Ramsgate, Wissant and Wimereux).
- Uncertainty and misunderstandings about the potential impact of Marine Conservation Zone designation on fishing activity.

Environmental processes and climate change

3.10 Under this theme, the following forces for change have been identified as affecting many of the seascapes within the Dover Strait:

- Climate change, including warmer, wetter winters and more frequent summer droughts, is likely to lead to increased levels of species migration, as well as an increased prevalence of pests and diseases affecting characteristic semi-natural habitats.
- The policy of 'no active intervention' across many undeveloped sections of coastline will see the dynamic nature of the coast sustained, and likely accelerated due to climate change. Some natural, geological and archaeological assets will be lost to the sea (coastal squeeze), whilst new ones will be revealed.
- Future sea level rise and an increased strength and frequency of storm surges are also likely, affecting low-lying sections of coast in particular. Some engineered intervention may be required to protect valued assets.
- The Strait's natural and culturally significant sand banks and shoals, such as Goodwin Sands and Bancs des Flandres, may be subject to more intense natural modification from storm surges. This could have knock-on effects for marine transportation (increasing demands for dredging), ecological integrity and their role in providing shelter to other parts of the Strait.

Guidelines and actions for the Dover Strait as a whole

3.11 In response to the issues identified for the SCTs and summarised above, a number of Strait-wide guidelines have emerged to help guide an appropriate, co-ordinated response. Further detail and additional guidelines/actions are provided for each SCT, but headline guidelines/actions are summarised below (using the same themes as above), using bold text to capture the key points for ease of reference:

Transport and development

3.12 Under this theme, the following guidelines and actions have been identified to help respond to the key issues affecting many parts of the Strait:

- **Any new developments within or adjacent to the seascapes of the Dover Strait should respect and enhance the characteristics and qualities of the area** – using the information provided in this Seascape Character Assessment. This includes considering the impact of new developments on the setting of the Strait.
- While accommodating transport growth and regeneration is clearly important, **the impact of development and regeneration proposals within SCT C3: Ports and Harbours on surrounding seascapes should be recognised, understood and managed / mitigated.** This should reflect the international importance of the Strait's natural and heritage assets, and the character of its landscape and seascape (including both direct and indirect impacts on natural and cultural assets as well as levels of tranquillity).
- Through the Dover Strait Implementation Plan and further cross-Channel collaboration, **continue to explore opportunities to encourage greater use of the rail freight network** to mitigate the impact of road freight increases. Barriers to increasing rail freight through the Channel Tunnel and establishing a better road/rail balance need to be understood and acted upon.

Coastal land and marine resource management

3.13 Under this theme, the following guidelines and actions have been identified to help respond to the key issues affecting many parts of the Strait:

- **Explore opportunities to undertake further research into the characteristics and management of the marine environment and seabed**, furthering an understanding of important aspects to conserve, enhance and communicate.
- **Continue to utilise land management schemes such as Environmental Stewardship to support local farmers** to sustainably manage (including through grazing) the seascape's valued coastal and intertidal habitats as an integral part of their farming systems. Continue close working between statutory conservation agencies, landowners and land managers.
- **Work with surrounding landowners and farmers to implement measures to protect watercourses from diffuse pollution**, including through the appropriate targeting of agri-environment options (e.g. buffer strips).

Tourism and recreation

3.14 Under this theme, the following guidelines and actions have been identified to help respond to the key issues affecting many parts of the Strait:

- **Continue to explore the costs, benefits and opportunities and submit bids for international designation status** for the Dover Strait as a whole.
- **Promote tourism which supports the character and quality of the coastal landscapes and seascapes.** This should form part of a wider marketing effort for the Dover Strait as a whole, drawing on the information in this Seascape Character Assessment to communicate its unique identity and importance.
- **Support the work of the East Kent Green Infrastructure Partnership to produce a sustainable strategic access and recreation management strategy**, initially aimed at protected nature conservation sites, but with the potential to consider other parts of the Strait's coastline too. Consider extending the remit of this strategy to cover adjacent coastal and inshore waters to further links between terrestrial and marine planning. Work with French partners to explore an equivalent approach in Pas-de-Calais.
- **Support the implementation of mitigation measures associated with new developments, including addressing further recreational pressures** on valued coastal spaces, heritage assets and access routes (including building on the proposals set out in the East Kent Green Infrastructure Partnership's *Approach to Green Infrastructure and Recreation* (April 2014) and the Kent Downs AONB Management Plan 2014-19).
- **Collate information from different providers on marine activities** e.g. seal trips, dive trips, fishing charters etc. This will allow for a more accurate picture of the uses of the coastal and inshore waters to be gained, allowing for their monitoring and appropriate management response.

Aquaculture and fishing

3.15 Under this theme, the following guidelines and actions have been identified to help respond to the key issues affecting many parts of the Strait:

- **Seek to explore opportunities to support and enhance the overall sustainability of traditional small-scale industries**, including the long-standing fishing fleets of the smaller ports and harbours (e.g. through the establishment of a Fishing Local Action Group, as proposed in the Kent Downs AONB Action Plan 2014-19).
- **Support the work of the IFCA and Natural England (and their French counterparts), encouraging further partnership working with the fishing industry**. Collaborative working and open dialogue to agree how to sustainably manage the marine resource whilst supporting the economic viability of local fishermen should be a priority.

Environmental processes and climate change

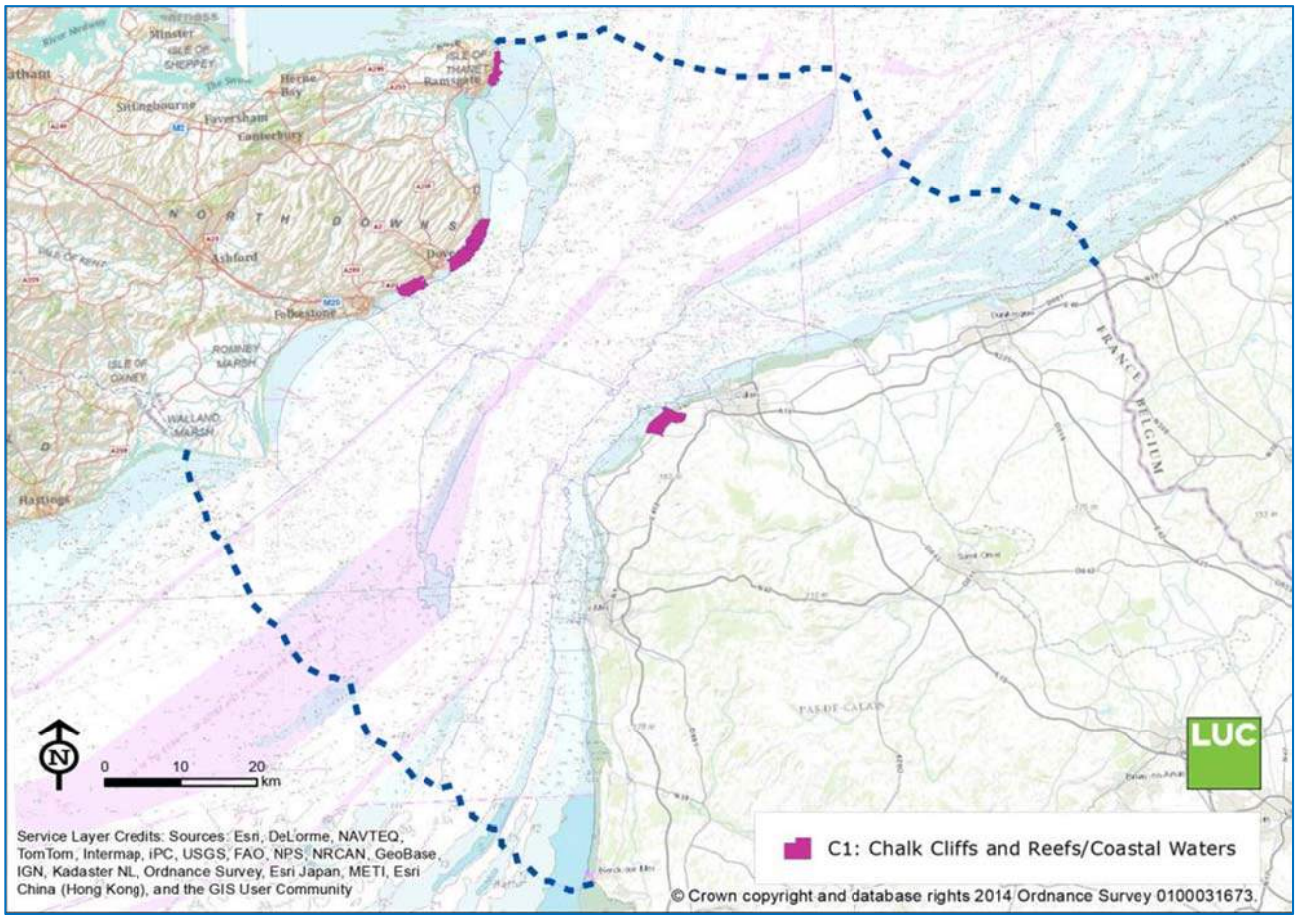
3.16 Under this theme, the following guidelines and actions have been identified to help respond to the key issues affecting many parts of the Strait:

- **Plan at a strategic level for the impacts of a changing climate on the coastline**, allowing natural processes to take place whilst considering how habitats and access provisions can be expanded or relocated to account for coastal squeeze. Consider species migration and responses to an increased prevalence of pests and diseases.
- **Work with statutory authorities/agencies to raise awareness of the natural processes affecting the coast and marine area**, including communicating the positive aspects of an eroding coastline (e.g. in revealing new archaeological and geological sites/features).
- **Ensure sympathetic and appropriate responses are taken to protect valued assets**, where it is agreed this course of action is required (e.g. through the Shoreline Management Plan process).

3.17 The remainder of this chapter presents an evaluation for each of the selected SCTs in turn, starting with C1.

C1: Chalk Cliffs and Reefs/Coastal Waters

Map of SCT in context of the Dover Strait



Component Seascape Character Areas

- C1A: Kingsdown Chalk Cliffs
- C1B: St Margaret's Bay
- C1C: White Cliffs of Dover
- C1D: Shakespeare and Abbot's Cliffs
- C1E: Broadstairs to North Foreland
- C1F: Les Deux Caps

Summary of valued seascape attributes (sensitivities)

a) Dramatic, visually prominent sheer white chalk cliffs which are popular and well-recognised tourism destinations.

b) Cliff top habitats of chalk downland, grassland and scrub.

c) Chalk character continuing offshore in the seabed, and in ledges, boulders and gullies.

d) Historical associations with coastal defence, particularly World War II.

e) Sections with high levels of tranquillity and remoteness, with long uninterrupted views across the Strait.

Key issues affecting valued seascape attributes

Development and transport

- Development pressures have the potential to impact on the natural and cultural assets found within this SCT (particularly locations adjacent to settlements).
- Water-borne litter can gather along the coast at the foot of the cliffs, impacting on its unspoilt qualities (e.g. Lydden Spout).
- **Strait-wide issue:** Views to development behind the coastal edge (e.g. wind turbines near Calais which are visible from the Kent coast) can impact on the rural backdrop and setting of the Strait.
- **Strait-wide issue:** Sulphur emissions from shipping currently causing pollution (smog and deposition, including on valued chalk grassland habitats behind Dover port).
- **Strait-wide issue:** Current and future port developments in adjacent SCAs impacting on the levels of tranquillity and dark night skies of surrounding seascapes.

Tourism and recreation

- Increasing popularity of 'honeypot' cliff-top sites within the SCT for recreation, such as the National Trust's White Cliffs centre and Cap Blanc-Nez. This brings both benefits (e.g. to the local economy and to promote understanding and appreciation), as well as impacts such as habitat erosion, wildlife disturbance, demand for infrastructure and reduced levels of tranquillity/remoteness.
- Access to some sections of cliff limited (so therefore retaining levels of remoteness and allowing wildlife to flourish). Cliff falls and erosion is an ongoing issue which can cause previously accessible areas to be cut off.
- Illicit wreck diving on the fragile chalk reefs causing damage to the marine ecosystem, as well as impacts on the maritime archaeology associated with the wrecks.

Coastal land and marine resource management

- Limited recognition of international natural and cultural importance of the area leading to inappropriate management and proposals which may have a negative impact on the area's special qualities.
- Scrub encroachment on remaining areas of semi-natural chalk grassland threatening the habitat's species diversity and open character. Programmes of mechanical clearance and grazing management are in place along designated sections of coastal downland.
- Lack of understanding of the undersea environment makes conveying a conservation and enhancement message to different audiences difficult.
- The popularity of the cliffs and coastal waters for a range of recreational activities can cause conflicts with nature and heritage conservation aims (terrestrial and marine).

Aquaculture and fishing

- Uncertain economic viability for community fishing fleets operating from small ports and harbours nearby, and fishing in the waters of this SCT.
- Impacts of fishing activity (particularly benthic trawling) on fragile marine habitats, contributing to sites being put forward for designation as Marine Conservation Zones.
- Uncertainty and misunderstandings about the potential impact of Marine Conservation Zone designation on fishing activity (the recommended sites of Dover to Folkestone and Dover to Deal will be put forward for designation in the next tranche).

Environmental processes and climate change

- The Shoreline Management Plan policy of 'no active intervention' across much of the Kent SCT will see the dynamic nature of the coast sustained, and likely accelerated due to climate change. Some

natural, geological and archaeological assets will be lost to the sea (coastal squeeze), whilst new ones will be revealed.

- Natural processes of erosion along the cliff line can be exacerbated by intensive arable farming (semi-natural grassland cover can help stabilise the soil).
- **Strait-wide issue:** Climate change, including warmer, wetter winters and more frequent summer droughts, is likely to lead to increased levels of species migration, as well as an increased prevalence of pests and diseases affecting characteristic semi-natural habitats.

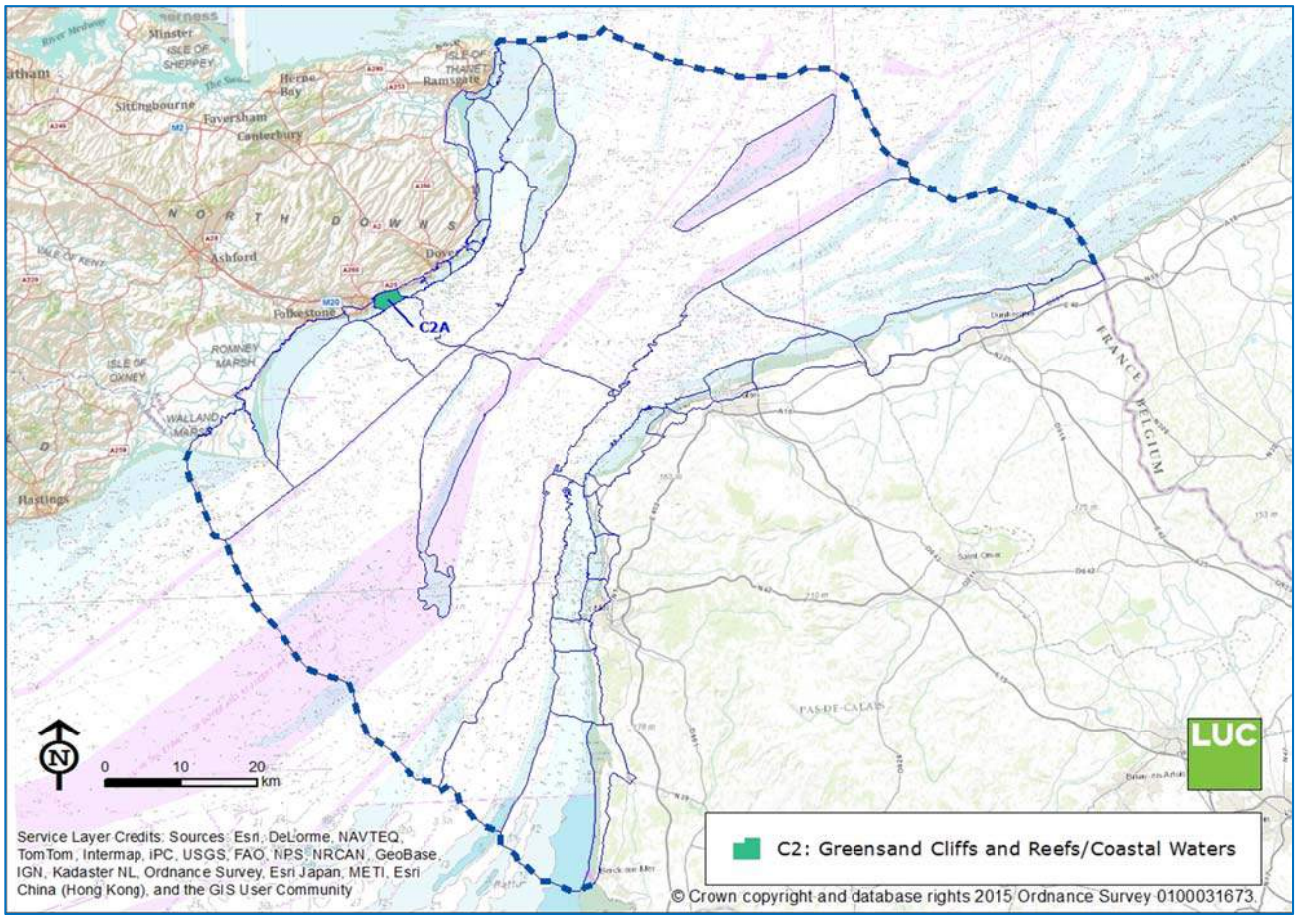
Shaping the future seascape

Guideline	Link to valued attributes
DEVELOPMENT AND TRANSPORT	
While accommodating transport growth and regeneration is clearly important in the area, the impact of development and regeneration proposals within SCT C3: Ports and Harbours on areas within this SCT should be recognised, understood and managed/mitigated. This should reflect the international importance of the Strait's natural and heritage assets, and the character of its landscape and seascape (including both direct and indirect impacts on natural and cultural assets as well as levels of tranquillity). This should consider information in this Seascape Character Assessment and other available Landscape Character Assessments, Heritage Asset surveys and Heritage Strategies (e.g. for Dover District).	b) cliff habitats d) historical associations e) tranquillity
TOURISM AND RECREATION	
Work with local, regional and national tourism organisations and businesses (in both England and France) to support initiatives that promote the sustainable use of assets within this SCT to people arriving by sea. Include information on the dynamic nature of the coastline as well as its current natural, geological and cultural/archaeological assets. Also ensure information on the underwater environment, including particularly the area's chalk reefs and the creation of the Strait, is included. Promote tourism which supports the character and quality of the coastal landscapes and seascapes. **Strait-wide guideline:** This should form part of a wider marketing effort for the Dover Strait as a whole, drawing on the information in this Seascape Character Assessment to communicate its unique identity and importance.	a) popular cliffs b) cliff habitats c) offshore chalk d) historical associations
Strait-wide guideline: Support the work of the East Kent Green Infrastructure Partnership to produce a sustainable strategic access and recreation management strategy, initially aimed at protected nature conservation sites, but with the potential to consider other parts of the Strait's coastline too. Consider extending the remit of this strategy to cover adjacent coastal and inshore waters to further links between terrestrial and marine planning. Work with French partners to explore an equivalent approach in Pas-de-Calais.	a) popular cliffs b) cliff habitats e) tranquillity
Ensure any new development or infrastructure relating to the area's recreational uses is sympathetically integrated into its landscape and seascape setting, particularly where located in open cliff-top locations. Sympathetic lighting schemes should be explored to reduce light pollution.	a) popular cliffs e) tranquillity
Support the implementation of mitigation measures associated with new developments, including addressing further recreational pressures on valued coastal spaces, heritage assets and access routes (including building on the proposals set out in the East Kent Green Infrastructure Partnership's *Approach to Green Infrastructure and Recreation* (April 2014) and the Kent Downs AONB Management Plan 2014-19).	a) popular cliffs b) cliff habitats d) historical associations e) tranquillity

Guideline	Link to valued attributes
Strait-wide guideline: Continue to explore the costs, benefits and opportunities and submit bids for international designation status for the Dover Strait as a whole.	a) popular cliffs b) cliff habitats c) offshore chalk d) historical associations e) tranquillity
COASTAL LAND AND MARINE RESOURCE MANAGEMENT	
Explore opportunities to extend areas of arable reversion to chalk grassland, working with the Kent Downs AONB, Natural England, the PNR des Caps et Marais d'Opale, and major landowners such as the National Trust and Conservatoire du Littoral.	b) cliff habitats
Explore opportunities to undertake further research into the characteristics and management of the marine environment and seabed, furthering an understanding of important aspects to conserve, enhance and communicate.	c) offshore chalk
AQUACULTURE AND FISHING	
Strait-wide guideline: Seek to explore opportunities to support and enhance the overall sustainability of traditional small-scale industries, including the long-standing fishing fleets of the smaller ports and harbours (e.g. through the establishment of a Fishing Local Action Group, as proposed in the Kent Downs AONB Action Plan 2014-19).	c) offshore chalk
Strait-wide guideline: Support the work of the IFCA and Natural England (and their French counterparts), encouraging further partnership working with the fishing industry. Collaborative working and open dialogue to agree how to sustainably manage the marine resource whilst supporting the economic viability of local fishermen should be a priority.	c) offshore chalk
ENVIRONMENTAL PROCESSES AND CLIMATE CHANGE	
Plan at a strategic level for the impacts of a changing climate on the coastline, allowing natural processes to take place whilst considering how habitats and access provisions can be expanded or relocated to account for coastal squeeze. Consider species migration and responses to an increased prevalence of pests and diseases.	a) popular cliffs b) cliff habitats
Work with statutory authorities/agencies to raise awareness of the natural processes affecting the chalk cliffs, including communicating the positive aspects of an eroding coastline (e.g. in revealing new archaeological and geological sites/features).	a) popular cliffs b) cliff habitats d) historical associations
Ensure sympathetic and appropriate responses are taken to protect valued assets, where it is agreed this course of action is required (e.g. through the Shoreline Management Plan process).	a) popular cliffs b) cliff habitats d) historical associations

C2: Greensand Cliffs and Reefs/Coastal Waters

Map of SCT in context of the Dover Strait



Component Seascape Character Areas

This is a unique SCT and contains just one Seascape Character Area:

C2A: East Wear Bay and The Warren

Summary of valued seascape attributes (sensitivities)

a) Unique area of Gault clay and Greendsand Cliffs in the Dover Strait at Copt Point headland running west to Sandgate, with chalk/marly chalk and clay at Folkestone Warren and East Way Bay Cliffs.

b) The only area of harder coastal, intertidal and subtidal rock in Kent (and one of only two in SE England) supporting species of algae not found elsewhere in Kent. Rich and diverse marine ecosystem of chalk reefs, ledges and gullies forming part of the recommended Dover to Folkestone Marine Conservation Zone. Copt Point recognised as important Plant Area by Plantlife.

c) Majority of coastline within Folkestone Warren SSSI valued for its calcareous and maritime grasslands, woodland and scrub providing a rich habitat for birds and invertebrates.

d) Fossil-rich exposures of Folkestone Beds and Gault representing the single most important locality in England for studying the sedimentology and stratigraphy of these formations.

e) Internationally significant prehistoric settlement and trading site, succeeded by a Roman villa (Scheduled monument) on the cliff top overlooking East Wear Bay.

f) Other important archaeological sites including from Iron Age to WW2 on the cliffs with archaeological material on the foreshore.

g) Large scale bay accessible for recreation, without road or traffic access or large scale development providing valued resource of tranquillity and sense of wildness in this part of the Dover Strait despite close proximity to the ports.

Key issues affecting valued seascape attributes

Development and transport

- Developments around Folkestone Harbour – with potential direct and indirect impacts on habitat and biodiversity within this area, including potential conflicts between dredging and marine conservation.

Tourism and recreation

- Increased tourism and recreational pressures potentially on cliffs and within the Bay impacting on the only area of harder coastal, intertidal, sub tidal rock around Kent and associated habitats and levels of tranquillity and quiet enjoyment. Positive management of The Warren for recreation by the White Cliff Countryside Project.
- Increased geological/fossil hunting interest associated with this unusual geological feature resulting is loss of natural resource.
- Emergency sewage outlet at Copt Point resulting in occasional high level of pollution of East Wear Bay.
- **Strait-wide issue**: The English Coastal Path is in the process of being developed around the Kent coast, with positive benefits including increased access provision, but increased potential for wildlife disturbance.

Coastal land and marine resource management

- Scrub encroachment and invasive species resulting in loss of chalk grassland on The Warren, now in positive management through the White Cliffs Countryside Project.

Aquaculture and fishing

- Potential uncertainty for fishing fleet at Folkestone regarding the impact of the recommended Marine Conservation Zones (MCZ) along this coastline. Although this is being managed to conserve viability of fishing and biodiversity.

Environmental processes and climate change

- A dynamic coastal seascape, future sea level rise and an increased strength and frequency of storm surges due to climate change will further shape this coastline, currently protected by coastal defences.
- Land slips of chalk over impermeable clays.
- In the long term maintenance of the toe defences that prevent cliff erosion and protect the railway line along the Warren may not be feasible resulting in unmitigated impacts of extreme weather events. Positively, this will result in a more natural functioning landscape and geomorphological processes, creating new exposures.
- At Copt Point the policy is for no intervention and the increased landslips will result in loss of the important historic landscape, including WWII Pill Boxes and, at Copt Point, the Roman Villa SM and associated areas of great archaeological interest.

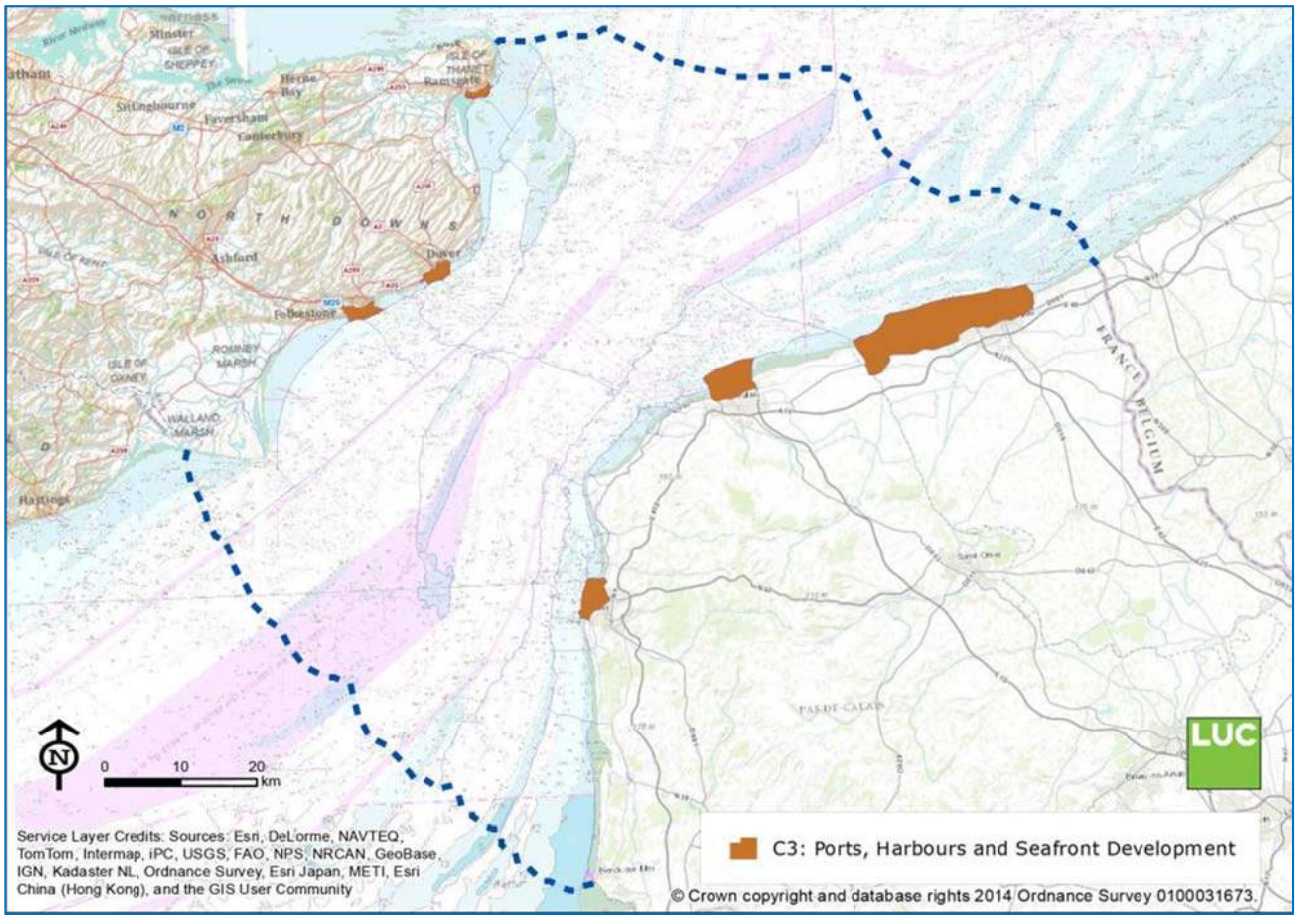
Shaping the future seascape

Guideline	Link to valued asset(s)
DEVELOPMENT AND TRANSPORT	
Regeneration is clearly an important priority for Folkestone. Ensure any future development and regeneration proposals within adjacent SCT 3B contribute positively to the character and enhancement of the adjacent SCTs, including the Greensand Cliffs and Coastal Waters and notably conservation of qualities of wildness and tranquillity.	b & c) marine and coastal biodiversity d) fossil rich exposures e & f) archaeology g) tranquillity and wildness
Strait-wide guideline: The impact of development and regeneration proposals within adjacent SCTs on the valued seascape and assets of this area should be considered (particularly in terms of impacts on natural and cultural assets and levels of tranquillity). This should consider information in this Seascape Character Assessment and other available Landscape Character Assessments and Heritage Asset surveys.	as above
TOURISM AND RECREATION	
Work with the White Cliffs Countryside Project (and others) to manage recreational pressures within this highly sensitive seascape and promote sustainable recreation which supports the character and quality of the coastal landscape and seascape.	b & c) marine and coastal biodiversity d) fossil rich exposures e & f) archaeology g) tranquillity and wildness
Kent coast-wide guideline: Support the work of the East Kent Green Infrastructure Partnership to produce a sustainable strategic access and recreation management strategy, initially aimed at protected nature conservation sites, but with the potential to consider other parts of the Strait's coastline too and extending west to include sites in Shepway. Consider extending the remit of this strategy to cover adjacent coastal and inshore waters to further links between terrestrial and marine planning.	as above
COASTAL LAND MANAGEMENT	
Continue to utilise land management schemes such as Environmental Stewardship to sustainably manage (including through grazing) the seascape's valued coastal and intertidal habitats as an integral part of their farming systems. Continue close working between Natural England, landowners and land managers.	c) coastal biodiversity
Work with surrounding landowners and farmers to implement measures to protect watercourses from diffuse pollution, including through the appropriate targeting of agri-environment options (e.g. buffer strips).	c) coastal biodiversity

ENVIRONMENTAL PROCESSES AND CLIMATE CHANGE	
Continue to plan at a strategic level for the impacts of a changing climate on this coastline, recognising that this area will remain defended to protect the railway in the medium term. In the longer term continue to consider opportunities created by an undefended landscape and creation of new geological exposures.	a & d) geodiversity
At Copt Point develop a plan to investigate and record all sites of archaeological interest that will be lost, through the result of coastal processes including opportunities for interpretation off site.	e & f) archaeology

C3: Ports, Harbours and Seafront Development

Map of SCT in context of the Dover Strait



Component Seascape Character Areas

- C3A: Dover Port, Harbour and Historic Defences
- C3B: Folkestone Harbour and Seafront
- C3C: Ramsgate Harbour
- C3D: Ports de Dunkerque et Gravelines et côte urbanisée
- C3E: Port de Boulogne
- C3F: Port de Calais

Summary of valued seascape attributes (sensitivities)

a) Ports and harbours with a long strategic importance for trade and defence.

b) Busy seascapes with large numbers of ship and boat movements, including both passenger and cargo traffic.

c) Frequent historic buildings and structures associated with past defensive and military activities, forming key local landmarks.

Key issues affecting valued seascape attributes

Development and transport

- **Strait-wide issue:** Sulphur emissions from shipping currently causing pollution (smog and deposition).
- **Strait-wide issue:** North Sea Sulphur Control Area legislation will in future limit sulphur emissions from shipping, but conversely will make the shorter Dover-Calais crossing more economically viable than longer shipping routes elsewhere.
- The predicted increase in shipping is likely to result in a linked increase in road freight – resulting in traffic congestion, pollution from road transport, and need for further infrastructure (e.g. lorry parks).
- Concentration of port-related activity and infrastructure at Dover and Calais with linked demands for further development and infrastructure provision.
- Economic decline of the Strait's other ports and harbours, particularly following the loss of ferry services from Folkestone, Ramsgate and Boulogne.
- **Strait-wide issue:** Current and future port developments impacting on the levels of tranquillity and dark night skies of surrounding seascapes.
- **Strait-wide issue:** The regeneration of the area's major ports could lead to pressure for development elsewhere in the coastal landscapes (e.g. housing to support increased economic activity).

Tourism and recreation

- The regeneration of Folkestone harbour, including in support of marine and coastal leisure activities, may see a local resurgence of sea-based tourism and activities.
- Dover and Calais seen by many as entry/exit ports rather than visitor destinations in their own right.
- Dover in particular is not recognised by many passing through as a gateway to an adjacent coastline of significant natural and cultural heritage value.

Coastal land management

- Development pressures relating to port expansion/re-development has the potential to impact on the seascape's natural and cultural assets.
- Historic defences in need of repair and interpretation - illegal and inappropriate activity taking place due to a lack of investment in appropriate management (e.g. Western Heights). The Dover Heritage Strategy (2013) is working to protect the district's heritage assets.

Aquaculture and fishing

- Uncertain economic viability for small fishing fleets operating from the smaller ports and harbours (e.g. Folkestone and Ramsgate).
- Port restrictions around Dover and Calais restricting east-west movements of vessels through the coastal waters.

Environmental processes and climate change

- Sea level rise and changes in coastal process (as a result of climate change) necessitating a policy to 'hold the line' to protect ports and harbours. This can result in a change to port/ harbour frontages – from amenity to defensive, with consequential impacts on character and local vernacular.

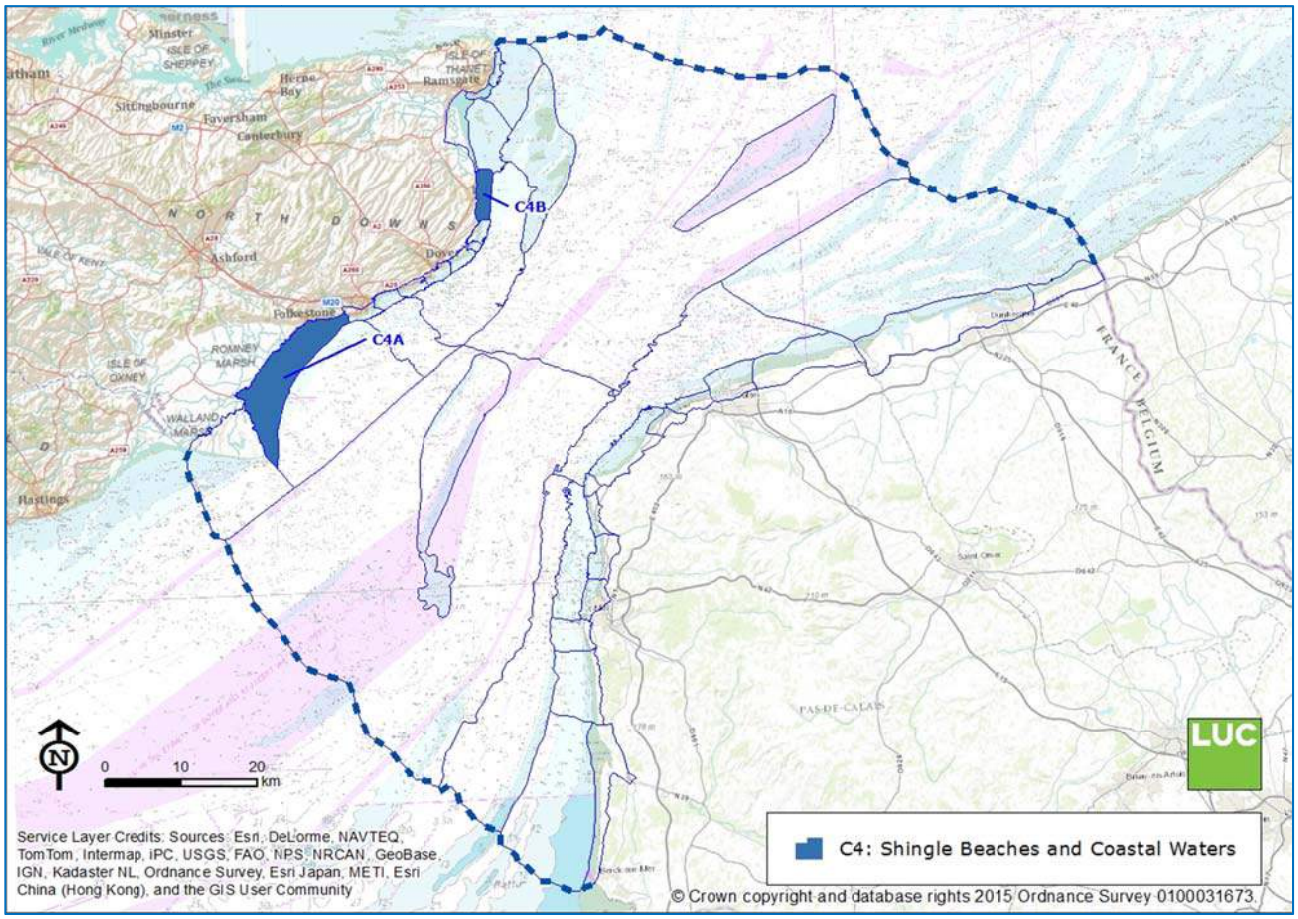
Shaping the future seascape

Guideline	Link to valued attributes
DEVELOPMENT AND TRANSPORT	
Through the Dover Strait Implementation Plan and further cross-Channel collaboration, continue to explore opportunities to encourage greater use of the rail freight network to mitigate the impact of road freight increases. Barriers to increasing rail freight through the Channel Tunnel and establishing a better road/rail balance need to be understood and acted upon.	a) strategic importance b) busy seascapes
Ensure any future development and regeneration proposals contribute positively to the character and enhancement of historic ports and harbours.	c) historic landmarks
Strait-wide guideline: While accommodating transport growth and regeneration is clearly important in the area, the impact of development and regeneration proposals within this SCT on surrounding landscapes and seascapes should be recognised, understood and managed/mitigated. This should reflect the international importance of the Strait's natural and heritage assets, and the character of its landscape and seascape (including both direct and indirect impacts on natural and cultural assets as well as levels of tranquillity). This should consider information in this Seascape Character Assessment and other available Landscape Character Assessments, Heritage Asset surveys and Heritage Strategies (e.g. for Dover District).	a) strategic importance b) busy seascapes c) historic landmarks
TOURISM AND RECREATION	
Work with local, regional and national tourism organisations and businesses (in both England and France) to support initiatives that promote the assets of the port towns and surrounding coastal landscapes and seascapes as visitor destinations in their own right. This should include making visitor information readily available both upon port exit/entry and on the ferries themselves. Promote tourism which supports the character and quality of the coastal landscapes and seascapes. **Strait-wide guideline:** This should form part of a wider marketing effort for the Dover Strait as a whole, drawing on the information in this Seascape Character Assessment to communicate its unique identity.	a) strategic importance c) historic landmarks
Promote and further develop integrated public transport routes from the main entry ports into the town centres (signposting to points of interest) and surrounding coastal landscapes.	a) strategic importance c) historic landmarks
Strait-wide guideline: Continue to explore opportunities and submit bids for international designation status for the Dover Strait as a whole.	a) strategic importance c) historic landmarks
AQUACULTURE AND FISHING	
Strait-wide guideline: Seek to explore opportunities to support and enhance the overall sustainability of traditional small-scale industries, including the long-standing fishing fleets of the smaller ports and harbours (e.g. through the establishment of a Fishing Local Action Group, as proposed in the Kent Downs AONB Action Plan 2014-19).	a) strategic importance

Guideline	Link to valued attributes
Strait-wide guideline: Support the work of the IFCA and Natural England (and their French counterparts), encouraging further partnership working with the fishing industry. Collaborative working and open dialogue to agree how to sustainably manage the marine resource whilst supporting the economic viability of local fishermen should be a priority.	a) strategic importance
COASTAL PROCESSES AND CLIMATE CHANGE	
Work with statutory authorities/agencies to ensure engineered sea defences are sympathetic to the historic fabric of the ports and harbours. Seek opportunities to enhance the character of the built vernacular.	c) historic landmarks

C4: Shingle Beaches and Coastal Waters

Map of the SCT in the context of the Dover Strait



Component Seascape Character Areas

- C4A: Romney Coast, Hythe Flats and Roar Bank
- C4B: Deal Seafront and Deal Bank

Summary of valued seascape attributes (sensitivities)

a) Important coastal and foreshore shingle habitats, including an area of high dunes, are designated by for their biodiversity interest (SSSI, SAC) in C4A supporting rich birdlife and invertebrate assemblages.

b) Muddy seabed at Hythe Bay rMCZ resulting from former inflow of the River Rother provides important habitat contrasting with the chalk reefs forming part of the Dover – Folkestone rMCZ close to Deal.

c) A low-lying, defended coastline with Martello Towers along Hythe Bay, Dymchurch Redoubt, plus Henry VIII's trio of castles at Deal, Sandown and Walmer – providing important historic features.

d) Valued fishing heritage - with small boats drawn up on the shingle beaches providing a charismatic feature. Also important for commercial fishing.

e) Cultural heritage associated with the Cinque Ports; Hythe and New Romney established as original Cinque Ports, Deal being a 'limb' to Sandwich and Lydd a 'limb' of New Romney. Associated strong time depth.

f) Busy, recreational coastline, with historic town of Deal and seaside/holiday development at Dymchurch and New Romney. Sheltered coastal waters are enjoyed for beach angling, kayaking, rowing, wind/kite surfing and sailing.

g) Large scale open seascape with wide vistas along the coastline and out across the Strait, and views inland through gaps in a largely built up sea front (historic town at Deal and ad hoc linear development along the Romney coastline).

Key issues affecting valued seascape attributes

Development and transport

- Intensification of development along the coastline, filling in of gaps resulting in a more urban seascape and potential greater pressures on fragile habitats and pollution of coastal waters.

Tourism and recreation

- Increased recreational pressure and disturbance of sensitive biodiversity/habitats including shingle beaches and dunes - the need to manage recreational activities in sympathy with the natural environment (e.g. considering associated impacts on the fragile coastal and inshore environments).

Aquaculture and fishing

- Uncertain economic viability for small fishing fleets, which are much valued as part of the community and local economy.

Environmental processes and climate change

- Climate change resulting in extreme weather events - low lying land at risk of flooding as a result of sea level rise plus damage to beach front (even with sea defences recently updated to 1 in 300 year risk (C4B).
- On-going demand for beach replenishment, and increased pressure for hard sea defences, impacting on intertidal habitats through smothering and coastal squeeze and changing the natural character of the coastline.

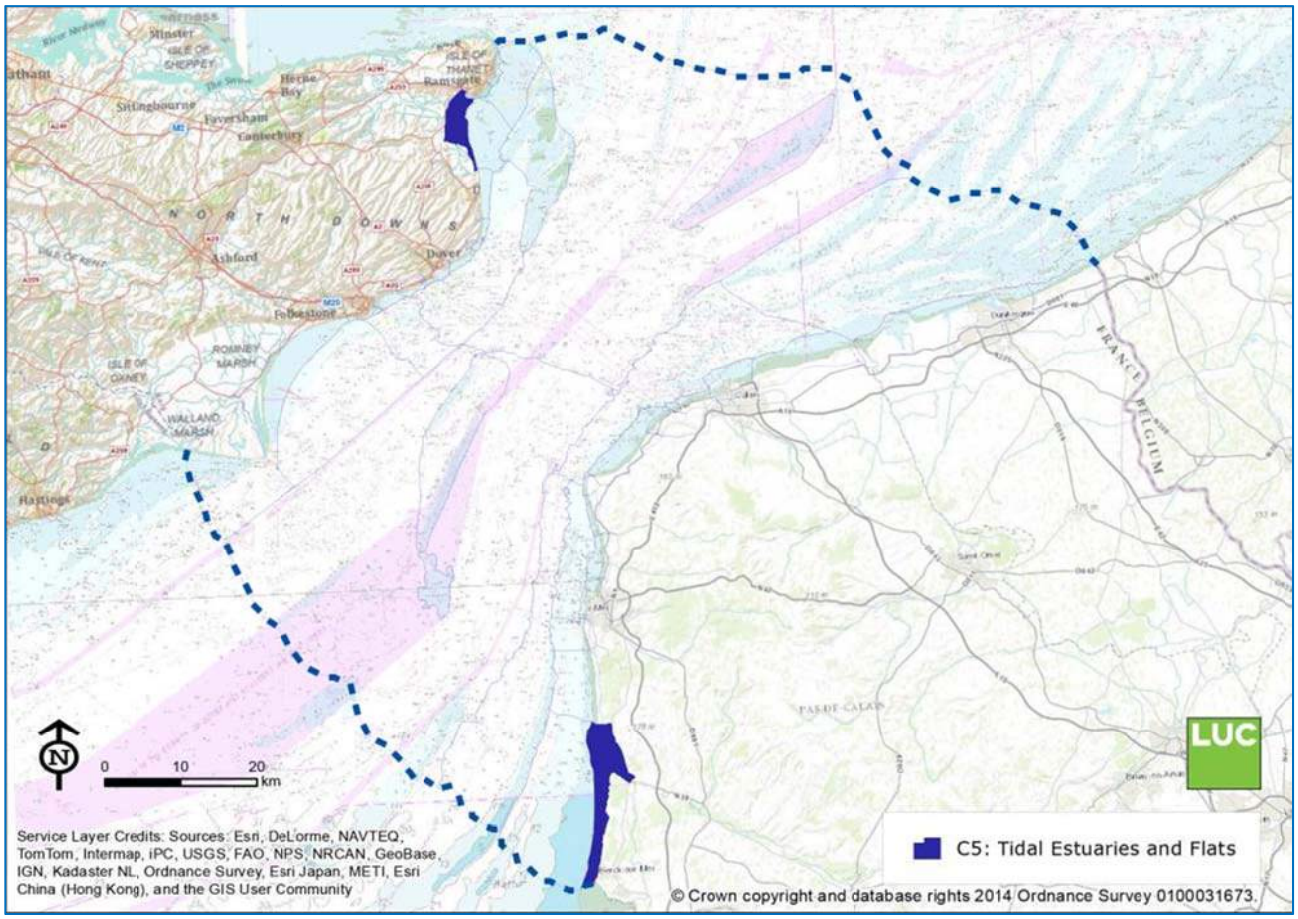
Shaping the future seascape

Guideline	Link to valued asset(s)
DEVELOPMENT AND TRANSPORT	
Monitor development proposals to ensure they respect landscape and seascape character. Refer to this seascape character assessment and relevant landscape character assessments. The remaining open, undeveloped, gaps between development connecting the rural hinterland and the sea are important and should be conserved.	g) Landscape and seascape character
TOURISM AND RECREATION	
Work with the Countryside Projects (Romney Marsh and White Cliffs) to manage recreational pressures within these highly sensitive seascapes and promote sustainable recreation based around their unique natural cultural assets in a way which supports the character and quality of the coastal landscape and seascape.	a) biodiversity e) cultural & maritime heritage
Kent coast-wide guideline: Support the work of the East Kent Green Infrastructure Partnership (and others) to produce a sustainable strategic access and recreation management strategy, initially aimed at protected nature conservation sites, but with the potential to consider other parts of the Strait's coastline too and extending west to include sites in Shepway. Consider extending the remit of this strategy to cover adjacent coastal and inshore waters to further links between terrestrial and marine planning.	a) biodiversity f) recreation
Strait-wide guideline: Continue to explore opportunities and submit bids for international designation status for the Dover Strait as a whole.	All
MARINE RESOURCE MANAGEMENT	
Continue to undertake further research into the marine environment (Hythe Bay rMCZ, Dover and Folkestone rMCZ) and future management needs to conserve and enhance marine biodiversity.	b) marine biodiversity
Monitor impact of recreation activities within the coastal water on biodiversity, e.g. effect of kite surfing and sea birds.	b) marine biodiversity f) recreation
AQUACULTURE AND FISHING	
Seek to explore opportunities to support traditional small-scale industries, including the long-standing fishing fleets of the smaller ports and harbours (e.g. through the establishment of a Fishing Local Action Group, as proposed in the Kent Downs AONB Action Plan 2014-19).	d) fishing
Support the work of the IFCA and Natural England (and their French counterparts), encouraging further partnership working with the fishing industry to agree how best to sustainably manage the marine resource.	b) marine biodiversity d) fishing

ENVIRONMENTAL PROCESSES AND CLIMATE CHANGE	
Work with statutory authorities/agencies to understand and monitor the effects of coastal processes and sea level rise on this area, recognising that the objective here is to hold the line and prevent flooding of this low lying, developed coastline. To this extent sea defences should be designed in sympathy with the character of the coastal environment, reduce impact on valued intertidal habitats and coastal squeeze, and enhance the character of the townscape and natural landscape.	a & b) marine and terrestrial biodiversity c & e) archaeology and cultural heritage g) natural and townscape heritage

C5: Tidal Estuaries and Flats

Map of SCT in context of the Dover Strait



Component Seascape Character Areas

C5A: Sandwich and Pegwell Bays

C5B: Baie de Canche et littoral dunaire d'Opale

Summary of valued seascape attributes (sensitivities)

a) A complex mosaic of internationally important habitats, including intertidal mudflats, salt marsh, shingle beach and dune pasture.

b) Internationally important populations of migratory and over-wintering waders and wildfowl, as well as seal colonies.

c) Varied seascape valued for a range of land, coast and water-based recreational activities.

d) Strong historic associations with early settlers, trade and defence.

e) A dynamic and ever-changing seascape, with a strong sense of naturalness.

Key issues affecting valued seascape attributes

Tourism and recreation

- For both SCAs within this type, tourism and recreational pressures on land surrounding the estuaries is a key issue. For the Canche, the impacts of hunting are an additional threat to the ecosystem.
- Growth in coastal recreation and tourism affecting levels of tranquillity and quiet enjoyment (e.g. jet skis/ fast motor craft).
- Research undertaken by Kent Wildlife Trust (2012) provides strong evidence to indicate that recreational and commercial activities including dog walking, walking without dogs, bait digging and kite surfing are having a detrimental impact on bird populations in Pegwell Bay.
- Future growth plans and housing developments within Dover and Thanet Districts may lead to further pressure on valued recreational green spaces along the coast such as Pegwell Bay.
- The English Coastal Path is in the process of being developed bringing positive benefits for public access, but with increased potential for further wildlife disturbance within Pegwell Bay.

Coastal land management

- Some scrub encroachment and invasive species affecting habitat condition and characteristic features (e.g. drainage ditches). Elsewhere, appropriate grazing levels by livestock and rabbits is maintaining coastal habitats in favourable condition.
- Diffuse pollution from surrounding agricultural land affecting some water courses and drainage ditches feeding into the estuaries and surrounding bays. Eutrophication has led to the growth of algae in some watercourses in Pegwell Bay.

Environmental processes and climate change

- A dynamic coastal seascape, future sea level rise and an increased strength and frequency of storm surges due to climate change will further shape this coastline.
- The current policy is for minimal intervention (maintaining existing flood defences where present) and to continue to utilise the natural protection from the sea provided by sand dunes and intertidal habitats. The increased frequency and strength of storm surges might, however, require further intervention.
- **Strait-wide issue:** Climate change, including warmer, wetter winters and more frequent summer droughts, is likely to lead to increased levels of species migration, as well as an increased prevalence of pests and diseases affecting characteristic semi-natural habitats.

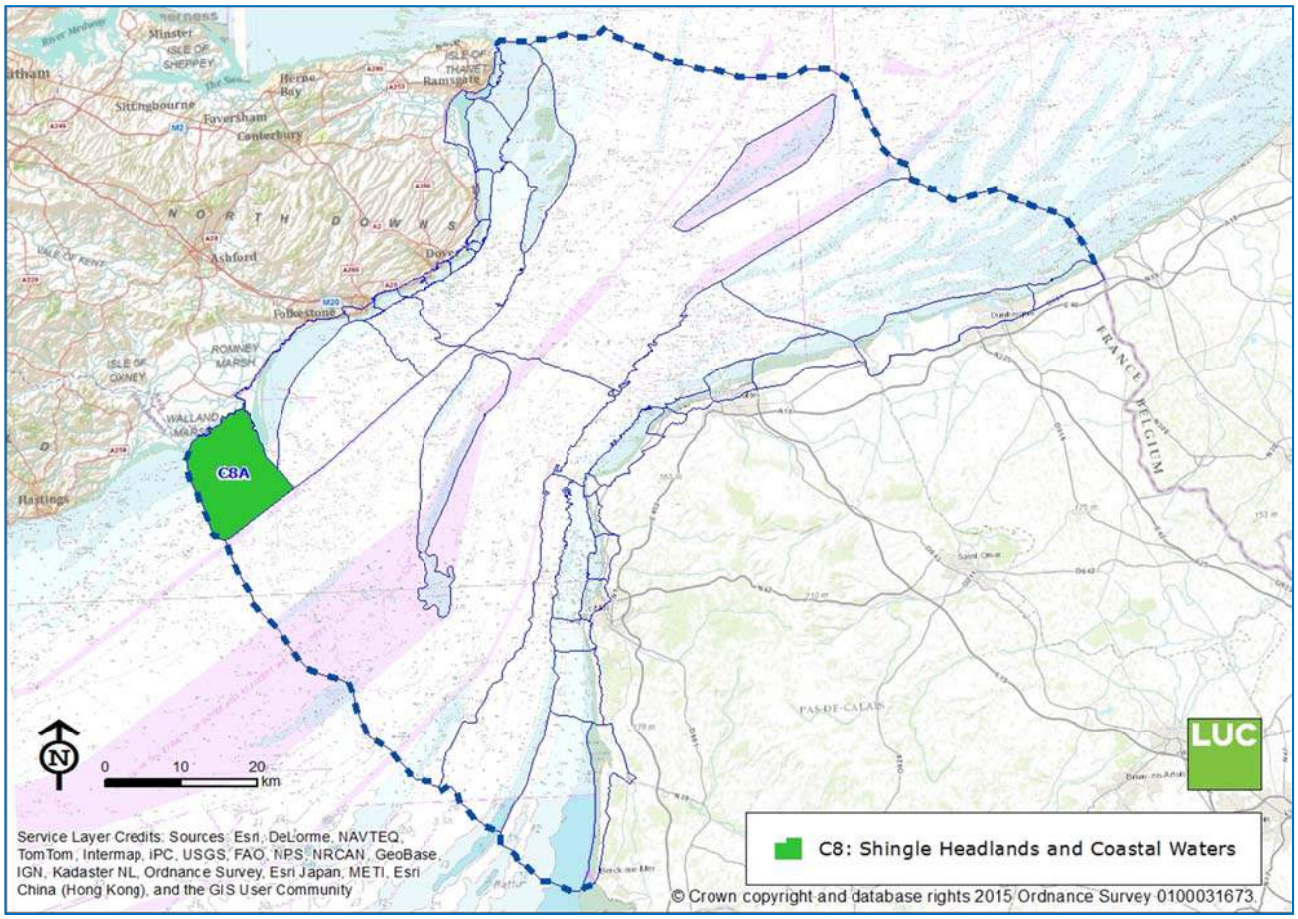
Shaping the future seascape

Guideline	Link to valued attributes
DEVELOPMENT AND TRANSPORT	
Ensure any future development and regeneration proposals contribute positively to the character and enhancement of the SCT's historic built vernacular and naturalistic setting, with wide, uninterrupted views into the Strait.	d) historic associations e) dynamic and naturalistic
Strait-wide guideline: The impact of development and regeneration proposals within this SCT on adjacent landscapes and seascapes should be considered (particularly in terms of impacts on natural and cultural assets and levels of tranquillity). This should consider information in this Seascape Character Assessment and other available Landscape Character Assessments and Heritage Asset surveys.	a) wetland habitats b) wildlife d) historic associations e) dynamic and naturalistic
TOURISM AND RECREATION	
Work with partners including the East Kent Green Infrastructure Partnership to consider the need, scale and funding, in consultation with Natural England, of further ecological study to better understand the links between recreation and wildlife disturbance.	b) wildlife c) recreational activities
Strait-wide guideline: Support the work of the East Kent Green Infrastructure Partnership to produce a sustainable strategic access and recreation management strategy, initially aimed at protected nature conservation sites, but with the potential to consider other parts of the Strait's coastline too. Consider extending the remit of this strategy to cover adjacent coastal and inshore waters to further links between terrestrial and marine planning. Work with French partners to explore an equivalent approach in Pas-de-Calais.	a) wetland habitats b) wildlife c) recreational activities
Ensure any new development or infrastructure relating to the area's recreational uses is sympathetically integrated into its landscape and seascape setting, particularly where located in open coastal locations.	c) recreational activities e) dynamic and naturalistic
Support the implementation of mitigation measures associated with new developments, including addressing further recreational pressures on valued coastal spaces, heritage assets and access routes (including building on the proposals set out in the East Kent Green Infrastructure Partnership's *Approach to Green Infrastructure and Recreation* (April 2014) and the Kent Downs AONB Management Plan 2014-19).	a) wetland habitats b) wildlife c) recreational activities d) historic associations e) dynamic and naturalistic
Work with local, regional and national tourism organisations and businesses (in both England and France) to support initiatives that promote the sustainable use of assets within this SCT. Promote tourism which supports the character	a) wetland habitats b) wildlife

Guideline	Link to valued attributes
and quality of the coastal landscapes and seascapes. **Strait-wide guideline:** This should form part of a wider marketing effort for the Dover Strait as a whole, drawing on the information in this Seascape Character Assessment to communicate its unique identity and importance.	c) recreational activities d) historic associations e) dynamic and naturalistic
Strait-wide guideline: Continue to explore the costs, benefits and opportunities and submit bids for international designation status for the Dover Strait as a whole.	a) wetland habitats b) wildlife c) recreational activities d) historic associations e) dynamic and naturalistic
COASTAL LAND MANAGEMENT	
Continue to utilise land management schemes such as Environmental Stewardship to support local farmers to sustainably manage (including through grazing) the seascape's valued coastal and intertidal habitats as an integral part of their farming systems. Continue close working between Natural England, landowners and land managers.	a) wetland habitats b) wildlife
Work with surrounding landowners and farmers to implement measures to protect watercourses from diffuse pollution, including through the appropriate targeting of agri-environment options (e.g. buffer strips).	a) wetland habitats b) wildlife
ENVIRONMENTAL PROCESSES AND CLIMATE CHANGE	
Plan at a strategic level for the impacts of a changing climate on the coastline, allowing natural processes to take place whilst considering how habitats and access provisions can be expanded or relocated to account for coastal squeeze. Consider species migration and responses to an increased prevalence of pests and diseases.	a) wetland habitats b) wildlife d) historic associations e) dynamic and naturalistic
Work with statutory authorities/agencies to understand and monitor the effects of coastal processes and sea level rise on the estuaries and surrounding coastline – including monitoring the frequency and intensity of storm surges.	a) wetland habitats b) wildlife d) historic associations e) dynamic and naturalistic
Work with statutory authorities/agencies to ensure any engineered sea defences are sympathetic to the naturalistic qualities of the seascape and presence of internationally important wildlife assets. Seek opportunities to enhance the character of the local built vernacular.	a) wetland habitats b) wildlife d) historic associations e) dynamic and naturalistic

C8: Shingle Headlands and Coastal Waters

Map of the SCT in the context of the Dover Strait



Component Seascape Character Areas

This is a unique SCT and contains just one Seascape Character Area:

C8A: Dungeness, Denge Marsh and Eastern Rye Bay

Summary of valued seascape attributes (sensitivities)

a) Unique shingle headland of Dungeness – largest shingle cuspate foreland in Great Britain supporting internationally important wildlife habitats (NNR, SAC, SPA, SSSI)

b) Extensive area of wetlands and marshland at Denge Marsh

c) Beach fishing fleet at Dungeness – forming distinctive feature of the coastline.

d) Distinctive Denge Marsh sound mirrors – one of best known examples of the early warning concrete acoustic mirrors constructed in the 1920s and 1930's.

e) 'Otherworldly' wild remote qualities of Dungeness - cultural and artistic associations.

f) A remote, largely inaccessible coastline and coastline as a result of Lydd Ranges (MOD), with active firing ranges extending offshore creating distinct 'empty' coast and seascape rare in SE England.

Key issues affecting valued seascape attributes

Development and transport

- Changes in coastal management and development to the west resulting in a reduction in sediment supply.
- Maintaining, rare wild remote character of this unique area in the face in incremental small scale changes and large scale energy development.
- Large scale gravel extraction

Environmental processes and climate change

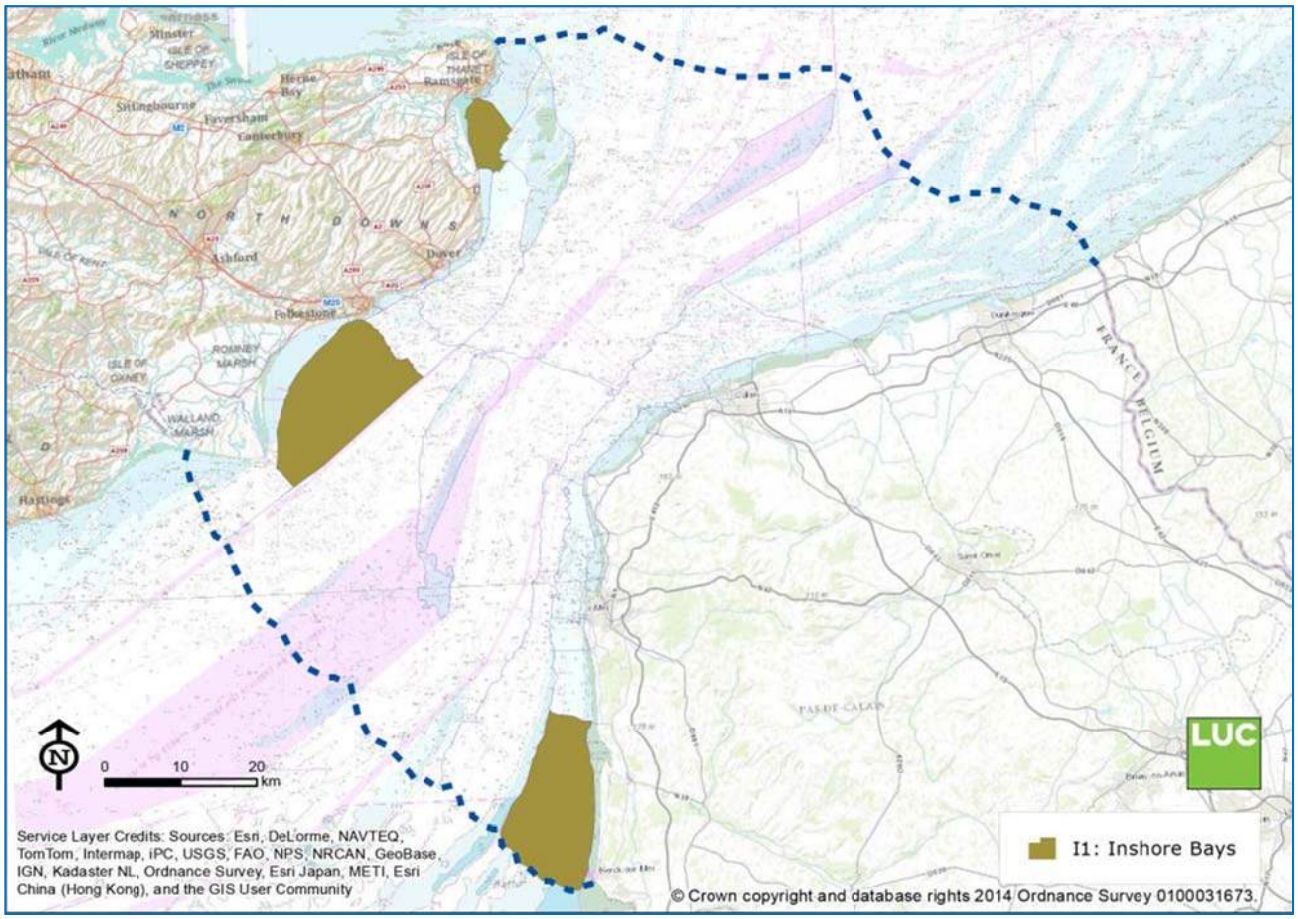
- Reduction in sediment supply and long term erosion of this coastline – overall policy of managed realignment plus need to 'hold the line' to protect MOD interests at Lydd.
- Sea-level rise and challenge of managing flooding and beach replenishment to protect the SAC designated habitats and viability of MOD firing range.

Shaping the future seascape

Guideline	Link to valued asset(s)
DEVELOPMENT AND TRANSPORT	
Continue to monitor planning applications and development proposals and overall effect on rare remote qualities of Dungeness and Denge Marsh. Refer to this seascape character assessment and relevant landscape character assessments. The informal, 'otherworldly' character is important and should be conserved.	e) distinctive character f) sense of remoteness
TOURISM AND RECREATION	
Continue to promote small scale low key tourism e.g. through the Romney Marsh Countryside Project in relation to features of cultural, historical and natural interest. **Strait-wide guideline:** This should form part of a wider marketing effort for the Dover Strait as a whole, drawing on the information in this Seascape Character Assessment to communicate its unique identity.	a) & b) biodiversity d) cultural heritage
Strait-wide guideline: Continue to explore opportunities and submit bids for international designation status for the Dover Strait as a whole.	All
AQUACULTURE AND FISHING	
Seek to explore opportunities to support traditional small-scale industries, including the long-standing beach fishing fleets of Dungeness (e.g. through the establishment of a Fishing Local Action Group, as proposed in the Kent Downs AONB Action Plan 2014-19).	c) fishing
Support the work of the IFCA and Natural England, encouraging further partnership working with the fishing industry to agree how best to sustainably manage the marine resource.	c) fishing
ENVIRONMENTAL PROCESSES AND CLIMATE CHANGE	
Work with statutory authorities/agencies to continue to understand and monitor the effects of coastal processes and sea level rise on this area.	All

I1: Inshore Bays

Map of the SCT in the context of the Dover Strait



Component Seascape Character Areas

- I1A:Sandwich and Pegwell Bays
- I1B: Hythe Bay
- I1C: Baie de Canche et littoral dunaire d'Opale

Summary of valued seascape attributes (sensitivities)

h) Inshore traffic zone plus valued area for recreational sailing and other water based activities.

i) Important fisheries sustaining small Kent and larger French fishing fleets including shellfish.

j) Relatively quiet areas of inshore sea adjacent to main offshore shipping lanes.

k) High biodiversity value recognised through marine designations – marine habitats of international importance.

Key issues affecting valued seascape attributes

Development and transport

- Potential for an increase in inshore traffic, including as a result of the regeneration of nearby ports and harbours (in SCT C3).

Tourism and recreation

- The need to manage recreational activities in sympathy with the natural environment (e.g. considering associated impacts on the nearby fragile coastal and inshore environments).

Coastal land management (in adjacent areas)

- Intensification of farming practices and urban development, plus disposal of industrial effluent leading to increased pollution of rivers and eutrophication of estuaries. This polluted water then feeds into the enclosed seas of this SCT (relevant to SCAs I1A and I1C).

Aquaculture and fishing and marine resource management

- Uncertain economic viability for fishing fleets operating from the smaller ports and harbours nearby, which are much valued as part of the community and local economy.
- Uncertainty and misunderstandings about the potential impact of Marine Conservation Zone designation on fishing activity (at the time of writing it is not known if the recommended site at Hythe Bay will be put forward for designation in the next tranche).
- Lack of understanding of the undersea environment makes conveying a conservation and enhancement message to different audiences difficult.

Environmental processes and climate change

- Low lying land at risk of flooding as a result of sea level rise – resulting in a change in extent of inshore bays.
- Coastal processes resulting from changes to natural configuration e.g. presence of offshore sandbanks which currently act as a natural break to storm surges.
- Increased storminess and extreme weather events affecting inshore waters potentially resulting in tidal surges along adjacent estuaries (relevant to SCAs I1A and I1C).

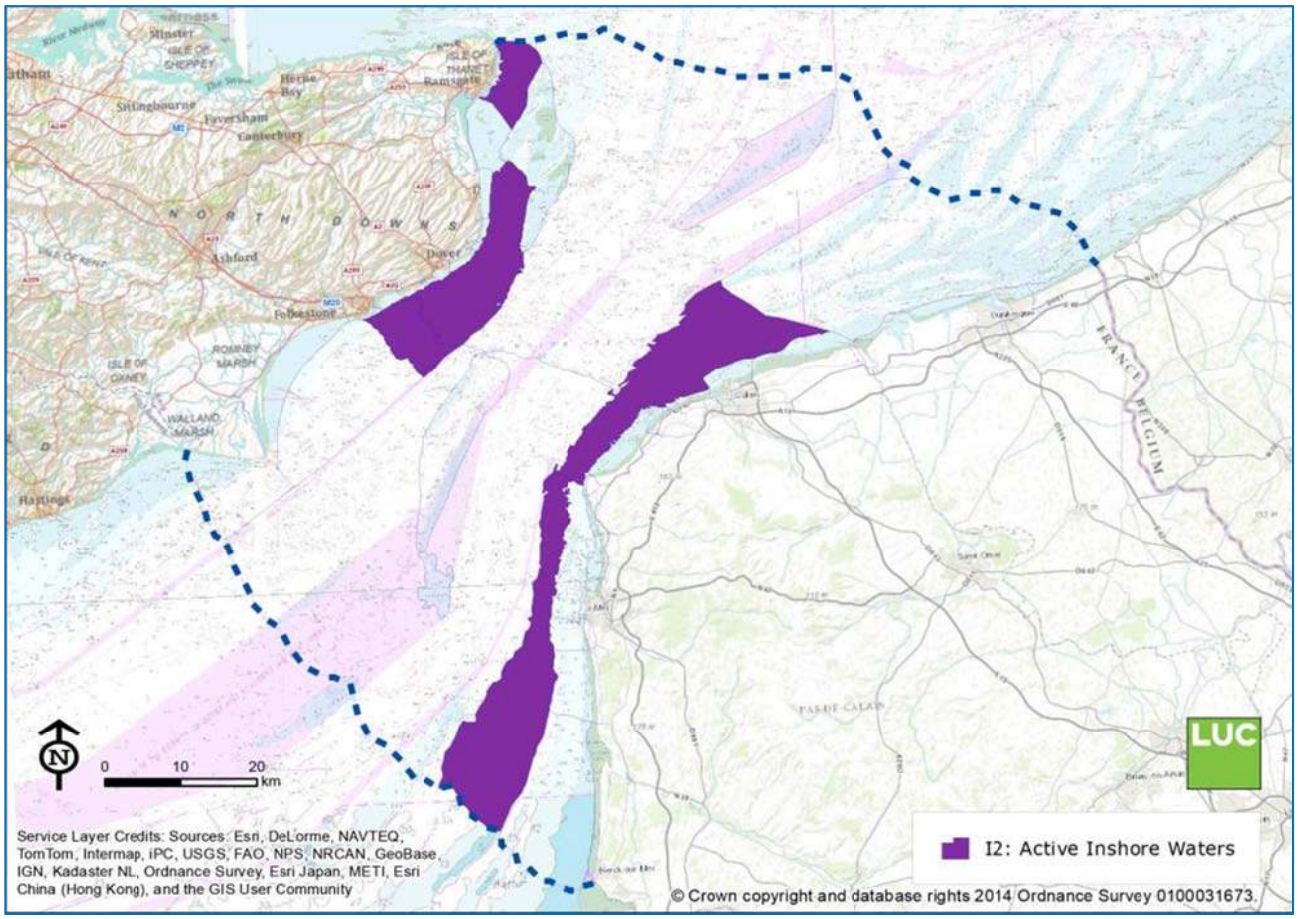
Shaping the future seascape

Guideline	Link to valued attributes
DEVELOPMENT AND TRANSPORT	
Continue to monitor and manage water quality in the inshore bays, including control of discharges within these areas.	d) marine biodiversity
Monitor any linked increases in marine traffic (both commercial and recreational) in this SCT as a result of the re-development and regeneration of ports and harbours in SCT C3.	a) inshore traffic and recreation b) fisheries
TOURISM AND RECREATION	
This SCT includes popular areas for water-based recreational activities. There is an opportunity to collate information from different providers e.g. seal trips, dive trips, fishing charters etc. This will allow for a more accurate picture of the uses of the area to be gained, allowing for their monitoring and appropriate management actions.	c) quiet waters d) marine biodiversity
Work with local, regional and national tourism organisations (in both Kent and Pas-de-Calais) to continue initiatives that promote the natural and cultural assets and identity of the distinctive inshore bays and their coastal hinterland. **Strait-wide guideline:** This should form part of a wider marketing effort for the Dover Strait as a whole, drawing on the information in this Seascape Character Assessment to communicate its unique identity.	c) quiet waters d) marine biodiversity
Strait-wide guideline: Continue to explore the costs, benefits and opportunities and submit bids for international designation status for the Dover Strait as a whole.	c) quiet waters d) marine biodiversity
AQUACULTURE AND FISHING & MARINE RESOURCE MANAGEMENT	
Explore opportunities to undertake further research into the characteristics and management of the marine environment and seabed, furthering an understanding of important aspects to conserve, enhance and communicate.	b) fisheries d) marine biodiversity
Strait-wide guideline: Seek to explore opportunities to support and enhance the overall sustainability of traditional small-scale industries, including the long-standing fishing fleets of the smaller ports and harbours (e.g. through the establishment of a Fishing Local Action Group, as proposed in the Kent Downs AONB Action Plan 2014-19).	b) fisheries
Strait-wide guideline: Support the work of the IFCA and Natural England (and their French counterparts), encouraging further partnership working with the fishing industry. Collaborative working and open dialogue to agree how to sustainably manage the marine resource whilst supporting the economic viability of local fishermen should be a priority.	b) fisheries

Guideline	Link to valued attributes
ENVIRONMENTAL PROCESSES AND CLIMATE CHANGE	
Work with statutory authorities/agencies to understand and monitor the effects of coastal processes and sea level rise on the enclosed waters of the inshore bays and effects on their associated coastal areas and estuaries e.g. storm surges.	a) inshore traffic and recreation b) fisheries c) quiet waters d) marine biodiversity

I2: Active Inshore Waters

Map of the SCT in the context of the Dover Strait



Component Seascape Character Areas

- I2A: Broadstairs Knolls and Ramsgate Road
- I2B: Inshore Dover Strait, The Downs and Trinity Bay
- I2C: Folkestone Pomerania
- I2D: Zone d'approche de Calais
- I2E: Bassure de Baas

Summary of valued seascape attributes (sensitivities)

a) Diverse sea beds and marine conditions which create a range of rare and valuable ecosystems, some of which are nationally or internationally designated.

b) Important fisheries sustaining small Kent and larger French fishing fleets including shellfish.

c) Frequent wrecks from various periods of history found on the seabed, attracting recreational divers. These waters have been of strategic importance throughout history.

d) Busy seascapes for a range of commercial and recreational activities.

Key issues affecting valued seascape attributes

Development and transport

- Intensification of farming practices and urban development along the coast, plus disposal of industrial effluent in watercourses, leading to polluted water flowing into parts of this SCT.
- **Strait-wide issue:** Sulphur emissions from shipping currently causing pollution (smog and deposition).
- **Strait-wide issue:** North Sea Sulphur Control Area legislation will in future limit sulphur emissions from shipping, but conversely will make the shorter Dover-Calais crossing more economically viable than longer shipping routes elsewhere. This may also lead to parts of this SCT witnessing an increase in marine traffic.

Tourism and recreation

- Popularity of the SCT for a range of water-based recreational activities, including diving, fishing parties and motor craft.
- Illicit wreck diving on the fragile chalk reefs causing damage to the marine ecosystem, as well as impacts on the maritime archaeology associated with the wrecks.
- The regeneration of Folkestone harbour, including in support of marine and coastal leisure activities, may see a local resurgence of sea-based tourism, including cruising and sailing. This could further impact on levels of tranquillity and cause potential conflicts with other marine uses (e.g. fishing).

Marine resource management

- Impacts of fishing activity (particularly benthic trawling) on fragile marine habitats, contributing to sites being put forward and designated as marine protected areas.
- The SCT includes internationally designated marine sites including the Thanet Coast and Cap Gris-Nez SACs, as well as the Parc Naturel Marin Estuaires picards Mer d'Opale which include restrictions on certain types of fishing activity (particularly trawling).
- Lack of understanding of the undersea environment makes conveying a conservation and enhancement message to different audiences difficult.

Aquaculture and fishing

- Uncertainty and misunderstandings about the long-term impacts of Marine Conservation Zone designation on fishing activity – Folkestone Pomerania and Thanet Coast MCZs were both designated in 2013.
- Uncertain economic viability for small fishing fleets operating from the smaller ports and harbours and fishing in these waters (e.g. Folkestone, Deal, Ramsgate, Wissant and Wimereux).
- Port restrictions around Dover and Calais restricting east-west movements of vessels through the waters of this SCT lying closest to the coast.

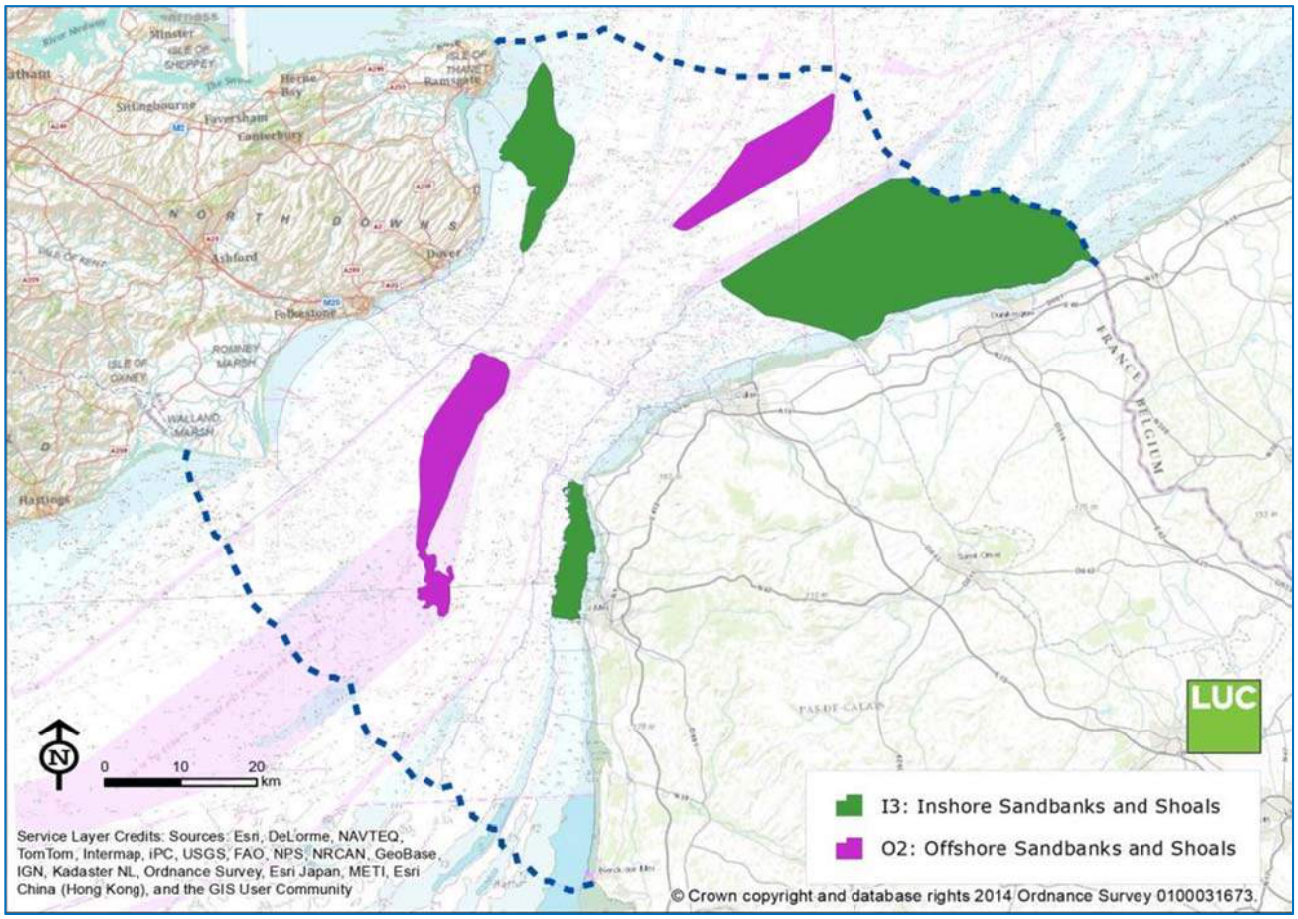
Shaping the future seascape

Guideline	Link to valued attributes
DEVELOPMENT AND TRANSPORT	
Continue to monitor and manage water quality in this SCT, including controlling discharges from the coast flowing into the seas of this area.	a) marine biodiversity b) fisheries d) commercial & recreational importance
Monitor any linked increases in marine traffic (both commercial and recreational) in this SCT as a result of the re-development and regeneration of ports and harbours in SCT C3.	a) marine biodiversity b) fisheries c) maritime heritage
TOURISM AND RECREATION	
This SCT includes popular areas for water-based recreational activities. There is an opportunity to collate information from different providers e.g. seal trips, dive trips, fishing charters etc. This will allow for a more accurate picture of the uses of the area to be gained, allowing for their monitoring and appropriate management actions.	a) marine biodiversity c) maritime heritage
Work with local, regional and national tourism organisations and businesses (in both England and France) to support initiatives that promote the sustainable use of assets within this SCT to people arriving by sea. Include information on the underwater environment, including particularly the area's chalk reefs and the ancient creation of the Strait. Such visitor information should be readily available both upon port exit/ entry and on the ferries themselves. **Strait-wide guideline:** This should form part of a wider marketing effort for the Dover Strait as a whole, drawing on the information in this Seascape Character Assessment to communicate its unique identity and importance.	a) marine biodiversity c) maritime heritage
Strait-wide guideline: Continue to explore opportunities and submit bids for international designation status for the Dover Strait as a whole.	a) marine biodiversity c) maritime heritage
AQUACULTURE AND FISHING & MARINE RESOURCE MANAGEMENT	
Strait-wide guideline: Seek to explore opportunities to support and enhance the overall sustainability of traditional small-scale industries, including the long-standing fishing fleets of the smaller ports and harbours (e.g. through the establishment of a Fishing Local Action Group, as proposed in the Kent Downs AONB Action Plan 2014-19).	b) fisheries
Strait-wide guideline: Support the work of the IFCA and Natural England (and their French counterparts), encouraging further partnership working with the fishing industry. Collaborative working and open dialogue to agree how to sustainably manage the marine resource whilst supporting the economic viability of local fishermen should be a priority.	b) fisheries
Explore opportunities to undertake further research into the characteristics and	a) marine biodiversity

Guideline	Link to valued attributes
management of the marine environment and seabed, furthering an understanding of important aspects to conserve, enhance and communicate.	c) maritime heritage

I3 / O2: Inshore / Offshore Sandbanks and Shoals

Map of SCT in context of the Dover Strait



Component Seascape Character Areas

- I3A: Goodwin Sands, Gull Stream and North Sand Head
- I3B: Bancs des Flandres
- I3C: Rade d'Ambleteuse
- O2A: The Varne-Le Colbart Ridge and Les Ridens
- O2B: Sandette Bank

Summary of valued seascape attributes (sensitivities)

a) Shoals of sand, gravel, and shell which are constantly shifting due to the action of tidal streams.

b) Rich waters and sediments which provide important feeding and spawning grounds for a range benthic and pelagic species. These in turn support commercial and recreational fishing activity.

c) Numerous historic shipwrecks found across the sandbanks and shoals, some of which are nationally protected and are popular dive sites.

d) Adverse sea conditions, poor weather and strong winds create a sense of danger and wildness.

Key issues affecting valued seascape attributes

Development and transport

- Dredging of shipping channels to maintain transport routes through the inshore sand banks (particularly I3B: Bancs des Flandres which is located near to Dunkirk port) – with associated impacts on sediment stability and ecological integrity.
- All of the SCT has areas within busy shipping routes – which associated effects on perceptions of remoteness as well as direct impacts on the features themselves.
- Potential demand for offshore renewables, capitalising on the natural energy provided by the SCT's strong wind conditions and tidal streams.
- **Strait-wide issue:** Sulphur emissions from shipping currently causing pollution (smog and deposition).

Marine resource management and aquaculture & fishing

- Inshore sandbanks with areas accessible to coastal populations and ports (SCAs I3A and I3B) under a range of pressures, both recreational and commercial (e.g. fishing, diving, marine transport, sub-marine infrastructure).
- The SCT includes internationally designated marine sites such as the Bancs des Flandres SAC and Parc Naturel Marin Estuaires picards Mer d'Opale– with measures in place to try to manage pressures.
- Uncertainty over the status of Marine Conservation Zone designation for Goodwin Sands (at the time of writing it is not known if the recommended site will be put forward for designation in the next tranche).
- Lack of understanding of the undersea environment makes conveying a conservation and enhancement message to different audiences difficult.
- Fragile economic viability for smaller fishing businesses and individual fishermen who use these waters – who are themselves much valued as part of the communities and local economy on both sides of the Strait.

Environmental processes and climate change

- Increased frequency of storm surges and sea level rise as a result of climate change, accelerating the shifting nature of the sandbanks.
- This in turn could present further hazards to navigation (due to sandbanks changing position), further demands for dredging, and impact upon the shelter afforded by the sandbanks to adjoining SCAs – including the historically significant area of safe anchorage provided by The Downs (SCA I2B) .

Shaping the future seascape

Guideline	Link to valued attributes
DEVELOPMENT AND TRANSPORT	
Any development proposals within this SCT should respond to and respect the dynamic nature of the seascape and its valued natural and cultural heritage assets, using the information set out in this Seascape Character Assessment (including the SCA descriptions in Chapter 5).	a) shifting shoals b) marine biodiversity c) maritime heritage d) wildness
The impact of development and regeneration proposals within adjacent SCTs (particularly C3) on the key characteristics and qualities of this SCT should be considered. This will include linked demands for increased marine transport passing through the seascape or new sub-marine infrastructure. This should consider information in this Seascape Character Assessment and other available Landscape Character Assessments and Heritage Asset surveys.	a) shifting shoals b) marine biodiversity c) maritime heritage d) wildness
TOURISM AND RECREATION	
The Inshore SCTs include popular areas for marine recreation, including sea angling, fishing and wildlife watching. There is an opportunity to collate information from different providers e.g. seal trips, dive trips, fishing charters etc. This will allow for a more accurate picture of the uses of the area to be gained, allowing for their monitoring and appropriate management actions.	b) marine biodiversity c) maritime heritage & wreck diving
Work with local, regional and national tourism organisations and businesses (in both England and France) to support initiatives that promote the sustainable use of assets within this SCT to people arriving by sea. Include information on the underwater environment, including particularly the ancient creation of the Strait and the evidence left behind today. Such visitor information should be readily available both upon port exit/ entry and on the ferries themselves. **Strait-wide guideline:** This should form part of a wider marketing effort for the Dover Strait as a whole, drawing on the information in this Seascape Character Assessment to communicate its unique identity and importance.	a) shifting shoals b) marine biodiversity c) maritime heritage & wreck diving
Strait-wide guideline: Continue to explore opportunities and submit bids for international designation status for the Dover Strait as a whole.	a) shifting shoals b) marine biodiversity c) maritime heritage d) wildness
MARINE RESOURCE MANAGEMENT & AQUACULTURE AND FISHING	
Explore opportunities to undertake further research into the characteristics and management of the marine environment and seabed, furthering an understanding of important aspects to conserve, enhance and communicate.	a) shifting shoals b) marine biodiversity c) maritime heritage d) wildness

Guideline	Link to valued attributes
Strait-wide guideline: Seek to explore opportunities to support and enhance the overall sustainability of traditional small-scale industries, including the long-standing fishing fleets of the smaller ports and harbours (e.g. through the establishment of a Fishing Local Action Group, as proposed in the Kent Downs AONB Action Plan 2014-19).	b) marine biodiversity
Strait-wide guideline: Support the work of the IFCA and Natural England (and their French counterparts), encouraging further partnership working with the fishing industry. Collaborative working and open dialogue to agree how to sustainably manage the marine resource whilst supporting the economic viability of local fishermen should be a priority.	b) marine biodiversity
ENVIRONMENTAL PROCESSES AND CLIMATE CHANGE	
Work with statutory authorities/agencies to monitor the impacts of climate change, particularly an increase in the frequency and intensity of storm surges, on the dynamism of the sandbanks.	a) shifting shoals d) wildness

4
Applications of the Seascape Character Assessment

4 Applications of the Seascape Character Assessment

A tool to support integrated terrestrial and marine planning

4.1 Seascape character assessments principally apply to coastal and marine areas seaward of the low water mark, while landscape character assessments principally apply to areas lying to the landward side of the high water mark. However, this seascape character assessment does consider coastal areas landward of the high water mark, with the aim of enabling an integrated understanding of character across the 'coastal' and 'marine' zones. It is the hope of Kent County Council that coastal districts will adopt this study as a material consideration in planning decisions and as part of their policy framework, with the potential for it being adopted as a supplementary planning document. There is also the opportunity for coastal parish councils to utilise this assessment for their own plan making. The overall aim is for this seascape character assessment to be viewed and used in the same way as landscape character assessments are, and have been for many years.

4.2 In this way, along with marine planning, the natural and cultural character of an area can become a valid consideration in planning and decision making, in order that the seascapes, valued by the public and important for quality of life and tourism, are maintained into the future. As with Landscape Character Assessments, the seascapes approach also works on the basis that all seascapes matter not just the areas with environmental or other designations.

4.3 In terms of its role in marine planning, this is the first time that a local Seascape Character Assessment has been able to ensure full compatibility with strategic-scale marine planning work undertaken by the Marine Management Organisation (MMO). Careful consideration has been taken to ensure that the classification of SCTs and SCAs for the Dover Strait sits within the framework of the regional-scale Marine Character Areas (MCAs) developed for the South Marine Plan Areas[7]. These are shown at **Figure 4.1**, with an illustration of the relationships between the two studies provided at **Figure 4.2**. Figure 4.1 shows that the MCAs extend into the western half of the Dover Strait, but do not cover the area in French waters.

4.4 The written information provided in this assessment also complements that provided at the strategic scale for the South; thus providing additional local evidence to inform marine planning. It is the MMO's intension to include the boundaries of the Dover Strait's SCTs and SCAs on its Marine Planning Portal[8], to allow users to query them against the full range of information held in support of marine planning. When the MMO undertakes its Seascape Assessment of the South East Marine Plan Area, the framework provided by this local assessment will be used to ensure full integration into new MCAs identified for the eastern part of the Dover Strait.

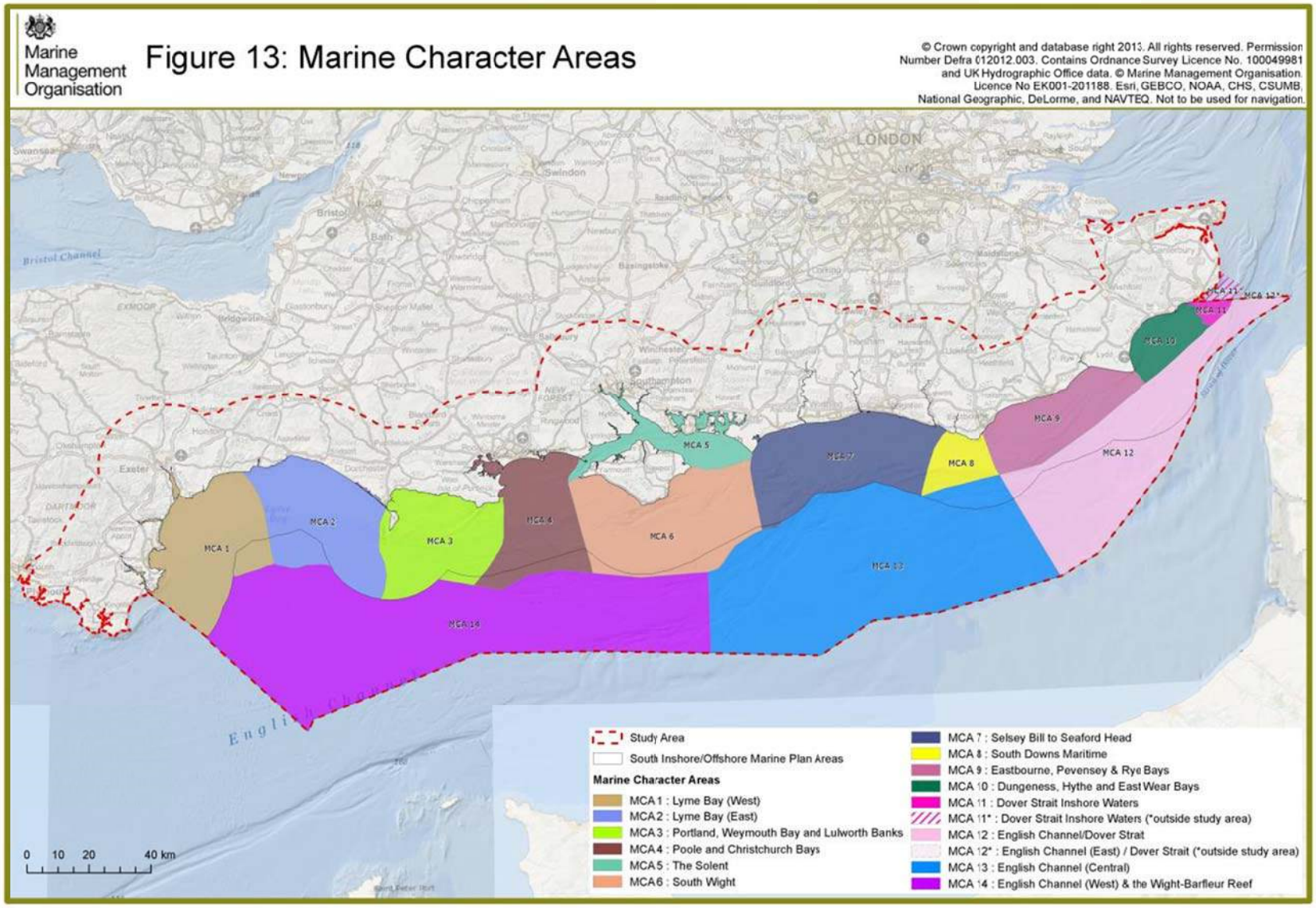
A spatial framework and evidence base to support the Dover Strait Implementation Plan

4.5 The Dover Strait Implementation Plan was draw up through the NOSTRA project and can be found on the website www.nostraproject.eu. It represents the shared vision of Pas-de-Calais Council and Kent County Council for the Dover Strait, and covers the same area as this seascape character assessment. The document was drawn together based upon experience and knowledge at the local level, combined with exploration of cross border management of straits from across

[7] LUC (2014) *Seascape Assessment of the South Marine Plan Areas.* For the Marine Management Organisation, available at https://www.gov.uk/government/publications/seascape-assessment-for-the-south-marine-plan-areas-mmo-1037

[8] http://planningportal.marinemanagement.org.uk/

Figure 4.1: Marine Character Areas identified for the South Marine Plan Areas



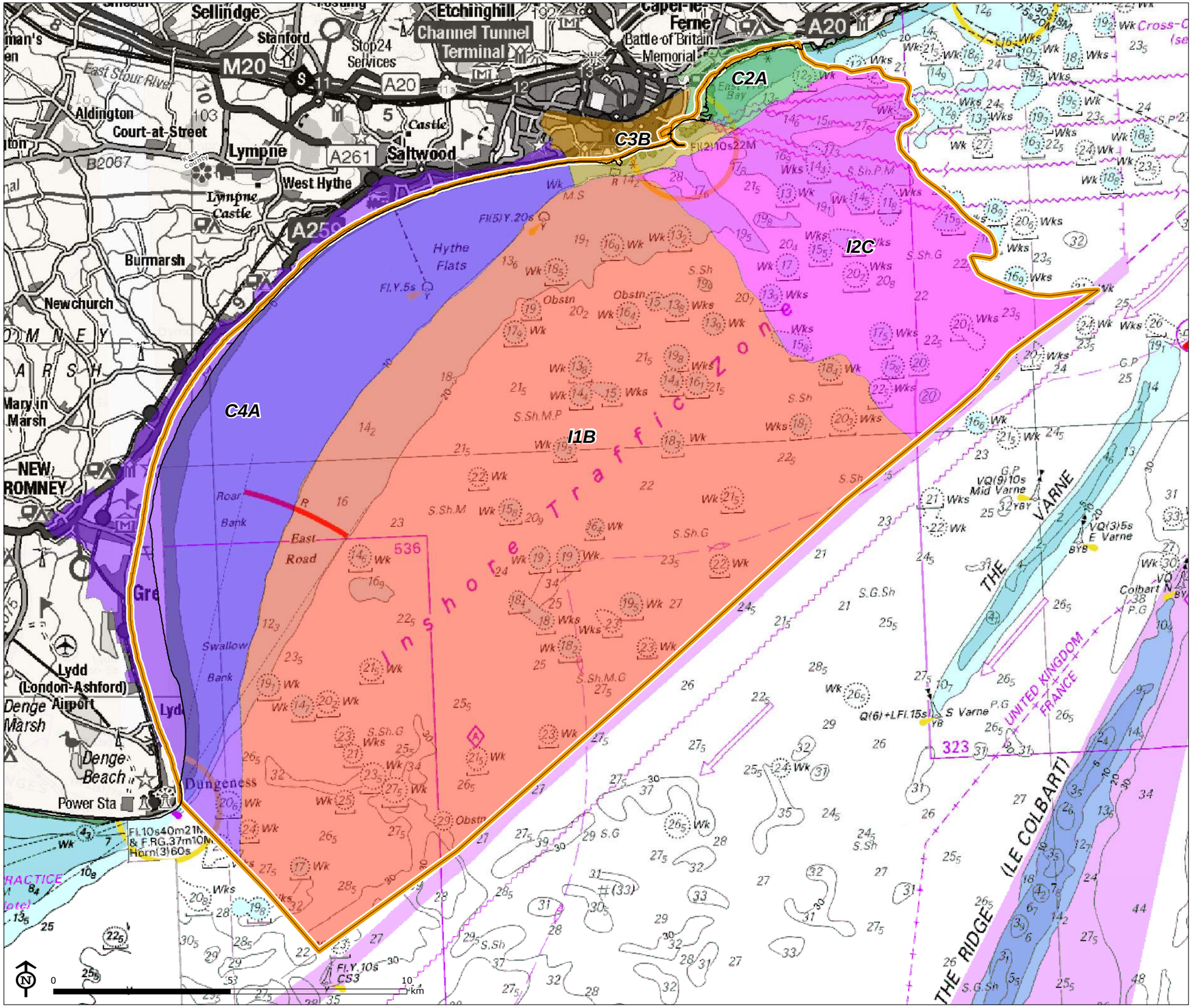


Figure 4.2: Demonstrating a national to local SCA hierarchy in the Dover Strait

Marine Character Area

- MCA 10 : Dungeness, Hythe and East Wear Bays

Local Seascape Character Area

- C2A : East Wear Bay and The Warren
- C3B : Folkestone Harbour & Seafront
- C4A : Romney Coast, Hythe Flats & Roar Bank
- I1B : Hythe Bay
- I2C : Folkestone Pomerania

Map Scale @ A3:1:105,000

LUC

CB: EB:Goosen_V LUCLON 6089-01_012_RPT_Dover_and_South_MCAs 25/11/2014

Source: LUC, OS, eMapsite

4.6 Europe. The pilot seascape study, carried out in 2013, helped to inform the plan and this full assessment provides a context and evidence base for some of the actions.

4.7 The Implementation Plan will be jointly implemented by Pas-de-Calais County Council and Kent County Council; the two authorities will also support relevant actions and projects taken forward by the stakeholders who helped develop the plan. There is a specific action on seascape aimed at ensuring that this study is utilised for decision making across the strait. Although the NOSTRA project has come to an end, the European Straits Initiative (ESI) will continue and help take forward the work. For the Dover Strait, Nord County Council and the Province of West Flanders joined Kent County Council and Pas-de-Calais County Council on the ESI in October 2014.

A best practice example for the management of straits

4.8 The concept of seascape character assessment and how it can assist with implementing the principles of the European Landscape Convention was part of the NOSTRA workshop on seascapes in 2013. It is also featured in the NOSTRA good practice guide, available on the project website.

4.9 The NOSTRA Implementation Plans have been drawn up by authorities from the Mediterranean to Scandinavia and includes good practice which authorities for each strait would like to export and implement or adapt at the local level. The Gulf of Finland are aiming to carry out their own seascape character assessment and will be looking to Kent County Council for advice.

4.10 The European Straits Initiative will utilise these completed assessments to highlight the benefits of using seascape character assessment as a tool for the cross border management of straits. This Dover Strait study will be distributed to all the NOSTRA/ESI partners.

Forming the basis for future designation applications

4.11 Achieving international recognition for Dover Strait has been an objective for Pas-de-Calais County Council and Kent County Council for some years, but will need to be re-examined before any future application to UNESCO is embarked upon. To assist with this, the NOSTRA Implementation Plan includes an action to set up a European project to examine international designation; the opportunities, threats, the process and the evidence base. It is on this latter point that this seascape character assessment will provide an invaluable tool in highlighting the unique natural and cultural characteristics of Dover Strait.

Please note that a further chapter, containing the Seascape Character Area descriptions, is provided in the full version of the report (Chapter 5).

Appendix 1: SCA and SCT classification with boundary rationale

SCA number/ name	Existing SCA (from pilot study)?	SCT	Boundary information (including any changes to those identified in the pilot)
KENT COASTLINE			
C1A: Kingsdown Chalk Cliffs	Yes	C1: Chalk Cliffs and Reefs/Coastal Waters	No changes made
C1B: St Margaret's Bay	Yes	C1: Chalk Cliffs and Reefs/Coastal Waters	No changes made
C1C: White Cliffs of Dover	Yes	C1: Chalk Cliffs and Reefs/Coastal Waters	No changes made
C1D: Shakespeare and Abbot's Cliffs	Yes	C1: Chalk Cliffs and Reefs/Coastal Waters	No changes made
C1E: Broadstairs to North Foreland	N/A	C1: Chalk Cliffs and Reefs/Coastal Waters	Ensure North Foreland lighthouse falls within the SCA at its northern extent
C2A: East Wear Bay and The Warren	Yes	C2: Greensand Cliffs and Reefs/Coastal Waters	No changes made
C3A: Dover Port, Harbour and Historic Defences	Yes	C3: Ports, Harbours and Seafront Development	No changes made
C3B: Folkestone Harbour and Seafront	N/A	C3: Ports, Harbours and Seafront Development	Take in all of Copt Point and "Folkestone Beds" bedrock geology (sandstone) Offshore extent follows boundary with I2C (10m bathymetry) Extend westwards on land to meet 'The Romney Coast' Kent Local LCA. Include the main sea front and development backing the harbour – use logical road routes backing the coast as boundary lines

SCA number/ name	Existing SCA (from pilot study)?	SCT	Boundary information (including any changes to those identified in the pilot)
C3C: Ramsgate Harbour	N/A	C3: Ports, Harbours and Seafront Development	Ramsgate Fort forms western extent, and East Cliff the eastern. Take in immediate coastal development following logical road routes Offshore extent covers harbour limits
C4A: Romney Coast, Hythe Flats and Roar Bank	N/A	C4: Shingle Beaches and Coastal Waters	Follow Local Kent LCA boundary ("The Romney Coast") for inland extent of the SCA Extend offshore to cover Roar Bank and Hythe Flats, out to the 10m bathymetry contour Meet the Dungeness headland by following the MCA 10 boundary (from the MMO seascape assessment)
C4B: Deal Seafront and Deal Bank	N/A	C4: Shingle Beaches and Coastal Waters *(note some parts have sand dunes behind the beach, often golf courses* *Also frequent presence of linear development backing the beaches)*	Use roads/railway line to form inland boundary behind Deal's seafront development Extend offshore to cover consistent area of sea to adjacent SCA (10m bathymetry)
C5A/I1A: Sandwich and Pegwell Bays	N/A	C5: Tidal Estuaries and Flats (including offshore to 'drying area') *(include the fringing land including sand dunes rather than splitting off into further SCTs)* I1: Inshore Bays	Extend inland to include tidal River Stour and seaward edge of Sandwich and logical coastal hinterland on edge of Ramsgate Include inshore areas 'Cross Ledge' and 'Ramsgate Channel' marked on the marine chart Ramsgate Fort forms eastern landward extent of the SCA
C8A: Dungeness, Denge Marsh and Eastern Rye Bay	N/A	C8: Shingle Headlands and Coastal Waters *(unique SCT)*	Inland boundary consistent with the 'Dungeness Shingle' Kent Local LCA (extend slightly in the far western corner to include consistent area of wetland/marsh up to study area limits)

SCA number/ name	Existing SCA (from pilot study)?	SCT	Boundary information (including any changes to those identified in the pilot)
			Seaward boundary formed by the Traffic Separation Zone (consistent with the MMO boundary for MCA 9) Include West Road and Stephenson Shoal marked on the marine chart
KENT INSHORE AREA			
I1B: Hythe Bay	N/A	I1: Inshore Bays	Outer boundary follows that of the MMO MCA boundary – coincident with the Traffic Separation Zone.
I2A: Broadstairs Knolls and Ramsgate Road	N/A	I2: Active Inshore Waters	Follow logical bathymetry contours from marine chart, taking in these named areas of sea
I2B: Inshore Dover Strait, The Downs and Trinity Bay	Partial SCA 7	I2: Active Inshore Waters	Extend existing SCA to cover The Downs and Trinity Bay showing on marine chart; use logical bathymetry contour lines as boundaries around these
I3A: Goodwin Sands, Gull Stream and North Sand Head	We had identified this as a potential SCA (but note not the exact boundary, which is now bigger)	I3: Inshore Sandbanks and Shoals	Follow logical bathymetry contour lines around the three features, taking in linked navigation markers shown on the chart
I2C: Folkestone Pomerania	Yes (SCA 8)	I2: Active Inshore Waters	Westward boundary to be amended and extended westwards to follow offshore bedrock geology (outer turquoise band of mudstone/sandstone) The southern boundary to be extended along Traffic Separation Zone (which was previous boundary with SCA 11, now O1B).
FRENCH COASTLINE			
C1F_C6C_C9A: Les Deux Caps	N/A	C1: Chalk Cliffs and Reefs/Coastal Waters C6: Sand Dunes, Wetlands and Coastal	Southern landward extent (around headland of Cap Gris Nez) to include all of the Special Protection Area

SCA number/ name	Existing SCA (from pilot study)?	SCT	Boundary information (including any changes to those identified in the pilot)
		Waters C9: Sandstone, Mudstone and Limestone Cliffs & Coastal Waters	Offshore extent to include shoals and wrecks out to 10m bathymetry contour Inland extent takes in main areas of elevated land surrounding the caps, following logical roads as boundary lines In the east, include the main block of Natura 2000 designation surrounding Cap Blanc Nez
C3D: Ports de Dunkerque et Gravelines et côte urbanisée	N/A	C3: Ports, Harbours and Seafront Development	Use main A-road to south of port-related development for inland boundary Eastern extent marked by change to open sand dunes marked on IGN base See map markup for offshore extent using bathymetry contours
C3E: Port de Boulogne	N/A	C3: Ports, Harbours and Seafront Development	Extend from Pointe de la Creche southwards to cover main port and harbour-related development, ending at the southern extent of development at Le Portel. Ensure the dome of Notre Dame cathedral is within the SCA (a skyline feature) Offshore extent to 10m bathymetry, including the outer harbour marked by the sea walls 'Digue Nord' and 'Digue Carnot'.
C3F: Port de Calais	N/A	C3: Ports, Harbours and Seafront Development	To follow port extent from marine charts, including main outer navigation marks and the Ridens de la Rade. Inland boundary formed by logical road route behind port and main coastal development.
C5B/11C: Baie de Canche et littoral dunaire d'Opale	N/A	C5:Tidal Estuaries and Flats *(include the fringing land including sand dunes rather than splitting off into further SCTs)*	Include all of the Baie de Canche SAC in offshore extent, using this to inform the western (offshore) SCA boundary

SCA number/ name	Existing SCA (from pilot study)?	SCT	Boundary information (including any changes to those identified in the pilot)
		I1: Inshore Bays	
C6A: Dunes du Fort Mahon et littoral de Sangatte	N/A	C6: Sand Dunes, Wetlands and Coastal Waters	Covering area between Calais and Cap Blanc Nez Low-lying dunes and marshes – follow logical road backing these as inland boundary Extend offshore to 10m bathymetry contour
C6B: Platier d'Oye et littoral dunaire de Calais	N/A	C6: Sand Dunes, Wetlands and Coastal Waters *(also often includes sandy beaches in front of dunes but distinct from other sand dunes SCT due to significant wetland areas)*	Include all of the Platier d'Oye Natura 2000 site/regional nature reserve Inland boundary formed by coastal road backing the main band of marshy farmland Extend offshore to 10m bathymetry contour
C7A: Littoral dunaire de Bray Dunes	N/A	C7: Sand Dunes, Beaches and Coastal Waters *(distinct from other sand dunes SCT due to lack of wetlands/reclaimed farmland)*	To cover the sand dunes defining the coast from the eastern edge of Dunkerque development to the Belgian border, extending offshore to approximately 5m bathymetry to the edge of the Bancs des Flandres.
C7B/C9B: Littoral des falaises d'Opale	N/A	C9: Sandstone, Mudstone and Limestone Cliffs & Coastal Waters C7: Sand Dunes, Beaches and Coastal Waters *(distinct from other sand dunes SCT due to lack of wetlands/reclaimed farmland)*	Out to 10m bathymetry line. Covers coastline with hummocky sand dunes backing wide sandy/shingle beaches with a low eroding cliffline (mudstone/sandstone/limestone)
C7C_C9C: Littoral dunaire d'Opale	N/A	C7: Sand Dunes, Beaches and Coastal Waters C9: Sandstone, Mudstone and Limestone Cliffs & Coastal Waters *(distinct from other sand dunes SCT due to lack of wetlands/reclaimed farmland)*	Use logical inland boundary (e.g. following roads), ensuring the main areas of dune/intertidal zone is included. Extend offshore to 20m bathymetry contour which marks the edge of the Bassure de Baas. Use IGN map (based on field observations) to divide

SCA number/ name	Existing SCA (from pilot study)?	SCT	Boundary information (including any changes to those identified in the pilot)
			the SCT into 2 types where dunes are replaced by cliffs.
FRENCH INSHORE AREA			
I2D: Zone d'approche de Calais	N/A	I2: Active Inshore Waters	Also including a number of banks and shoals (e.g. Ridens de Calais), associated wrecks, vessel waiting areas and approach channels to Calais port.
I3C: Rade d'Ambleteuse	N/A	I3: Inshore Sandbanks and Shoals	From Cap Gris Nez down to Boulogne, and offshore to 20m bathymetry contour around Bassure de Baas rocky shoals. Also includes the inshore ferry channel to/from Boulogne.
I3B: Bancs des Flandres	N/A	I3: Inshore Sandbanks and Shoals	See map markups – taking in main sandbanks and large proportion of the Bancs des Flandres SAC
I2E: Bassure de Baas	N/A	I2: Active Inshore Waters	Offshore extent marked by Traffic Separation Zone.
CENTRAL STRAIT			
O1A: Dover Strait Channel (North)	Yes (SCA 10)	O1: Offshore Shipping Channels	Just extended to show continuation beyond pilot study area boundary.
01B: Dover Strait Channel (South)	Yes (SCA 11)	O1: Offshore Shipping Channels	Just extended to show continuation beyond pilot study area boundary.
02A: The Varne-Le Colbart Ridge and Les Ridens	N/A	O2: Offshore Sandbanks and Shoals	Following outer contours of the banks/ridges as shown on marine chart.
O2B: Sandette Bank	N/A	O2: Offshore Sandbanks and Shoals	See pink area (traffic exclusion) on marine chart

Appendix 2: List of individuals/organisations who inputted into this study

We are grateful for the helpful inputs received from a range of organisations and individuals on this study. This included attendance at a workshop held at Samphire Hoe on 2 September 2014, as well specific comments provided on an individual basis. A list of all those who contributed is included below.

- Kirk Alexander, Manager, White Cliffs Countryside Partnership
- Bryony Chapman, Kent Wildlife Trust
- Ruth Childs, Landscape Officer, Kent County Council
- Peter Cosgrove, Marine Plan Implementation Officer (South), Marine Management Organisation
- Nick Delany, Ecologist, Dover District Council
- David Deverson, Essex and Kent Inshore Fisheries Conservation Authority
- Chris Drake, Coastal Officer, Kent County Council
- Liz Fagg, Port of Dover
- Pauline Gessant, Counseil générale du Pas-de-Calais
- Xavier Harlay, Agence des aires marine protégées – Parc naturel marin des estuaires picards et de la mer d'Opale
- Mike Hayes, GIS & Mapping Officer, Kent and Essex Inshore Fisheries Conservation Authority
- Paul Holt, Samphire Hoe Site Manager, White Cliffs Countryside Partnership
- David Illsley, Shepway District Council
- Nick Johannsen, Manager, Kent Downs AONB Unit
- Rebecca Korda, Natural England
- Cécile Leclaire, Région Nord-Pas-de-Calais
- Stéphane Louhaur, Counseil générale du Pas-de-Calais
- Colette Marie, Counseil générale du Pas-de-Calais
- Cllr Sue Murray, Tonbridge and Malling Borough Council
- Andrew Richardson, Outreach and Archives Manager, Canterbury Archaeological Trust
- Antoine Surget, Counseil générale du Pas-de-Calais
- Mel Wrigley, White Cliffs Countryside Partnership