

Marine Management Organisation

Maximising the socio-economic benefits of marine planning for English coastal communities



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CONTENTS

	EXECUTIVE SUMMARY.....	i-ii
1	INTRODUCTION.....	1
2	OUR BRIEF, SCOPE AND APPROACH	3
	Introduction.....	3
	Our brief	3
	Issues outside our brief	3
	Our scope: the geographical area covered	5
	Defining our terms	6
3	SOCIAL AND ECONOMIC PROCESSES AT WORK IN COASTAL COMMUNITIES.....	11
	Introduction.....	11
	Our approach	12
	The role of productivity growth	13
	Labour utilisation	14
	Labour productivity	20
	Outcomes of coastal socio-economic processes: exposure to economic risks.....	30
	Outcomes of coastal socio-economic processes: deprivation.....	31
	Coastal labour productivity and labour utilisation: a summary	32
4	HOW CAN MARINE ACTIVITIES AFFECT COASTAL SOCIO-ECONOMIC PERFORMANCE?	35
	Introduction.....	35
	Our approach	35
	Analysing the marine activities	40
	Defence	40
	Energy production and infrastructure	45
	Ports and shipping.....	55
	Marine aggregates	60
	Marine dredging and disposal	65
	Telecommunications cabling.....	65
	Fisheries.....	69
	Aquaculture	76
	Surface water management and waste water treatment and disposal.....	80

	Tourism and recreation	84
	How to apply this analysis in a marine area	92
5	COASTAL SOCIO-ECONOMIC CONDITIONS	97
	Introduction.....	97
	A typology of coastal communities	97
	Important caveats: how the coastal typology is intended to be used	97
	A typology of coastal communities	98
	Where are different types of coastal community located?.....	101
	How do different types of coastal community fare on key socio-economic indicators?.....	104
	Profile of local coastal communities	110
6	THE POTENTIAL FIT BETWEEN AREAS AND MARINE ACTIVITIES.....	111
	Introduction.....	111
	The summary table.....	111
7	HOW PLANNING PROCESSES CAN BE USED TO DELIVER IMPROVEMENTS.....	119
	Introduction.....	119
	How the marine and terrestrial planning systems can work together	119
	How the Local Development Framework can help marine planners	120
	Where are the opportunities for marine planners to work with spatial planners?	123
	How to apply this analysis in a marine area	130
8	ISSUES	139
	Introduction.....	139
	Issues arising	139
	Prioritisation.....	140
	Getting a delivery plan.....	144
	Other considerations	145
	Monitoring the effects of marine planning	147
	Evidence base gaps	148
	Sources	153
	What is changing at National Level?	164

APPENDICES

Appendix 1 - Sources

Appendix 2 - Spatial Planning Summary

Appendix 3 - Table of Acronyms

Appendix 4 - Marine Activities Statistics – Method Overview

Appendix 5 - Typology Maps

EXECUTIVE SUMMARY

- 1 This report seeks to help the Marine Management Organisation (MMO) maximise the socio-economic benefits of the marine planning process. It was written by a team from Roger Tym & Partners and Oxford Consultants for Social Inclusion (OCSI).
- 2 This report aims to help marine planners meet that challenge set by the Marine Policy Statement (MPS). The MPS requires marine planners to plan in such a way that “benefits society as a whole,” and contributes to resilient and cohesive communities “both in regeneration areas and areas that already benefit from strong local economies”.
- 3 We begin by examining the socio-economic processes at work in coastal communities. We set out a framework for thinking about these processes. This is important, because we need a way of picking out how different socio-economic processes relate to each other, and which processes are the most important.
- 4 A number of different approaches could be adopted here, but we emphasise the role of economic competitiveness as the primary explanation of subsequent socio-economic success. We use HM Treasury work to structure this approach. The Treasury work explains that economies can grow either by increasing labour resources in an economy, increasing capital in use, or by using labour and capital inputs more efficiently. The Treasury work has isolated “productivity drivers” which raise economic growth. These are skills, innovation, competition, enterprise, and investment.
- 5 We use these concepts to analyse the evidence on coastal economies. Whilst coastal communities are a very diverse group, evidence suggests that whilst jobs numbers have grown in coastal economies, the jobs created tend not to be well paid, and are frequently part time. The productivity drivers may function less well in coastal areas. Together, these factors mean that over time some coastal economies can fall behind the rest. This can result in high levels of deprivation in some areas.
- 6 We then use this framework to examine the marine activities listed in the Marine Policy Statement. We do this because we want to inform marine planners of the extent of the relative possible socio-economic benefits of the main marine activities they will be dealing with. As far as data allows – and the data certainly has important failings in the way it captures marine activities - we look at the levels of employment that each marine activity currently generates, and look at “hot spots” where levels of employment in a marine activity are proportionately higher than the national average. We look at the future for each marine activity, and examine how each marine activity might raise labour utilisation rates and labour productivity.
- 7 Up to this point, our work has not been applied to particular places. But if they are to maximise socio-economic benefits, marine planners will need a good understanding of the nature of the coastal communities that they are dealing with. In order to help provide marine planners with this understanding, we have developed typologies which cover every English coastal area. Maps of the typologies have been provided as an appendix to this report. The typologies are a powerful way of getting a coherent overview of English coastal communities: although every community has a unique combination of characteristics, the typologies help group together those areas with similar characteristics on key indicators, for which particular

planning approaches and policy initiatives might be appropriate. It is very important to point out, though, that the typologies need to be used with care: they are only a starting point for further work with local authorities and communities.

- 8 By this stage, we have developed a view on a) what socio-economic processes are at work in coastal communities; b) the relative socio-economic impacts of the marine activities; and c) an understanding of the socio-economic character of the coastal communities. We pull these threads together in order to reach some very broad conclusions about which marine activities might fit most readily into different areas, given the characteristics of each. We provide this overview in tabular form.
- 9 We then turn to look at the mechanisms by which marine planning might best maximise socio-economic benefits. Benefits are likely to be maximised when marine planning works effectively with terrestrial planning and economic development activity: marine planning will need to inform terrestrial planning, and vice versa. We map out the processes involved in both marine and terrestrial planning to explore how this might happen in practice. The work helps marine planners understand when, where and how they might interact with terrestrial planning in the preparation of plans, with a view to ensuring that benefits for coastal communities are maximised. We then set out a set of practical steps that marine planners can take in order to develop their understanding of the planning context of an area.
- 10 The final section draws out some key issues and conclusions. Starting from an understanding of the pressures currently on the terrestrial planning process and the current thinking behind emerging Government policy, we suggest that if it wishes to maximise socio-economic benefits, the MMO will need to prioritise effort on issues where there is a) a proven need for marine planning to maximise socio-economic outcomes, b) evidence that intervention will have a high socio-economic benefits, and c) evidence that benefits will reach the places that most need them. Regarding the latter point, it is important to note that the extent to which equity considerations are considered important is a policy choice made by democratically elected politicians. If the policy choice was made to influence activity towards worse-off areas (and planning's scope for this is relatively limited), then it would need to be handled carefully.
- 11 This prioritisation process would need to be done outside this brief, but we estimate work that might have maximum socio-economic impact involves helping to accelerate investment in energy sectors, ports and shipping, and structural change in disused waterfront areas. Tourism impacts will need to be taken into account, such as when siting power cabling, or in licensing maintenance dredging. To maximise economic benefit, it might be best to look for areas where synergies can be found between the fisheries industry and the tourism industry.
- 12 Having identified the key issues, Government policy and strategy suggests that the MMO will best maximise socio-economic benefits if it adopts a particular approach to the way it does business. The MMO will need a highly proactive approach to planning and licensing, a clear understanding of the needs of investors, and an understanding of how to solve issues that obstruct investment. We think there is a role for using marine planning to accentuate local distinctiveness and inform development strategies.
- 13 Finally, we discuss how our work might be used to monitor marine planning impacts, and the gaps in the evidence base.

1 INTRODUCTION

- 1.1 This report has been written by Roger Tym & Partners with Oxford Consultants for Social Inclusion on behalf of the Marine Management Organisation (MMO).
- 1.2 Future marine plans are expected to deliver the vision set out in the UK Marine Policy Statement (MPS) of “clean, healthy, safe, productive and biologically diverse oceans and seas”. The MPS requires this vision to be delivered sustainably – meaning that economic considerations need to be integrated with concerns for the marine environment. Marine planning is therefore required to have positive *terrestrial* as well as marine impacts, and deliver “a strong, healthy and just society” with marine development which is “benefiting society as whole, [and] contributing to resilient and cohesive communities”.¹ The MPS states that marine planning should contribute to sustainable economic growth “both in regeneration areas and areas that already benefit from strong local economies” through integrating with terrestrial planning and engagement with coastal communities.²
- 1.3 The report aims to help marine planning maximise the socio-economic benefits of marine planning. The report provides marine planners with
 - a background analysis of the socio-economic processes under way in coastal communities;
 - an understanding of the socio-economic impacts of marine activities in coastal communities;
 - an analysis of on-the-ground socio-economic conditions in coastal communities, and
 - practical suggestions about how the marine planning process can maximise its positive socio-economic impact.
- 1.4 This work provides this analysis for the England as a whole. A sister document (provided under separate cover) then takes this analysis and provides more local detail for the Eastern marine plan area. The sister document is entitled “*The Eastern marine area: maximising the socio-economic benefits of marine planning*”.
- 1.5 **The content of this report reflects the view and interpretation of the consultants, as a product of the evidence from research. This document provides one approach to the socio-economic considerations that should be taken in to account as part of decision-making in marine planning. The MMO will consider the evidence in this study alongside other data, evidence and stakeholder views to develop marine plans.**

¹ HM Government (2011) *UK Marine Policy Statement* TSO London (10)
<http://www.defra.gov.uk/environment/marine/documents/interim2/marine-policy-statement.pdf> (11)

² HM Government/Northern Ireland Executive/Scottish Government/ Welsh Assembly Government. (March 2011) *UK Marine Policy Statement* (paragraph 2.5.5)

2 OUR BRIEF, SCOPE AND APPROACH

Introduction

2.1 This section defines the scope of our work and the approach we have taken.

Our brief

2.2 This guidance document has been commissioned by the Marine Management Organisation to help them to consider how marine planning activities can support the socio-economic development of coastal communities, contributing to sustainable development. It is a document (and data tool) that will be part of the evidence base for use in marine planning for all marine areas in England.

2.3 This project has focused on an identified gap in the MMOs socio-economic knowledge, specifically related to coastal communities.

2.4 The focus on socio economic benefits for coastal communities from marine planning is re-stated in England's marine planning document which identifies that 'by placing coastal communities at the interface of two planning systems, marine planning has the potential where appropriate, to contribute to the transformation of coastal towns from geographically peripheral areas to hubs for sustainable economic growth based on the shared terrestrial and marine evidence base'.³

Issues outside our brief

2.5 In order to keep a proper focus on this main objective, we have concentrated on how the socio-economic benefits of marine planning can be maximised, given the marine activities taking place and coastal socio-economic context.

2.6 We have not looked at the broader socio-economic consequences of other environmental changes, because they are not the consequences of marine activities.

- The socio-economic consequences of climate change, environmental change and coastal change will not be covered within the scope of this specific piece of research. These factors will have socio-economic consequences, but they do not directly allow us to answer questions about how to maximise marine planning's socio-economic impact. These issues are not being ignored in the marine planning evidence base. They are being dealt with separately.⁴ The MMO will work with organisations running a number of initiatives focused on these matters (including Local Authorities, Environment Agency/LA Shoreline Management Plans (SMPs)

³ Defra (March 2011) *A Description of the Marine Planning System for England*.
<http://www.defra.gov.uk/environment/marine/protect/planning/>

⁴ The MPS states that marine planning must take into account climate change adaptation and mitigation in Section 2.6.7, and coastal change and flooding in Section 2.6.8.

and the work of the Marine Climate Change Impact Partnership) to ensure that evidence developed from these and a wide range of other work streams are taken in to account as part of marine planning.

- We have not looked specifically at seascape or environmental impacts within this brief for the same reason, namely that considering these issues would not help answer the questions we have been set. This work is being undertaken elsewhere.⁵
- We have not adopted an ecosystems services approach (or any other kind of hedonic analysis or expressed preference analysis) to the quantification of environmental, economic and social impacts of marine activities. This is because such an approach would not serve our ends, which are to look at how marine planning might maximise its positive socio-economic impact. We are not providing a *quantified* impact analysis of marine activities as such in this document.

2.7 There are also questions of emphasis and approach. We have not focused on the following elements.

- We have not studied the effects of marine activity on local culture. Whole communities, for example, have grown up around (say) fishing, and this has had an important bearing on the ways that those communities have developed. Whilst we attempt to take some account of these factors in the report narrative, we have not been able to provide hard evidence of these cultural impacts and outcomes of marine activity. Good evidence on these matters would need a different approach, perhaps involving ethnography or anthropology.
- We have not looked at the effects of marine activity on broader measures of wellbeing. The concept of wellbeing is part of an emerging policy agenda, but the implications of this agenda for marine planning would need to be the subject of a separate study.⁶
- We have not looked at the effects of marine activity on health. Health impact assessment of marine activities would need to be the subject of a separate study.⁷

2.8 Again, the MMO may be taking on board a number of these issues in different ways.

⁵ The marine planning team have been working closely with partners such as Natural England to contribute to production of Seascape Character Assessment guidance and the undertaking of trial Seascape Character Assessment work around the English coast within the east inshore and offshore plan areas together with an area of the Dorset coast. This work offers an insight into the features and assets of our coast together with a methodology for identifying characteristics of seascape for their incorporation within marine plans in accordance with obligations within the Marine Planning Statement.

⁶ See, for example, the work commissioned by the French Government. Sen, Stiglitz and Fitoussou (2011), *Report by the Commission on the Measurement of Economic Performance and Social Progress* http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf. These ideas are also being pursued in the UK, and the ONS has been asked to investigate good quality measures of wellbeing. The National Wellbeing Project will report in July 2011. See <http://www.ons.gov.uk/well-being>

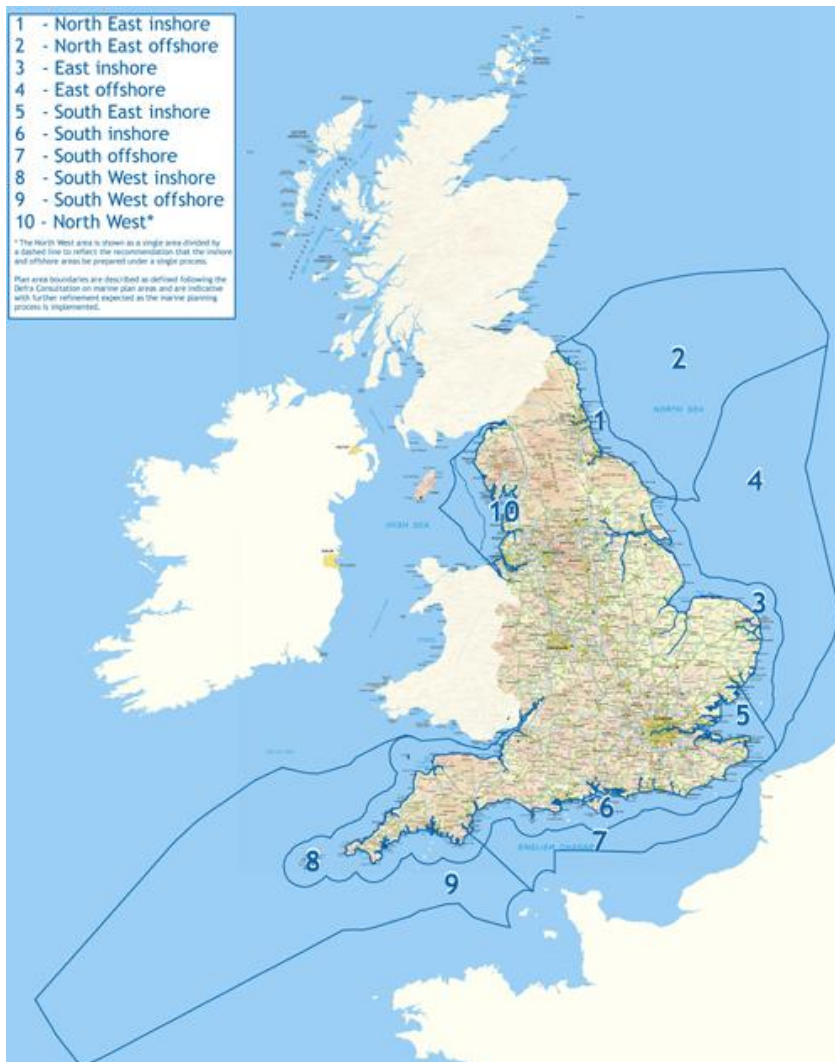
⁷ DEFRA (2011) *A framework for understanding the social impacts of policy and their effects on wellbeing* begins to map out how policy affects wellbeing.

2.9 It will be for the marine planning process to consider how best to use the information provided by this project alongside the wider evidence base, including information on the marine environment, to develop marine plans that contribute to sustainable development.

Our scope: the geographical area covered

- 2.10 This report covers the English coastline. For the purposes of marine planning, the English waters have been split into a number of different plan areas. The coastal areas we are covering are North East, East, South East, South, South West and North West.
- 2.11 The map below shows that some coastal areas (though not all) will be related to two marine plans – one inshore, and one offshore. This report will inform both inshore and offshore marine planning.
- 2.12 A sister document to this report entitled “*The Eastern marine area: maximising the socio-economic benefits of marine planning*” looks more specifically at the Eastern marine region. The Eastern marine region was chosen for further analysis because it is the first area where the marine planning process is being undertaken.

Figure 2.1 English marine plan areas



Source: MMO

Defining our terms

Defining what is “coastal”

We need a clear definition of what is “coastal” for this report

- 2.13 We need a working definition of “coastal” for the purposes of creating coastal typologies and considering the potential for benefits from marine activities for coastal communities. This is important, as we want our analysis to isolate and reflect truly coastal characteristics. It is important that the specifically “coastal” characteristics are not masked, which could be the case if the coastal definition were drawn too widely inland.

Defining what is “coastal” is not straightforward. Planning policy does not give a precise guide

- 2.14 As the House of Commons report on Coastal Towns points out, there is no standard definition of English coastal towns for either policymakers or practitioners⁸.
- 2.15 For example, Planning Policy Guidance (PPG) 20 on Coastal Planning⁹ identifies the seaward extent for coastal planning purposes on land as the mean low water mark, the landward limit in terms of characterising socio-economic features related to the coast is not defined. It indicates that the limits of the coastal zone should be determined by the ‘geographical extent of coastal natural processes and human activities related to the coast’. As such, this general statement does not help to provide a starting point for our purposes.
- 2.16 Defra published a strategy for promoting Integrated Coastal Zone Management (ICZM) in England in 2008¹⁰. This document does not define what is meant by the coastal zone.¹¹

Other research has suggested (and used) various working definitions of “coastal” and “seaside”

- 2.17 Some have suggested that the definition of “coastal” should be based around economy and identity. Work for the Coastal Communities Alliance stated that “we could reserve the category ‘coastal town’ for a different kind of place: one whose economy and identity depends, and has depended, to a significant extent on seaside tourism.”¹²

⁸ House of Commons Communities and Local Government Committee (2006) *Coastal Towns Second Report of Session 2006–07* (6) House of Commons HC 351, The Stationery Office, London

⁹ Department of the Environment and Welsh Office (1992). *Planning Policy Guidance 20: Coastal Planning*

¹⁰ Defra (2008). *A Strategy for Promoting an Integrated Approach to the management of Coastal Areas in England*. The Strategy defines ICZM as a ‘joined up approach to the many different interests in the coastal area’.

¹¹ The ICZM refers back to PPG20 and its guidance to Local Authorities, as set out in paragraph 3.24

¹² Walton and Browne (2010) for Coastal Communities Alliance *Coastal Regeneration in English Resorts 2010* (14)

2.18 Other work has sought to focus on “seaside resorts” with a large tourism component, and so have excluded ports and industrial areas¹³.

Our definition of “coastal”

2.19 Given the difficulties of defining coastal communities through socio economic metrics and taking note of discussions during preparation of the SPP, the MMO looked for a physical and ecological metric, preferably used in existing plans, which might provide a more meaningful definition of coastal communities.

2.20 The inland extent of marine planning has been the subject of discussion in the MMO’s Statement of Public Participation (SPP) engagement process.¹⁴

2.21 A recognised alternative to the ‘limit of tidal influence’ is to take the saline inundation limit i.e. transitional water data. One relevant initiative that partly uses this factor is River Basin Management Plans, used to deliver the Water Framework Directive (WFD)¹⁵.

2.22 Using this definition we have therefore taken the limit of transitional waters as the basis for analysis of coastal communities.

2.23 The question then was how far inland our analysis should extend. As we have explained, we wanted to investigate coastal communities specifically, so it was important not to have our analysis extend too far inland: this would mean that we lost the specifically coastal nature of our work. Equally, though, it was important not to restrict our analysis too far: there is a coastal hinterland which has economic, social, cultural and environmental ties to the coast and coastal settlements.

2.24 There is no one “right” answer here; having consulted with the MMO, we decided that our analysis should extend 10 km inland from the low water mark, including around each defined estuary and river limit to include all transitional waters. The Sail2 project used an identical 10km inland cordon.

2.25 We have used Lower-layer Super Output Areas (LSOAs) as the base geographical unit for the definition of coastal in this study. LSOAs are a geography created by the ONS for the purposes of analysis. There are 32,482 LSOAs covering England, each with an average population of 1,500.

¹³ Beatty and Fothergill (2003) *The Seaside Economy; the final report of the seaside towns research project*, CRESR, Sheffield Hallam University.

¹⁴ The published SPP notes: ‘The Act(s 42) defines the marine area to include ‘the waters of every estuary, river or channel, so far as the tide flows at mean high water spring tide’. Such waters include the freshwater section of some rivers to quite far inland e.g. the Nene at Peterborough and the Norfolk Broads. A number of stakeholders have expressed concern that encompassing such locations is not necessary as marine plans will add no or little value to existing arrangements’

¹⁵ The Environment Agency uses the following criteria to define the saline inundation limit in estuaries and rivers, known as transitional waters; ‘Salinity: transitional waters have been defined as either polyhaline or mesohaline or just predominantly polyhaline’. Other factors are sometimes used to define transitional waters if the saline inundation limit is not conclusive.

- 2.26 Our definition of the “coastal” is based on those Lower-layer Super Output Areas (LSOAs) that lie within this 10 km boundary. Three additional criteria were used to further refine the definition:
- Although lying on the Thames estuary, and mainly located within the 10 km boundary used to define “coastal”, the socio-economic character of Greater London is clearly not primarily driven by proximity to the coast. The effect of including London in our analysis would be to make it harder to identify socio-economic issues in coastal areas. We have therefore taken our boundary of the coastal area as the Greater London area boundary¹⁶. This means that London Boroughs are excluded from our analysis¹⁷, but coastal communities along the Thames estuary and up to Dartford Crossing are included.
 - Any LSOA with less than 15% of their geographic area lying inside the 10km buffer was excluded, to ensure that large LSOAs lying mainly outside the coastal area were not counted as coastal.
 - LSOAs located in urban areas were excluded from the definition, if only a small number of LSOAs in the urban area were coastal (in other words, the 10km buffer cut across the urban area). For example, this excluded four LSOAs in Greater Manchester, and a single area in Norwich.
- 2.27 Map 2.2 on the following page shows the extent of England’s coastal area as defined by the criteria above. The red line shows the 10 km buffer zone. Of the 32,482 LSOAs in England, just over 10,000 are in coastal areas (these are shaded yellow), just under one-third of all areas.

¹⁶ Other coastal work such as the Sail2 project also excludes Greater London from their analysis.

¹⁷ If included they would significantly skew the typologies because of the large number of lower layer Super Output Areas (LSOAs) in London. The LSOAs are the geographical building blocks for the typologies.

Figure 2.2 The extent of the “coastal” area defined for the purposes of the study



What is a coastal “community”?

We use the word “communities” as a shorthand to refer to the people who live on the coast, irrespective of the size of the settlement they inhabit

- 2.28 The project brief asked us to show how marine planning might generate positive outcomes for coastal communities. The phrase “coastal communities” is used extensively throughout the Marine Policy Statement and other Government documents. We have therefore also used the phrase in this work. But it is important to understand what we mean by the term.
- 2.29 We have used the word “communities” loosely in this study. We have defined “coastal communities” as including everyone who lives within the coastal area defined above. This definition includes both rural and urban areas, and we have not limited our analysis to settlements of a particular size.

3 SOCIAL AND ECONOMIC PROCESSES AT WORK IN COASTAL COMMUNITIES

Introduction

- 3.1 In this section, we review the available evidence to understand the important socio-economic processes in operation in coastal communities. We have used peer reviewed academic literature, “grey” literature and a range of other sources (including team and stakeholder experience).¹⁸
- 3.2 In this section, we need to explore some of the reasons that might help explain coastal areas’ socio-economic performance and underperformance. This process will guide marine planners around the debates which currently surround the socio-economic circumstances of coastal communities. We then seek to make this review of practical use in the final section.
- 3.3 A few points need to be borne in mind when using this review.
- Coastal communities are very diverse. As the House of Commons Select Committee point out, there are risks inherent in any generalisation about coastal areas, given their differing circumstances. There can be no “one size fits all” response, or way of understanding coastal socio-economic processes: too much depends on local circumstances. Our approach here is to report the broad debates and processes under way in coastal communities. However, this review does not purport to be exhaustive. It does not purport to cover all circumstances and all coastal issues.
 - The literature review is inevitably backward looking. That means that more recent events (even including the evolving effects of recession on coastal communities) are not covered in detail.
 - We will attempt to report the literature faithfully. However, we have not confined ourselves to reporting the literature in an entirely descriptive way, because we wish to put the review to practical use in the way described above. That requires us to use our professional judgment. The narrative constructed around the literature, and the way that evidence is marshalled (in particular, the way that work on productivity drivers is applied to coastal areas) is inevitably ours. Some of this analysis may be contentious, but its objective is to help stimulate thinking and debate on the part of marine planners and others involved in the policy process.

¹⁸ Grey literature is open source, frequently original work which has not been peer reviewed or published in academic journals.

Our approach

- 3.4 In seeking to pull a coherent understanding from a broad range of literature such as this, it is useful to have a few overarching concepts which can a) help us pick out the social processes at work, and b) help us get a sense of the relative performance, and c) help us understand how those processes relate to each other.
- 3.5 Our chosen approach is to put economic productivity and competitiveness at the centre of wider explanations of the social and economic processes under way in different communities. From this perspective, it is important to understand the drivers of productivity growth in coastal areas. Although we are not aware of instances of when these ideas have been specifically applied to coastal areas before, we are not alone in this general approach. For example, work by Prof Michael Parkinson suggests that the real emphasis for regeneration policy should be on productivity and competitiveness.¹⁹ The argument goes that productivity and competitiveness is important for an area because more productive areas are not only wealthier, but also tend to provide a better social, cultural and environmental quality for their residents, compared to other less productive areas. This perspective approach sees deprivation and social exclusion as *outcomes* of a process of economic failure, relative to other areas of the country. It is certainly not blind to social or environmental factors; it sees them as important contributors to a productive environment.
- 3.6 However, it is important to point out that these ideas are not the only way of understanding coastal economic and social processes. In particular, the relationship between economic productivity and other cultural, environmental and social benefits could be contested: in the process of doing this work, it has been pointed out to us that a number of people in coastal communities have made what is a perfectly legitimate choice to trade a reduced income for a higher quality of life, and that their choice of a coastal environment is part of that choice. The Local Growth White Paper acknowledges that not every place “will, or will want to, become an economic powerhouse”.²⁰ Equally, reviews of Brighton & Hove’s economy, for example, have found that the area has been a relatively successful economy that has grown rapidly in employment terms in recent years, but in value terms the area still lags some way behind what might be expected of a city of its size and assets.²¹ This lifestyle factor is perhaps one reason why this might be the case.
- 3.7 Other research focusing on Hastings has identified a group of UK in-migrants in the town. This work suggests that these migrants (termed ‘DFLs’ - Down from London) are in search of “more family friendly employment practices, an enhanced quality of life, and an alternative lifestyle by the sea”.²²

¹⁹ ODPM (2006) *State of the English Cities* Volume 2 (148).

²⁰ Department for Business, Innovation and Skills (2010) *Local Growth: Realising Every Place’s Potential* (8)

²¹ RTP (2006) for Brighton and Hove City Council *Employment Land Study*

²² Truder J, University of Brighton Gentrification and family migration in Old Town, Hastings quoted Walton and Browne (2010) for Coastal Communities Alliance *Coastal Regeneration in English Resorts 2010* (189)

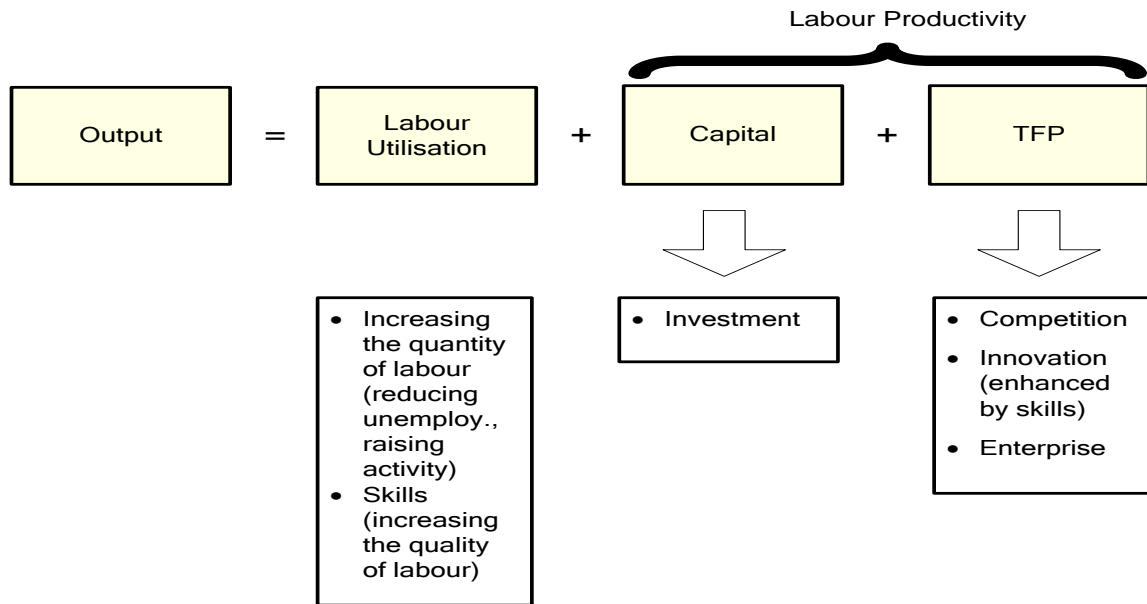
- 3.8 Whilst there are inevitably different perspectives, we use our chosen framework here because it is particularly helpful to our job in this section: it helps analyse current conditions, and also provides some thought provoking ways of approaching future coastal development and marine planners' role in that development.

The role of productivity growth

- 3.9 Work by the Treasury has pointed out that economic output can be increased in three ways.
- Increasing labour resources in an economy. This would require either by growing the labour force, each worker working longer, or from improvements in skills increasing the value of labour resources.
 - Increasing capital in use. An example in the tourism sector might be investing in higher quality accommodation or new visitor attractions that allow the value of services produced by each worker to rise.
 - Increasing what is known as “total factor productivity” (TFP). TFP is the part of productivity growth that cannot be attributed to the growth of labour or capital. Work for the Treasury states that it can represent technology, ways of working and culture, management, economies of scale, competition and measurement error. TFP is best thought of as a measure of the efficiency by which capital and labour inputs are combined.²³
- 3.10 The latter two factors are often grouped together into an overall measure of “labour productivity”.
- 3.11 The most important way of generating long-term economic growth is by raising labour productivity. The alternative - that of constantly raising the number of hours worked – is in the long term not possible. The Government has undertaken a useful review of the economic literature on productivity growth, and set the following five drivers of productivity growth. They are:
- competition;
 - innovation (including technological progress);
 - investment (physical capital);
 - skills (human capital); and
 - enterprise.
- 3.12 The diagram below shows how these five drivers of productivity relate to the determinants of output. The skills driver relates to labour utilisation; investment driver to capital; whilst competition, innovation (enhanced by skills) and enterprise affect the economic efficiency of the economy, and so fall under the category of total factor productivity.

²³ HM Treasury/DTI (March 2006) *Productivity in the UK 6: Progress and new evidence* p9

Figure 3.1 : Growth accounting and the five drivers of productivity growth



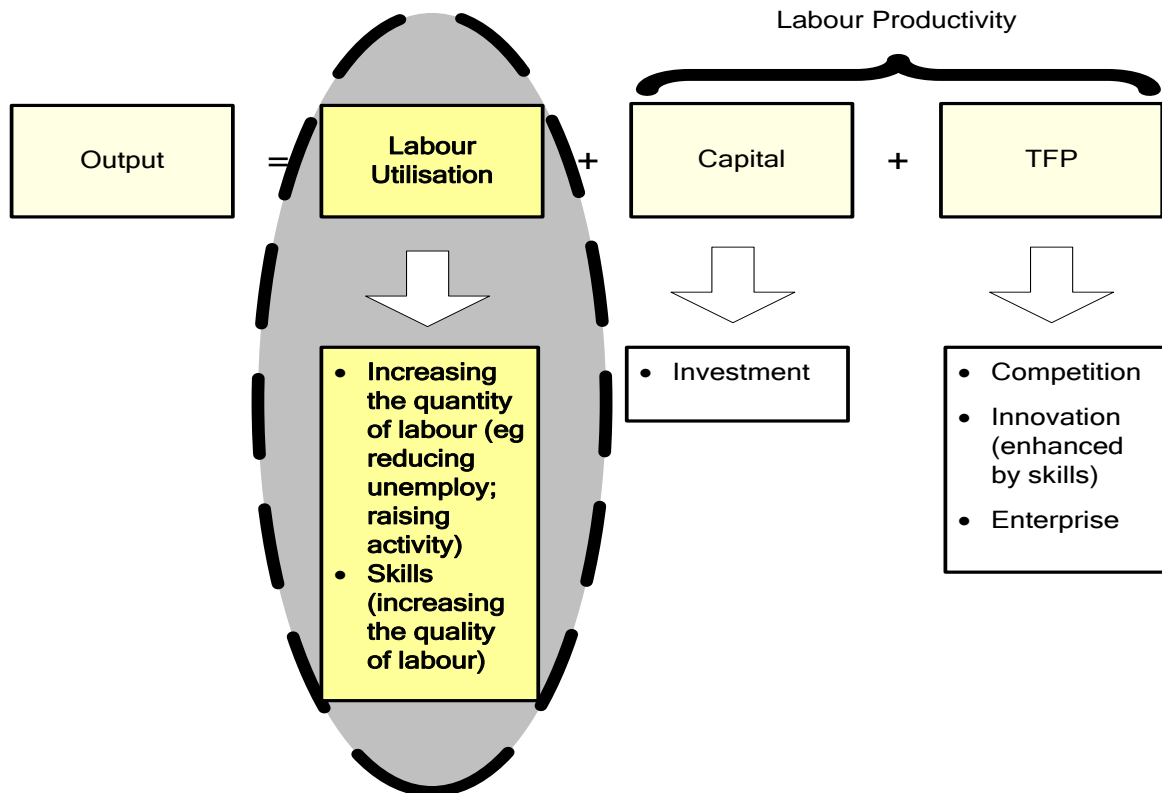
Source: Treasury (2006) Productivity in the UK 6

3.13 The next step is to apply this logic to coastal communities.

Labour utilisation

3.14 In this section we look at the processes affecting labour utilisation in coastal communities. Here, we deal with the element of growth accounting highlighted within the dotted line on the figure below.

Figure 3.2 The determinants of output



- 3.15 Within a coastal economy, increases in labour inputs could come from the following sources:
- from accommodating new jobs filled from the ranks of the unemployed and economically inactive;
 - from the skills of the labour force rising, and so allowing more work to be done;
 - from workers working longer hours; and
 - from outside the area. Workers from outside the area might commute in, or choose to relocate to the area.

3.16 Research has been done to look at some, though not all, of these factors in coastal economies. We work through the evidence below.

Productivity driver 1: skills

Educational attainment and workforce skills in coastal areas are not generally worse than the English average – but this hides pockets of real problems

3.17 The House of Commons Select Committee found evidence of high proportions of young people in some coastal communities with low educational attainment levels and low

aspirations, although the report acknowledges that these findings apply to many other areas in the country too.²⁴

- 3.18 Poor attainment is a particularly ominous sign for the future. Educational attainment – in the form of qualifications and test scores – during compulsory schooling has been identified as “the most frequent and effective childhood predictor of adult outcomes”.²⁵ The Social Exclusion Unit notes the existence of a body of evidence indicates that “individuals who leave schools with low levels of [formal] educational attainment and poor basic skills are at a higher risk of experiencing social exclusion as adults, with those who lack basic literacy and numeracy skills at particular risk”.²⁶
- 3.19 Regarding workforce skills levels, the level of qualifications of the workforce is not fundamentally different to the English average across seaside towns as a whole. Work for the DCLG found that workers with the highest level of qualifications (Level 4/5) “are under-represented in seaside towns (17 per cent of the workforce compared to 21 per cent for England as a whole) but not to any important extent compared to the averages for regions outside London and the South East (16–20 per cent)”.²⁷
- 3.20 However, the average position was found to conceal particular problem areas. A number of seaside towns – for example, Clacton, Great Yarmouth and Skegness – have a very low proportion of workers with high-level qualifications.
- 3.21 On the other hand, Greater Brighton and Whitley Bay are exceptional in having a share of highly qualified workers well in excess of the English average.

Coastal areas with strong environments may be well positioned to attract highly skilled workers

- 3.22 Work in places such as Brighton has successfully made the linkage between strong local environments, the attraction of a young, innovative population, and economic growth.²⁸

²⁴ House of Commons Communities and Local Government Committee (2007) *Coastal Towns: the Government's Second Response First Report of Session 2007–08* <http://www.parliament.the-stationery-office.co.uk/pa/cm200708/cmselect/cmcomloc/69/69.pdf> (30)

²⁵ ODPM – SEU (2004) *The drivers of social exclusion - Review of the literature for the Social Exclusion Unit* (33)

²⁶ Sparkes, (1999) op. quoted SEU (2004) *The Drivers of Social Exclusion*
http://archive.cabinetoffice.gov.uk/seu/docs/bc_drivers.pdf

²⁷ Beatty, Fothergill and Wilson for DCLG (2008) *England's Seaside Towns - A 'benchmarking' study* (28)

²⁸ See Taylor, M 'Brighton: Regeneration of a major resort' in Walton and Browne (2010) for Coastal Communities Alliance *Coastal Regeneration in English Resorts 2010* (195-197)

- 3.23 Fuelled by increasing labour mobility and trend rises in personal wealth over time, many households will have a growing choice as to where they live. These households contain the highly qualified workers that the coastal economies will need to attract and retain. These workers particularly value environmental factors.²⁹ As Florida points out, “Quality of place – particularly natural, recreational, and lifestyle amenities – is absolutely vital in attracting knowledge workers and in supporting leading-edge high technology firms and industries. Knowledge workers balance economic opportunity and lifestyle in selecting a place to live and work. Given that they have a wealth of job opportunities, knowledge workers have the ability to choose cities and regions that are attractive places to live as well as work”.³⁰
- 3.24 Coastal areas may be particularly well placed in developing these attributes. Ubiquitous fast telecommunications may assist in the attraction of knowledge workers to these strong coastal environments. The Work Foundation suggests that the number of people working from home for at least one day per week has grown by 14% per annum since 1997.³¹ More flexible working arrangements, particularly for professionals, may allow greater dispersal of knowledge based workers to more peripheral parts of the country.^{32 33}

Employment growth in coastal towns has been better than average

- 3.25 As we showed above, increasing the amount of labour input used in production will boost overall output.
- 3.26 Research by Beatty and Fothergill shows that employment in the 37 principal seaside towns has been growing a little faster than the national average – by 7.5 per cent between 1998–99 and 2005–06, compared to 6.9 per cent across England as a whole. Earlier, the authors had used similar earlier findings to argue that “far from entering a spiral of decline caused by the loss of tourism business, the economy of Britain’s seaside towns actually proved resilient”.³⁴
- 3.27 This process will raise economic output in coastal areas but might not increase per capita output. Walton points out, though, that “in emphasizing coastal employment growth, Beatty

²⁹ Studies reviewed in work for the Government found that population characteristics such as income, age, education, occupation, household structure influenced the value that people placed on open space provision (see DTLR Valuing the External Benefits for Undeveloped Land <http://www.communities.gov.uk/index.asp?id=1145259>) Whilst the literature itself is somewhat vague about how these effects play out in practice, it is clear that better-off groups attach greater value to open space. CABE (2001) *The Value of Urban Design* states that this highlights the importance of understanding local demographics in relation to the economic value of an environmental asset - in this case, a park.

³⁰ Florida, R (2000) *Competing in the age of talent: quality of place and the new economy*

³¹ Work Foundation (2003) *Time to Go Home – Embracing the Home Working Revolution*

³² DTZ Peda, *Use of Business Space and Changing Working Practices in the South East*, May 2004.

³³ <http://www.flexibility.co.uk/issues/transport/travsubsummary.htm>

³⁴ Beatty and Fothergill (2003) *The Seaside Economy; the final report of the seaside towns research project*, CRESR, Sheffield Hallam University

and Fothergill may be glossing over the extent to which a lot of the work on offer has been low-paid and part-time.”³⁵ We explore these points below.

Labour resources in coastal areas have been boosted by in-migration by people of working age

- 3.28 Work for DCLG has found that the population of coastal areas is rising. Sheffield Hallam “Benchmarking” work for the DCLG reported that from the 2001–06 period their estimated growth (about 0.35 per cent a year) differed only marginally from the average over the previous thirty years (about 0.4 per cent a year). However, whereas between 1971 and 2001 population growth in seaside towns was faster than the English average, since 2001 it has fallen behind.³⁶
- 3.29 The literature has identified that coastal environments – with their proximity to seascapes - attract particular groups of in-migrants. This is a group of in-migrants to coastal communities that we may loosely term lifestyle shifters – people who are attracted by the lifestyle that coastal proximity can offer. The widely quoted *Seaside Economy* report of 2003 found that “a great deal of the in-migration to seaside towns appears to be driven by residential preference. Put simply, many people move to seaside towns because they want to live there” rather than moving because a specific job is available, but even so, this trend (if continuing) will tend to raise the labour resources available in the area.³⁷ The research suggested that these were people who were in the second half of their working lives.
- 3.30 Work on the coastal South East has shown that whilst the population is ageing overall, the working age population is expected to increase faster than the region as a whole between 2004 and 2029. The labour force will therefore increase in size from over the next 20-25 years.³⁸
- 3.31 However, the literature has suggested that younger in-migrants to coastal areas moved in the expectation of finding work, but that as a result, this process was leading to an imbalance in seaside labour markets, with too much labour chasing too few jobs.³⁹ Other evidence has suggested, though, that “as in other urban areas throughout the country, the problem is not a shortage of work but one of high inactivity.”⁴⁰

³⁵ Walton and Browne (2010) for Coastal Communities Alliance *Coastal Regeneration in English Resorts 2010* (4)

³⁶ Beatty, Fothergill and Wilson for DCLG (2008) *England’s Seaside Towns - A ‘benchmarking’ study* (14)

³⁷ Beatty and Fothergill (2003) *The Seaside Economy; the final report of the seaside towns research project*, CRESR, Sheffield Hallam University (6)

³⁸ SQW (2008) *Coastal South East: A Framework for Action Final Report*

³⁹ Beatty and Fothergill (2003) *The Seaside Economy; the final report of the seaside towns research project*, CRESR, Sheffield Hallam University (6)

⁴⁰ HM Government (2007) *Government Response to the Communities and Local Government Committee Report on Coastal Towns* (9) <http://www.official-documents.gov.uk/document/cm71/7126/7126.pdf>

Employment rates are slightly below the English average

- 3.32 Research for the Government found that the average employment rate in seaside towns is just below the England average – 72 per cent compared to 74 per cent. The work found substantial variation in the employment rate between seaside towns – from 78 per cent in Whitley Bay, Greater Worthing and Sidmouth to just 62 per cent in Clacton⁴¹.

Claimant rates for the three main benefits for the non-employed is above average

- 3.33 Research for the Government found that across seaside towns as a whole the share of working age adults claiming the three main benefits for the non-employed (Jobseeker's Allowance (JSA), Income Support (IS) paid to lone parents, and Incapacity Benefit/Severe Disablement Allowance (IB/SDA) is above average (13.3 per cent compared to 11.2 per cent in England as a whole).⁴²
- 3.34 The research found that incapacity claimants are "by far the largest group of non-employed working age claimants". In England's 37 principal seaside towns they account for 8.8 per cent of the working age population – or nearly one-in-eleven of all adults aged between 16 and state pension age - compared to 6.9 per cent in the English average.

The amount of paid work done in coastal communities is depressed by seasonality – although the importance of seasonality is contested

- 3.35 The House of Common Select Committee report suggested that seasonal unemployment was a major concern in coastal towns. However, responses by Government suggested that this problem was small,⁴³ and subsequent independent work for DCLG found that "there is a seasonal cycle in claimant unemployment in seaside towns, but on average this is not large – just 0.5 percentage points". The DCLG work found that "only four seaside towns – Skegness, Newquay, St Ives and Great Yarmouth – experience a seasonal fluctuation of two percentage points or more".⁴⁴
- 3.36 However, other research suggests that there is a more complex story with regard to seasonal unemployment that is not picked up on official statistics. Considerable amounts of seasonal unemployment might not be picked up on claimant count measures of inactivity. Walton points out that seasonal industries in coastal areas create "extensive intermittent opportunities for female, child and indeed pensioner employment, often in the 'black economy'...phenomena such as 'dovetailing' where people move between occupations on a seasonal basis and different family members becoming dominant earners

⁴¹ Beatty, Fothergill and Wilson for DCLG (2008) *England's Seaside Towns - A 'benchmarking' study* (25)

⁴² Beatty, Fothergill and Wilson for DCLG (2008) *England's Seaside Towns - A 'benchmarking' study* (31,32). The research notes that these three benefits are mutually exclusive (ie an individual claimant cannot receive more than one at the same time) so there is no double-counting.

⁴³ HM Government (2007) *Government Response to the Communities and Local Government Committee Report on Coastal Towns* <http://www.official-documents.gov.uk/document/cm71/7126/7126.pdf> (9)

⁴⁴ Beatty, Fothergill and Wilson for DCLG (2008) *England's Seaside Towns - A 'benchmarking' study* (38)

at different times, are well established in coastal settings. This applies to fishing, trade, building and manufacturing as well as tourism”.⁴⁵

Part-time working is more prevalent in coastal communities than elsewhere

- 3.37 Research has shown that seaside towns have a high concentration of part-time jobs. However, this research could be usefully updated as it was carried out in 2003.⁴⁶

In some areas, relatively high concentrations of older people may reduce per capita productivity levels

- 3.38 Some areas experience significant amounts of in-migration by older people⁴⁷. Whilst it is important to point out that the country as whole is ageing, the Commission for Rural Communities found that there were particular concentrations of older people in coastal locations in the South West, South East, Lincolnshire, and East Anglia.⁴⁸ Work for DCLG found that the share of the population over state pension age in English coastal towns is markedly above the English average (24 per cent compared to 19 per cent).⁴⁹
- 3.39 Low levels of economic activity because there are large numbers of retired people in the area, many of whom are likely to be on state pensions - will tend to reduce the per capita productivity of an area (although not on per worker or per hour worked measures of productivity).
- 3.40 Low incomes may also have broader economic consequences for an area: low incomes mean low spending, which in turn means that there is less local job creation as those incomes are spent.

Labour productivity

- 3.41 In this section we look at the processes affecting labour productivity in coastal communities. Here, we deal with the element of growth accounting highlighted within the dotted line on the figure below.

⁴⁵ Walton and Browne (2010) for Coastal Communities Alliance *Coastal Regeneration in English Resorts 2010* (123)

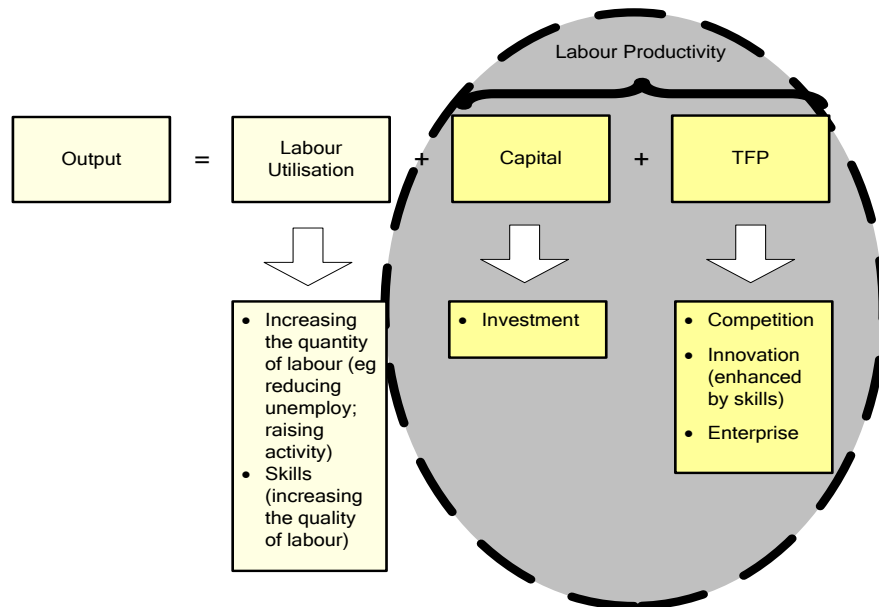
⁴⁶ Beatty and Fothergill (2003) *The Seaside Economy; the final report of the seaside towns research project*, CRESR, Sheffield Hallam University (47)

⁴⁷ House of Commons Communities and Local Government Committee (2007) *Coastal Towns: the Government’s Second Response First Report of Session 2007–08* <http://www.parliament.the-stationery-office.co.uk/pa/cm200708/cmselect/cmcomloc/69/69.pdf> (12);

⁴⁸ Atterton (2006) ‘Ageing and Coastal Communities’ *Final Report for Lincolnshire Coastal Action Zone* (Centre for Rural Economy Research)

⁴⁹ Beatty, Fothergill and Wilson for DCLG (2008) *England’s Seaside Towns - A ‘benchmarking’ study* (7)

Figure 3.3 The determinants of output



3.42 Labour productivity growth (which is a function of capital and Total Factor Productivity) is the main long-term way that growth takes place. It is determined by a number of components. The main factors are that the intensity of capital that each worker uses can rise; technology can improve; or more innovative work practices can be adopted. Detailed work has been done to understand the underlying drivers of productivity growth, and we work through this below.

Productivity driver 2: Innovation processes under way in coastal communities

3.43 Innovation is one of the Government’s productivity drivers. It can be simply defined as “the successful exploitation of new ideas”.⁵⁰ Research shows that innovation is “one of the main engines of long-term economic growth and structural change”.⁵¹ It is one of the two keys to modern growth, according to the historical evidence.⁵²

3.44 The OECD argues that the comparative advantage of high-cost countries is increasingly based on innovative activity, pointing out that “the creation of new ideas based on tacit knowledge cannot easily be transferred across distance.”⁵³ It will therefore be important to ensure that English coastal economies keep up with this shift.⁵⁴

⁵⁰ <http://www.dti.gov.uk/innovation/index.html>

⁵¹ HM Treasury/DTI (March 2006) *Productivity in the UK 6: Progress and new evidence*

⁵² Reviewing the literature, Coyle notes that there are two keys to modern growth, according to the evidence: technical innovation, which improves productivity in certain industries, and increasing specialisation through trade. See Coyle (2007) *The Soulful Science*

⁵³ Audretsch, D. B. and R. Thurik (2001), "Linking Entrepreneurship to Growth", *OECD Science, Technology and Industry Working Papers, 2001/2, OECD*

⁵⁴ Audretsch, D. B. and R. Thurik (2001), "Linking Entrepreneurship to Growth", *OECD Science, Technology and Industry Working Papers, 2001/2, OECD*

There is no specific research on Knowledge Based Industries in coastal areas

- 3.45 Perhaps of greatest importance to the future of seaside economies is the share of coastal employment in Knowledge Based Industries (KBIs). These industries are those in which it is hoped that the UK will have competitive advantage in future.
- 3.46 There appears to be no separate analysis in the literature of the prevalence of KBIs in seaside areas. We have provided separate analysis on this point (see paragraph 5.19 onwards).

Some evidence suggests that some local coastal cultures do not prioritise change and innovation

- 3.47 There have been some suggestions in the literature that the presence of an older population can create a local political constituency which dislikes innovation and change. This may reduce the local scope for “taking full advantage of new opportunities.”⁵⁵
- 3.48 Exactly how important this influence is in practice is open to question. There are indications that it might reduce over time. The emerging trend of “agelessness” has a countervailing impact: baby boomers have heightened expectations about remaining active until much later in life, and a more widespread demand for new experiences.

Productivity driver 3: competition processes under way in coastal communities

- 3.49 Competition improves productivity by creating incentives to innovate and ensures that resources are allocated to the most efficient firms. Competition should not be confused with competitiveness: competition is a driver of productivity growth, whereas competitiveness is an outcome of it.
- 3.50 The joint DTI/Treasury document *Productivity in the UK* states that enterprise – the creation of new firms – raises productivity in a continually evolving process which has been called “creative destruction”.⁵⁶ The mechanisms by which this process works are as follows.
- Competition rises as new firms drive out existing underperforming firms, so leveraging up productivity.
 - New firms and entrepreneurs introduce new technology and innovation – again leveraging up productivity.
- 3.51 The theory assumes that new firms exit the market promptly, and new firms grow up to replace old ones, using the resources released by exiting firms in more productive ways.
- 3.52 The Treasury suggests “differing levels of competitive pressures in a particular region or sub-region can have an impact on that area’s economic prosperity and productivity. Firms

⁵⁵ House of Commons Communities and Local Government Committee (2007) Coastal Towns: the Government’s Second Response First Report of Session 2007–08 <http://www.parliament.the-stationery-office.co.uk/pa/cm200708/cmselect/cmcomloc/69/69.pdf> (32)

⁵⁶ HM Treasury/DTI (March 2006) *Productivity in the UK 6: Progress and new evidence*

in poorer and more remote regions may face less competition, and hence reduced incentives to cut costs and innovate.”⁵⁷ This point was also made during our consultations with local authorities.

Some coastal areas are struggling to make structural economic changes

3.53 The theory assumes that new firms grow up to replace old ones. However, some areas struggle to participate effectively in this process. The literature shows that some coastal industries - including fisheries, tourism, shipbuilding and port activities - have all been subject to profound structural change in the last half century. A number of coastal areas have struggled to respond by moving their economies to other, more productive activities.

The risks of economic “path dependency”

3.54 One useful way of thinking about economic development processes has been advanced by James Simmie in a paper for the National Endowment on Science and Technology and the Arts (NESTA).⁵⁸

3.55 As Simmie has pointed out, it is an area’s economic inheritance that determines much of the social and economic conditions of communities today, and that “it is difficult for new ideas to start in old industrial places. Nineteenth century industrial legacies can be difficult to overcome”.⁵⁹ Many coastal areas are still in the process of making the structural adjustments required.

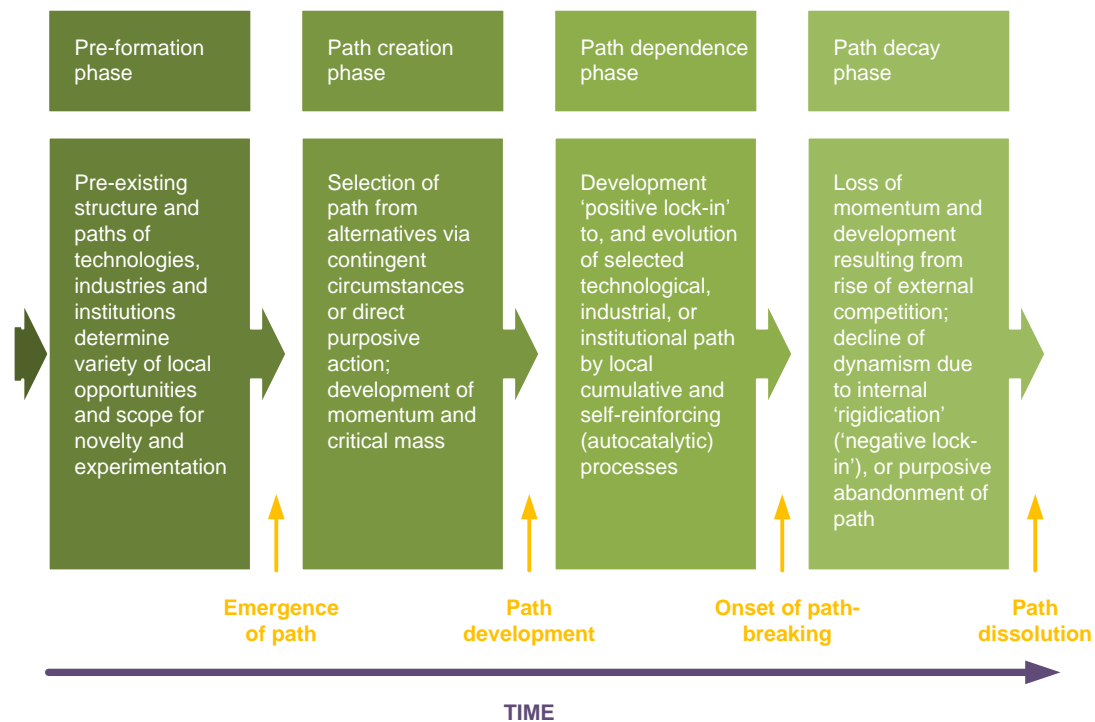
3.56 Simmie puts the role of innovation and change at the centre of explanations of why areas have performed in the way that they do. He suggests that the economic future of places rests to a certain extent on its historic economic “path”. Places are therefore said to be “path dependent”. But equally, there are points when places lose momentum as a result of rising external competition or an internal decline in dynamism. This is the “path decay” phase. The diagram below shows the cycle involved.

⁵⁷ HM Treasury/DTI (2003) *Productivity in the UK 4: The Local Dimension* (21)

⁵⁸ Simmie et al (2008) *History matters: Path dependence and innovation in British city-regions*

⁵⁹ Simmie et al (2008) *Policy Briefing HM/26 History matters: Unlocking innovation in British cities and regions* (5)

Figure 3.4 Path formation and path decay



Source: Simmie et al (2008) *History matters: Path dependence and innovation in British city-regions*

3.57 According to Simmie, places become path dependent because⁶⁰

- there are (originally) profits to be made – which leads to firms and consumers being locked-into repetitive patterns of production and consumption, and hence this limits the opportunity for new products and services to make it to the market.
- Technological (and capital) “lock-in” occurs, where areas are tied to existing technologies;
- Institutional inertia which includes Governmental, organisational or cultural systems that lag behind economic change. Simmie points out that the development of economies is not just the result of economic factors but also simultaneous “technological, socio-cultural and institutional developments”.

3.58 Places move through the path dependence phase into the path decay phase. Just as with industrial cities, it is this process of path decay that threatens coastal areas.

3.59 It is certainly not possible to say that all coastal communities are to be found in the “path decay” phase – or anything approximating such a statement. For one thing, there is a very wide range of types of coastal communities around the coast, and secondly, these ideas have not been specifically applied to coastal areas. But one significant theme which emerges from reviewing the literature is that there are frequent calls for economic

⁶⁰ Simmie et al (2008) *History matters: Path dependence and innovation in British city-regions* (5)

diversification in coastal economies,⁶¹ and it is easy to see the history of many coastal economies in the terms laid out above: we can see the “path creation” phase during the early period of coastal development, with industry, ports, fisheries and tourism all developing rapidly through the Victorian era. We can then see the “path dependency” phase emerge, with coastal economies exploiting the earlier investments made; and then see the “path decay” phase in the latter half of the twentieth century, as external competition has grown, and falling profits reduced the ability of some coastal sectors to respond.

- 3.60 Simmie’s work suggests that the challenge is to create a new growth path. As Simmie says, areas “must be able to escape their past to create new economic futures. Continual growth is never guaranteed. There is a continual need for constant change and innovation”.⁶²
- 3.61 This might be a fruitful area for further study, because it is possible that there are a number of factors present in some coastal areas that may combine to slow this process of economic innovation and change in coastal communities.

Productivity driver 4: enterprise processes under way in coastal communities

- 3.62 New enterprises bring new ideas and technologies and increase competition. Entrepreneurs are able to combine factors of production and new technologies. The ability of entrepreneurs to turn ideas into production is affected by the skills of the labour force, availability of capital and the rules and regulations that affect the competitive environment – including planning restrictions.

Business stock and start-up rates in coastal communities are slightly below average

- 3.63 Research on business density, and the rate of business start ups, has used VAT-registration. This is a sensible source of data, but it should be borne in mind that these statistics do not capture businesses under the VAT registration level (around £70,000 turnover).
- 3.64 Benchmarking work for the Government showed that in relation to population, the stock of VAT registered businesses in England’s principal seaside towns is a little lower than the English average. There are sizeable variations between seaside towns in the stock of businesses per 10,000 residents.
- 3.65 The rate of new VAT registrations in England’s principal seaside towns is a little below the English average, though again not greatly out-of-line with the figures for several regions outside London.⁶³

⁶¹ See, for example, HOC (27); English Heritage (2007) *Regeneration in Historic Coastal Towns* (3); English Tourism Council (2001) *Sea Changes: Creating World Class Resorts in England* (3); Local Government Association (undated) *‘Coastal’ Special Interest Group Report - Coastal Economic Development* (4)

⁶² Simmie et al (2008) *History matters: Path dependence and innovation in British city-regions*

⁶³ Beatty, Fothergill and Wilson for DCLG (2008) *England’s Seaside Towns - A ‘benchmarking’ study* (43)

- 3.66 Some seaside towns are responding to this challenge head-on. Scarborough, for example, has put the development of new businesses and a highly enterprising environment at the centre of its strategy.⁶⁴

Productivity driver 5: investment

- 3.67 Investments increase labour productivity by increasing the capital each worker can utilise. Infrastructure investments facilitate movement of goods and services and influence the location decisions of business.

Frequently, coastal status means that coastal areas are peripherally located, creating difficulties in competing successfully in labour and product markets, so reducing levels of investment the market is willing to make

- 3.68 Generally speaking – although less so in the case of estuarine areas – coastal areas are “at the edge” of the country. This status of being “at the edge” means that coastal communities are frequently peripheral - that is to say, relatively distant from the rest of the country. This has an effect on coastal areas’ ability to compete effectively in labour and product markets, and may reduce their exposure to innovation.
- 3.69 Equally, coastal economies are frequently said to suffer poorer transport links to product markets than those economies more centrally located. They are seen as distant from motorway links and fast train services.⁶⁵
- 3.70 Proximity to other areas of population density and economic mass appears to have an effect on productivity: research has found a robust relationship with proximity to economic mass, suggesting that doubling the population of working age proximate to an area is associated with a 3.5% increase in productivity in the area. Proximity was measured by travel time.⁶⁶
- 3.71 Government work also stresses the economic value of connections to other markets (amongst other things). It has stated that “recent research on smaller cities and towns is relevant to the growth of coastal towns ... Smaller places are more likely to prosper if they are well connected to national and international markets.”⁶⁷

The lack of a 360 degree economic hinterland means that coastal towns may experience difficulties in attracting investment and remaining competitive

- 3.72 In economic terms, waterfront creates a natural limit on their economic hinterland. Because of this basic fact, coastal communities are never centrally located, and so coastal

⁶⁴ Walton and Browne (2010) for Coastal Communities Alliance *Coastal Regeneration in English Resorts 2010* (90)

⁶⁵ House of Commons Communities and Local Government Committee (2006) *Coastal Towns Second Report of Session 2006–07* (9) House of Commons HC 351, The Stationery Office, London

⁶⁶ Patricia Rice and Anthony J. Venables (2004) CEP Discussion Paper No 642 July 2004 *Spatial Determinants of Productivity - Analysis for the Regions of Great Britain*

⁶⁷ HM Government (2007) *Government Response to the Communities and Local Government Committee Report on Coastal Towns* (9)

towns cannot effectively function as service centres for a 360 degree hinterland. This has the biggest impact in the context of retailing (an increasingly important town function in a consumer age), but also a wide range of other services. This means that coastal towns might often struggle to focus the same volume of service functions and consumer spending in their towns as comparable areas further inland.

There are reasons to think that these difficulties associated with peripherality and hinterland may have increasing importance in the modern economy

3.73 Gordon has argued that since the 1980s/90s, physical location and natural endowments has tended to matter less in explanations of economic development, and softer, place-based socio-cultural externalities matter more.⁶⁸ Amin and Thrift emphasise three aspects of these positive externalities which tend to allow places to capture higher levels of activity:⁶⁹

- The ability to provide locations and context for face-to-face contact.
- To provide for social and cultural interaction – “to act as places of sociability, of gathering information, establishing coalitions, [and] monitoring and maintaining trust”.
- The ability to enhance knowledge and innovation though concentrating labour markets and expertise in particular places.

3.74 These concepts have never (to our knowledge) been specifically investigated by academic work with relation to coastal areas. However, it is possible that coastal areas might find themselves at a disadvantage in this respect, because they lack the economic hinterland that other areas have.

Some coastal areas are struggling to generate the income required to make investments in their businesses

3.75 The tourism industry in some coastal resorts suffers from particular problems with regard to reinvesting on the scale required to keep up with customer expectations. Some work has suggested that tourism in the UK no longer generates the funds to create the continuous and evolving response that are required to respond to changing tastes.⁷⁰ Similarly, John Walton makes the point that, “the streets of Victorian boarding houses are a particular problem, as the economics of adaptation to new tastes and expectations with limited access to capital present daunting challenges.”⁷¹

⁶⁸ Gordon, I presentation to GEMACA
http://www.lse.ac.uk/collections/LSELondon/events/gemaca/Gordon_presentation.ppt

⁶⁹ Amin and Thrift (1992) *Neo-Marshallian nodes in Global Networks International Journal of Urban and Regional Research* v16 p 571-587

⁷⁰ Agarwal, S (1998) *Restructuring and local economic development: implications for seaside resort regeneration in Southwest Britain Tourism Management* 20

⁷¹ Walton and Browne (2010) for Coastal Communities Alliance *Coastal Regeneration in English Resorts 2010* (21)

- 3.76 These economic challenges create onward difficulties for the provision of good quality public spaces.
- Redundant investment in outdated tourist provision has combined with unintended policy consequences to create concentrations of deprivation*
- 3.77 Evidence presented to the House of Commons Select Committee suggested that some coastal areas were suffering from a process that was driven by the high availability of Houses in Multiple Occupation (HMOs) and care homes that have been converted from hotels and guesthouses.
- 3.78 The Committee heard of the existence in some places of a large number of “vulnerable” adults and children. These “vulnerable” individuals had either moved to coastal areas voluntarily or had been placed there by other authorities to take advantage of available, cheap accommodation.⁷² Thanet District Council, for example, told the Committee that London boroughs promoted relocation to Thanet to people on their housing and care lists. Kent County Council referred to this practice as “social dumping”.⁷³
- 3.79 The concern is that the influx of these groups may put local services under strain, and create “area effects” – that is, concentrations of deprivation which work to further compound and perpetuate deprivation in future.⁷⁴
- 3.80 Similarly, there is evidence that some parts of the coast have large numbers of residents who live for the bulk of the year in caravans. Because they are not classed as permanent residents, these individuals are not accounted for in census and other statistics. These are frequently “retirees who often have health issues”.⁷⁵
- 3.81 The Government’s second response to the House of Commons report promised to investigate this practice. The Government stated that “there is an evidence gap in terms of data on homes in multiple occupation (HMOs) and the employment status of people who

⁷² Vulnerable adults were defined in the report as being those who either receive or are in need of community care services, requiring support from service providers such as mental health, housing and social services. House of Commons Communities and Local Government Committee (2007) *Coastal Towns: the Government’s Second Response First Report of Session 2007–08* <http://www.parliament.the-stationery-office.co.uk/pa/cm200708/cmselect/cmcomloc/69/69.pdf> (15)

⁷³ House of Commons Communities and Local Government Committee (2007) *Coastal Towns: the Government’s Second Response First Report of Session 2007–08* <http://www.parliament.the-stationery-office.co.uk/pa/cm200708/cmselect/cmcomloc/69/69.pdf> (16)

⁷⁴ Researchers have noticed what are known as “area effects”. These suggest that to be poor in an area which houses lots of other poor people would generally be worse than being poor in a wealthy area. See Tunstall, Lupton (2003) CASE Paper 70 London School of Economics *Is Targeting Deprived Areas an Effective Means to Reach Poor People? An assessment of one rationale for area based funding programmes*

⁷⁵ Browne in Walton and Browne (2010) for Coastal Communities Alliance *Coastal Regeneration in English Resorts 2010* (38’)

live in such accommodation.”⁷⁶ There have been recent changes to regulations on notifying authorities of intentions to create HMOs.

- 3.82 The presence of Houses in Multiple Occupation, and the populations they tend to attract, has been seen relatively recently as being of particular importance in resort towns. The British Resorts and Destinations Association (BRADA) believe that “HMOs are now the single greatest barrier to resort development and one which impacts significantly relative to size on almost every resort town.”⁷⁷

Investment by central Government through regeneration schemes have been an important process at work in many coastal communities

- 3.83 Some of the literature points out the risks of seeing regeneration as a process of destroying what was there before on a “slum clearance” model: work by the Coastal Communities Alliance (CCA) point out that the most successful regeneration often goes forward without “heavy footed demolition and redevelopment”, suggesting that this has not always been the case⁷⁸ The CCA work argues that regeneration needs to be about “giving a new, fresh lease of life to something that is already there...drawing on existing identities, resources and vitality”.⁷⁹
- 3.84 Walton, an economic historian of the coast, points out that chaos and irregularity has always been central to much of the coast’s appeal. Looking at Whitby, Walton writes that “ports, especially fishing ports, offered an exciting ‘otherness’, access to a different and distinctive way of life...from at least the 1880s this irregularity and informality of layout, with the activity of the fishing and commercial ports, was central to Whitby’s attractions for growing numbers of visitors”.⁸⁰ Walton is worth quoting extensively, as his work illustrates points made about the importance of maintaining and accentuating local distinctiveness in coastal areas elsewhere in the literature.⁸¹ Whilst Walton writes about Whitby, many of these points apply to the successful environments in a number of coastal towns, including Falmouth, Whitstable, Woodbridge, and Aldeburgh.

“The key to Whitby’s survival and success has been its atmospheric sense of history and identity ... Its current popularity with seekers after history, authenticity,

⁷⁶ House of Commons Communities and Local Government Committee (2007) *Coastal Towns: the Government’s Second Response First Report of Session 2007–08* <http://www.parliament.the-stationery-office.co.uk/pa/cm200708/cmselect/cmcomloc/69/69.pdf> (20)

⁷⁷ Peter Hampson, Director of BRADA, presentation at the Understanding the Coastal Communities of the North West Conference 29th June 2009, Midland Hotel, Morecambe

⁷⁸ Walton in Walton and Browne (2010) for Coastal Communities Alliance *Coastal Regeneration in English Resorts 2010* (21)

⁷⁹ Walton in Walton and Browne (2010) for Coastal Communities Alliance *Coastal Regeneration in English Resorts 2010* (65)

⁸⁰ Walton (2010) ‘Constructing “Old Whitby”’: Frank Meadow Sutcliffe, Tourism, Heritage And Regeneration in Leeds Metropolitan University *A Collection of Essays on Place, Skills and Governance in Yorkshire and Humber Region* (29)

⁸¹ See, for example, entries on character and identity in English Heritage (undated) *Regeneration in Historic Coastal Towns*

atmosphere and the urban picturesque was not inevitable, but has been the outcome of a series of conflicts and accidents, which resulted in the survival of enough of the ‘Old Town’ to sustain a sense of romance and mystery among a broad spectrum of visitors...[and] has benefited from the survival of a local fishing industry, alongside the development of pleasure boating in the harbour and a history of intermittent conflict between different harbour users, and a belatedly successful effort to remove sewage pollution from the harbour itself...it is no good remaking everywhere in an identical image derived from the current fashions on the drawing-board, when you can build on existing historic identities, not preserving them in aspic, but modifying them, like Whitby’s cottages, to take account of changing standards, expectations and preferences.”⁸²

3.85 Similarly, English Heritage notes that

“improved transport links for geographically remote coastal towns (which are often seen as drivers of economic growth) and development or expansion projects on ports and harbours can have a wide range of implications for the historic environment, including marine archaeology, historic dock structures, townscapes and historic buildings. In addition, the rising popularity of sailing and the consequent increase in the size and numbers of marinas poses challenges for historic harbours and associated buildings.”⁸³

Outcomes of coastal socio-economic processes: exposure to economic risks

Some coastal areas appear particularly vulnerable to industry competition or sector contraction

3.86 Whilst there has already been some very significant economic adjustment in coastal communities in the last 30 years, some areas remain potentially vulnerable to economic change. No research is available specifically for coastal areas on these issues, but it is clear from existing knowledge within the MMO that some coastal communities are particularly exposed.

3.87 Effectively we need a measure of risk or exposure to economic change. Economic vulnerability breaks out two ways.

- Exposure to single industry failure, particularly when this industry is on a declining trajectory. When few sectors, products or firms dominate a local labour market, then its failure or decline could have a profound impact on the local economy.
- Exposure to public sector jobs. Significant cuts in public sector employment are expected over the medium term. Reducing the deficit will inevitably result in job

⁸² Walton (2010) ‘Constructing “Old Whitby”’: Frank Meadow Sutcliffe, Tourism, Heritage And Regeneration in Leeds Metropolitan University *A Collection of Essays on Place, Skills and Governance in Yorkshire and Humber Region* (34)

⁸³ English Heritage (2007) *Regeneration in Historic Coastal Towns* (10)

losses that will affect local economies. The Office for Budget Responsibility (OBR) has previously estimated that 330,000 jobs could go from the public sector by 2014/15 across the UK.⁸⁴ Coastal areas are frequently listed as being amongst those most likely to be affected by losses in public sector employment. Work for DCLG has shown that jobs in public administration, education and health are over-represented in most seaside towns.⁸⁵ Similarly, work by the Centre for Cities looked at the whole of the UK, and shows that of the top ten cities likely to be worst affected by public sector job cuts, nine are in coastal areas. Of the ten least affected cities, only Grimsby is coastal (assuming that we do not consider London to be a coastal city).⁸⁶

- 3.88 We have not found any research focusing on these issues on coastal areas. We have therefore provided additional research, and provide our findings in section 5.

Outcomes of coastal socio-economic processes: deprivation

- 3.89 Deprivation is a relative concept, and so compares the conditions of individuals to others in society. It can broadly be seen as the outcome of economic and social underperformance in an economy over time.
- 3.90 Deprivation has multiple dimensions (with the Index of Multiple Deprivation possessing eight “domains”) but the biggest determinant of how a marine activity will affect deprivation is likely to be the extent to which it generates labour demand at the unskilled end of the labour market.^{87 88} The approach is in line with both this and the previous Government’s overall approach that paid work is the best way out of poverty, deprivation and social exclusion.⁸⁹

⁸⁴ OBR quoted Centre for Cities *Cities Outlook 2011*

⁸⁵ Beatty, Fothergill and Wilson for DCLG (2008) *England’s Seaside Towns - A ‘benchmarking’ study* (20)

⁸⁶ See Centre for Cities *Cities Outlook 2011* Table 4. Settlements listed are Newport, Swansea, Plymouth, Liverpool, Portsmouth, Sunderland, Dundee, Middlesborough, and Hull.

⁸⁷ ODPM – SEU (2004) *The drivers of social exclusion - Review of the Literature for the Social Exclusion Unit*(12) states that “The state of labour demand drives social exclusion more than any other factor.”

⁸⁸ ODPM – SEU (2004) *The drivers of social exclusion - Review of the Literature for the Social Exclusion Unit* (29) states that typically, unemployment is found concentrated in lower skilled individuals.

⁸⁹ In effect, this is the “integrationist” viewpoint on social exclusion, arguing that paid employment is seen as the key socially integrating force through income, identity, a sense of self worth and the social networks that it generates. Levitas notes that there are different ways of conceptualising the causes of social exclusion: an integrationist approach in which paid employment is seen as the key integrating force through income, identity, a sense of self worth and networks; a poverty approach in which the causes of exclusion are related to low income – with redistribution the remedy; and an underclass approach in which the excluded are viewed as deviants from the moral and cultural norms of society and are blamed for their own poverty and its reproduction. Levitas (1999) *The Inclusive Society? Social Exclusion and New Labour*.

Coastal communities are generally less economically successful than inland areas – but differences are relatively small

- 3.91 Getting precise measurements of economic output in terms of Gross Value Added (GVA) per capita in coastal areas is difficult. GVA measurements are not reliable below NUTS3 level (county/UA level).⁹⁰ We have therefore reviewed the available evidence below. Whilst it does not directly concern output, it gives a general view of the relative success of coastal areas.
- 3.92 Whilst some coastal areas are remarkably successful, coastal communities run a higher risk of being less economically successful than others in the country.⁹¹ Work on seaside towns for the Government has concluded that on around three-quarters of indicators reviewed, the average for the seaside towns is worse than for England as a whole. However, the review pointed out that “the scale of the disparity between the seaside town average and the English average is not always large...a balanced view, taking account of a range of statistical evidence, would be that on average England’s principal seaside towns are rather more disadvantaged than the rest of the country, but not markedly so”.⁹²

Coastal labour productivity and labour utilisation: a summary

- 3.93 A review of the labour utilisation processes under way in coastal communities has found that
- Educational attainment and workforce skills in coastal areas (a key productivity driver) are not generally worse than the English average – but this hides pockets of real problems.
 - Employment growth in coastal towns has been better than average, and labour resources in coastal areas have been boosted by in-migration by people of working age.
 - However, employment rates are slightly below the English average, and claimant rates for the three main benefits for the non-employed is above average.
 - The amount of paid work done in coastal communities is depressed by seasonality and part-time working.
 - In some areas, relatively high concentrations of older people may reduce per capita productivity levels.
- 3.94 The review of the labour productivity processes underway in coastal areas undertaken above has suggested that:

⁹⁰ This discussion of productivity measurements in rural areas makes this point.
<http://archive.defra.gov.uk/rural/documents/policy/dso/annex2.pdf>

⁹¹ Here, we take the view that a successful economy is one that can generate a sufficient income to maintain an acceptable standard of living and close to full employment without relying on state transfer payments - such as benefit payments or subsidies - from elsewhere in the country.

⁹² Beatty, Fothergill and Wilson for DCLG (2008) *England’s Seaside Towns - A ‘benchmarking’ study* (64)

- Innovation is a key productivity driver, but relatively little is currently published about the prevalence of innovative Knowledge-Based Industries in coastal areas. Cultures in some coastal areas appear not to prioritise change and innovation.
- Looking at the processes under way on the productivity drivers of competition, the literature suggests that some coastal areas are struggling to make the structural economic changes they need to make to remain competitive. It could be argued that some coastal economies show signs of being “path dependent.”
- Looking at the enterprise productivity driver, business stock and start-up rates in coastal communities are slightly below average.
- Regarding the investment productivity driver, some coastal areas are up against formidable natural obstacles. Frequently, coastal status means that coastal areas are peripherally located, creating difficulties in competing successfully in labour and product markets, so reducing levels of investment the market is willing to make. The lack of a 360 degree economic hinterland means that coastal towns experience difficulties in attracting investment, and there are reasons to think that these difficulties associated with peripherality and hinterland may have increasing importance in the modern economy. Some coastal areas are struggling to generate the income required to make investments in their businesses, and redundant tourist provision has combined with unintended policy consequences to create concentrations of deprivation as HMOs attract vulnerable populations. Investment by central Government through regeneration schemes have been an important process at work in many coastal communities, but the point has been made that this investment process needs to be undertaken sensitively.

Pulling together a view of labour utilisation and labour productivity

- 3.95 Pulling labour utilisation and labour productivity explanations together is helpful. Overall, it shows that whilst jobs numbers have grown in coastal areas, the jobs created appear not to have been the most economically productive, and there are questions whether the jobs created allow coastal areas to keep pace with the rest of the country.
- 3.96 Work for the DCLG, for example, has found that the more productive sectors of manufacturing and banking, finance, insurance and business services are under represented in most seaside towns.⁹³ Equally, the share of jobs in distribution, hotels and restaurants is markedly higher in seaside towns (30 per cent compared to an English average of 24 per cent).⁹⁴ The hourly earnings of seaside town residents, both male and female, are on average 7–8 per cent below the English average.⁹⁵
- 3.97 Although tourism is by no means the whole picture in coastal areas, it can neatly illustrate the problems faced in some coastal communities. Research on tourism has argued that

⁹³ Beatty, Fothergill and Wilson for DCLG (2008) *England's Seaside Towns - A 'benchmarking' study* (20)

⁹⁴ Beatty, Fothergill and Wilson for DCLG (2008) *England's Seaside Towns - A 'benchmarking' study* (20)

⁹⁵ Beatty, Fothergill and Wilson for DCLG (2008) *England's Seaside Towns - A 'benchmarking' study* (40)

“the GVA per job in the sectors in which seaside tourism jobs are concentrated is low. This is partly because so many of the jobs are part-time, and partly because many are low wage. Unlike say much of manufacturing, seaside tourism is not a ‘high productivity, high wage’ environment underpinned by substantial investment in plant and machinery. Thus in 2007 the national average GVA per job in hotels and restaurants (which accounts for around half of all seaside tourism jobs according to the estimates presented earlier) was just £11,000 a year, compared to a national average of £36,500 a year across all sectors.”⁹⁶

⁹⁶ Beatty, Fothergill, Gore and Wilson (June 2010) *The Seaside Tourist Industry In England And Wales - Employment, economic output, location and trends* http://www.shu.ac.uk/_assets/pdf/cresr-seaside-tourism-report.pdf (53)

4 HOW CAN MARINE ACTIVITIES AFFECT COASTAL SOCIO-ECONOMIC PERFORMANCE?

Introduction

- 4.1 In this section, we explore the ways that key marine activities listed in the Marine Policy Statement (MPS) can affect coastal socio-economic performance.
- 4.2 It is important to note that the marine activities listed are not intended to function as a listing of key industries in a sector-based economic strategy or coastal industrial policy. Instead, this list of key activities is relevant to this exercise because the bulk of marine planning activity will concern these industries and sectors. We use this list of key activities to:
- inform marine planners of the possible socio-economic consequences of the main means by which the marine plan's vision will be achieved;
 - sketch out the broad shape of impacts in order to inform marine planners seeking to maximise positive terrestrial socio-economic impacts;
 - contribute to decisions which maximise sustainable development;
 - promote compatibility of marine and terrestrial uses, and reduce conflicts between uses.
- 4.3 As the MPS points out, each marine plan area has its own characteristics and features. This means that not all of the activities discussed in this section will necessarily be applicable to each Marine Plan area. Equally, there may be socio-economic impacts of marine activities that are not covered here. Much will depend on the local context. This section can only provide a foundation for more detailed planning work in future which takes into account the detail of the local context.

Our approach

- 4.4 Research has already taken place on the economic and social impacts of marine activities. Rather than duplicate this work, we have sought to use this evidence wherever possible. We have relied heavily on work for the Crown Estate by Pugh and the DEFRA *Charting Progress 2 Feeder Report*. We acknowledge our debt to those efforts.
- 4.5 We have supplemented this work wherever necessary with our own reviews of the available literature, but have not undertaken primary research work.

The key marine activities listed in the Marine Policy Statement

- 4.6 The Marine Policy Statement (MPS) sets out eleven "key activities which take place in the marine environment"⁹⁷. These are defence, energy production and infrastructure, ports and shipping, marine aggregates, marine dredging and disposal, telecommunications cabling,

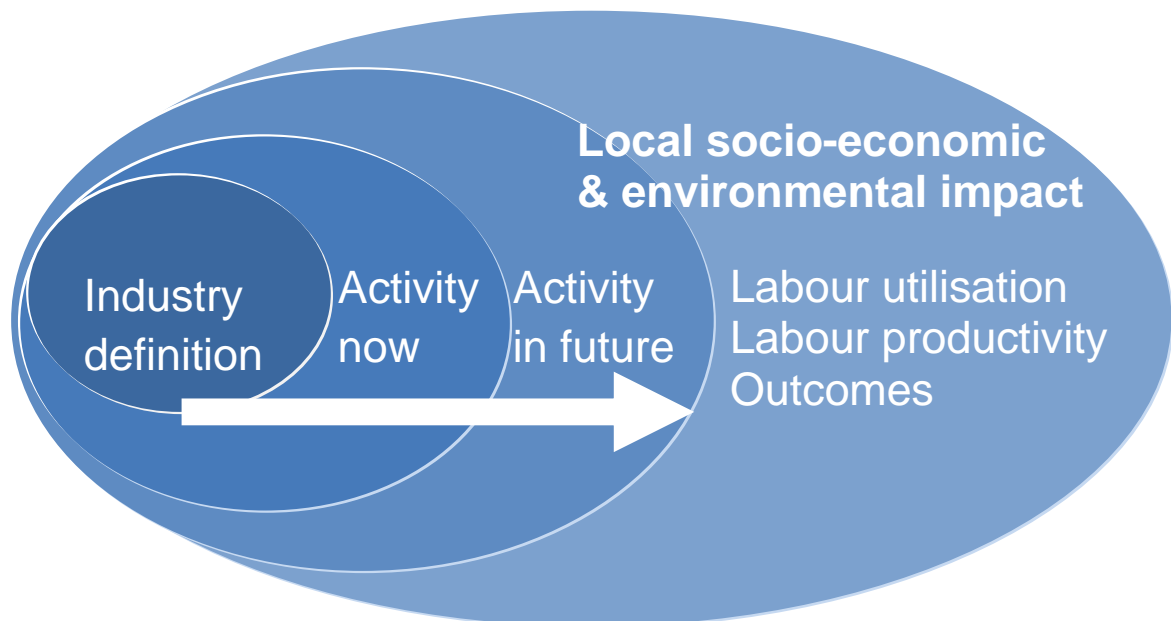
⁹⁷ HM Government (2011) *UK Marine Policy Statement* TSO London (10)
<http://www.defra.gov.uk/environment/marine/documents/interim2/marine-policy-statement.pdf>

fisheries, aquaculture, surface water management and waste water treatment and disposal, and tourism and recreation and Marine Protected Areas.⁹⁸ Note that Marine Protected Areas are not included in this list of activities for the purpose of this study because conservation is being considered outside of this study.

What are the local socio-economic impacts of the key marine activities?

- 4.7 Modern economies are spatially highly integrated. That means that economic activity in one place has economic, social and even environmental consequences in other places which can be physically very distant. However, it is our brief to concentrate on the specifically *local, coastal* impacts of the key activities suggested through a marine plan.⁹⁹
- 4.8 Any economic activity can affect a local economy and society in a number of ways. Whether these effects are considered positive or negative may depend on local circumstances. We investigate these local circumstances in section 6, but at this stage, our analysis simply seeks to isolate these socio-economic impacts without value judgements.
- 4.9 The figure below sets out a conceptualised approach to our analysis of the local impact of marine activities.

Figure 4.1 Impacts



⁹⁸ Ibid Chapter 3

⁹⁹ It is not sensible to tie down the concept of “local” to being any particular distance from the coast. What will be considered “local” impacts will vary in different cases. Any attempt to more closely define what impacts can be considered “local” to a given coastal area would be difficult, and of little analytical use in any event.

The analysis we have undertaken on the marine activities

- 4.10 We start with understanding the marine activity in question. We define it by Standard Industrial Classification (SIC) code, and provide a brief description. We are indebted to work by for the Crown Estate by Pugh and the DEFRA Feeder Report for these SIC codes.¹⁰⁰ We then describe the nature of activity currently taking place.
- 4.11 It is important to point out, though, that it is not always possible to isolate specifically marine activity within the broad industry classification. For example, the specifically marine activity of aggregates extraction is part of the broader SIC code of “operation of gravel and sandpits; mining of clays and kaolin” in the statistics. We have mapped where jobs are located, as activity which takes place on the coast is often marine-related, but this cannot always be relied on to isolate specifically marine activities: for example, clay mining in St Austell takes place in a coastal area, but is not a marine activity.
- 4.12 With this important caveat in mind, the maps that we have produced show where the absolute numbers of jobs generated by this activity are located (naturally, the activity will often take place at sea, but we look at the location of the workplace jobs involved using 2008 ONS data). These maps have been formatted to show areas within the MMO’s coastal definition in brighter colours, whilst retaining useful comparative information for other inland areas.
- 4.13 Secondly, we use a location quotient analysis to show when a given sector is over-represented in the local economy, relative to other activities. A location quotient analysis looks at whether a sector is “over represented” is in the local economy compared to the UK generally. A location quotient of 3.0 for a sector would mean that there were proportionately 3 times more people working in this sector than the national average. This might show where there was a particular economic specialism that has built up over time in a place. It is important to bear in mind, though, that past economic performance is not necessarily a guide to future performance, or to future policy: for example, simply because an area is underweight in a given sector might suggest that it is less suitable for this use, but certainly would not prove it.
- 4.14 We then look at future activity. We have reviewed the available literature to understand the factors which are driving change in the sector, and understand whether the sector is expected to grow or contract in future.
- 4.15 Next, we look at local socio-economic impacts of the marine activity. We interpret “socio-economic” impacts widely. In our choice of measures, we have been influenced by the review of coastal socio-economic processes undertaken in the previous section. This looked at labour utilisation, labour productivity, and the socio-economic outcomes of these processes. Seen together, the indicators provide a view of how a marine activity and its social, terrestrial environmental and heritage impacts might begin to raise productivity in a

¹⁰⁰ Pugh for Crown Estate (2008) *Socio-economic indicators of marine-related activities in the UK economy* London TSO (39); DEFRA (2010) *Charting Progress 2: Productive Seas Feeder Report*

local economy, and so contribute to solving some of the social and economic difficulties experienced by some coastal economies.

4.16 With each marine activity, we have pursued the following questions related to labour utilisation.

- How local are impacts? Is marine activity likely to increase employment in coastal towns? What is the extent of typical labour market catchments and supply chains? The objective of this section is to explore how different marine activities will affect local economies, as opposed to those further afield. It is the case that some (particularly highly specialised or capital intensive) activities may have relatively little impact on local economies, as they demand highly specialised labour or capital equipment from regional, national and even international markets. These activities are said to have high rates of “leakage” from a local economy, which means that even high levels of activity may have little local impact. Even though a detailed understanding of this issue will not be possible in this report, it will be important to broadly understand these likely leakage rates, as higher levels of leakage will mean that development might have little coastal impact.
- Does the activity generate above-average skills demands in the local economy? Our analysis of coastal socio-economic processes indicated that skills were an important part of the explanation of the productivity of any economy, and that some coastal areas underperformed in this respect. We have therefore looked at how the different marine activities may alter the demand for skilled labour. An increase in higher skilled jobs would be desirable in many coastal areas from the point of view of local economic development: these jobs are better paying, and are less likely to be subject to international competition from lower wage economies overseas. However, this is something of a double-edged sword: the review showed that most deprived people were unskilled, and so if new jobs created were out of the reach of this population, then the impacts of job growth on deprivation would be limited. NVQ levels are defined in Appendix 3.
- When the activity creates jobs, are these often seasonal or part time? These issues reduce output in a given area, because labour will be idle during down periods. Although we noted in our review Government statistics which suggested that seasonal fluctuations in coastal employment were perhaps not as high as commonly thought, there is evidence that this remains an important consideration in certain coastal locations, particularly those with an important tourist economy.

4.17 With each marine activity, we have pursued the following questions related to labour productivity.

- Does the activity generate above average wages? Our review of the economic processes affecting coastal communities in section 3 showed that coastal areas frequently possessed low productivity economies. In other words, the value of goods and services created per head was comparatively low. The effect of a marine activity on wages are likely to be important because a) a proportion of wages will be respent in the local economy, raising the demand for local goods and services through the “multiplier effect” and b) because higher wages generally

reflect that the activity in question is of a higher productivity¹⁰¹. It is important to bear in mind that changes in the level of any given marine activity are unlikely in themselves to create any fundamental changes in local productivity, because they are likely to represent only a marginal change in what is likely to be a mature, developed local economy (although there can be exceptions, particularly in smaller, more remote economies). However, the analysis provided here is likely to be useful in helping marine planners understand the relative desirability of different marine activities in economic development terms.

- Is the activity likely to affect investment in local infrastructure and connectivity? Our review of coastal socio-economic processes suggested that a problem suffered by many areas was one of geographical peripherality. The effects of coastal peripherality can be reduced by improvements to transport infrastructure. Spending on transport infrastructure can be stimulated by some marine activities such as port development or tourism. (Broadband infrastructure quality may also have important implications for economic development, but because we do not anticipate that marine activities will have significant effects on broadband provision, we do not pursue this point further in the analysis).
- Is the activity likely to affect local environments, heritage or neighbouring uses? The review of coastal socio-economic processes suggested that these factors were an important component in coastal regeneration and future economic adjustment. In economic terms, these factors could be sources of important positive externalities that raise productivity in coastal regions, which were both important now in allowing places to develop a locally distinctive offer, and might be of growing importance in attracting economically productive populations in future. Here, we therefore look at the high level possible impacts of these marine activities on these elements.

4.18 We then discuss how the effects of each marine activity on labour utilisation and productivity processes might combine to create socio-economic outcomes in coastal areas.

- Is the activity likely to affect deprivation levels in the local area? Our review found that deprivation was an important consideration in coastal communities, and that the biggest determinant of how a marine activity will affect deprivation is likely to be the extent to which it generates labour demand at the unskilled end of the labour market.^{102 103}

¹⁰¹ Productivity statistics for a precise marine activity are frequently not available, so we have used wage and salaries information. Wages and salaries have a close relation to labour productivity, and so can be used as a very good proxy indicator for productivity levels of a given industry

¹⁰² ODPM – SEU (2004) *The drivers of social exclusion - Review of the Literature for the Social Exclusion Unit*(12) states that “The state of labour demand drives social exclusion more than any other factor.”

¹⁰³ ODPM – SEU (2004) *The drivers of social exclusion - Review of the Literature for the Social Exclusion Unit* (29) states that typically, unemployment is found concentrated in lower skilled individuals.

Analysing the marine activities

4.19 In the following tables, we look at how each of the MPS' ten key marine activities will impact influence socio-economic conditions in the above dimensions.

Defence

1. Activity SIC definition	SIC code definitions which most closely matches this marine activity are SIC 2007: part of 84.22.
2. What activity currently takes place?	<p>Sea training is carried out within defined military practice and exercise (PEXA) training areas. Land support comes from training establishments based at:¹⁰⁴</p> <ul style="list-style-type: none"> ▪ Britannia Royal Naval College (BRNC) Dartmouth, Devon ▪ HMS Raleigh – Torpoint, Cornwall ▪ HMS Excellent – Portsmouth, Hampshire ▪ HMS Collingwood – Fareham, Hampshire ▪ HMS Sultan – Gosport, Hampshire ▪ HMS Temeraire – Portsmouth, Hampshire. <p>Note that shipbuilding is dealt with separately (under ports and shipping).</p>
3. Where does this activity currently create employment?	<p>Activities and hence the location of the value to the economy are mainly related to the location of the Naval bases and exercise areas. Activities related to maritime transport are mainly associated with the Naval Bases (HMNB). In England, these include:</p> <ul style="list-style-type: none"> ▪ HMNB Portsmouth ▪ HMNB Devonport <p>The Charting Progress report states that, overall, the Royal Navy employs 38,600 people and 5,200 civilians. Local coastal economies benefit from activities associated with the naval bases. In Plymouth, for example the naval base at Devonport generates about 10% of income for the city, employs 2,500 people and creates business opportunities for around 500 firms¹⁰⁵.</p> <p>Figure 1.3 below presents the strength of the defence activity across England in terms of Location Quotient scores and employment numbers. It can be seen that defence employment is important to a number of coastal areas including Newquay, Portsmouth and Dover.</p>
4. What is the future for this activity?	Change (e.g. in relation to sea training activities) is driven by home defence policies (e.g. surveillance and monitoring of UK waters) and military activities abroad. The Strategic Defence Review outlines that by 2015 there will be 5,000 job losses in the Navy. The impact of the

¹⁰⁴ UKMMAS (2010) *Charting Progress 2: Feeder Report: Productive Seas* (87)

¹⁰⁵ UKMMAS (2010) *Charting Progress 2: Feeder Report: Productive Seas* (90)

	<p>decommissioning is likely to be felt most in Portsmouth and Plymouth, the main Naval bases in England.</p> <p>Future impacts of this marine activity will be policy driven. We anticipate that the key decisions regarding defence will be taken at the MoD, and that the marine planning process will not be likely to have great influence over the prevalence or location of defence activities.</p>
<p>5. Labour utilisation: how local are impacts? Is marine activity likely to increase employment in coastal areas? What is the extent of typical labour market catchments and supply chains?</p>	<p>Although there are frequently local traditions of recruiting into a particular part of the armed services, recruitment into the defence sector itself can be broadly said to be national in nature. There are however many civilian jobs associated with the defence sector, which are taken up locally. For example, an economic impact assessment of Portsmouth Naval Base concluded that the base employs almost 35,000 jobs within South Hampshire, of which 13,300 are service jobs and 21,600 are civilian jobs¹⁰⁶.</p> <p>Of greater local importance is the local supply chain for naval bases and activities. Research has suggested that supply chains for military bases are at times relatively non-local. This would tend to reduce the local impact of cuts in defence expenditure, and instead diffuse impacts over a wider area. The majority of bases without industrial elements (such as dockyards), expenditure on local suppliers is thought to be relatively low.¹⁰⁷ There are exceptions: for example, research has suggested the industrial element of the Devonport dockyard is thought to have significantly closer links to the local economy than is typical for military bases¹⁰⁸. UKMAS estimate that the Naval base at Devonport (Plymouth) generates about 10% of income for Plymouth, employs 2500 people, and creates business opportunities for around 400 firms¹⁰⁹. Similarly, the University of Portsmouth estimates that employment and the spending of defence firms associated with Portsmouth Naval Base generates an income of £680 million for the local economy per annum¹¹⁰.</p> <p>Rationalisation of naval spending, and consequent job losses, may have significant local economic impacts, both within the naval sector and in local supply chains. The areas likely to be most affected will be those areas which have a combination of a) particularly close economic links to naval activity, and b) relatively few economic</p>

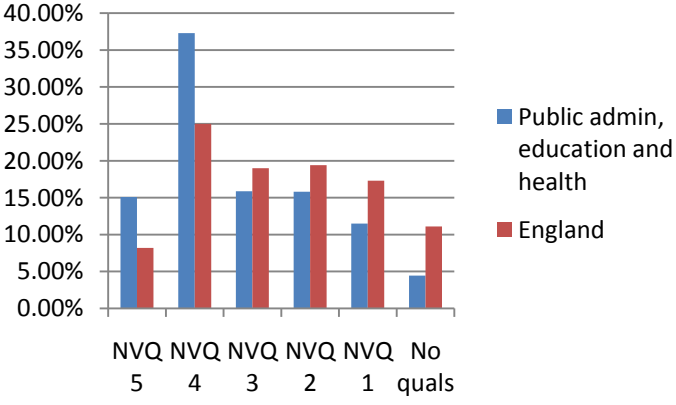
¹⁰⁶ University of Portsmouth (2007) *Socio-economic Assessment of Portsmouth Naval Base Executive Summary* (2)

¹⁰⁷ Bishop for South West Economy Centre (2005) *The Economic Impact of Devonport Dockyard and Naval Base* quoted Wiltshire Council 2009 *Military Presence and Economic Significance in the South West Region* (61)

¹⁰⁸ *ibid*

¹⁰⁹ UKMMAS (2010) *Charting Progress 2: Feeder Report: Productive Seas* (90)

¹¹⁰ University of Portsmouth (2007) *Socio-economic Assessment of Portsmouth Naval Base Executive Summary* (2)

<p>6. Labour utilisation: does the activity generate above average skills demands in the local economy?</p>	<p>alternatives.</p> <p>Skills levels for the defence sectors are merged with local government and health in the Annual Population Survey. Analysis of the APS reveals that the government related activities as a whole have a significantly higher proportion of workers that are qualified to levels 4 (37%) and 5 (15%) than the England profile for all employment sectors. Just 4% of the workforce had no qualifications in 2009¹¹¹.</p> <p style="text-align: center;">Figure 4.2 Public admin, education and health skill levels</p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Data for Figure 4.2: Public admin, education and health skill levels</caption> <thead> <tr> <th>Qualification Level</th> <th>Public admin, education and health (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>NVQ 5</td> <td>15.00%</td> <td>8.00%</td> </tr> <tr> <td>NVQ 4</td> <td>37.00%</td> <td>25.00%</td> </tr> <tr> <td>NVQ 3</td> <td>16.00%</td> <td>19.00%</td> </tr> <tr> <td>NVQ 2</td> <td>16.00%</td> <td>20.00%</td> </tr> <tr> <td>NVQ 1</td> <td>12.00%</td> <td>18.00%</td> </tr> <tr> <td>No quals</td> <td>4.00%</td> <td>11.00%</td> </tr> </tbody> </table> <p>APS (2010) – (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	Qualification Level	Public admin, education and health (%)	England (%)	NVQ 5	15.00%	8.00%	NVQ 4	37.00%	25.00%	NVQ 3	16.00%	19.00%	NVQ 2	16.00%	20.00%	NVQ 1	12.00%	18.00%	No quals	4.00%	11.00%
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No quals	4.00%	11.00%																				
<p>7. Labour utilisation: when the activity creates jobs, are these often seasonal or part time?</p>	<p>This is not a seasonal activity. There is therefore no problem of seasonality affecting employment. Although the Royal Navy has 2,300 part time positions through the Royal Naval Reserve, this does not generally affect labour utilisation rates in the local economy (because these individuals are likely to be in paid employment).¹¹²</p>																					
<p>8. Labour productivity: does the activity generate above average wages?</p>	<p>Analysis of the defence sector on its own is not possible using the Annual Survey of Hours and Earnings (ASHE) because statistics are not broken out at the required level of detail. Defence falls within the 'Public administration & defence; Education; Health & social work' category, which we use as a proxy here. The average mean gross annual earnings in this category were £29,527 in 2010, significantly higher than that recorded across the whole of England (£26,510).</p>																					

¹¹¹ LFS/IER (2009) *Share of Working Age Workers 19-59/64 (Workplace) in Broad Sectors by NQF Qualification*

¹¹² Royal Navy (2011) *About the RNR* <http://www.royal-navy.mod.uk/operations-and-support/royal-naval-reserve-2/about-rnr/index.htm>. Note, however, that some of these Reserve positions are compulsory attachments following the completion of service.

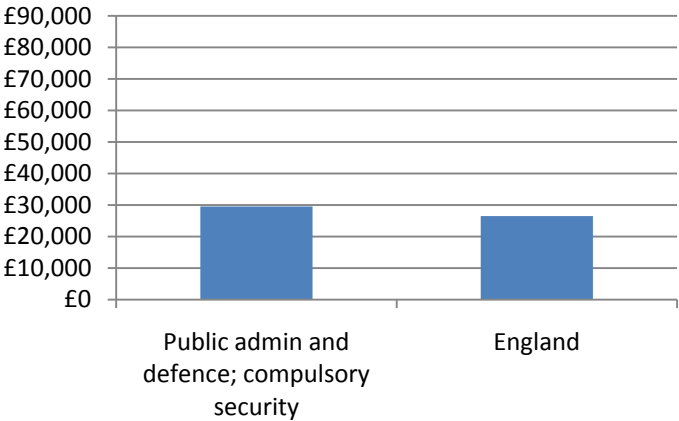
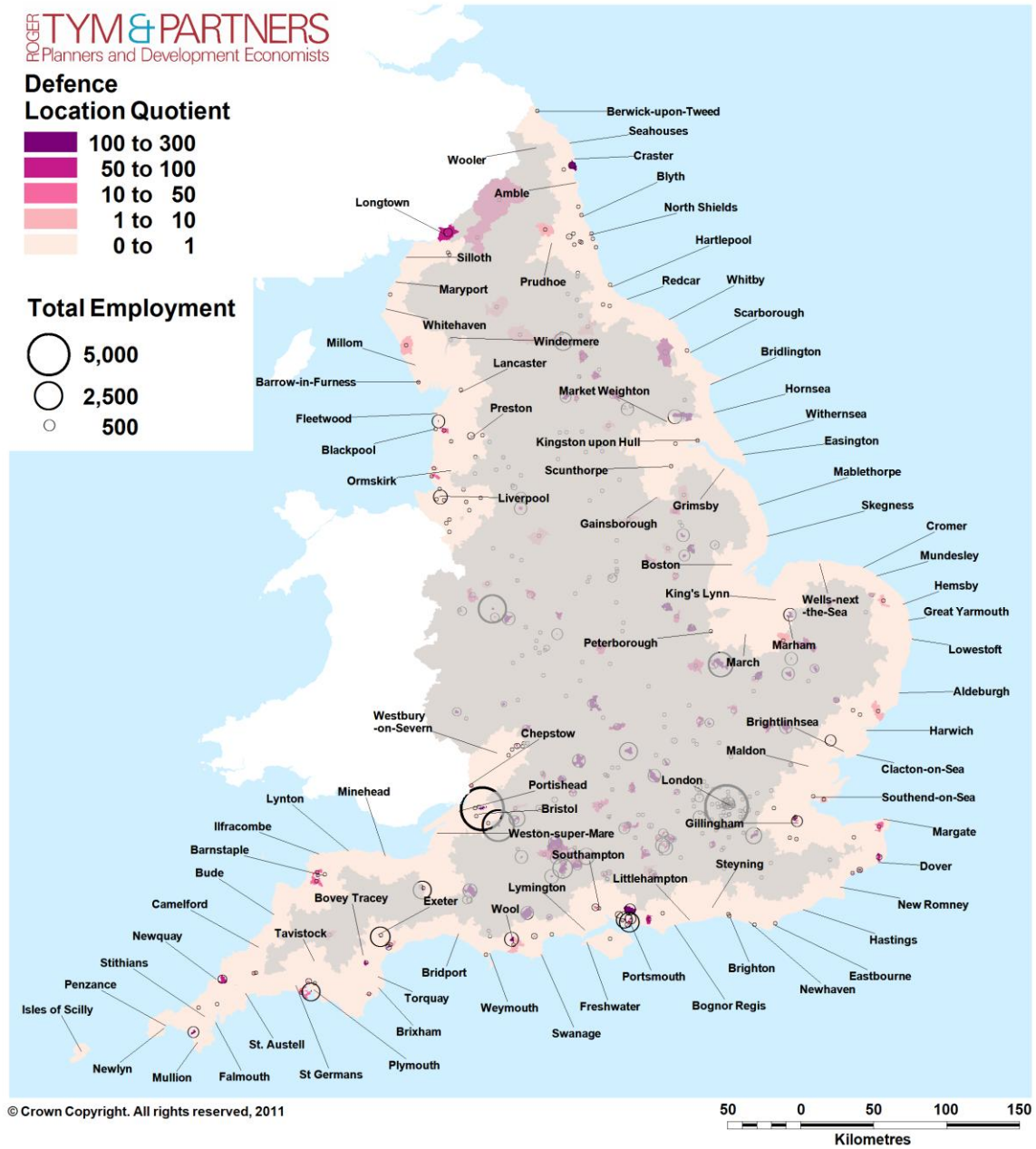
	<p>Figure 4.3 Public admin and defence</p> <p>Gross annual pay (mean)</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Mean Gross Annual Pay (approx. £)</th> </tr> </thead> <tbody> <tr> <td>Public admin and defence; compulsory security</td> <td>30,000</td> </tr> <tr> <td>England</td> <td>28,000</td> </tr> </tbody> </table> <p>ASHE (2010) - (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	Category	Mean Gross Annual Pay (approx. £)	Public admin and defence; compulsory security	30,000	England	28,000
Category	Mean Gross Annual Pay (approx. £)						
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England	28,000						
<p>9. Labour productivity: is the activity likely to affect investment in local infrastructure and connectivity?</p>	<p>Changes in this activity are unlikely to make significant differences to local infrastructure and connectivity.</p>						
<p>10. Labour productivity: is the activity likely to affect local terrestrial environments, heritage or neighbouring uses?</p>	<p>Defence activity has frequently taken place in certain locations for generations, and local environments, heritage and neighbouring uses reflect that fact. Cuts in defence activity may have significant local impacts, but these will be entirely contingent on the individual case. It is possible, for example, that there may be reductions in local infrastructure and connectivity if military activity were to reduce significantly or cease (such as local public transport system downsizing/frequency reduction on routes).</p>						
<p>11. Outcomes: is the activity likely to affect deprivation levels in the local area?</p>	<p>Contraction in naval employment (both directly, and indirectly through the supply chain) is likely to have uneven impacts on deprivation in local economies. Different areas will be subject to different impacts, depending on profiles of the local economy. The critical question will be the ability of the local economies affected by falling defence spending to diversify into other areas of activity.</p>						

Figure 4.4 Defence – Location Quotient and employment mapping (Note that the specifically marine component cannot be separately isolated in the statistics)



Energy production and infrastructure

<p>1. Activity SIC definition</p>	<p>SIC code definitions which most closely matches this marine activity are:</p> <p>06.10 – Extraction of crude petroleum</p> <p>06.20 – Extraction of natural gas</p> <p>09.10 – Support activities for petroleum and natural gas extraction</p>
<p>2. What activity currently takes place?</p>	<p>The UK Marine Policy Statement states that the marine environment will make an increasingly major contribution to the provision of the UK’s energy supply and distribution. This contribution includes the oil and gas sectors which supply the major part of the UK’s current energy needs, and a growing contribution from renewable energy and from other forms of low carbon energy supply in response to the challenges of tackling climate change and energy security¹¹³. (Nuclear power stations are located at the coast due to cooling requirements, but do not properly constitute marine activity as such).</p> <p>The offshore renewables sector incorporates offshore wind, wave and tidal energy. The technology to enable wave and tidal energy generation is at an earlier stage of development than offshore wind. We therefore do not focus on wave and tidal energy in this section. However, it is anticipated that the amount of wave and tidal energy being generated will increase markedly up to and beyond 2020. Offshore wind has the most established presence. Following an initial planning phase, activity in this sector is made up of four areas, as follows a) manufacturing of wind turbines, b) construction c) O&M (“operations and maintenance) activity and d) decommissioning (although turbines have a 25 year design life, and so no decommissioning activity has yet taken place).</p>
<p>3. Where does this activity currently create employment?</p>	<p>Oil and gas</p> <p>Oil and gas can only be produced where they are found, though current technology allows a degree of flexibility over the precise location of production facilities.¹¹⁴ Oil and gas industries frequently recruit from national rather than local labour markets. For example, staff for gas installations off the Norfolk coast are taken by helicopter from Norwich¹¹⁵, and may live at a considerable distance from Norwich itself.</p> <p>Figure 1.3 below displays the strength of the energy production and infrastructure activity across England in terms of Location Quotient</p>

¹¹³ HM Government (2011) *UK Marine Policy Statement* (29)

¹¹⁴ UKMMAS (2010) *Charting Progress 2: Feeder Report: Productive Seas* (244)

¹¹⁵ <http://www.helihub.com/2010/06/03/bond-offshore-helicopters-start-new-perenco-contract-in-southern-north-sea/>

	<p>scores and employment numbers.</p> <p>Renewables</p> <p>Turning to renewables industries, manufacturing of turbines is in the process of gearing up, although much is still in the planning stage. For example, Siemens have an option on a site adjacent to the ABP port in Hull¹¹⁶; Able UK are seeking to develop a large site on the South Humber bank for the assembly of turbines¹¹⁷; and there are plans for growth in Sheerness¹¹⁸. There are a number of plans elsewhere.</p>
<p>4. What is the future for this activity?</p>	<p>The Stern Review highlights that action on climate change will create significant business opportunities, as new markets are created in low-carbon energy technologies and other low-carbon goods and services. These markets could grow to be worth hundreds of billions of pounds each year, and employment in these sectors will expand accordingly.¹¹⁹</p> <p>Oil and gas</p> <p>Research for the Government suggests that although indigenous production is now in long-term decline, oil and gas are expected to remain of importance even as the country moves towards a low carbon economy. Looking ahead, the recovery of remaining oil and gas reserves will require additional investment in both money and expertise, while the ending of production in particular fields will lead in due course to decommissioning of the facilities (although Carbon Capture and Storage is an opportunity to reuse existing infrastructure if appropriate and may result in the retention of some facilities and infrastructure).</p> <p>Around 500 installations are expected to be decommissioned over the next three decades¹²⁰. The value of decommissioning work is estimated at £630m a year. The projected workload is expected to exceed the capacities of the existing heavy lift vessel fleet and onshore deconstruction facilities, and could present opportunities for future recycling yards and oil well service companies. The</p>

¹¹⁶ BBC 20 January 2011 *Thousands of jobs created in Hull turbine plant plan* <http://www.bbc.co.uk/news/uk-england-humber-12240113>

¹¹⁷ BBC 8 February 2011 *Humber marine energy park plans go on view to public* <http://www.bbc.co.uk/news/uk-england-humber-12391454>

¹¹⁸ BBC 11 May 2011 *Sheerness Vestas wind turbine plant set to create jobs* <http://www.bbc.co.uk/news/uk-england-13368029>

¹¹⁹ Stern (2007) *Stern Review on the economics of climate change* Short Executive Summary,ii

¹²⁰ HM Government (2011) *UK Marine Policy Statement* (31)

	<p>majority of decommissioning activity and related spend is expected to take place between 2017 and 2027.¹²¹</p> <p>Research for the Government suggests that offshore storage of gas, offshore unloading of gas and provision of gas import facilities are activities which are of increasing importance to UK security of supply as indigenous gas supplies decline. A range of offshore infrastructure is required to increase the UK's storage capacity including:</p> <ul style="list-style-type: none"> ▪ New import infrastructure, including conventional import pipelines, gas reception facilities and LNG import facilities. These will be necessary to provide import capacity for the increasingly import dependent UK gas market; ▪ New subsea gas storage facilities and pipelines to allow the offshore off-loading of LNG. <p>Renewables</p> <p>The low-carbon energy industry is developing rapidly in response to policy and financial mechanisms. Expansion of the offshore wind supply is likely to require significant investment in new high-value manufacturing capability with potential to regenerate local and national economies and provide employment. Long term, the Round 2 and Round 3 expansion plans suggest that this industry has considerable growth potential.</p> <p>Improvements in the turbine manufacture supply line in UK could afford further economic impacts. A 2010 report carried out for the Crown Estate is suggested that a number of improvements were required in the offshore wind farm supply chain if the industry was to supply 33GW of power by 2020.¹²² Constraints were identified in the UK supply chain for offshore turbines, sub-sea cables, and installation vessels. If additional manufacturing and support capacity is established in the UK, then this will have a positive impact on employment. There are key components within turbines that are now seeing a supply shortfall. The most significant are bearings, gearboxes and blades. Supply chain demand is growing and the key major components can have lead-times of up to three years. Expansion within these sub-component companies is ongoing but most are not currently managing to meet the present high demand.</p>
5. Labour utilisation:	Oil and gas

¹²¹ BBC News 5 October 2010 *£19bn to dismantle aged North Sea oil platforms* quoting Deloitte and Douglas-Westwood research http://www.deloitte.com/view/en_GB/uk/industries/eiu/oil-gas/61bb8cff0287b210VgnVCM1000001956f00aRCRD.htm

¹²² BVG Associates for the Crown Estate *Towards Round 3: Building the Offshore Wind Supply Chain* (3)

<p>how local are impacts? Is marine activity likely to increase employment in coastal areas? What is the extent of typical labour market catchments and supply chains?</p>	<p>The local impacts of energy production and infrastructure are mixed. Onshore support for offshore gas and oil industries has brought considerable wealth to some areas, notably around Aberdeen, and been a very important local economic driver. However, these effects are more limited in England given the relatively small English industry.</p> <p>Renewables</p> <p>Offshore renewables offer a significant opportunity. It is the case, though, that the renewable energy infrastructure may have relatively limited economic effects on an adjacent coastal area.</p> <ul style="list-style-type: none"> ▪ Manufacturing: Offshore wind turbines are typically manufactured at facilities in Denmark and Germany (from Vestas and Siemens respectively). However, recently there has been significant investment to improve the UK's manufacturing capability. Recently, an agreement was reached between Siemens and Associated British Port's (ABP) to build an offshore wind farm manufacturing plant in Hull¹²³. This investment will be supplemented by £20m from the Government's ports upgrade fund¹²⁴. It is envisaged that this manufacturing plant will create 700 jobs¹²⁵. ▪ The construction phase can create local employment, but specialist contractors can be brought in from outside a local economy. ▪ There are some local jobs impacts in the operation and maintenance. Operation and maintenance is frequently run out of the smaller ports, so as to avoid congestion problems in ports dealing with larger shipping. Ports of this nature will be used for mobilising the construction workforce and then post-construction, the mobilising service and maintenance vessels and crew. These are by definition longer term facilities required to be in operation and dedicated to the support of the array for up to 50 years. Currently there are 12 offshore wind farms in the UK, with the largest offshore wind farm in the world located off Kent¹²⁶. The Thanet offshore wind farm has 100 turbines and
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¹²³ Webb T, The Guardian (Thursday 20th January 2011) *Siemens chooses Hull for wind turbine plant generating 700 jobs* <http://www.guardian.co.uk/business/2011/jan/20/siemens-associated-british-ports-wind-turbines>

¹²⁴ UKMMAS (2010) *Charting Progress 2: Feeder Report: Productive Seas* (244)

¹²⁵ UKMMAS (2010) *Charting Progress 2: Feeder Report: Productive Seas* (244) UKMMAS (2010) *Charting Progress 2: Feeder Report: Productive Seas* (244)

¹²⁶ BBC News Kent (2010) *Largest offshore wind farm opens off Thanet in Kent* <http://www.bbc.co.uk/news/uk-england-kent-11395964>

	<p>employs up to 20 technicians from the local area¹²⁷. Clearly, this is a modest level of employment given the scale of investment involved.</p> <p>Construction and maintenance impacts may be particularly pronounced in smaller, particularly rural, labour markets. Some areas (particularly in Scotland's larger anticipated investment areas) can expect to see an influx in construction workers and technicians. Overall impacts in any given area, then, depend on the ability of the local economy to support the supply chain. These can vary widely.</p> <ul style="list-style-type: none"> ▪ The development, construction and initial five years operation of the Scroby Sands offshore wind farm resulted in a total expenditure of £80 million. Contracts to the value of £38.8m (48%) were sourced from UK companies, with £12.8m (16%) originating within the East of England.¹²⁸ ▪ By comparison, wind turbine development off Barrow only resulted in 2-3% English value, as Belfast was used for construction and contractors were mainly European rather than UK-based.¹²⁹ ▪ Analysis suggests that the Kentish Flats wind projects have not resulted in significant benefits for Kent's economy. Local content on the project was low and there are few significant signs of direct economic benefit following on from it.¹³⁰ <p>Work by Oxford Economics for Vestas provides a useful benchmark for estimating the number of operational and maintenance jobs for offshore wind farms. Oxford Economics assumed that each 1MW of installed capacity requires 0.29 direct and 0.16 indirect FTE jobs.¹³¹</p> <p>The sheer scale of investment in Round 3, and the consequent local jobs growth effects, may mean that certain towns which are successful in capturing activity do see a significant economic boost. In some instances, rising direct employment will create positive</p>
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¹²⁷ UKMMAS (2010) *Charting Progress 2: Feeder Report: Productive Seas* (244)

¹²⁸ RTP with Douglas Westwood and Buro Happold for SWRDA (2008) *Offshore Renewables Ports and Infrastructure Study* (Section 6.7). The Scroby Sands project was commercially complete on 31st December 2004 and was formally opened in March 2005. It was the second of the UK Round 1 offshore wind projects to be constructed.

¹²⁹ RTP with Douglas Westwood and Buro Happold for SWRDA (2008) *Offshore Renewables Ports and Infrastructure Study* (Section 6.7). The Scroby Sands project was commercially complete on 31st December 2004 and was formally opened in March 2005. It was the second of the UK Round 1 offshore wind projects to be constructed.

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¹³¹ Oxford Economics for Vestas *Analysis of the Employment Effects of the Operation and Maintenance of Offshore Wind Parks in the UK*

	local consequences for the broader local economy as incomes are respent in local businesses.																					
6. Labour utilisation: does the activity generate above average skills demands in the local economy?	<p>Skills levels for the energy production and infrastructure and extraction of crude petroleum and natural gas sectors are merged within the 'Energy and Water' sector in the Labour Force Survey. Analysis of skills levels across the workforce of this sector reveals that NVQ level 3 (23%) and 4 (35%) attainment levels are higher than the England profile for all sectors.</p> <p style="text-align: center;">Figure 4.5 Energy and water skill levels</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Data for Figure 4.5: Energy and water skill levels</caption> <thead> <tr> <th>NVQ Level</th> <th>Energy and water (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>NVQ 5</td> <td>~7.00%</td> <td>~8.00%</td> </tr> <tr> <td>NVQ 4</td> <td>35.00%</td> <td>~25.00%</td> </tr> <tr> <td>NVQ 3</td> <td>23.00%</td> <td>~19.00%</td> </tr> <tr> <td>NVQ 2</td> <td>~18.00%</td> <td>~19.00%</td> </tr> <tr> <td>NVQ 1</td> <td>~14.00%</td> <td>~17.00%</td> </tr> <tr> <td>No quals</td> <td>~4.00%</td> <td>~11.00%</td> </tr> </tbody> </table> <p>APS (2010) Throughout the sector skill shortages are being found with engineering skills being in short supply. The other problem is finding staff that are willing to work offshore. The combination of experience and offshore willingness is seen as being increasingly scarce. When the seasonal nature of the offshore wind industry is taken into account, contractors are facing difficulty recruiting and future expansion will be a concern in this respect.¹³² We have (anecdotal) evidence that this scarcity of skills and aptitudes is driving up wages for skilled technicians. Some local higher educational providers are responding to local opportunities by providing specialised training. For example, from September 2011 the Grimsby Institute will offer full and part-time renewable energy engineering courses and apprenticeships based on the production and maintenance of offshore wind farms.¹³³</p>	NVQ Level	Energy and water (%)	England (%)	NVQ 5	~7.00%	~8.00%	NVQ 4	35.00%	~25.00%	NVQ 3	23.00%	~19.00%	NVQ 2	~18.00%	~19.00%	NVQ 1	~14.00%	~17.00%	No quals	~4.00%	~11.00%
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¹³² RTP with Douglas Westwood and Buro Happold for SWRDA (2008) *Offshore Renewables Ports and Infrastructure Study*

¹³³ This is Grimsby (1 March 2011) "Multi-million pound renewable energy centre to be first of its kind in UK" <http://www.thisisgrimsby.co.uk/Energy-centre-s-wind-sails-institute/story-11547483-detail/story.html>

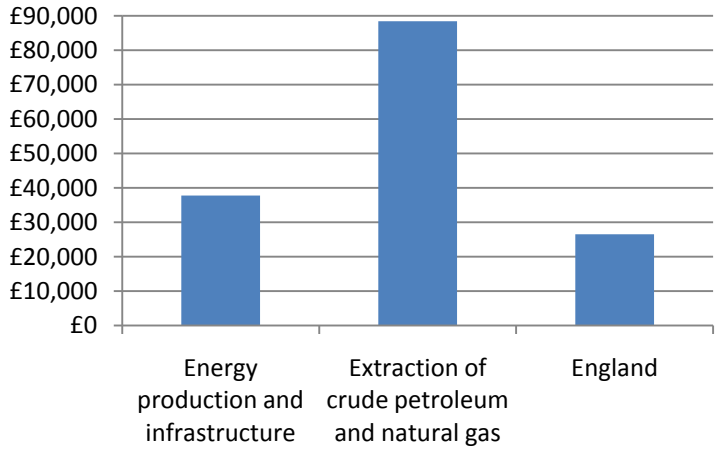
	<p>Although we have no direct evidence of the effect, the prospect of employment in these new industries may work to improve local aspirations and “drag up” local skills levels.¹³⁴</p> <p>Work by Oxford Economics for Vestas finds that operations and maintenance jobs, which are directly supported by offshore operation and maintenance activities, are “often highly skilled and located away from urban centres in areas where job creation is generally weaker and deprivation higher”.¹³⁵</p>
<p>7. Labour utilisation: when the activity creates jobs, are these often seasonal or part time?</p>	<p>Some activities are seasonally driven and as a result there may be peaks and troughs in numbers of staff engaged within the sector (for example, maintenance purposes and certain types of exploration activity).</p> <p>Whilst we have no information on the extent of part time working in this occupation, it can be assumed that the majority working in this activity are in full-time positions.</p>
<p>8. Labour productivity: does the activity generate above average wages?</p>	<p>The average gross annual wages (mean) for energy production and infrastructure (£37,763) and extraction of crude petroleum and natural gas (£88,399) are significantly higher than the England average (£26,510).¹³⁶</p> <p>Work by Oxford Economics for Vestas on Operations and Maintenance activities for wind farm development finds that the average income from these jobs is “often significantly higher than the average earnings in the areas where the jobs are located” and that consequently, “further creation of operations and maintenance jobs will raise average earnings in these areas”.¹³⁷</p>

¹³⁴ The relationship between the availability of work and the skills aspirations of the local labour force has been subject to research. However, the hypothesis that improving the supply of “good jobs” in a local area leads in particular to an increase in youngsters staying on in education in order to get these “good jobs” does not seem to have been investigated in empirical assessments. The paper quoted below reviewed the literature and developed a model of educational choices which considered more general impacts. However, the above hypothesis is not tested. Research is clear that behaviour responds to economic incentives, though, so this argument can be advanced relatively confidently. De Coulon et al (2010) *Minimum Wage and Staying on Rates for Teenagers*
http://www.lowpay.gov.uk/lowpay/research/pdf/Decoulon_et_al_final_07_jan_10.pdf

¹³⁵ Oxford Economics for Vestas *Analysis of the Employment Effects of the Operation and Maintenance of Offshore Wind Parks in the UK*

¹³⁶ Annual Survey of Hours and Earnings (2010)

¹³⁷ Oxford Economics for Vestas *Analysis of the Employment Effects of the Operation and Maintenance of Offshore Wind Parks in the UK*

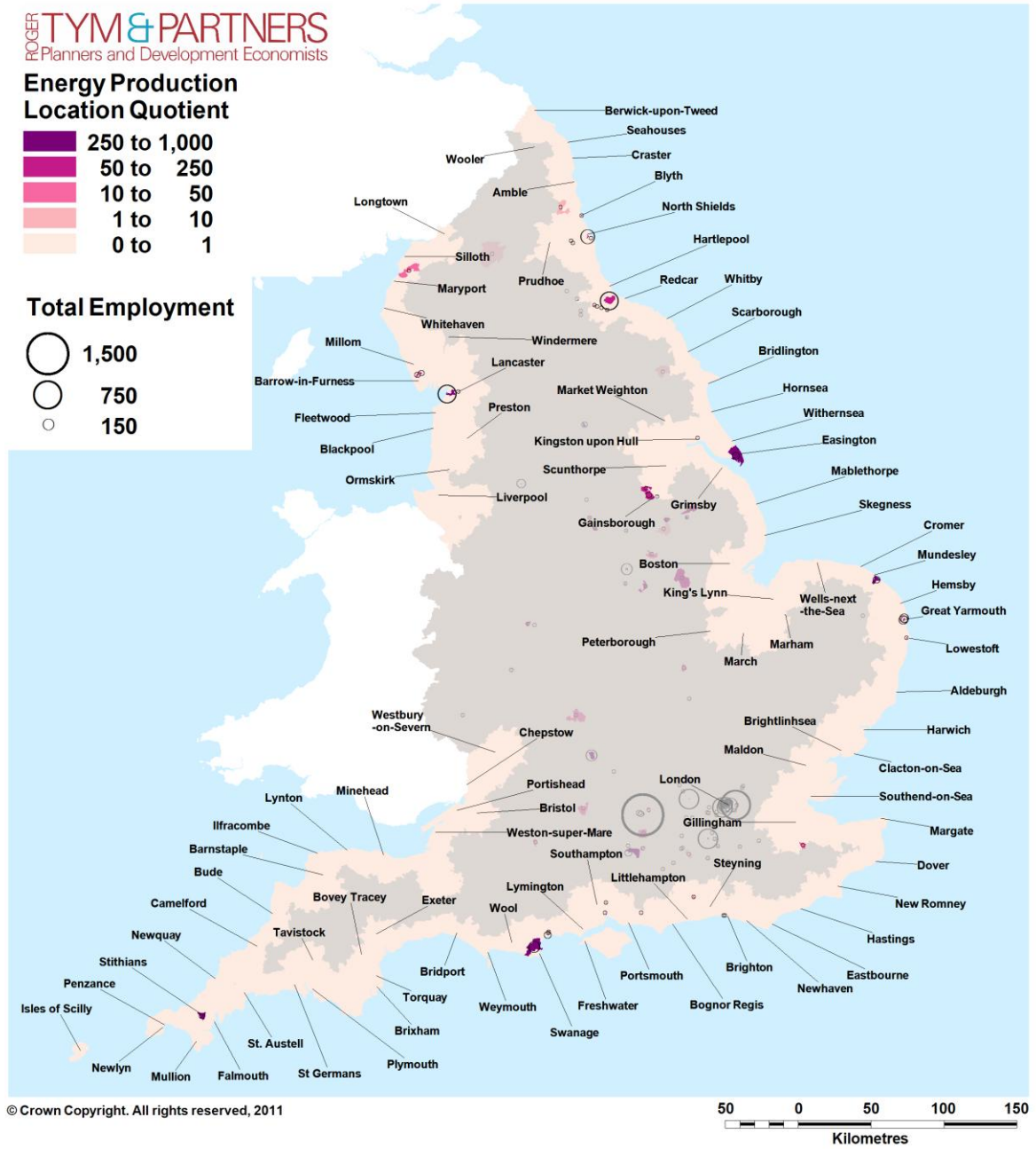
	<p>Figure 4.6 Energy and extraction wages</p> <p style="text-align: center;">Gross annual pay (mean)</p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Data for Figure 4.6: Gross annual pay (mean)</caption> <thead> <tr> <th>Category</th> <th>Mean Gross Annual Pay (£)</th> </tr> </thead> <tbody> <tr> <td>Energy production and infrastructure</td> <td>~38,000</td> </tr> <tr> <td>Extraction of crude petroleum and natural gas</td> <td>~88,000</td> </tr> <tr> <td>England</td> <td>~28,000</td> </tr> </tbody> </table> <p>ASHE (2010)</p>	Category	Mean Gross Annual Pay (£)	Energy production and infrastructure	~38,000	Extraction of crude petroleum and natural gas	~88,000	England	~28,000
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Energy production and infrastructure	~38,000								
Extraction of crude petroleum and natural gas	~88,000								
England	~28,000								
<p>9. Labour productivity: is the activity likely to affect investment in local infrastructure and connectivity?</p>	<p>Local infrastructure may be affected by this marine activity. For example, road widening projects are being considered in North East Lincolnshire to accommodate low-loader movements to manufacturing and assembly plants. But whilst these improvements may be necessary they are unlikely to constitute a systematic improvement in connectivity that will have a significant impact on issues of peripherality.</p>								
<p>10. Labour productivity: is the activity likely to affect local terrestrial environments, heritage or neighbouring uses?</p>	<p>Local infrastructure issues explored above may have significant effects on local environments and neighbouring uses. Major increases in offshore wind, wave and tidal generation will require the expansion, connection and reinforcement of the UK's electricity networks both onshore and offshore. These requirements have created significant local opposition in some locations. For example, an extensive sub-station proposed in Norfolk was recently denied planning permission amid significant local opposition¹³⁸. The sub station would have enabled the 560MW Dudgeon offshore wind farm to be built off Cromer. The planning committee found that the development would have significant detrimental effect on the local landscape. The construction, operation or decommissioning of a coastal power station or wind turbine facilities may have impacts on the local environment through the construction of the plants and associated development and marine offloading facilities, such as jetties and</p>								

¹³⁸ Daisy Wallace (2010) *Tears, then jubilation after sub-station plan is rejected*, http://www.edp24.co.uk/news/politics/tears_then_jubilation_after_sub_station_plan_is_rejected_1_678101

	<p>marinas, for heavy plant items. This can have positive consequences for other industries: in Wells on the North Norfolk coast, an expansion of port facilities for turbine maintenance operations has been used by local fishing businesses.¹³⁹</p> <p>Liaison and partnership working between marine and terrestrial planners will be likely to be required in order to find low-impact locations for required infrastructure. Some site safeguarding may be required.</p>
<p>11. Outcomes: is the activity likely to affect deprivation levels in the local area?</p>	<p>The local economy may experience some positive impacts from this investment in this activity – but the labour needed is higher skilled. Given that most deprived people are low skilled, and therefore unlikely to have direct access to these jobs, the effects on deprivation could be limited, but some rural and peripheral economies may experience more pronounced “trickle down” effects, where increased local activity creates more jobs throughout the supply chain.</p>

¹³⁹ MMO interview with Wells Harbour Master 24/5/11

Figure 4.7 Energy production & Infrastructure – Location Quotient and employment mapping (Note that the specifically marine component cannot be separately isolated in the statistics)



Ports and shipping

<p>1. Activity SIC definition</p>	<p>SIC code definitions which most closely matches this marine activity are:</p> <ul style="list-style-type: none"> 30.11 – Building of ships and floating structures 30.12 – Building of pleasure and sporting boats 33.15 – Repair and maintenance of ships and boats 50.10 – Sea and coastal passenger water transport 50.20 – Sea and coastal freight water transport 52.22 – Service activities incidental to water transportation 52.24/1 – Cargo handling.
<p>2. What activity currently takes place?</p>	<p>This category deals with the operation and maintenance of ports, port cargo operations, ship building and ancillary services. The operation of ports and marinas requires dredging and the disposal of the dredged marine sediment.</p> <p>Ports employ far fewer people today than they did 30 years ago. Currently it is estimated that some 54,000 employees are in direct port employment, with a further 19,700 in port related jobs in the UK. About 11,000 are employed directly by the port authorities¹⁴⁰. The UK ship building industry is dominated by a few large yards mostly engaged in building ships for the Royal Navy.</p>
<p>3. Where does this activity currently create employment?</p>	<p>Research suggests that in total, there are more than 650 ports in the UK for which statutory harbour authorities have been established, of which 120 are commercially active. In 2007 97% of all port traffic was handled by 52 major ports. The leading ports, in terms of tonnage, were Grimsby and Immingham (66.3 million tonnes), London (52.7mt), Tees and Hartlepool (49.8mt), Southampton (43.8mt) and Forth (36.7mt)¹⁴¹. Dover is the main passenger port with 14.3 million ferry passengers in 2007. It also received 2.4 million road goods vehicles¹⁴².</p> <p>Figure 1.4 below details the strength of the ports and shipping activity across England in terms of Location Quotient scores and employment numbers. It can be seen that employment in this activity is important to a large proportion of English coastal areas, especially around the south-west. Key employment hotspots are located in Plymouth, Southampton, Portsmouth, Harwich and Barrow-in-Furness.</p>

¹⁴⁰ Pugh for Crown Estate (2008) *Socio-economic indicators of marine-related activities in the UK economy* London TSO (23);

¹⁴¹ UKMMAS (2010) *Charting Progress Feeder Report - Productive Seas* (200)

¹⁴² UKMMAS (2010) *Charting Progress Feeder Report - Productive Seas* (200)

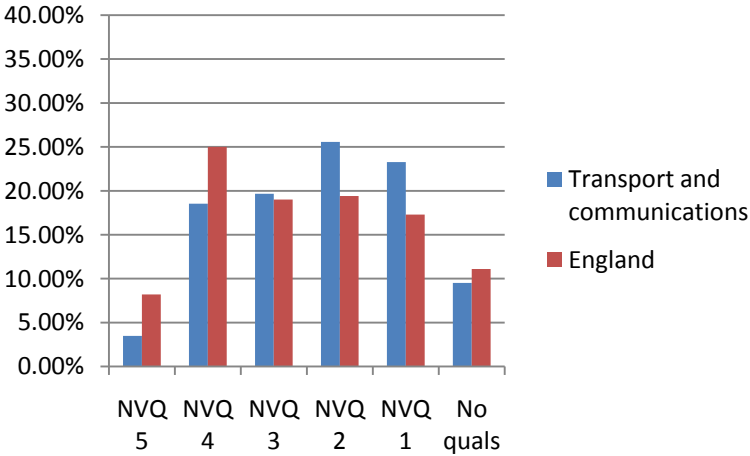
<p>4. What is the future for this activity?</p>	<p>Research indicates that overall, there has been steady growth in UK port activity over the past 5 years, mainly by more efficient use of existing port structures. The long-term trend is for sustained growth of 3% to 4% on average per year in the container and Ro-Ro sectors. However, new facilities with riverside berths (as opposed to docking) are needed to accommodate further expected expansion.¹⁴³ Excluding transshipment movements, between 2005 and 2030 containerised port traffic is forecast to increase by 183% as measured by TEU and Ro-ro traffic is forecast to increase by 101% in terms of HGV units. Non-unitised traffics are forecast to grow by 4% overall to 429 million tonnes, mainly driven by a forecast increase in LNG imports. Unitised tonnages are expected to grow by 112%.¹⁴⁴</p> <p>The Defence Review makes clear that the Government intends to continue with major construction contracts. The new aircraft carriers HMS Queen Elizabeth and HMS Prince of Wales (valued at £3.8 billion each) will be constructed at Rosyth, Barrow-in-Furness and Portsmouth and assembled at Rosyth. The Government also plan to procure a fleet of hunter killer Astute class submarines, complete production of six Type 45 destroyers and start a programme to develop "less expensive, more flexible, modern frigates".¹⁴⁵</p> <p>Government and European policy is a major driver for the increased usage of water transport. Since the late 1990s policies including the Integrated White Paper (DETR, 1998), European Transport Policy for 2010 (EC, 2001) and Delivering a Sustainable Transport System (DfT, 2008), have encouraged the use of non-road modes where practicable.</p>
<p>5. Labour utilisation: how local are impacts? Is marine activity likely to increase employment in coastal areas?</p>	<p>Research suggests that labour market catchments for port activities are generally relatively local in nature.¹⁴⁶ This would suggest that employment in coastal areas would be positively affected by jobs expansion.</p> <p>Turning to shipping, work on the cruise industry in Southampton indicated that cruise operators had a national and international</p>

¹⁴³ UKMMAS (2010) *Charting Progress Feeder Report – Productive Seas* (200)

¹⁴⁴ MDS Transmodal for DfT (2007) *Update of UK Port Demand Forecasts to 2030* (3, 5).
http://www2.dft.gov.uk/pgr/shippingports/ports/portspolicyreview/207015_Final_Report_2.pdf

¹⁴⁵ HM Government (2010) *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review* (32)

¹⁴⁶ Roger Tym & Partners for Hutchison Ports (2002) *Proposed Port Development At Harwich Bathside Bay* (20)

<p>What is the extent of typical labour market catchments and supply chains?</p>	<p>supply chain, which worked to reduce the impact of change in this industry on the local economy.¹⁴⁷</p>																					
<p>6. Labour utilisation: does the activity generate above average skills demands in the local economy?</p>	<p>Ports and shipping falls within the ‘transport and communications’ sector in the Labour Force Survey. Analysis of workforce skills levels in this sector reveals that attainment levels are higher in lower end NVQ 1 (23%) and 2 (23%) levels than the England profile. At the other end of the scale there are fewer workers who have achieved NVQ level 4 and 5 qualifications.</p> <p style="text-align: center;">Figure 4.8 Transport and communications skill levels</p>  <table border="1" data-bbox="595 734 1348 1187"> <caption>Data for Figure 4.8: Transport and communications skill levels</caption> <thead> <tr> <th>NVQ Level</th> <th>Transport and communications (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>NVQ 5</td> <td>~3.5</td> <td>~8.0</td> </tr> <tr> <td>NVQ 4</td> <td>~18.5</td> <td>~25.0</td> </tr> <tr> <td>NVQ 3</td> <td>~19.5</td> <td>~19.0</td> </tr> <tr> <td>NVQ 2</td> <td>~25.5</td> <td>~19.5</td> </tr> <tr> <td>NVQ 1</td> <td>~23.5</td> <td>~17.5</td> </tr> <tr> <td>No quals</td> <td>~9.5</td> <td>~11.5</td> </tr> </tbody> </table> <p>APS (2010) (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	NVQ Level	Transport and communications (%)	England (%)	NVQ 5	~3.5	~8.0	NVQ 4	~18.5	~25.0	NVQ 3	~19.5	~19.0	NVQ 2	~25.5	~19.5	NVQ 1	~23.5	~17.5	No quals	~9.5	~11.5
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NVQ 2	~25.5	~19.5																				
NVQ 1	~23.5	~17.5																				
No quals	~9.5	~11.5																				
<p>7. Labour utilisation: when the activity creates jobs, are these often seasonal or part time?</p>	<p>This is not a seasonal activity. There is therefore no problem of seasonality affecting employment. We have no written information on the extent of part time working in this occupation, although we understand that some part time working exists at smaller ports. Ports also take on additional workers when activity levels dictate.</p>																					
<p>8. Labour productivity: does the activity generate above average wages?</p>	<p>The average gross annual pay (mean) for the Water Transport sector in 2010 was £32,991¹⁴⁸. This was significantly higher than the national average wage of £26,510.</p>																					

¹⁴⁷ TTC International & Roger Tym & Partners (2005) *Southampton Cruise Tourism*

¹⁴⁸ Annual Survey of Hours and Earnings (2010)

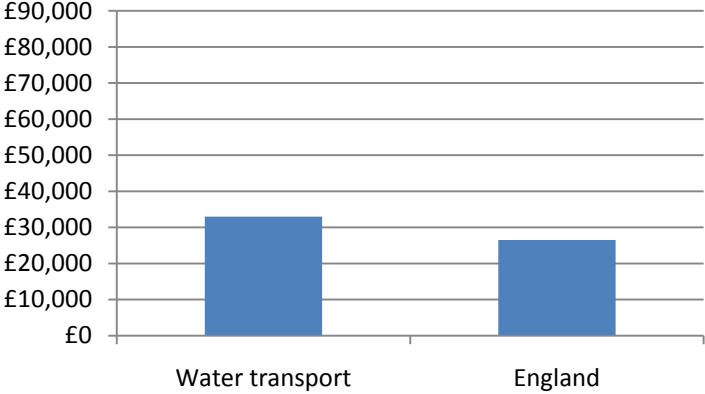
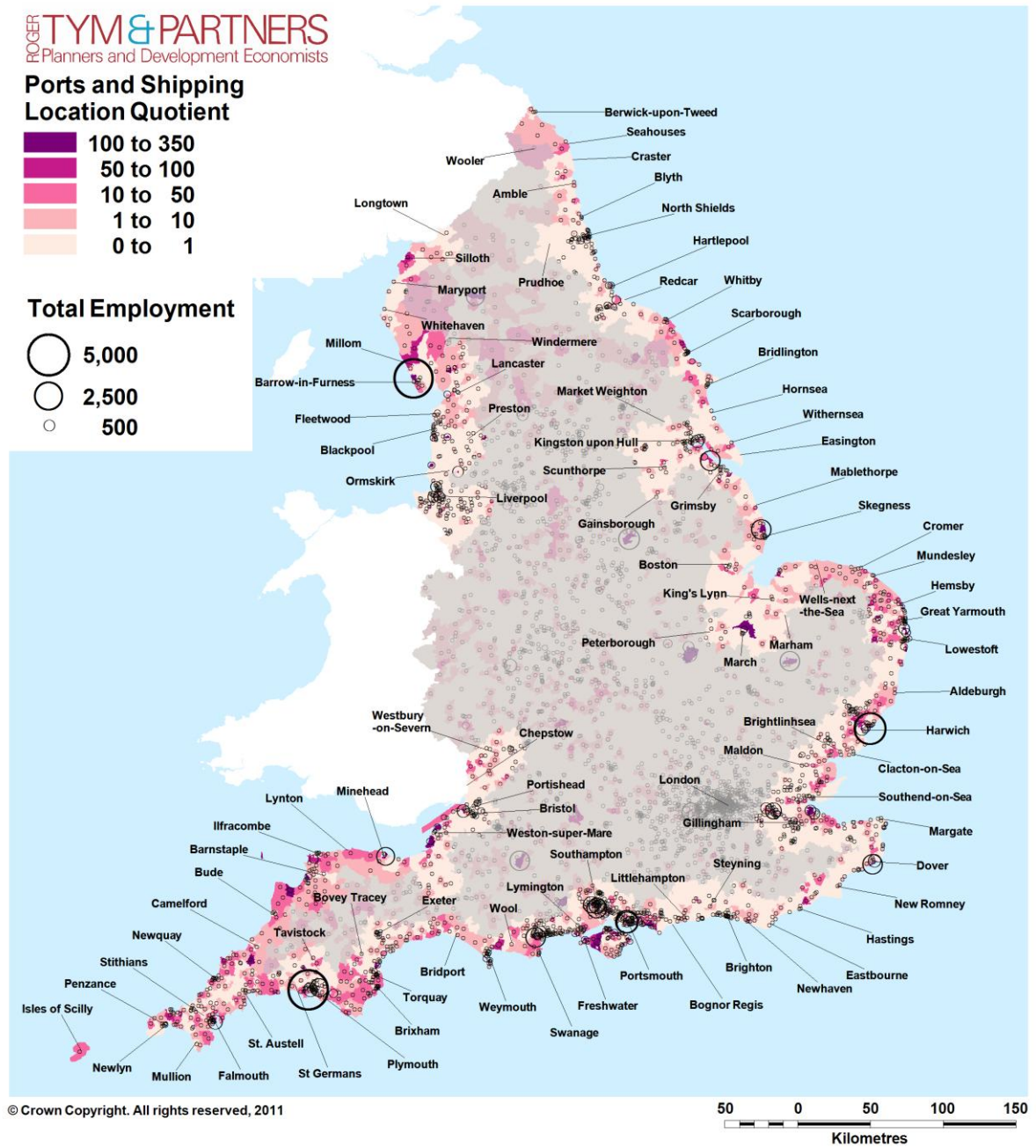
	<p>Figure 4.9 Water transport wages</p> <p>Gross annual pay (mean)</p>  <table border="1" data-bbox="587 392 1295 784"> <thead> <tr> <th>Category</th> <th>Mean Gross Annual Pay (£)</th> </tr> </thead> <tbody> <tr> <td>Water transport</td> <td>~33,000</td> </tr> <tr> <td>England</td> <td>~26,000</td> </tr> </tbody> </table> <p>ASHE (2010) (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	Category	Mean Gross Annual Pay (£)	Water transport	~33,000	England	~26,000
Category	Mean Gross Annual Pay (£)						
Water transport	~33,000						
England	~26,000						
<p>9. Labour productivity: is the activity likely to affect investment in local infrastructure and connectivity?</p>	<p>Port activity has major impacts on local infrastructure. Expansion of existing ports can have very significant space requirements, and place greater demand on local road and rail transport infrastructure. In the largest projects, there can be positive connectivity spin-offs for local economies resulting from these impacts, as upgraded road infrastructure may be available to other business users, and so improve linkages to labour and product markets. Significant planning work is required in these instances.</p>						
<p>10. Labour productivity: is the activity likely to affect local terrestrial environments, heritage or neighbouring uses?</p>	<p>Port activities, and associated infrastructure development, may have significant effects on local environments and neighbouring uses. Port activities (alongside related functions such as fisheries) can have an important role in animating the marine environment, creating positive externalities for coastal areas. Liaison and partnership working between marine and terrestrial planners will be likely to be required in order to find low-impact locations for required infrastructure. Some site safeguarding may be required.</p>						
<p>11. Outcomes: is the activity likely to affect deprivation levels in the local area?</p>	<p>Expansion in port activity may reduce local unemployment. Although the precise effects on local employment will depend on the level of capital intensity associated with port expansion, ports employ relatively high proportions of lower skilled labour, which is most likely to be at greatest risk of unemployment. Deprivation is concentrated in those with low skills. Port activity is therefore likely to have a positive effect on deprivation.</p>						

Figure 4.10 Ports and Shipping – Location Quotient and employment mapping



Marine aggregates

<p>1. Activity SIC definition</p>	<p>SIC code definitions which most closely matches this marine activity are SIC code 8.12 – ‘Operation of gravel and sandpits; mining of clays and kaolin’.</p> <p>It is not possible to isolate the parts of these activities that are specifically related to the marine environment within the statistics available from the ONS. (However, industry information is available from the British Marine Aggregate Producers Association).</p>
<p>2. What activity currently takes place?</p>	<p>Research for the Government states that marine sand and gravel contributes to meeting UK demand for construction aggregate materials. In England, they account for 38% of the total regional demand for sand and gravel in the South East (80% in London), 46% in the North East and 22% in the North West¹⁴⁹.</p> <p>Secondary activities include: processing of aggregate at wharf; manufacture of products, such as ready mixed concrete, concrete blocks, etc; the principal activity also contributes to the value of the ultimate end use, for example, construction activities, coastal defence and beach replenishment¹⁵⁰.</p> <p>Although the sector makes an important onward contribution to the construction industry, total employment in this sector is modest. According to British Marine Aggregate Producers Association (BMAPA), 640 people were directly employed in the marine aggregates sector in 2006 (500 of which are ship crew and the rest provide shore support and administration). Further down the supply chain, a further 600 staff are employed on the wharves that receive UK marine aggregates.¹⁵¹</p> <p>Note that these statistics will provide a better view of the overall levels of employment in the marine aggregates industry than those ONS statistics which show aggregates activity overall, including both marine and non-marine activity (presented in the map below). However, we have mapped ONS data because it may provide a broad insight into the locations of aggregates activity on the coast.</p>
<p>3. Where does this activity currently</p>	<p>Approximately 79% of marine aggregates were used in the production of concrete and concrete products, a sector that</p>

¹⁴⁹ HM Government (2011) *UK Marine Policy Statement* (38)

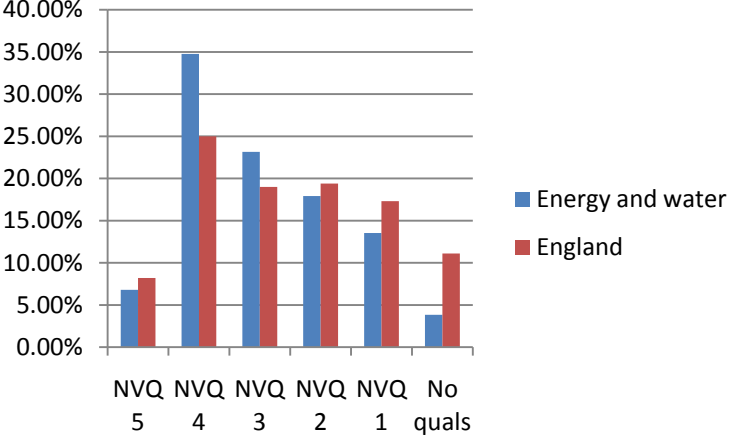
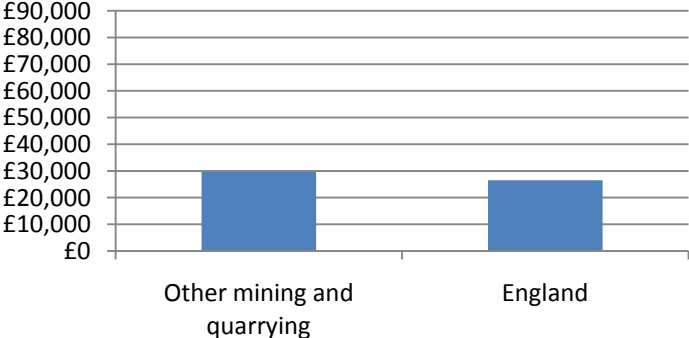
¹⁵⁰ Pugh for Crown Estate (2008) *Socio-economic indicators of marine-related activities in the UK economy* London TSO (13)

¹⁵¹ British Geological Survey (2007) *The Strategic Importance of the Marine Aggregates Industry to the UK* (18) http://www.bmapa.org/downloads/BMAPA_download.pdf

<p>create employment?</p>	<p>employed 31,000 people in 2004. Figure 1.5 below details the strength of the aggregates and clay mining activity across England in terms of Location Quotient scores and employment numbers. Employment in this activity is important to a small number of areas in England, particularly to the north of the country. There is a cluster of employment in this sector in the Cornwall area around St Austell, but this is largely unrelated to marine aggregates, instead showing (terrestrial) clay mining activities.</p>
<p>4. What is the future for this activity?</p>	<p>UKMAS states that demand for marine aggregate materials could significantly increase over the next five to ten years to support large-scale infrastructure projects and coastal defence programmes, and reports that “the marine aggregate industry believes that existing identified deposits will be sufficient for at least 50 years production at current rates of extraction. Climate change may increase the demand for protection against coastal flooding, which in turn may call for more soft engineered defences. Internationally, demand for exports may grow as continental land supplies become exhausted”.¹⁵²</p>
<p>5. Labour utilisation: how local are impacts? Is marine activity likely to increase employment in coastal areas? What is the extent of typical labour market catchments and supply chains?</p>	<p>There are 70 production licence areas located off the coast of England and Wales which are used for marine sand and gravel dredging. Although we have no specific evidence, we assume that many of the lower skilled employees employed on aggregates extraction vessels are taken from local labour markets near these licence areas. We anticipate that this will particularly be the case for smaller vessels (less than 3000 tonnes) which supply local ports.¹⁵³ Larger vessels travel further offshore, and their crew may come from around the country.</p>
<p>6. Labour utilisation: does the activity generate above average skills demands in the local economy?</p>	<p>Similarly to energy production, the marine aggregates sector falls within the ‘Energy and Water’ sector in the Labour Force Survey. Attainment levels at NVQ level 4 are much higher at 35%.</p>

¹⁵² UKMAS (2010) *Charting Progress Feeder Report – Productive Seas* (220,221)

¹⁵³ British Geological Survey (2007) *The Strategic Importance of the Marine Aggregates Industry to the UK* (19) http://www.bmapa.org/downloads/BMAPA_download.pdf

	<p>Figure 4.11 Energy and water skill levels</p>  <table border="1"> <caption>Data for Figure 4.11: Energy and water skill levels</caption> <thead> <tr> <th>Qualification</th> <th>Energy and water (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>NVQ 5</td> <td>~7.0</td> <td>~8.0</td> </tr> <tr> <td>NVQ 4</td> <td>~35.0</td> <td>~25.0</td> </tr> <tr> <td>NVQ 3</td> <td>~23.0</td> <td>~19.0</td> </tr> <tr> <td>NVQ 2</td> <td>~18.0</td> <td>~19.0</td> </tr> <tr> <td>NVQ 1</td> <td>~13.0</td> <td>~17.0</td> </tr> <tr> <td>No quals</td> <td>~4.0</td> <td>~11.0</td> </tr> </tbody> </table> <p>APS (2010) (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	Qualification	Energy and water (%)	England (%)	NVQ 5	~7.0	~8.0	NVQ 4	~35.0	~25.0	NVQ 3	~23.0	~19.0	NVQ 2	~18.0	~19.0	NVQ 1	~13.0	~17.0	No quals	~4.0	~11.0
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No quals	~4.0	~11.0																				
<p>7. Labour utilisation: when the activity creates jobs, are these often seasonal or part time?</p>	<p>We have no direct evidence regarding the seasonality of employment, although there are likely to be some effects of weather on activity.</p> <p>Whilst we have no information on the extent of part time working in this occupation, we assume that the majority working in this activity are in full-time positions.</p>																					
<p>8. Labour productivity: does the activity generate above average wages?</p>	<p>The average gross annual pay (mean) for 'other mining and quarrying' in 2010 was £29,628. This was higher than the England average of £26,510.</p> <p>Figure 4.12 Other mining and quarrying wages</p> <p>Gross annual pay (mean)</p>  <table border="1"> <caption>Data for Figure 4.12: Other mining and quarrying wages</caption> <thead> <tr> <th>Category</th> <th>Gross annual pay (mean) (£)</th> </tr> </thead> <tbody> <tr> <td>Other mining and quarrying</td> <td>£29,628</td> </tr> <tr> <td>England</td> <td>£26,510</td> </tr> </tbody> </table> <p>ASHE (2010) (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	Category	Gross annual pay (mean) (£)	Other mining and quarrying	£29,628	England	£26,510															
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<p>9. Labour productivity: is the activity likely to affect investment in local infrastructure and</p>	<p>Expansion of aggregates activity can have very significant space requirements, and place greater demand on local road and rail transport infrastructure. Marine aggregates activities are in themselves unlikely to lead to the expansion of local infrastructure and connectivity.</p>																					

connectivity?	
10. Labour productivity: is the activity likely to affect local terrestrial environments, heritage or neighbouring uses?	<p>This activity can help maintain coastlines of local environments. Dredging of large quantities of marine sand and gravel are increasingly being used for coast protection purposes, through beach nourishment.</p> <p>The onshore transfer and storage of marine aggregates can be visually intrusive, and so these activities might not be appropriate in some contexts. Close co operation with terrestrial planners is essential if negative impacts of such activities are to be minimised. Specifically environmental impacts of this activity are outside the remit of this report, but The Crown Estate notes that “in parts of the country where marine aggregate dredging occurs close to (sometimes within sight of) areas experiencing coastal erosion, the media articles frequently quote dredging as the prime cause of the coastal changes.” The Crown Estate states that there is no evidence for this occurring, but these concerns may need to be borne in mind by marine planners when they are liaising with terrestrial planners.¹⁵⁴</p>
11. Outcomes: is the activity likely to affect deprivation levels in the local area?	<p>Whilst we do not have skills data specific to marine aggregates activity, our assumption is that a high proportion of jobs in the sector are relatively unskilled jobs that are available to local lower-skilled people.</p>

¹⁵⁴ http://www.thecrownestate.co.uk/marine_aggregates

Marine dredging and disposal

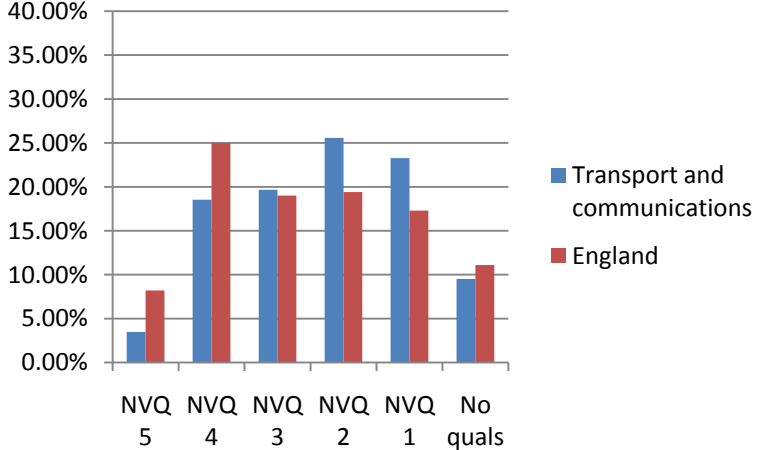
- 4.20 The MPS states that most marine dredging and disposal is for the purposes of navigation and existing and future port development (although other works can take place to facilitate the construction of pipelines, outfalls and tunnels). Since 1998, in compliance with international obligations, the UK Administrations have – with some minor exceptions – only licensed the disposal at sea of capital and maintenance dredgings and small amounts of fish waste.¹⁵⁵
- 4.21 It is very difficult to separate out this activity from activities associated with the maintenance of ports captured under the “ports and shipping” category listed above. We have therefore dealt with the socio-economic aspects of this activity under the ports and shipping category.

Telecommunications cabling

1. Activity SIC definition	SIC code definitions which most closely matches this marine activity is 61.10. It is not possible to isolate the specifically marine component using the available data.
2. What activity currently takes place?	This activity concerns the laying of telecommunications cable on the seabed for the purposes of voice and data transmission.
3. Where does this activity currently create employment?	Figure 1.6 below details the strength of the telecommunications activity across England in terms of Location Quotient scores and employment numbers. There are few areas where this activity is of particular importance. Note that it is not possible to isolate the specifically marine aspect of telecommunications cabling in the available statistics, so the specifically marine component will represent a share of the statistics presented.
4. What is the future for this activity?	The telecommunications are set to grow, but the effects of this growth specifically on the manufacture and laying of cables is not known. Satellite communication is the available alternative to cables for the international transmission of voice and data, although fibre optic cables are a more cost effective method of transmitting data.
5. Labour utilisation: how local are impacts? Is marine activity likely to increase employment in coastal areas?	Clearly, telecommunications are of “socially and economically crucial to the UK,” ¹⁵⁶ and coastal communities share in those benefits. However, the local impacts of the process of manufacturing and laying marine cables are likely to be modest in coastal communities. Manufacture of cables is a highly specialised activity

¹⁵⁵ HM Government (2011) *United Kingdom Marine Policy Statement* (40)

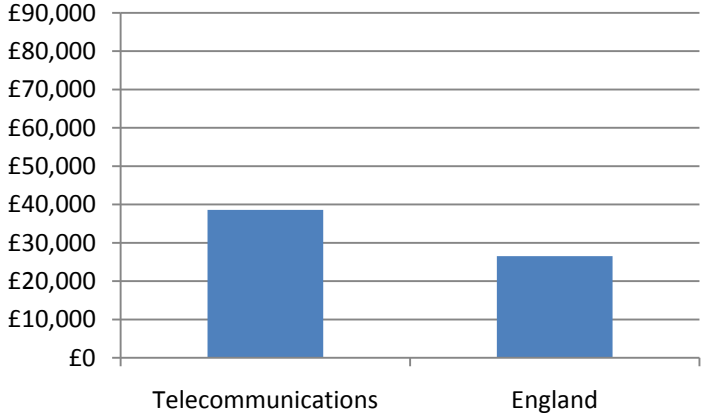
¹⁵⁶ HM Government (2011) *Marine Policy Statement* (41)

<p>What is the extent of typical labour market catchments and supply chains?</p>	<p>which takes place at relatively few sites, and cable laying is carried out by specialist contractors using large vessels.¹⁵⁷</p>																					
<p>6. Labour utilisation: does the activity generate above average skills demands in the local economy?</p>	<p>Telecommunications cabling falls within the ‘transport and communications’ sector in the Labour Force Survey. As such, the data provides only a general guide to this marine activity. Analysis of workforce skills levels in this sector reveals that attainment levels are higher in lower end NVQ 1 (23%) and 2 (23%) levels than the England profile. At the other end of the scale there are fewer workers who have achieved NVQ level 4 and 5 qualifications.</p> <p>Figure 4.14 Transport and communications skill levels</p>  <table border="1"> <caption>Data for Figure 4.14: Transport and communications skill levels</caption> <thead> <tr> <th>NVQ Level</th> <th>Transport and communications (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>NVQ 5</td> <td>~3.0</td> <td>~8.0</td> </tr> <tr> <td>NVQ 4</td> <td>~18.0</td> <td>~25.0</td> </tr> <tr> <td>NVQ 3</td> <td>~19.0</td> <td>~19.0</td> </tr> <tr> <td>NVQ 2</td> <td>~25.0</td> <td>~19.0</td> </tr> <tr> <td>NVQ 1</td> <td>~23.0</td> <td>~17.0</td> </tr> <tr> <td>No quals</td> <td>~9.0</td> <td>~11.0</td> </tr> </tbody> </table> <p>APS (2010) (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	NVQ Level	Transport and communications (%)	England (%)	NVQ 5	~3.0	~8.0	NVQ 4	~18.0	~25.0	NVQ 3	~19.0	~19.0	NVQ 2	~25.0	~19.0	NVQ 1	~23.0	~17.0	No quals	~9.0	~11.0
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No quals	~9.0	~11.0																				
<p>7. Labour utilisation: when the activity creates jobs, are these often seasonal or part time?</p>	<p>We have no specific information available on the seasonal or part-time nature of employment, although we understand that some activities are likely to be seasonally restricted due to weather conditions or spawning or migratory activities.¹⁵⁸</p>																					
<p>8. Labour productivity: does the activity generate above average wages?</p>	<p>The average gross annual salary (mean) for workers in the ‘telecommunications’ sector was £38,598 in 2010¹⁵⁹. This was higher than the England average salary for all sectors of £26,510.</p>																					

¹⁵⁷ See Glover (undated) *History of the Atlantic Cable & Undersea Communications* <http://atlantic-cable.com/CableCos/CandW/CW/>

¹⁵⁸ MMO expert input 12/05/11

¹⁵⁹ Annual Survey of Hours and Earnings (2010)

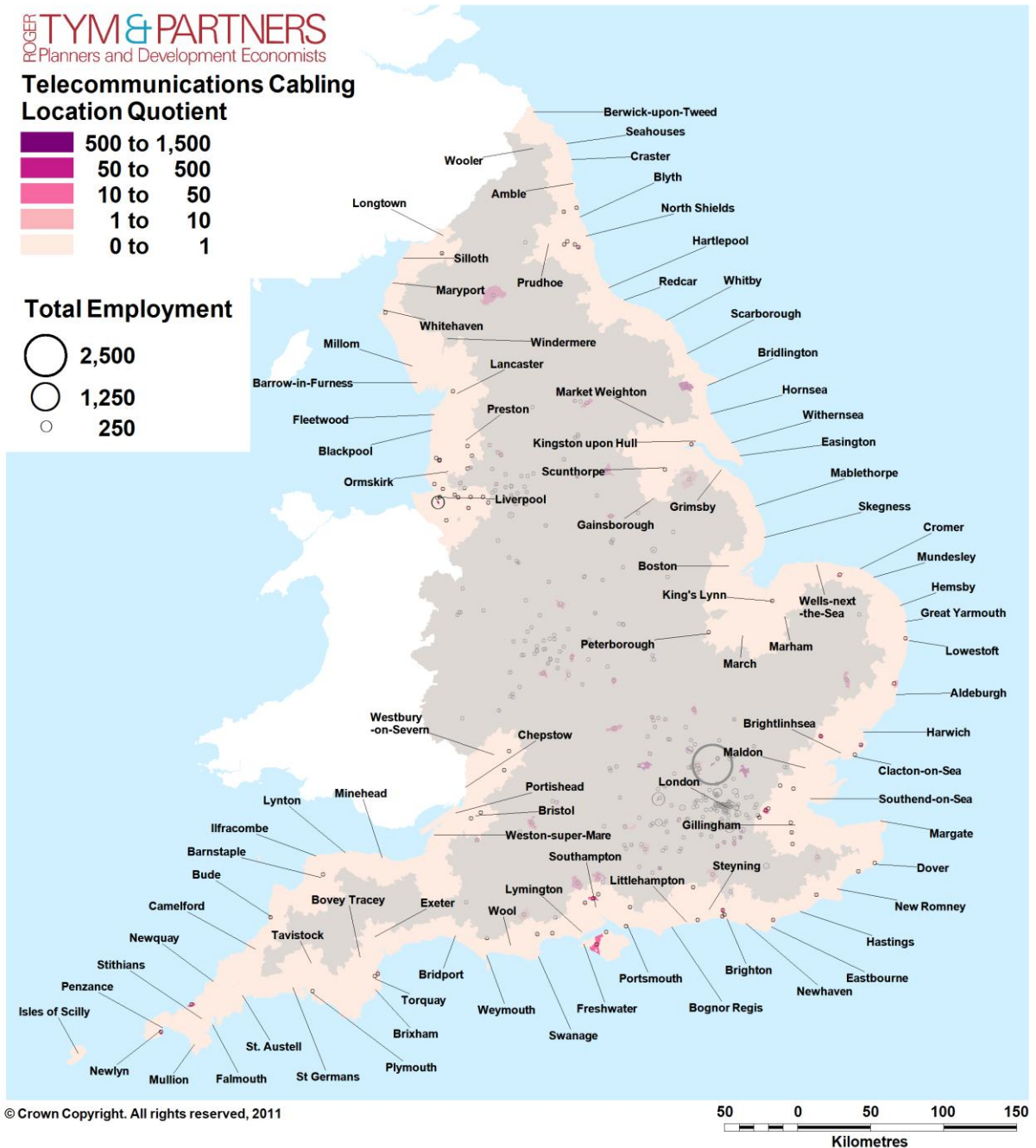
	<p>Figure 4.15 Telecommunications wages</p> <p>Gross annual pay (mean)</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Mean Gross Annual Pay (£)</th> </tr> </thead> <tbody> <tr> <td>Telecommunications</td> <td>~38,000</td> </tr> <tr> <td>England</td> <td>~26,000</td> </tr> </tbody> </table> <p>ASHE (2010) (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	Category	Mean Gross Annual Pay (£)	Telecommunications	~38,000	England	~26,000
Category	Mean Gross Annual Pay (£)						
Telecommunications	~38,000						
England	~26,000						
<p>9. Labour productivity: is the activity likely to affect investment in local infrastructure and connectivity?</p>	<p>Whilst telecommunications cabling marine activity has an important role in facilitating international communications, the prevalence of cabling manufacturers, cable laying, or even onshore data nodes will not in themselves provide relative improvements in infrastructure and connectivity for coastal communities.</p>						
<p>10. Labour productivity: is the activity likely to affect local terrestrial environments, heritage or neighbouring uses?</p>	<p>The MPS states that cabling activities are likely to be low impact.¹⁶⁰ Cables are typically buried as they come onshore, and associated infrastructure is generally small scale.¹⁶¹ We do not expect this marine activity to have significant effects on local terrestrial environments, heritage or neighbouring uses.</p>						
<p>11. Outcomes: is the activity likely to affect deprivation levels in the local area?</p>	<p>Telecommunications cable activity is unlikely to have significant effects on deprivation. Manufacture takes place at a small number of sites, and cable laying contractors are international. Although we cannot prove the point using statistics (given that the available</p>						

¹⁶⁰ HM Government (2011) *Marine Policy Statement* (41)

¹⁶¹ See, for example, 'The mysterious cable that links the UK to the US' *The Guardian* 23 October 2009 <http://www.guardian.co.uk/technology/2009/oct/23/mysterious-cable-uk-us>

data does not allow us to pinpoint specifically marine activity) jobs created are likely to be highly specialised and consequently inaccessible to deprived people.

Figure 4.16 Telecommunication Cabling – Location Quotient and employment mapping (Note that the specifically marine component cannot be separately isolated in the statistics)



Fisheries

<p>1. Activity SIC definition</p>	<p>SIC code definitions which most closely matches this marine activity are: 03.11 Marine fishing 10.20 Processing and preserving of fish, crustaceans and molluscs</p>
<p>2. What activity currently takes place?</p>	<p>The marine fisheries sector comprises all economic activities related to the capture of wild marine organisms (fish and shellfish), and the subsequent handling and processing of catches. There were a total of 12,729 full and part time fishermen in Britain in 2008. Whilst this number has declined significantly over the last few decades, fishing remains an important socio-economic activity for many coastal communities, particularly in the more remote parts of Scotland¹⁶². The UK processing sector comprised 573 businesses and employed 18,180 people in 2005. In the retail trade, there were 13,000 fishmongers in the UK (including mobile fishmongers and stalls)¹⁶³.</p>
<p>3. Where does this activity currently create employment?</p>	<p>The <i>Charting Progress</i> report suggests that the main concentrations of fishermen numbers are in the administration ports of Newlyn (1,167 fishermen), Poole (818), Plymouth (605), Grimsby (578), North Shields (545), Hastings (469), Brixham (465) and Scarborough (453).¹⁶⁴ This point is reiterated in Figure 1.7 below which details the strength of the fisheries activity across England in terms of Location Quotient scores and employment numbers. It can also be seen that employment in this activity is particularly important to a number of coastal areas around south-west. It should be noted that employment data on fisheries industries may not be reliable. The statistics do not successfully pick up the high levels of self employment prevalent in the industry. Attempting to overcome these problems by looking numbers of boats registered at a given port is not a complete solution either, because boats may be registered to one port but recruit and land catches at another. As additional analysis, we have therefore provided maps showing the fish tonnage landed at ports around the country, which may serve as a proxy measure of the likely economic impacts of fisheries industries at each port.</p>

¹⁶² DEFRA (2010) *Charting Progress 2: Productive Seas Feeder Report* (116)

¹⁶³ DEFRA (2010) *Charting Progress 2: Productive Seas Feeder Report* (143)

¹⁶⁴ DEFRA (2010) *Charting Progress 2: Productive Seas Feeder Report* (144)

<p>4. What is the future for this activity?</p>	<p>DEFRA states that the commitment of the EU to attaining the World Summit on Sustainable Development target of achieving maximum sustainable yield for fish stocks by 2015, and the progressive development of recovery and management plans to achieve this, should ensure continued reduction in fishing pressures on stocks.¹⁶⁵</p> <p>The UKMAS Feeder Report states that declines in fish landings, fleet size and employment observed up to 2003 or 2004 have become less marked in subsequent years, indicating greater stability. However this does not preclude more severe localised fishery management problems and related socio-economic impacts caused by local imbalances between fishing capacity and fish availability.¹⁶⁶</p> <p>The industry has been in broad decline over the last few years. In the North Sea and Eastern Channel the total fishing effort (kW days) of the international fishing fleets has declined by around 27% since 2002. In contrast, fishing effort in the Western Channel and Celtic Sea appears to have increased since 2000.¹⁶⁷ In the UK there was a 38.7% decline in catching sector employment between 1999 and 2009.¹⁶⁸ The number of UK registered fishing vessels has fallen by 16% from 2001 to 2010. The number of days at sea for vessels over 10m in length has fallen by 37% over the same period.¹⁶⁹</p>
<p>5. Labour utilisation: how local are impacts? Is marine activity likely to increase employment in coastal areas? What is the extent of typical labour market catchments and</p>	<p>The UK fishing fleet is made up of a wide range of vessel types with varying levels of activity.¹⁷⁰ It can be assumed that many of the vessels, especially smaller vessels, will have close links to the local economies of fishing villages and towns. All vessels are subject to standard fishing costs which will affect local economies i.e. harbour dues, subscriptions and levies.¹⁷¹ Moreover, parts of the supply chain i.e. boats, nets, fuel can also be closely linked to the local economy.¹⁷² Therefore, the labour market catchments and aspects of the supply chain can be relatively local for this activity.</p>

¹⁶⁵ DEFRA (2010) *Charting Progress 2: Productive Seas Feeder Report* (161)

¹⁶⁶ UKMAS (2010) *Charting Progress Feeder Report – Productive Seas* (219)

¹⁶⁷ DEFRA (2010) *Charting Progress 2: Productive Seas Feeder Report* (132)

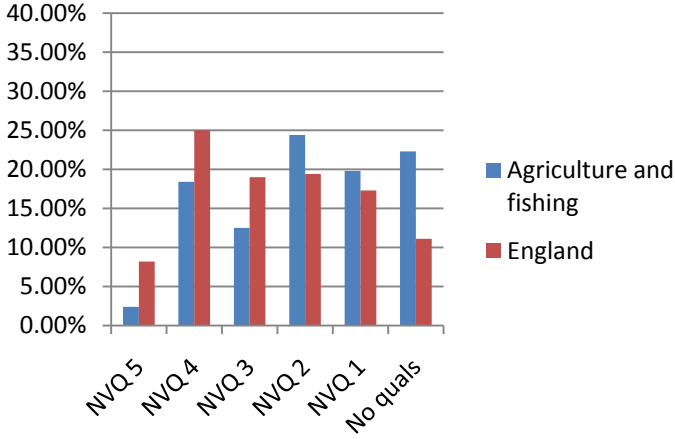
¹⁶⁸ Aberdeenshire Council Fishing Industry Statistics (November 2010) using DEFRA statistics. See <https://www.aberdeenshire.gov.uk/statistics/economic/fishing/EmploymentandFleetSize2010.pdf>

¹⁶⁹ MMO (2011) *The UK Fishing Industry in 2011*

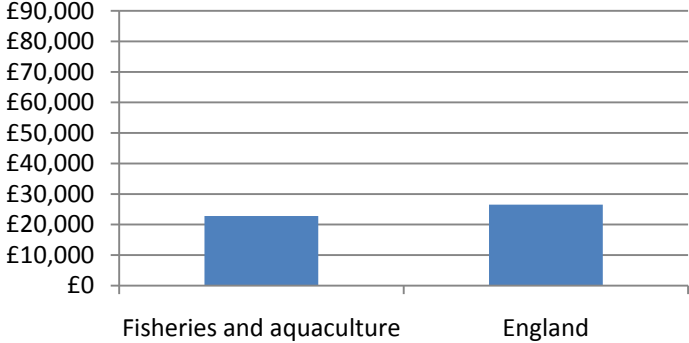
¹⁷⁰ Curtis, Brodie and Longoni for Seafish (2010) *2008 Economic Survey of the UK Fishing Fleet short report* (5)

¹⁷¹ Ibid

¹⁷² Seafish (2008) *The economic impacts of the UK sea fishing and fish processing sectors: An input-output analysis* (1)

supply chains?																						
<p>6. Labour utilisation: does the activity generate above average skills demands in the local economy?</p>	<p>Fisheries falls within the ‘agriculture and fishing’ sector in the Labour Force Survey and so marine activities cannot be precisely distinguished. Although 18% of the workforce are educated to NVQ level 4, a large proportion of the workforce have only achieved NVQ levels 1 and 2. A significantly greater proportion of the workforce (22%) have no qualifications at all, compared to the England average.</p> <p>Figure 4.17 Agriculture and fishing skill levels</p>  <table border="1"> <caption>Data for Figure 4.17: Agriculture and fishing skill levels</caption> <thead> <tr> <th>Qualification Level</th> <th>Agriculture and fishing (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>NVQ 5</td> <td>~2.0</td> <td>~8.0</td> </tr> <tr> <td>NVQ 4</td> <td>~18.0</td> <td>~25.0</td> </tr> <tr> <td>NVQ 3</td> <td>~12.0</td> <td>~19.0</td> </tr> <tr> <td>NVQ 2</td> <td>~24.0</td> <td>~19.0</td> </tr> <tr> <td>NVQ 1</td> <td>~20.0</td> <td>~17.0</td> </tr> <tr> <td>No quals</td> <td>~22.0</td> <td>~11.0</td> </tr> </tbody> </table> <p>APS (2010) (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	Qualification Level	Agriculture and fishing (%)	England (%)	NVQ 5	~2.0	~8.0	NVQ 4	~18.0	~25.0	NVQ 3	~12.0	~19.0	NVQ 2	~24.0	~19.0	NVQ 1	~20.0	~17.0	No quals	~22.0	~11.0
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<p>7. Labour utilisation: when the activity creates jobs, are these often seasonal or part time?</p>	<p>Fishing has considerable seasonal variations driven by target species lifecycle, behavioural factors and legislative restrictions.¹⁷³</p>																					
<p>8. Labour productivity: does the activity generate above average wages?</p>	<p>The average gross annual salary (mean) for ‘fishing and aquaculture’ was £22,802 in 2010. This was below the average salary for all sectors of £26,510.</p>																					

¹⁷³ MMO expert input 12/05/11

	<p>Figure 4.18 Fishing and aquaculture wages</p> <p>Gross annual pay (mean)</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Mean Gross Annual Pay (approx. £)</th> </tr> </thead> <tbody> <tr> <td>Fisheries and aquaculture</td> <td>22,000</td> </tr> <tr> <td>England</td> <td>28,000</td> </tr> </tbody> </table> <p>ASHE (2010) (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	Category	Mean Gross Annual Pay (approx. £)	Fisheries and aquaculture	22,000	England	28,000
Category	Mean Gross Annual Pay (approx. £)						
Fisheries and aquaculture	22,000						
England	28,000						
<p>9. Labour productivity: is the activity likely to affect investment in local infrastructure and connectivity?</p>	<p>This marine activity is unlikely to have a significant effect on infrastructure and connectivity.</p>						
<p>10. Labour productivity: is the activity likely to affect local terrestrial environments, heritage or neighbouring uses?</p>	<p>Our review of the processes under way in coastal communities suggested that activities such as fishing were central in establishing the distinctiveness and character of some coastal areas.</p> <p>In some communities, the industry is likely to have a very important role in tourism, and place-making, and the broader culture of a place. Its importance in this respect should not be underestimated, and (for example) has been placed as one of the central factors in the “Whitby’s survival and success”.¹⁷⁴ There is a difficulty in quantifying the extent of this influence, and more evidence on the role of fishing in this regard would be welcome.</p>						
<p>11. Outcomes: is the activity likely to affect deprivation levels in the local area?</p>	<p>The MPS stresses that sustainable fish stocks have the potential to maintain a prosperous and efficient fishing industry and provide social, cultural and economic benefits to often fragile coastal communities.¹⁷⁵</p> <p>Any reductions or changes in direct impacts such as fleet numbers</p>						

¹⁷⁴ Walton (2010) ‘Constructing “Old Whitby”: Frank Meadow Sutcliffe, Tourism, Heritage And Regeneration in Leeds Metropolitan University *A Collection of Essays on Place, Skills and Governance in Yorkshire and Humber Region* (34)

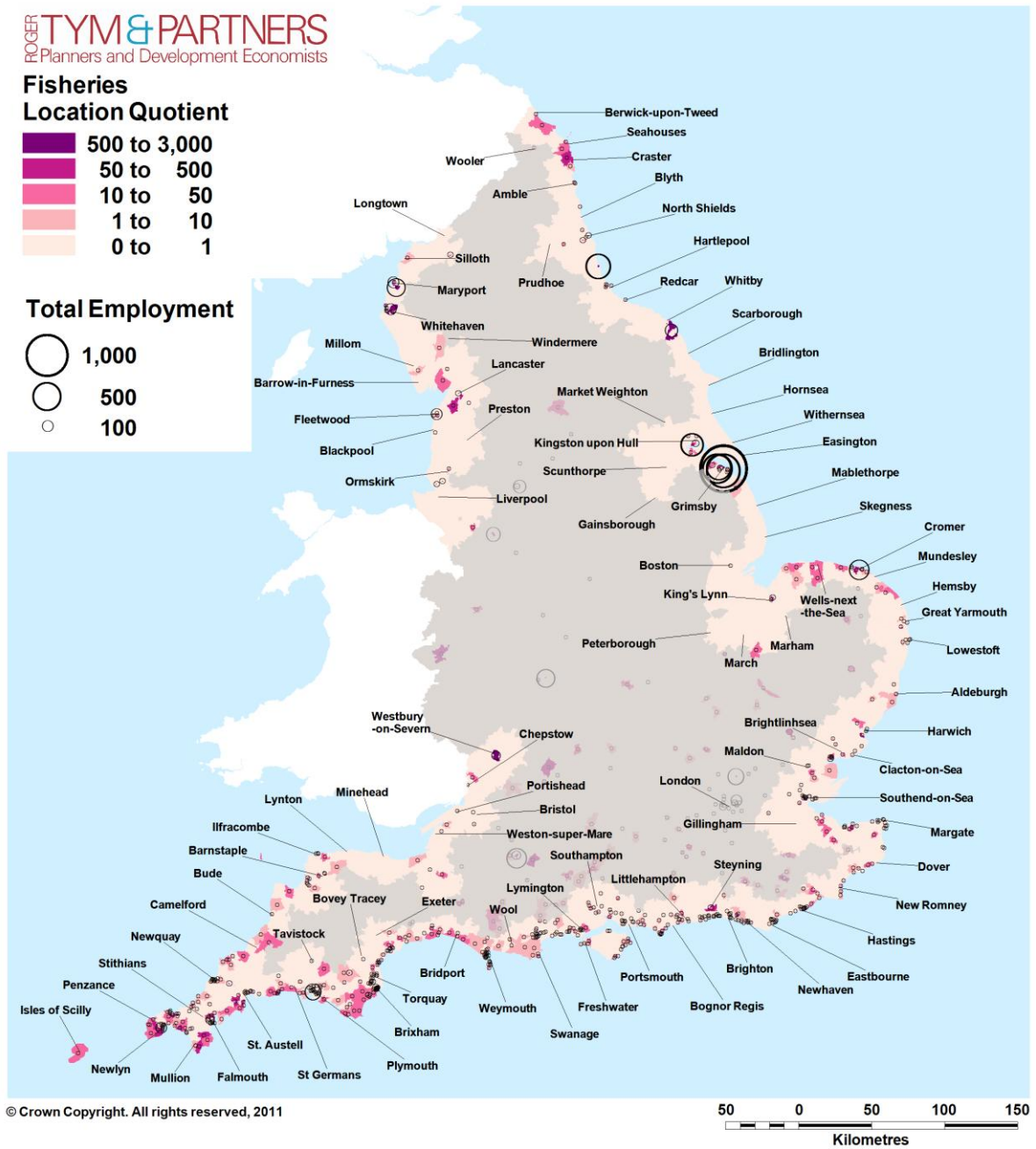
¹⁷⁵ HM Government (2011) *UK Marine Policy Statement* (42)

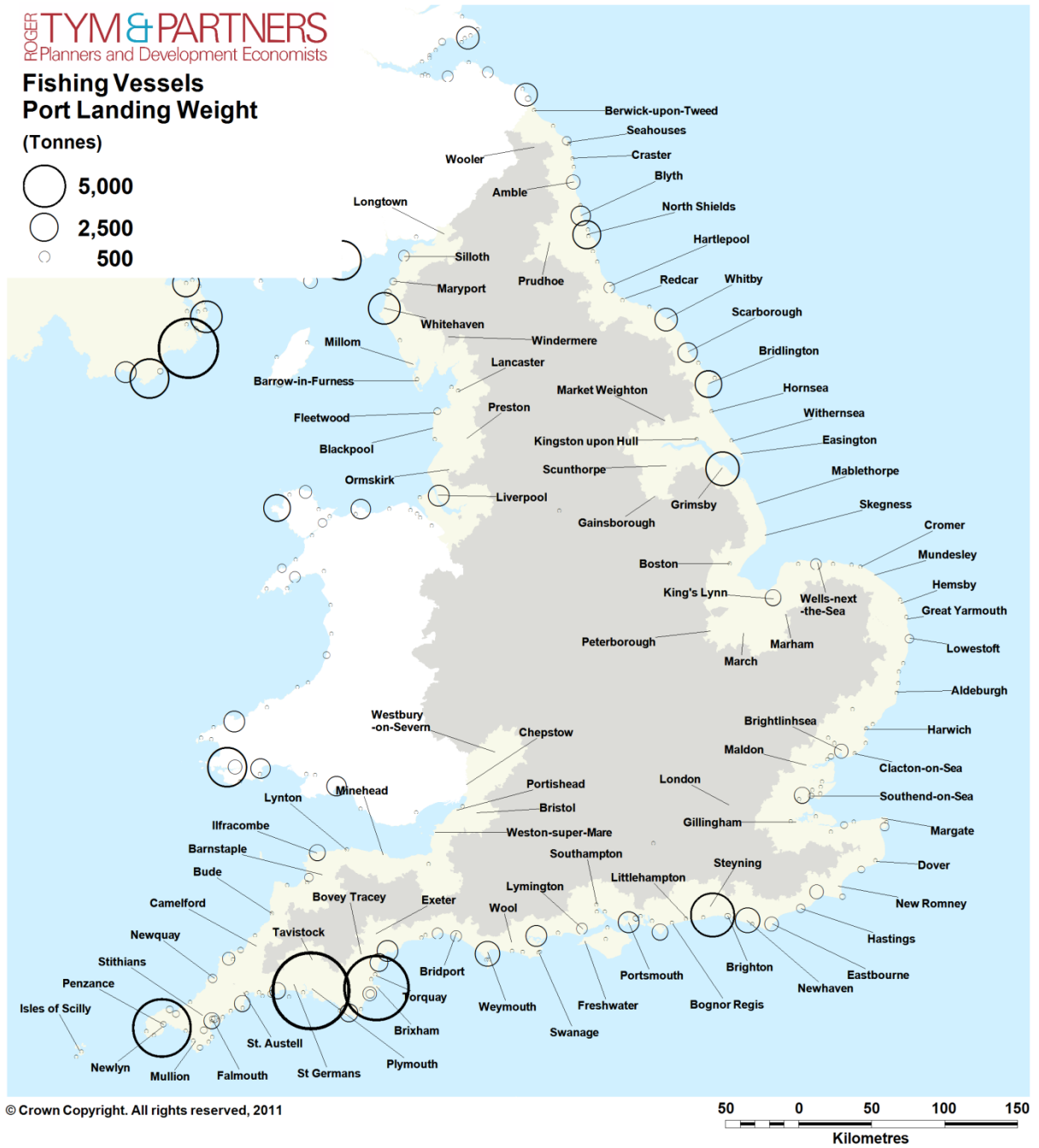
	<p>or quotients could have significant local impacts. Impacts are likely to be particularly pronounced in communities which depend on fishing for a significant proportion of local employment. The MPS states that “the dependence of jobs on fishing can be as high as 20% or more in some communities”.¹⁷⁶ Changes in these direct impacts will often have a greater effect on indirect impacts in the local area, such as unemployment and deprivation.¹⁷⁷ This is especially true in larger more remote locations.</p>
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¹⁷⁶ HM Government (2011) *UK Marine Policy Statement* (42)

¹⁷⁷ Seafish (2008) *The economic impacts of the UK sea fishing and fish processing sectors: An input-output analysis* (1)

Figure 4.19 Fisheries – Location Quotient and employment mapping





Aquaculture

1. Activity SIC definition	The SIC code definition for aquaculture is 03.21 – ‘Marine Aquaculture’
2. What activity currently takes place?	Aquaculture is the process of farming or culturing aquatic organisms. The majority of marine aquaculture is currently related to Atlantic salmon and shellfish. The sector also includes the operation of marine worm farms to produce angling bait. The farming of seaweed as a food or fuel is a growing part of this sector.
3. Where does this activity currently create employment?	<p>The majority (99%) of existing UK marine based finfish aquaculture activity is located in Scotland, which is the largest producer of farmed salmon in the EU, and the second largest in the world, although aquaculture activity is increasing in other areas of the UK.¹⁷⁸ Shellfish production is evenly spread throughout the UK and is an expanding activity.</p> <p>There are approximately 530 businesses in the UK aquaculture market, which equate to 3,150 jobs.¹⁷⁹ Only 800 of these jobs are within England (800) with the majority based in Scotland (2,200). It is estimated that indirectly 8,500 jobs are dependent on the industry.¹⁸⁰ UKMAS, in their assessment of the sector, highlight that within England, the highest proportion of staff is within the South East. Jobs in aquaculture are particularly important for rural coastal communities which are heavily reliant on the fish industry for employment.¹⁸¹</p> <p>Figure 1.8 below displays the strength of the aquaculture activity across England in terms of Location Quotient scores and employment numbers.</p>
4. What is the future for this activity?	<p>Trends in the industry are closely tied in with changes in wild fisheries, the availability of investment, and site availability. More intensive types of aquaculture can use space and resources more efficiently if they are carefully planned and managed. The overall outlook is dependent on site availability and environmental carrying capacity. Future development of deepwater finfish production could lead to large scale offshore production.¹⁸²</p> <p>The British Marine Finfish Association envisages that within the next</p>

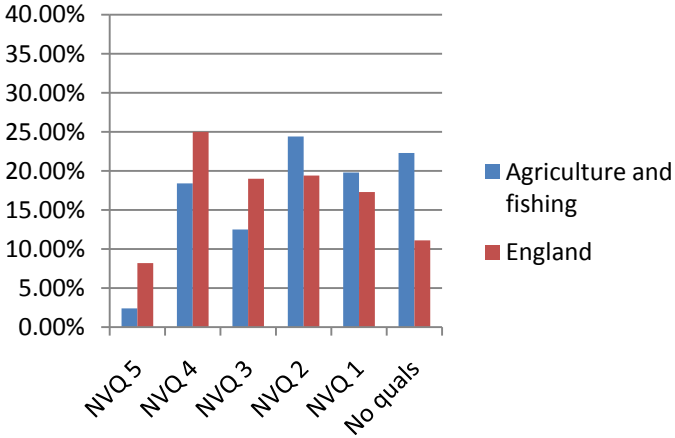
¹⁷⁸ HM Government (2011) *UK Marine Policy Statement* (43)

¹⁷⁹ Lantra (2009) Research Factsheet for Aquaculture (2)

¹⁸⁰ Pugh for Crown Estate (2008) *Socio-economic indicators of marine-related activities in the UK economy* London TSO (7);

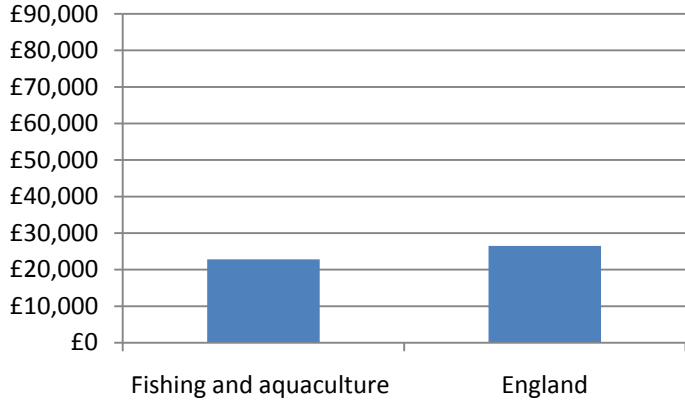
¹⁸¹ UKMAS ((2010) *Charting Progress Feeder Report – Productive Seas* (53)

¹⁸² HM Government (2011) *UK Marine Policy Statement* (41)

	<p>eight to 10 years, the UK could produce annually up to 10,000 tonnes of halibut, up to 25,000 tonnes of cod and 5,000 tonnes of haddock, creating 2,000 jobs with a first sale value of £100m. Shellfish production is expected to grow steadily.¹⁸³</p>																					
<p>5. Labour utilisation: how local are impacts? Is marine activity likely to increase employment in coastal areas? What is the extent of typical labour market catchments and supply chains?</p>	<p>The majority of businesses in the shellfish industry are small in size and they predominately offer employment opportunities in remote locations.¹⁸⁴ We have no direct evidence, but labour market catchments are likely to be local.</p>																					
<p>6. Labour utilisation: does the activity generate above average skills demands in the local economy?</p>	<p>Aquaculture falls within the ‘agriculture and fishing’ sector in the Labour Force Survey. Unskilled labour predominates (although it should be noted that agriculture is included in these statistics).</p> <p>Figure 4.20 Agriculture and fishing skill levels</p>  <table border="1"> <caption>Data for Figure 4.20: Agriculture and fishing skill levels</caption> <thead> <tr> <th>Skill Level</th> <th>Agriculture and fishing (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>NVQ 5</td> <td>~2.0</td> <td>~8.0</td> </tr> <tr> <td>NVQ 4</td> <td>~18.0</td> <td>~25.0</td> </tr> <tr> <td>NVQ 3</td> <td>~12.0</td> <td>~19.0</td> </tr> <tr> <td>NVQ 2</td> <td>~24.0</td> <td>~19.0</td> </tr> <tr> <td>NVQ 1</td> <td>~20.0</td> <td>~17.0</td> </tr> <tr> <td>No quals</td> <td>~22.0</td> <td>~11.0</td> </tr> </tbody> </table> <p>APS (2010) (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	Skill Level	Agriculture and fishing (%)	England (%)	NVQ 5	~2.0	~8.0	NVQ 4	~18.0	~25.0	NVQ 3	~12.0	~19.0	NVQ 2	~24.0	~19.0	NVQ 1	~20.0	~17.0	No quals	~22.0	~11.0
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No quals	~22.0	~11.0																				
<p>7. Labour utilisation: when the activity creates jobs, are these often seasonal or part time?</p>	<p>We have no information on the extent of part time or seasonal working in this occupation.</p>																					

¹⁸³ Pugh for Crown Estate (2008) *Socio-economic indicators of marine-related activities in the UK economy* London TSO (7);

¹⁸⁴ The Crown Estate (2011) <http://www.thecrownestate.co.uk/aquaculture>

<p>8. Labour productivity: does the activity generate above average wages?</p>	<p>The average gross annual salary (mean) for fishing and aquaculture was £22,802 in 2010¹⁸⁵. This was below the average salary for all sectors of £26,510.</p> <p>Figure 4.21 Fishing and aquaculture wages</p> <p>Gross annual pay (mean)</p>  <table border="1"> <thead> <tr> <th>Category</th> <th>Gross annual pay (mean)</th> </tr> </thead> <tbody> <tr> <td>Fishing and aquaculture</td> <td>£22,802</td> </tr> <tr> <td>England</td> <td>£26,510</td> </tr> </tbody> </table> <p>ASHE (2010) (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	Category	Gross annual pay (mean)	Fishing and aquaculture	£22,802	England	£26,510
Category	Gross annual pay (mean)						
Fishing and aquaculture	£22,802						
England	£26,510						
<p>9. Labour productivity: is the activity likely to affect investment in local infrastructure and connectivity?</p>	<p>Although we have no direct evidence, we believe it is unlikely that this activity will have a significant impact on investment in local infrastructure and connectivity. This is because the volume of movements generated by the industry in accessing suppliers, product markets or labour markets will be of a sufficient scale to justify improved connections.</p>						
<p>10. Labour productivity: is the activity likely to affect local terrestrial environments, heritage or neighbouring uses?</p>	<p>We have found no evidence to demonstrate positive or negative impacts in these regards.</p>						
<p>11. Outcomes: is the activity likely to affect deprivation levels in the local area?</p>	<p>Expansion in this activity would, on the whole, tend to create jobs that would be accessible to lower skilled members of the labour force who might be most at risk of deprivation.</p>						

¹⁸⁵ Annual Survey of Hours and Earnings (2010)

Surface water management and waste water treatment and disposal

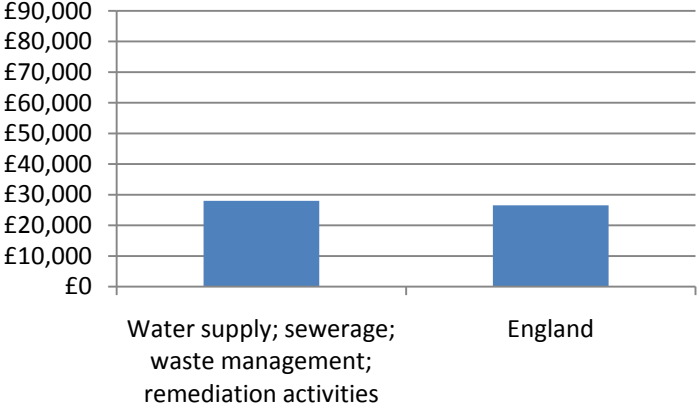
<p>1. Activity SIC definition</p>	<p>SIC code definitions which most closely matches this marine activity are:</p> <p>37 - Sewerage 38.21 - Treatment and disposal of non-hazardous waste 38.22 - Treatment and disposal of hazardous waste.</p> <p>It is not possible to isolate the parts of these activities that are specifically related to the marine environment within the statistics available from the ONS.</p>
<p>2. What activity currently takes place?</p>	<p>UKMAS state that the Disposal of waste material into the marine environment includes the regulated discharge of wastewater and the disposal of hazardous and non-hazardous waste. Solid wastes include disposal of dredged material from capital and maintenance dredging. Waste disposal is dependent on the sea's ability to assimilate wastes and has a positive economic benefit to communities where it allows industries to function¹⁸⁶.</p> <p>There are relatively few water abstractions from estuarine and coastal waters. The major saline abstractions provide cooling water for power stations. Other types of saline abstraction include fish farms and fish processing factories, passive and pumped navigation abstractions (to maintain water levels in impounded docks), ballast water abstractions and abstractions associated with certain dredging activities (e.g. hydraulic dredging).</p>
<p>3. Where does this activity currently create employment?</p>	<p>Figure 1.9 below details the level of this activity across England in terms of Location Quotient scores and employment numbers. There areas where employment in this activity is of significant importance.</p>
<p>4. What is the future for this activity?</p>	<p>Demand for waste disposal and dredging activities will continue, however there is increasing pressure from the various environment agencies to minimise disposal into the marine environment¹⁸⁷. With a move towards larger vessels (particularly in the field of container movements) increased levels of dredging activity is possible.¹⁸⁸</p>

¹⁸⁶ UKMAS ((2010) *Charting Progress Feeder Report – Productive Seas* (359)

¹⁸⁷ UKMAS ((2010) *Charting Progress Feeder Report – Productive Seas* (360)

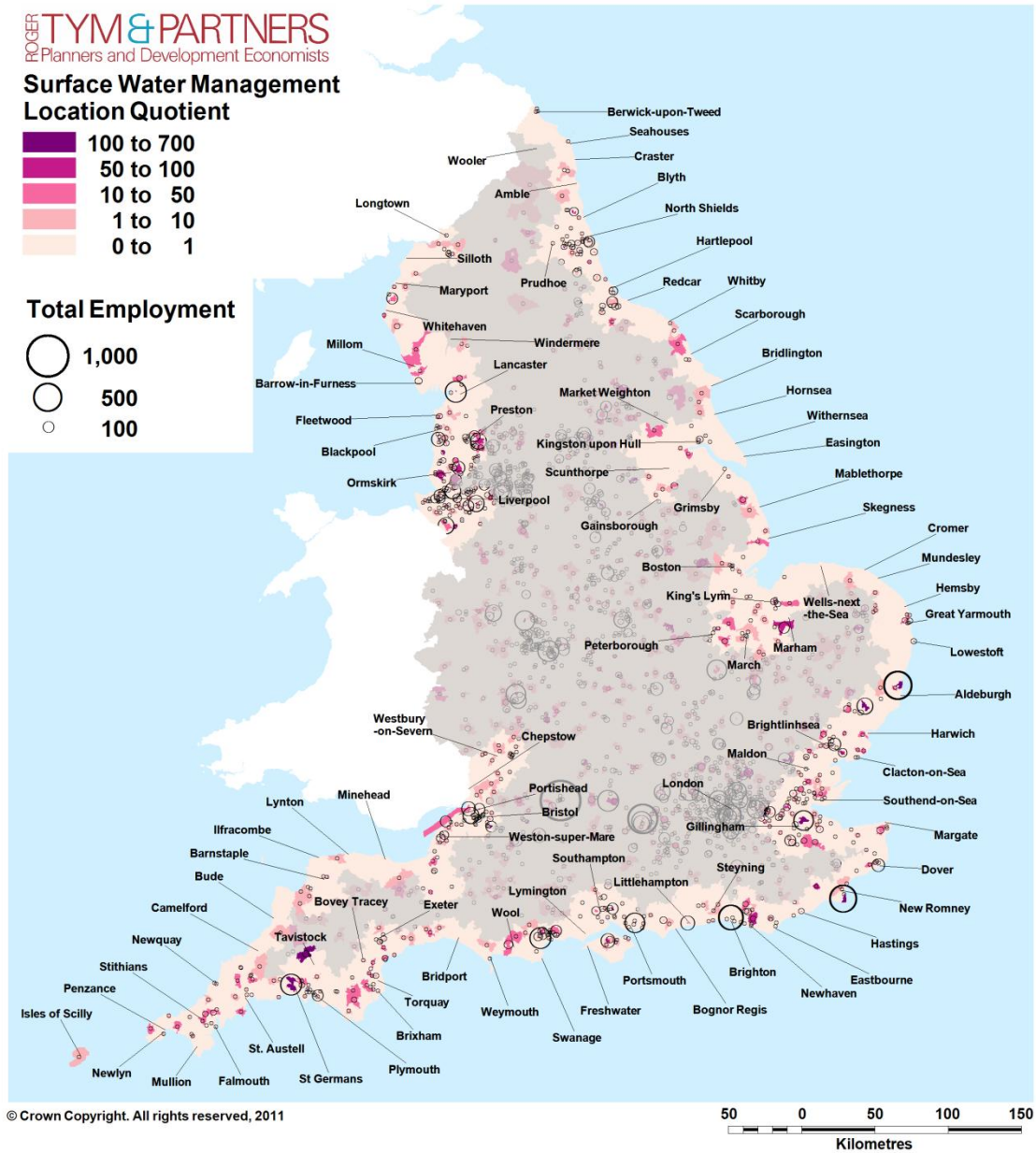
¹⁸⁸ MMO expert input 12/05/11

<p>5. Labour utilisation: how local are impacts? Is marine activity likely to increase employment in coastal areas? What is the extent of typical labour market catchments and supply chains?</p>	<p>Whilst we have no direct information, the data suggests that the sector employs a significant number of workers with NVQ level 1 or 2 qualifications. If this is the case, it can be assumed that a fair proportion of the workforce is made up from local employment markets. This would suggest that employment in coastal areas would be positively affected by jobs expansion.</p>																					
<p>6. Labour utilisation: does the activity generate above average skills demands in the local economy?</p>	<p>The 'Surface water management and waste water treatment and disposal' sector is merged within the 'Energy and Water' sector in the Labour Force Survey. Analysis of skills levels across the workforce of this sector reveals that NVQ level 1 (23%) and 2 (25%) attainment levels are higher than the England profile for all sectors.</p> <p style="text-align: center;">Figure 4.23 Energy and water skill levels</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Data for Figure 4.23: Energy and water skill levels</caption> <thead> <tr> <th>NVQ Level</th> <th>Energy and water (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>NVQ 5</td> <td>~7</td> <td>~8</td> </tr> <tr> <td>NVQ 4</td> <td>35</td> <td>25</td> </tr> <tr> <td>NVQ 3</td> <td>23</td> <td>19</td> </tr> <tr> <td>NVQ 2</td> <td>18</td> <td>19</td> </tr> <tr> <td>NVQ 1</td> <td>13</td> <td>17</td> </tr> <tr> <td>No quals</td> <td>4</td> <td>11</td> </tr> </tbody> </table> <p>APS (2010) (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	NVQ Level	Energy and water (%)	England (%)	NVQ 5	~7	~8	NVQ 4	35	25	NVQ 3	23	19	NVQ 2	18	19	NVQ 1	13	17	No quals	4	11
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NVQ 1	13	17																				
No quals	4	11																				
<p>7. Labour utilisation: when the activity creates jobs, are these often seasonal or part time?</p>	<p>This is not a seasonal activity. There is therefore no problem of seasonality affecting employment. Whilst we have no information on the extent of part time working we think it likely that the majority working in this activity are in full-time positions.</p>																					
<p>8. Labour</p>	<p>The average gross annual salary (mean) for the 'water supply;</p>																					

<p>productivity: does the activity generate above average wages?</p>	<p>sewerage, waste management and remediation activities' was £27,972 in 2010¹⁸⁹. This was higher than the England average for all sectors of £26,510.</p> <p style="text-align: center;">Figure 4.24 Water supply; sewerage; waste management; remediation activities wages</p> <p style="text-align: center;">Gross annual pay (mean)</p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Category</th> <th>Gross annual pay (mean)</th> </tr> </thead> <tbody> <tr> <td>Water supply; sewerage; waste management; remediation activities</td> <td>£27,972</td> </tr> <tr> <td>England</td> <td>£26,510</td> </tr> </tbody> </table> <p>ASHE (2010) (Note that the specifically marine component cannot be separately isolated in the statistics)</p>	Category	Gross annual pay (mean)	Water supply; sewerage; waste management; remediation activities	£27,972	England	£26,510
Category	Gross annual pay (mean)						
Water supply; sewerage; waste management; remediation activities	£27,972						
England	£26,510						
<p>9. Labour productivity: is the activity likely to affect investment in local infrastructure and connectivity?</p>	<p>This marine activity will have little impact local infrastructure and connectivity that will help overcome the peripherality problems affecting some coastal communities.</p>						
<p>10. Labour productivity: is the activity likely to affect local terrestrial environments, heritage or neighbouring uses?</p>	<p>Sewerage infrastructure and drainage is a requirement for development, and for reducing the risk of flooding in urban areas. However, aspects of these activities may have bad neighbour effects. Waste water treatment infrastructure has the potential to have negative visual impacts within communities and on seascape unless carefully designed. Impacts of odour can be far reaching.</p>						
<p>11. Outcomes: is the activity likely to affect deprivation levels in the local area?</p>	<p>We have no information on the precise impact of this marine activity on deprivation. However, given that it is a relatively high employer of NVQ1 level staff, and the fact that it is likely to draw labour from the local area, expansion in this marine activity may be expect to have mild positive impacts on local deprivation.</p>						

¹⁸⁹ Annual Survey of Hours and Earnings (2010)

Figure 4.25 Surface Water Management – Location Quotient and employment mapping (Note that the specifically marine component cannot be separately isolated in the statistics)



Tourism and recreation

<p>1. Activity SIC definition</p>	<p>This sector is hard to define precisely using SIC codes. This is for two reasons. Firstly, much activity that is supported by tourism (such as restaurant spending) is across a wide range of activities listed in the SIC (e.g. restaurants, cafés, retail), and is supported by people other than tourists (for example, residents of coastal areas will spend in restaurants in their local area – but this should not be classed as tourist spend). This problem has bedevilled various studies of tourism impacts.</p> <p>Progress has recently been made in this regard. Work from Sheffield Hallam university compared seaside towns to other towns in order to estimate that additional spend that should be attributed to seaside tourism.¹⁹⁰</p> <p>We need to use SIC-based approaches to generate skills and wages data. We accept that there are potential difficulties with this method. We have used the South West Regional Development Agency definition, which defines tourism in such a way as to exclude from the measure activities – such as retailing – where the main source of spending is from residents.¹⁹¹ The definition does this to enable the monitoring (as closely as standard industrial classifications and the Annual Business Inquiry data will permit) of the performance of the tourism economy as distinct from other economic activities.</p>
<p>2. What activity currently takes place?</p>	<p>As the Sheffield Hallam work points out, ‘seaside tourism’ is a wider category “than just set-piece family holidays on the beach”.¹⁹² There are a wide range of leisure, sporting and other recreational opportunities on offer. Day trips are an important part of the total. The study estimates that some 210,000 jobs are directly supported by seaside tourism in England and Wales, and the value of the</p>

¹⁹⁰ Beatty, Fothergill, Gore and Wilson (June 2010) *The Seaside Tourist Industry In England And Wales - Employment, economic output, location and trends* Centre for Regional Economic and Social Research, Sheffield Hallam University <http://www.shu.ac.uk/assets/pdf/cresr-seaside-tourism-report.pdf>

¹⁹¹ The SWRDA definition includes: hotels and motels with and without restaurants; youth hostels and mountain refuges; camping and caravan sites; other lodging; activities of travel agents; artistic and literary creation; operation of arts facilities; fair and amusement park activities; museum activities; botanical and zoological activities; museum activities; operation of sports arenas and stadiums; other sporting activities; gambling and better activities and other recreational activities not otherwise classified.

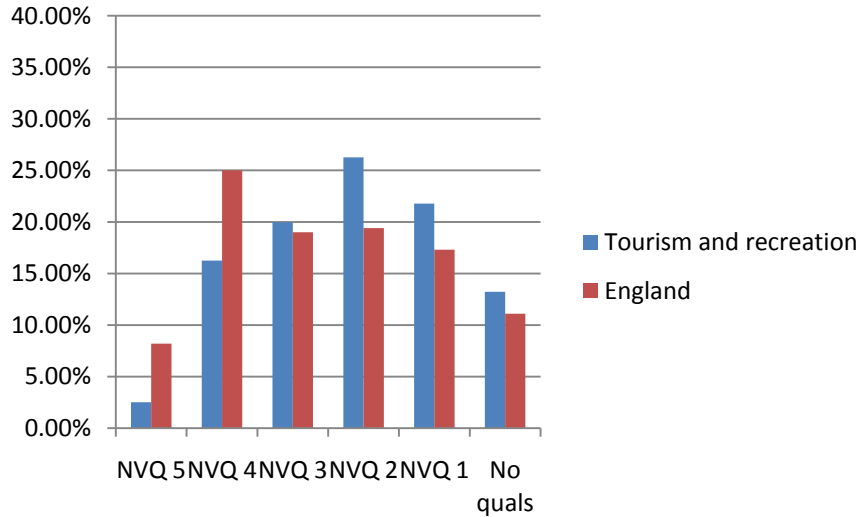
¹⁹² Beatty, Fothergill, Gore and Wilson (June 2010) *The Seaside Tourist Industry In England And Wales - Employment, economic output, location and trends* Centre for Regional Economic and Social Research, Sheffield Hallam University <http://www.shu.ac.uk/assets/pdf/cresr-seaside-tourism-report.pdf> (14)

	economic output associated with this employment is estimated to have been £3.6 billion in 2009. ¹⁹³
3. Where does this activity currently create employment?	<p>Because of the complexity of the maps resulting from our analysis, we have split the tourism location quotient map from the tourism employment map.</p> <p>Figure 1.10 below details the strength of this activity across England in terms of location quotient scores. This shows that tourism employment is important to a large proportion of the English coast line, with particular concentrations around certain areas of the north-east and south-west.</p> <p>Figure 1.11 shows where the key employment areas are located around the county. In terms of coastal tourism employment, there are key clusters in the north-west around the greater Liverpool and Blackpool areas. In the north-east there are significant pockets of coastal employment around the greater Newcastle area. There are also hotspots around the Great Yarmouth and Portsmouth areas.</p>
4. What is the future for this activity?	<p>The future is hard to forecast. Much depends on consumer spending. Past trends are easier to define. In 2001, the seaside still accounted for around a third of British domestic tourism expenditure, but its share of the market has fallen by 50% in the previous 25 years; the main seaside visitor market is a relatively old cohort and predominantly social classes C2, D and E.¹⁹⁴</p> <p>A decade ago, the influential English Tourism Council report <i>Sea Changes</i> urged resorts to diversify, stating that it was important that resorts “recognise [the] need for a sustainable and diversified economy.... Tourism alone cannot, therefore, be a regeneration solution for all our resorts. Most will need to diversify their economy to some extent; indeed, some are unable to compete any longer and may need to move away from tourism altogether.”¹⁹⁵</p> <p>By contrast, the Sheffield Hallam work is more positive. It concludes that the British seaside tourist industry is by any standards a large industry that has been growing in employment over the past decade. The work suggests that it “has survived and adapted to a changing market and has the potential to prosper in the coming years”.</p> <p>Rising carbon costs and tourism industry updating may encourage domestic tourism. Work from the LGA Coastal Special Interest Group on Economic Development noted that “changing visitor trends and behaviour can be exploited as new market opportunities (e.g. people</p>

¹⁹³ Ibid (14)

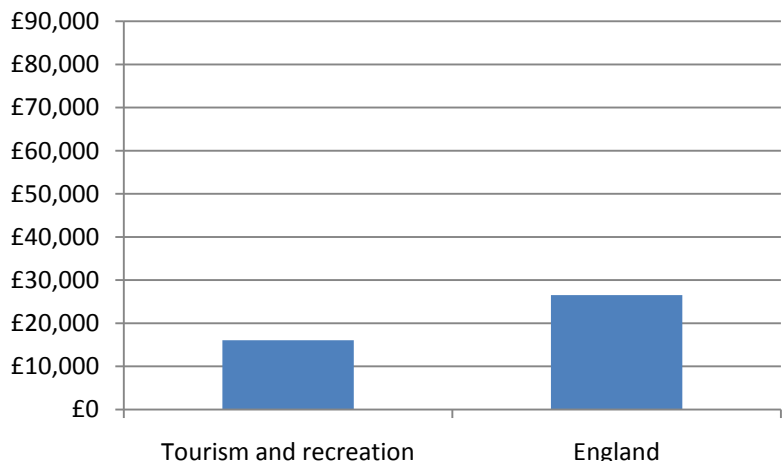
¹⁹⁴ English Tourism Council (2001) *Sea Changes: Creating World Class Resorts in England*

¹⁹⁵ English Tourism Council (2001) *Sea Changes: Creating World Class Resorts in England*

	<p>taking more second and third holidays, people increasingly unwilling to fly abroad) thus appealing to a different market and helping to promote a coastal resort as an all year round holiday destination".¹⁹⁶ An innovative approach to this growing market might take domestic tourism up market into higher value (and so more economically productive) sectors.</p>																					
<p>5. Labour utilisation: how local are impacts? Is marine activity likely to increase employment in coastal areas? What is the extent of typical labour market catchments and supply chains?</p>	<p>Tourism labour market catchments are relatively local. Research has suggested that lower paid individuals are less likely to be able to travel long distances to work.¹⁹⁷ However, tourism labour markets are becoming increasingly global, and there is anecdotal evidence that tourism jobs are increasingly being filled by national and international migration.</p>																					
<p>6. Labour utilisation: does the activity generate above average skills demands in the local economy?</p>	<p>Tourism jobs (as represented by the SWRDA proxy measures) are concentrated in low skill activities.</p> <p>Figure 4.26 Tourism and recreation skill levels</p>  <table border="1"> <caption>Data for Figure 4.26: Tourism and recreation skill levels</caption> <thead> <tr> <th>Skill Level</th> <th>Tourism and recreation (%)</th> <th>England (%)</th> </tr> </thead> <tbody> <tr> <td>NVQ 5</td> <td>~2.5</td> <td>~8.0</td> </tr> <tr> <td>NVQ 4</td> <td>~16.0</td> <td>~25.0</td> </tr> <tr> <td>NVQ 3</td> <td>~20.0</td> <td>~19.0</td> </tr> <tr> <td>NVQ 2</td> <td>~26.0</td> <td>~19.0</td> </tr> <tr> <td>NVQ 1</td> <td>~22.0</td> <td>~17.0</td> </tr> <tr> <td>No quals</td> <td>~13.0</td> <td>~11.0</td> </tr> </tbody> </table> <p>APS (2010)</p>	Skill Level	Tourism and recreation (%)	England (%)	NVQ 5	~2.5	~8.0	NVQ 4	~16.0	~25.0	NVQ 3	~20.0	~19.0	NVQ 2	~26.0	~19.0	NVQ 1	~22.0	~17.0	No quals	~13.0	~11.0
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¹⁹⁶ Churchill, N (undated) *Local Government Association 'Coastal' Special Interest Group Report - Coastal Economic Development*

¹⁹⁷ p10 P12 Smith G (1999) *Area-based Initiatives: The rationale and options for area targeting* Centre for Social Exclusion (CASE) at LSE <http://sticerd.lse.ac.uk/dps/case/cp/CASEpaper25.pdf>

<p>7. Labour utilisation: when the activity creates jobs, are these often seasonal or part time?</p>	<p>Typically, unemployment is found concentrated in lower skilled individuals.¹⁹⁸ The low skilled nature of employment of the type typically created by tourism would tend to increase demand in this section of the labour market.</p> <p>However, it is important to point out that an increase in jobs in tourism will not result in an equivalent decline in the number of unemployed. Labour markets are flexible, and attract labour from outside the immediate market. Much of tourism’s summer peak is provided by migrant labour from both within and outside the UK. Employment in the seaside tourist economy peaks in the summer months and declines during the winter. This represents a significant problem in providing a sustainable basis for employment in the sector.</p>						
<p>8. Labour productivity: does the activity generate above average wages?</p>	<p>Figure 4.27 Tourism and recreation wages</p> <p style="text-align: center;">Gross annual pay (mean)</p>  <table border="1" data-bbox="555 918 1340 1377"> <thead> <tr> <th>Category</th> <th>Gross annual pay (mean)</th> </tr> </thead> <tbody> <tr> <td>Tourism and recreation</td> <td>£15,000</td> </tr> <tr> <td>England</td> <td>£25,000</td> </tr> </tbody> </table> <p>ASHE (2010)</p> <p>The figure above shows that pay (and thus likely productivity) in the tourism sector is low. This is corroborated by other research, which suggests that “the GVA per job in the sectors in which seaside tourism jobs are concentrated is low. This is partly because so many of the jobs are part-time, and partly because many are low wage. Unlike say much of manufacturing, seaside tourism is not a ‘high productivity, high wage’ environment underpinned by substantial investment in plant and machinery. Thus in 2007 the national average GVA per job in hotels and restaurants (which accounts for around half of all seaside tourism jobs according to the estimates</p>	Category	Gross annual pay (mean)	Tourism and recreation	£15,000	England	£25,000
Category	Gross annual pay (mean)						
Tourism and recreation	£15,000						
England	£25,000						

¹⁹⁸ ODPM – SEU (2004) *The drivers of social exclusion - Review of the Literature for the Social Exclusion Unit* (29)

	<p>presented earlier) was just £11,000 a year, compared to a national average of £36,500 a year across all sectors.”¹⁹⁹</p> <p>Investment to raise productivity can be difficult when businesses are not generating a surplus that can be reinvested, and existing fixed investment locks an area into a particular profile. The CCA uses the example of Blackpool: “The streets of Victorian boarding houses are a particular problem, as the economics of adaptation to new tastes and expectations with limited access to capital present daunting challenges.”²⁰⁰</p>
<p>9. Labour productivity: is the activity likely to affect investment in local infrastructure and connectivity?</p>	<p>Local connectivity may be enhanced by the travel demand created by tourism. Part of the rationale for investment in the A65 in Scarborough, for example, is to deal with tourism-generated impacts. Additional capacity and improved connections can then be used by other businesses.</p> <p>However, it is important to note that tourism has significant effects on local transport infrastructure and resulting connectivity that cannot be effectively overcome which may affect wider locational choices. In work carried out in Bridlington, the tourism related impacts were the issues that generated the most interest and debate were road access, traffic congestion and parking. This can have implications for locational choices of non-tourism businesses: for example, a survey of businesses in Bridlington conducted by Drivers Jonas found that even office-based businesses avoid operating from the town centre because of access and parking problems; these are perceived as being so bad during the season as to deter them from the town centre all year round.²⁰¹</p> <p>Conversely, improved transport infrastructure can attract tourists by lowering the costs (both financial and time) associated with tourism activity. But, as the SACTRA report pointed out at the time, it is not known how transport improvements affect tourism and the SACTRA report called for further study on this issue.²⁰² A 1998 report commissioned by the Scottish Executive into the socio-economic impacts of the Skye Bridge since its construction in 1995, showed modest impacts. Fears that tolls would deter tourists were unfounded; the bridge has made no difference in tourist visits to the</p>

¹⁹⁹ Beatty, Fothergill, Gore and Wilson (June 2010) *The Seaside Tourist Industry In England And Wales - Employment, economic output, location and trends* Centre for Regional Economic and Social Research, Sheffield Hallam University http://www.shu.ac.uk/_assets/pdf/cresr-seaside-tourism-report.pdf

²⁰⁰ Walton and Browne (2010) for Coastal Communities Alliance Coastal Regeneration in English Resorts 2010 (21)

²⁰¹ RTP for East Riding of Yorkshire Council, Yorkshire Forward, Bridlington Regeneration Partnership (2004) *A Strategy For Regenerating Bridlington - Final Report*

²⁰² 10.169 SACTRA full report

	island. However, local residents are increasingly considering the bridge as an asset. ²⁰³
10. Labour productivity: is the activity likely to affect local terrestrial environments, heritage or neighbouring uses?	Tourism, and the infrastructure associated with it, can create valuable year-round amenities for local residents that improve the quality of life offered by an area. Heritage and environmental assets can be upgraded for tourist use, and then be used by local communities. For example, investment in cultural and community facilities in Hastings has taken place to improve the tourism offer, with positive consequences for local communities. Where this takes place, there is evidence of the benefits from cultural activity. ²⁰⁴ However, local environments can be damaged by the weight of tourism numbers. Impacts of tourism do need to be managed quite carefully.
11. Outcomes: is the activity likely to affect deprivation levels in the local area?	Tourism activity is likely to have a series of complex effects on deprivation. Tourism has the potential to create jobs at the lower end of the labour market which are accessible to deprived people. This could have a positive effect on deprivation, given that research indicates that “the state of labour demand drives social exclusion more than any other factor.” ²⁰⁵ Both this Government and the last have put work at the centre of anti-deprivation strategy. ²⁰⁶ However, as we have shown above, many tourism jobs (though by no means all) are low wage, part time and seasonal in nature. This reduces the long-term positive impact of the tourism industry on deprivation.

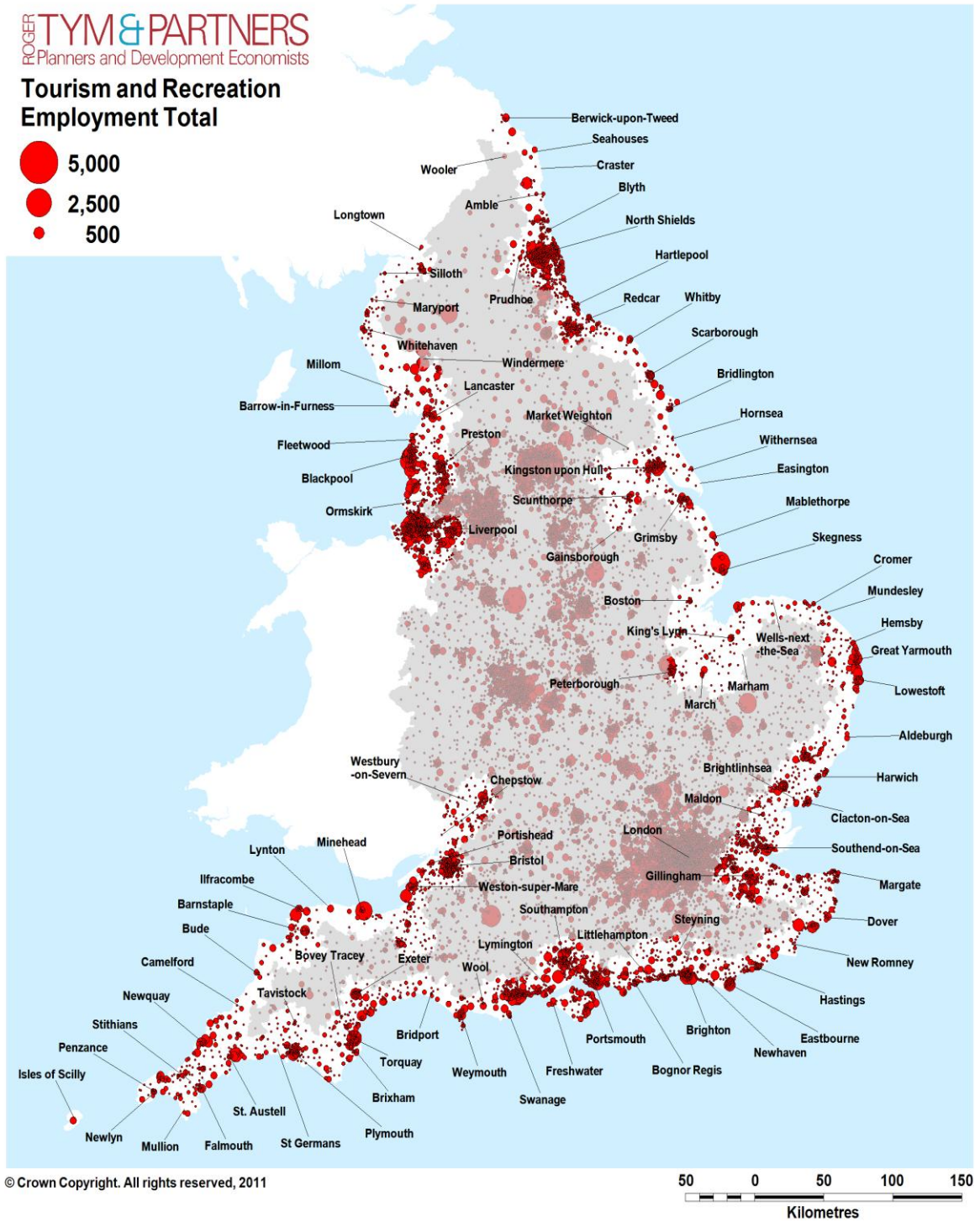
²⁰³ Banister and Berechman, 2000, quoted in Llewellyn Davies, Bannister, Hall for DfT & ODPM: *Transport and City Competitiveness: A Literature Review* Table 3.1

²⁰⁴ Hastings Borough Council (2005) *Vital Currents – The Arts, Social Inclusion and Community Regeneration*; Creative Partnerships, Hastings and East Sussex (undated) *The Casebook – Programmes, Projects and Partnerships*

²⁰⁵ ODPM – SEU (2004) *The drivers of social exclusion - Review of the Literature for the Social Exclusion Unit*(12)

²⁰⁶ Levitas (1999) *The Inclusive Society? Social Exclusion and New Labour* Levitas notes that there are different ways of conceptualising the causes of social exclusion: an integrationist approach in which paid employment is seen as the key integrating force through income, identity, a sense of self worth and networks; a poverty approach in which the causes of exclusion are related to low income – with redistribution the remedy; and an underclass approach in which the excluded are viewed as deviants from the moral and cultural norms of society and are blamed for their own poverty and its reproduction.

Figure 4.11 Tourism – employment mapping



How to apply this analysis in a marine area

Summarising marine activities' impacts on coastal economies

- 4.22 We have taken the above analysis and used it to look at how marine activities might affect labour utilisation, labour productivity, and deprivation outcomes.
- 4.23 In order to judge these impacts in a consistent way, we have considered the economic and social effects of a notional one pound investment in a particular marine activity. We have indicated the likely order of magnitude of effects of each marine activity on these key measures and have rated these likely "impacts" as being low, medium or high. This rating is intended to be a broad guide only. It is not sensible to quantify these impacts in any way. This is because so much will depend on the circumstances of a local economy, and the magnitude of investment concerned. In practice, though, some investments will be very large (notably Round 3 investments in wind turbines) which means that the effects of these investments may in practice be underestimated in these rankings, particularly when it is focused in particular port towns.
- 4.24 No impacts of marine activities are considered economically negative in general terms, although there could be local instances where some marine activities have negative externalities on neighbouring uses, so reducing overall economic activity overall. These negative externalities would need to be determined in individual instances.
- 4.25 Finally, it is important to stress that we are dealing here with specifically local, coastal economic impacts of marine activities. We are not concerned with the broader socio-economic consequences of investment at a national or international scale.



Table 4.1 Summary table A - What is the potential local impact of key marine activities on key socio-economic indicators?

Marine activity	What are effects on local labour utilisation? (skills, job growth, unemployment)	What are effects on local labour productivity? (including wages, new businesses, investment)	What are effects on socio-economic outcomes: deprivation
Defence	Medium local effects. Service recruitment is national in nature, but skills higher than average. Looking outside direct employment in the armed services, some defence bases will be responsible for significantly higher amounts of local employment through the supply chain than others. The loss of some bases may cause acute problems in some areas.	Medium local effects. Although defence industries are not associated with the production of goods and services for exchange, their work contributes to the total economic activity in the economy in a similar way to other public sector workers. Wage data is not specifically available for defence, but wages appear to be higher than average.	Medium local effects. Contraction in defence employment (both directly, and indirectly through the supply chain) is likely to have uneven impacts on deprivation in local economies. Different areas will be subject to different impacts, depending on profiles of the local economy.
Energy production and infrastructure	<p>Medium local effects (though high at some particular points). Geographical proximity to a energy production or infrastructure site will not in any way guarantee economic impacts. Effects of local labour utilisation will depend on the extent to which a local maintenance, operations or construction industry exists that is able to embed economic activity locally.</p> <p>Because jobs generated will require skilled staff, impacts on rates of labour utilisation may be modest (given that it is the most unskilled in society who run the greatest risk of being outside the labour market). But this is likely to rise over time as policies to ensure that the local workforce is sufficiently skilled to gain access to the available work come on stream. The prospect of employment in these new industries may work to improve local aspirations and “drag up” local skills levels.</p> <p>The sheer scale of investment in some Round 3 projects, and the consequent local jobs growth effects, may mean that certain towns which are successful in capturing activity do see a significant economic boost. In some instances, rising direct employment will create</p>	<p>Medium local effects (though high at some particular points). Impacts here are complex. On the one hand, it is the case that average wages in the industry overall are high (and in the case of oil and gas extraction, very high).</p> <p>The renewables industry in particular will be the beneficiary of very high levels of capital investment over coming years, and per capita output (for both oil and gas and renewables sectors) can be expected to be significantly higher than average.</p> <p>However, there is a question around the extent to which these positive productivity impacts will “stick” to most coastal economies. Manufacturing will tend to take place remotely, and whilst there are expected to be large manufacturing and assembly activities in some areas will create very significant impacts, other areas on the coast will remain relatively unaffected. Maintenance activities, which can be relatively modest in jobs generation terms, will be more distributed around the country, frequently in smaller ports in peripheral areas. These impacts may be small scale, but more pronounced because they take place in smaller local economies.</p>	<p>Medium local effects. Given that most deprived people are low skilled, and therefore unlikely to have direct access to these jobs, the effects on deprivation could be limited, but some rural and peripheral economies may experience more pronounced “trickle down” effects, where increased local activity creates more jobs throughout the supply chain. The scale of Round 3 investments will mean that these effects might be locally pronounced.</p> <p>Equally, some areas which experience very high levels of investment in, say, manufacturing or assembly plants will see higher levels of impact.</p>



Marine activity	What are effects on local labour utilisation? (skills, job growth, unemployment)	What are effects on local labour productivity? (including wages, new businesses, investment)	What are effects on socio-economic outcomes: deprivation
	positive local consequences for the broader local economy as incomes are re-spent in local businesses.		
Ports and shipping	High local effects. Labour catchments tend to be relatively local, and there is demand for lower skilled labour, so creating jobs that are accessible for less well skilled workers who find themselves at increased risk of unemployment, but lower skilled jobs make a smaller contribution to productivity growth.	High local effects. Wages are higher than average, and in some of the largest port development projects (such as the Bathside Bay port development scheme), there can be positive connectivity spin-offs for local economies.	High local effects. Ports employ relatively high proportions of lower skilled labour, which is most likely to be at greatest risk of unemployment. Deprivation is concentrated in those with low skills. Port activity is therefore likely to have a positive effect on deprivation.
Marine aggregates	Medium local effects. The specifically marine element of this industry is small in jobs terms, but industry growth could have some impacts in more peripheral jobs markets. Specific data on skills demands in marine aggregates is not available.	Medium local effects. Wages data which identifies specifically marine activity is not available, but broad sector data suggests that wages are slightly higher than average. Investment in aggregate extraction vessels is capital intensive; higher levels of investment will tend to increase per capita output.	Medium local effects. Whilst we do not have skills data specific to marine aggregates activity, our assumption is that a high proportion of jobs in the sector are relatively unskilled jobs that are available to local lower-skilled people. On this assumption, we have rated deprivation effects as medium.
Marine dredging and disposal	The MPS states that most marine dredging and disposal is for the purposes of navigation and existing and future port development. See ports and shipping.	The MPS states that most marine dredging and disposal is for the purposes of navigation and existing and future port development. See ports and shipping.	The MPS states that most marine dredging and disposal is for the purposes of navigation and existing and future port development. See ports and shipping.
Telecommunications cabling	Low local effects. Manufacture takes place at a small number of sites, and cable laying contractors are international. Jobs created are likely to be highly specialised consequently inaccessible to deprived people.	Low local effects. Whilst telecommunications cabling marine activity has an important role in facilitating international communications, the prevalence of cabling manufacturers, cable laying, or even onshore data nodes will not in themselves provide relative improvements in labour productivity for coastal communities.	Low local effects. Telecommunications cable activity is unlikely to have significant effects on local deprivation.
Fisheries	High local effects. Whilst the total number of individuals employed in fisheries has fallen in past decades, making this activity one of less economic significance in many local areas, it is the case that changes in levels of fisheries activity will still have significant impacts in	Low local effects. Fisheries pay is below average, with intermittently high wage being eroded by factors such as seasonality and weather. As with other primary/extractive industries, fisheries are unlikely to drive forward local productivity significantly. It is important to note, though, that the presence of fisheries	High local effects. Jobs tend to be lower skilled in nature, creating opportunities for those lower skilled individuals which are at greater risk of unemployment. Whilst the effects of a notional £1 investment would be likely to be significant in this regard, the modest scale of the industry will mean that real world effects will be



Marine activity	What are effects on local labour utilisation? (skills, job growth, unemployment)	What are effects on local labour productivity? (including wages, new businesses, investment)	What are effects on socio-economic outcomes: deprivation
	<p>some labour markets (particularly those which are more peripheral, and lack alternative occupations). The MPS states that “the dependence of jobs on fishing can be as high as 20% or more in some communities”.</p> <p>Many of the vessels, especially smaller vessels, will have close links to the local economies of fishing villages and towns. Employment will tend to be local, as will the supply chain.</p> <p>Jobs tend to be lower skilled in nature, creating opportunities for those lower skilled individuals which are at greater risk of unemployment. These employment opportunities are clearly important, but it should be noted that lower skilled jobs make a smaller contribution to productivity growth.</p>	<p>may have an important role in creating distinctive local environments which assist the tourism industry. There is a difficulty in quantifying the extent of this influence, and more evidence on the role of fishing in this regard would be welcome.</p>	<p>limited in practice.</p>
Aquaculture	<p>High local effects. The majority of businesses predominately offer employment opportunities in remote locations. We have no direct evidence, but we anticipate that labour market catchments are likely to be local. Jobs tend to be lower skilled in nature, creating opportunities for those lower skilled individuals which are at greater risk of unemployment, but lower skilled jobs make a smaller contribution to productivity growth.</p>	<p>Low local effects. The available statistics suggest that pay is below average. As with fishing, aquaculture industries are not likely to drive forward local productivity to any great degree.</p>	<p>High local effects. Jobs tend to be lower skilled in nature, creating opportunities for those lower skilled individuals which are at greater risk of unemployment.</p> <p>Whilst the effects of a notional £1 investment would be likely to be significant in this regard, the modest scale of the industry will mean that real world effects will be limited in practice.</p>
Surface water management and waste water treatment and disposal	<p>Medium local effects: precise skills impacts are unclear, because data is merged within the ‘Mining and Quarrying’, but there appear to be proportionately high levels of jobs available for NVQ level 1 and 2. It can be assumed that a fair proportion of the workforce is made up from local employment markets. This would suggest that employment in coastal areas</p>	<p>Medium local effects: wage rates are slightly above average, this industry is a stable, utility function and is not likely to drive forward local productivity to any great degree.</p>	<p>Medium local effects: we have no information on the precise impact of this marine activity on deprivation. However, given that it is a relatively high employer of NVQ1 level staff, and the fact that it is likely to draw labour from the local area, expansion in this marine activity may be expect to have mild positive impacts on local deprivation.</p>



Marine activity	What are effects on local labour utilisation? (skills, job growth, unemployment)	What are effects on local labour productivity? (including wages, new businesses, investment)	What are effects on socio-economic outcomes: deprivation
	would be positively affected by jobs expansion. Employment impacts would be higher, but the available proxy data suggests that there may be below average levels of unskilled jobs available.		
Tourism and recreation	High local effects. Jobs created in tourism are low skilled in nature. On the positive side, this means that they are available to individuals who are at greater risk of unemployment, but lower skilled jobs make a smaller contribution to productivity growth. Tourism jobs tend to be seasonal and are frequently part time.	Low local effects. Wage rates are low, although there is evidence that speciality tourism and a refreshed tourist offer might work to raise productivity. In many areas on the coast, though, investment levels in the industry can be low. A number of coastal towns are attempting to diversify away from what is perceived as an over-dependence on tourism.	Medium local effects. Tourism activity is likely to have a series of complex effects on deprivation. Tourism has the potential to create jobs at the lower end of the labour market which are accessible to deprived people. This could have a positive effect on deprivation. However, many (although by no means all) tourism jobs are low wage, part time and seasonal in nature. Where this is the case, this reduces the long-term positive impact of the tourism industry on deprivation.

5 COASTAL SOCIO-ECONOMIC CONDITIONS

Introduction

- 5.1 In Section 3 we outlined the main socio-economic processes at work in coastal areas. However, marine planners also require more detailed knowledge of conditions in particular coastal communities in order to inform more detailed subsequent discussions with local authorities about where marine development might take place most appropriately, and where it might have the most positive socio-economic impact.

A typology of coastal communities

- 5.2 To gain a more detailed understanding of local coastal areas, we have developed a typology of coastal communities, to differentiate between different types (or categories) of coastal area on the basis of their socio-economic characteristics. Although every coastal community has a unique combination of characteristics, the typology helps group together those areas with similar characteristics on key indicators, for which particular planning developments and policy initiatives may be appropriate.
- 5.3 We then use these categories as a basis to analyse how different types of coastal area are performing, and how categories differ from each other. In addition, the typology provides a set of benchmark ‘types’ (ie, the average for the group of areas in each typology category) against which to monitor future trends and performance.

Important caveats: how the coastal typology is intended to be used

- 5.4 It is very important to be clear at the outset about how the typology set out in this chapter can – and cannot – be used.
- 5.5 The typology is intended to be used in the following ways.
- **We have developed the typology for internal use by the MMO. The MMO is not expecting Local Authorities or other stakeholders to use the typology: they may have carried out far more analysis to understand their local areas than the typology developed here (although of course, they are free to use the work if it is seen as helpful locally).**
 - The typology is provided as a strategic overview for marine planners to understand local socio-economic conditions and inform further discussions with local land-based planners, economic development staff and other stakeholders.
 - The typology category names are provided only to aid marine planners in using the typology. The names help marine planners get a sense of how these areas differ from the average, so aid in using the typology as a technical tool.

5.6 **The typology cannot be used for the following purposes.**

- Planning decisions will not be based on the typology on its own. The typology exists to aid marine planners initiate discussions with local authorities. No planning decisions will rest wholly or mostly on this information. Planning decisions will be based on a far wider range of information.
- Licensing or investment decisions will not be based on the typology on its own. Again, licensing decisions will be based on a far wider range of information.

5.7 **Any typologies approach has a number of clear limitations. These are as follows.**

- Many people living in a particular area will not fit the profile of the typology category or the name.
- The typology categories reflect how areas fare, at a point in time, on a range of social and economic indicators available on a consistent basis all round the English coast. **They do not reflect future plans that Local Authorities or local communities may have for such areas, or reflect issues for which data is not available on a consistent basis around the coastline, such as local wellbeing, needs or aspirations.**

A typology of coastal communities

- 5.8 The coastal typology developed here provides a swift overview of the types of coastal communities and their characteristics including current position and recent trends. In later sections in this report we show how this can be used by planners to identify how the socio-economic impacts from marine activities might affect coastal communities. In the accompanying East of England guidance report²⁰⁷ we show in more detail how to apply the analysis to local Marine Plan Areas.
- 5.9 The typology we have developed categorises each of the 10,000 LSOAs in the English coastal area into one of ten categories, based on a set of 42 underlying characteristics (or indicators). Our methodology is set out under separate cover in the report entitled '*Coastal Typologies: detailed method and outputs*'.
- 5.10 The table below outlines the ten categories, summarising the main differences between each of the categories and the average across coastal areas.

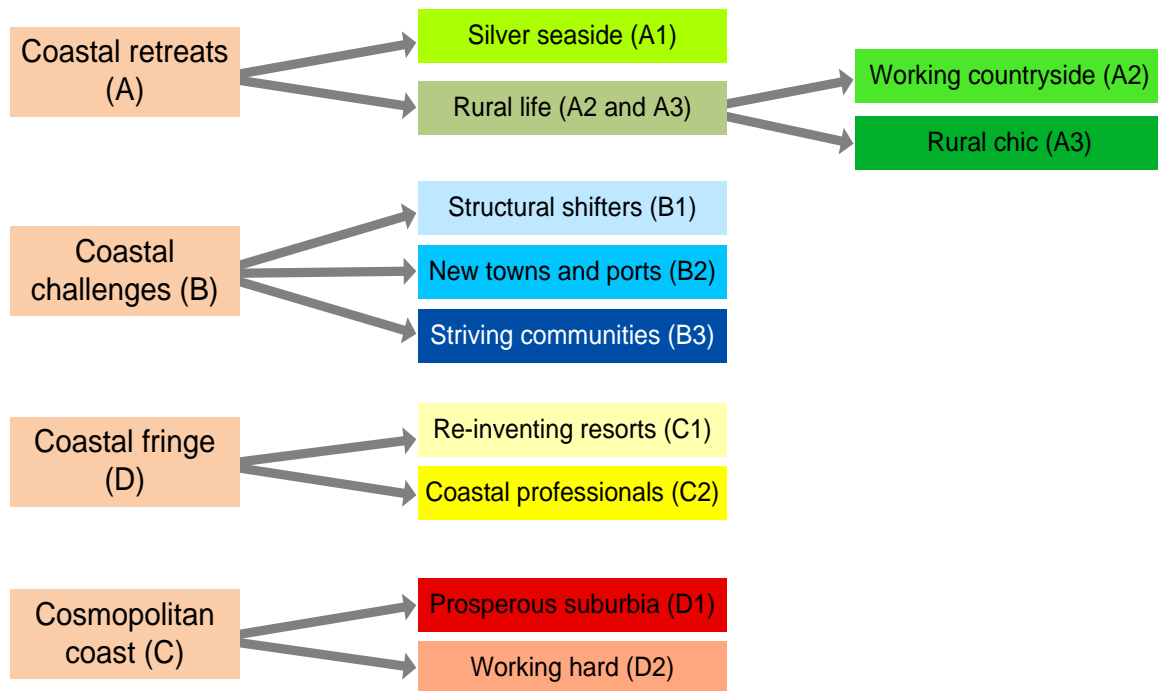
²⁰⁷ MMO (In preparation). The East marine plan area: maximising the socio-economic benefits of marine planning: Guidance and Recommendation.

Table 5.1 Differences between each of the typology categories and the average

Typology category	Overview -	Above the coastal average	Below the coastal average
A1 Coastal retreats: Silver seaside	Retirement areas primarily located in smaller, less developed resorts	<ul style="list-style-type: none"> • People of pensionable age • Part-time employment • Home working • Self employment • People employed in tourism 	<ul style="list-style-type: none"> • People receiving Jobseekers Allowance • People receiving incapacity benefits • ID 2010 Crime domain
A2 Coastal retreats: Working countryside	Largely rural areas, low population density or in smaller settlements, with people employed in lower skill occupations	<ul style="list-style-type: none"> • Travel time to key amenities • People working from home • Second homes 	<ul style="list-style-type: none"> • Population density • People qualified to degree level • People living in flats • Jobseekers Allowance claimants • Attendance Allowance claimants
A3 Coastal retreats: Rural chic	Largely rural areas, low population density or in smaller settlements, with a well qualified population	<ul style="list-style-type: none"> • Travel time to key amenities • People qualified to degree level • Dwellings with 8 or more rooms • % of dwellings in council tax band E to I • Jobs growth • Self employment 	<ul style="list-style-type: none"> • Population density • Households with no car or van • ID 2010 Crime domain • Child and pensioner poverty
B1 Coastal challenges: Structural shifters	Towns and cities which have lost their primary markets, and are facing the challenge to find new ones. This group includes a range of single industry coastal towns, including seaside resorts, mining areas, industrial heartlands and former agricultural centres	<ul style="list-style-type: none"> • People working in manufacturing • Jobseekers Allowance claimants • Incapacity Benefit claimants • Disability Living Allowance claimants • All people with a limiting long-term illness aged 0-64 	<ul style="list-style-type: none"> • People qualified to degree level • Overall employment rate • Jobs Growth • People living in flats
B2 Coastal challenges: New towns and ports	Challenges relating to poor skills and high levels of worklessness, but counterbalanced by relatively strong economy and often located close to areas of economic growth	<ul style="list-style-type: none"> • Jobs growth • Child and pensioner poverty • Jobseekers Allowance claimants • Incapacity Benefit claimants 	<ul style="list-style-type: none"> • People qualified to degree level
B3 Coastal challenges: Striving communities	High levels of deprivation across all indicators, and a very high proportion of people living in social rented accommodation	<ul style="list-style-type: none"> • Social housing • Jobseekers Allowance claimants • Incapacity Benefit claimants • Disability Living Allowance claimants • Child and pensioner poverty • People providing intensive unpaid care • People working in wholesale, retail and motor vehicle repair 	<ul style="list-style-type: none"> • People qualified to degree level • Overall employment rate • Jobs Growth
C1 Cosmopolitan coast: Reinventing resorts	Primarily tourist economies with high levels of deprivation, but diversifying to attract a more highly skilled population	<ul style="list-style-type: none"> • Private rented housing • People working in tourism • Jobseekers Allowance claimants • Incapacity Benefit claimants • People qualified to degree level • People moving in and out of the area • Full-time students aged 16-74 • Seasonal Unemployment 	<ul style="list-style-type: none"> • People living in houses • Owner occupied • Overall employment rate • Part time employees

Typology category	Overview -	Above the coastal average	Below the coastal average
		<ul style="list-style-type: none"> Household vacancy rate People travelling more than 40km to work People living in flats ID 2010 Crime domain 	
C2 Cosmopolitan coast: Coastal professionals	City and market town service centres with highly skilled populations and dynamic economies	<ul style="list-style-type: none"> People qualified to degree level Full-time students aged 16-74 People who have moved address in the last year People travelling more than 40km to work Private rented housing ID 2010 Crime domain People living in flats 	<ul style="list-style-type: none"> People of pensionable age Part time employees People living in houses
D1 Coastal fringe: Prosperous suburbia	Affluent areas predominantly on the edge of towns and in satellite towns around larger coastal cities	<ul style="list-style-type: none"> People qualified to degree level Overall employment rate Owner-occupied households Pupil attainment: average point score at GCSE Dwelling with 8 rooms or more 	<ul style="list-style-type: none"> Jobseekers Allowance claimants (unemployment benefit) People receiving workless benefits due to poor health Child and pensioner poverty Households with no car or van
D2 Coastal fringe: Working hard	Towns characterised by high levels of employment typically in industrial sectors, and a stable population	<ul style="list-style-type: none"> Overall employment rate People working in manufacturing Owner-occupied households 	<ul style="list-style-type: none"> People qualified to degree level People who have moved address in the last year Jobseekers Allowance claimants (unemployment benefit) People receiving workless benefits due to poor health Self-employed people Social rented housing

Figure 5.1 The Coastal typology categories



Where are different types of coastal community located?

- 5.11 The map below highlights the coastal typology around the coast of England, with maps by marine region provided in Appendix 5. The table on the following page sets out example locations for each of the typology categories.
- 5.12 More detail is set out under separate cover in the report entitled '*Coastal Typologies: detailed method and outputs*'.

Figure 5.2 Coastal typologies (England)

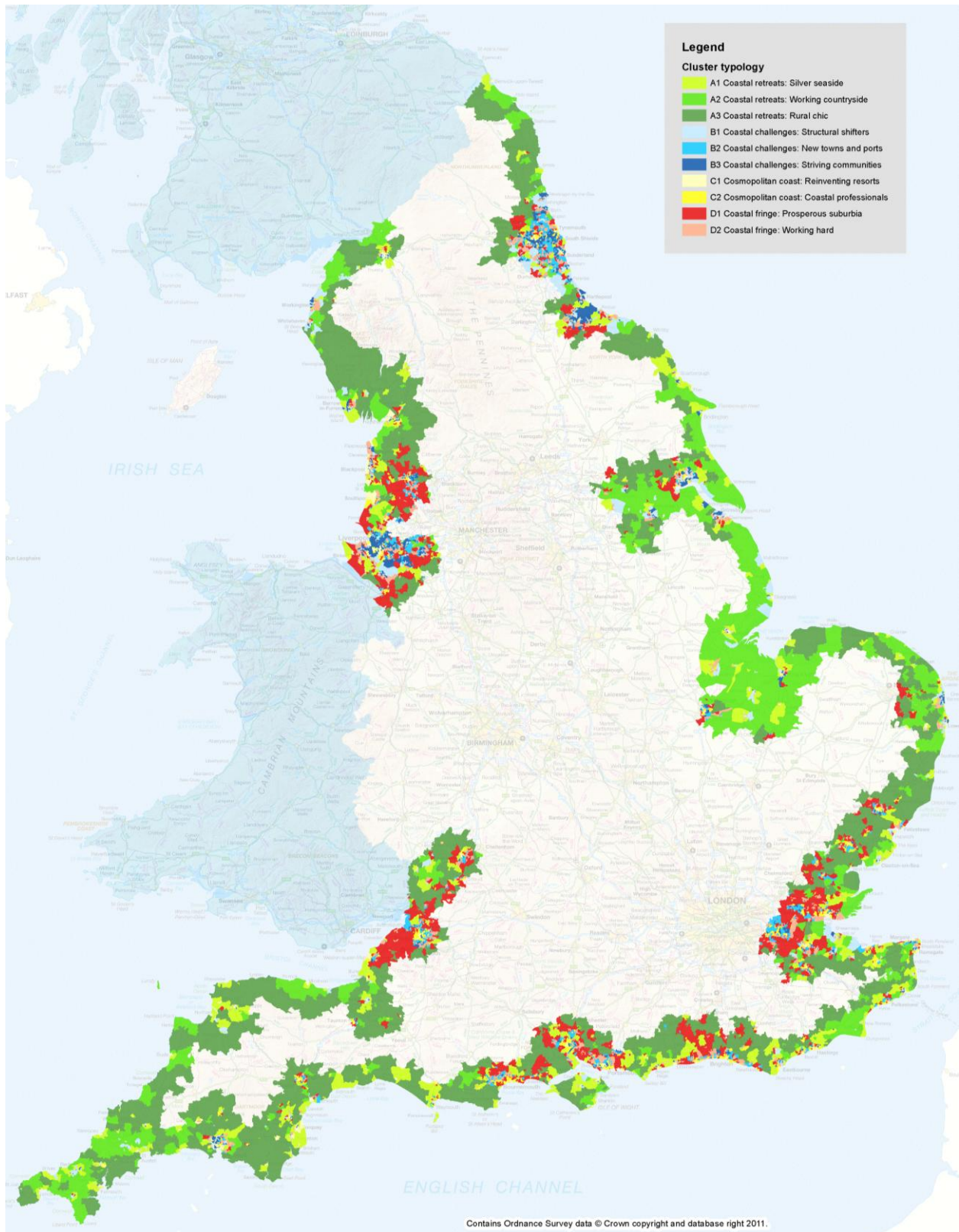


Table 5.2 Typical locations for each typology

Typology category	Example locations
A1 Coastal retreats: Silver seaside	Areas in and around: Sidmouth, Seaton, New Romney, Selsey, Emsworth, Frinton-on-Sea, Herne Bay. Some concentrations in larger coastal resorts such as Scarborough, Clacton, Torbay
A2 Coastal retreats: Working countryside	Large concentrations in the Fens including Outwell, Terrington St. Clement, Long Sutton. More than half are located in smaller settlements with populations less than 1,500
A3 Coastal retreats: Rural chic	Particular concentrations in more historical small towns and villages, including Southwold, Aldeburgh. More than two-thirds are located in smaller settlements with populations less than 1,500
B1 Coastal challenges: Structural shifters	Areas in and around: Ex-Mining areas in county Durham, Cumbria coast Whitehaven/Cleator Moor. Small remote seaside resorts Jaywick, Sheerness, Newbiggin-by-the-Sea, Mablethorpe
B2 Coastal challenges: New towns and ports	Large concentrations in the Thames Gateway: Basildon, Thurrock, Gravesend and southern coastal (non-resort) areas such as Canvey Island, Gosport, Havant
B3 Coastal challenges: Striving communities	Areas in and around: Merseyside (Kirkby, Liverpool, St Helens, Bootle, Runcorn, Widnes), Teesside (Middlesbrough, Redcar, Hartlepool) Tyneside (Gateshead, South Shields, Jarrow) Sunderland. Strong presence in former industrial areas and housing estates across most major coastal towns
C1 Cosmopolitan coast: Reinventing resorts	Areas in and around: Torbay, Hastings, Scarborough, Penzance. Also smaller resorts in holiday areas such as Ilfracombe, Totnes, Appledore, Ryde, Whitby, Minehead
C2 Cosmopolitan coast: Coastal professionals	Areas in and around: Seaside cities particularly in the South, Brighton, Portsmouth (Southsea), Southampton, Bristol. Also historic county towns such as Canterbury, Lewes, Chichester, Exeter
D1 Coastal fringe: Prosperous suburbia	Areas in and around: Predominantly satellite suburban towns surrounding larger coastal towns for example Wimborne Minster/Oakley and Ferndown/Three Legged Cross (Greater Bournemouth), Billericay, Rayleigh and South Benfleet (Southend), Hoylak/ West Kirby (Merseyside), Locks Heath/Bursledon/Whiteley and Botley/Hedge End (Southampton) Nailsea and Portishead (Bristol).
D2 Coastal fringe: Working hard	Areas in and around: Maghull, Peacehaven, Stanford Le-Hope, Fleetwood, Fareham, Totton, Canvey Island

How do different types of coastal community fare on key socio-economic indicators?

- 5.13 The table below identifies how each of the typology categories is faring, for key indicators identified for the socio-economic drivers set out in Section 3. Alongside average values for the typology categories, we show average values for all coastal areas, non-coastal areas and England as a whole. Below we summarise the main points of analysis.

Table 5.3 How do the coastal communities perform on key statistics? How can they be characterised?

	A1 Coastal retreats: Silver seaside	A2 Coastal retreats: Working countryside	A3 Coastal retreats: Rural chic	B1 Coastal challenges: Structural	B2 Coastal challenges: New	B3 Coastal challenges: Striving	C1 Cosmopolitan coast: Reinventing	C2 Cosmopolitan coast: Coastal	D1 Coastal fringe: Prosperous suburbia	D2 Coastal fringe: Working hard	Coastal	Non Coastal	England
Labour utilisation													
People qualified to degree level (2009) (%) ²⁰⁸	20.4	18.0	28.2	10.7	12.0	7.9	20.5	28.5	28.8	18.7	19.1	25.5	23.5
Population growth 2001-2009 (% change)	5.7	6.6	3.8	1.9	2.3	-0.6	7.8	8.9	5.9	2.0	4.0	5.1	4.8
Jobs growth 2001-2008 * (% change)	5.5	5.1	5.9	3.6	5.8	3.6	4.8	5.6	4.6	4.4	4.8	5.3	5.0
Jobseekers Allowance claimants (2011) (%)	2.6	2.7	1.5	5.4	4.5	9.1	7.4	3.3	1.6	2.4	4.0	3.8	3.9
Seasonal unemployment (2010) - seasonal variation in JSA claim rates (%) ²⁰⁹	49.2	49.9	36.7	68.0	57.3	79.8	73.7	45.0	35.4	43.8	53.0	48.0	50.0
Income Support claimants (2010) (%)	3.4	3.3	1.9	6.9	6.5	13.8	8.7	3.9	1.5	2.4	5.3	4.8	4.9
Incapacity Benefit claimants (2010) (%)	5.3	5.4	3.5	8.1	7.2	13.1	10.0	4.7	2.7	4.0	6.3	5.1	5.4
Self-employed people (2001) (%)	10.3	11.9	16.3	5.6	5.8	3.5	8.3	8.0	10.0	7.2	8.0	8.4	8.3
Productivity drivers													

²⁰⁸ Census data has been combined with Annual Population Survey (APS) data to provide an estimate of small area qualification levels. The estimate is derived by comparing the change in qualification levels derived from APS surveys, and applying this change to the small area qualifications data from the Census.

²⁰⁹ Standard deviation of Jobseekers Allowance claimant rates during the twelve months of 2010. A higher value indicates greater month-to-month variation in Jobseekers Allowance claimant rates – highlighting a possible seasonal unemployment effect.

	A1 Coastal retreats: Silver seaside	A2 Coastal retreats: Working countryside	A3 Coastal retreats: Rural chic	B1 Coastal challenges: Structural	B2 Coastal challenges: New	B3 Coastal challenges: Striving	C1 Cosmopolitan coast: Reinventing	C2 Cosmopolitan coast: Coastal	D1 Coastal fringe: Prosperous suburbia	D2 Coastal fringe: Working hard	Coastal	Non Coastal	England
Employment in knowledge industry, 2009 (%) *	6.3	5.9	7.6	6.2	10.9	8.5	7.7	10.5	10.7	9.4	9.0	11.6	11.0
Business stock per 10,000 population, 2007 **	598.2	615.5	697.7	455.8	436.7	359.9	470.8	467.0	534.1	456.3	488.6	565.9	545.7
VAT registrations (as a % of total stock), 2007 **	8.6	8.3	8.2	9.9	10.9	11.2	9.8	10.6	10.3	10.6	10.1	10.8	10.4
VAT de-registrations (as a % of total stock), 2007 **	6.8	6.5	6.4	6.9	7.6	7.6	7.5	7.9	7.3	7.4	7.3	7.6	7.4
Outcomes / deprivation													
Index of Multiple Deprivation (IMD) 2010 - average score	15.76	18.26	13.36	29.92	26.73	52.58	38.63	18.75	7.04	11.75	22.78	21.2	21.67
IMD 2010 - average rank (where 1 is most deprived)	18,238	16,036	20,508	9,029	10,477	2,356	6,044	15,807	27,554	22,197	15,475	16,585	16,241
% of LSOAs in the most deprived 20%	0.1	0.6	0.0	29.7	17.3	97.3	56.8	0.8	0.0	0.0	20.6	19.7	20.0
Risks													
Concentration of single industries, 2008 (%) *	3.4	3.4	3.5	3.2	3.5	3.2	3.4	3.8	4.0	3.4	3.5	4.7	4.4
Public sector employment, 2008 (%)*	21.7	21.4	21.5	23.8	21.8	24.3	23.1	21.3	21.1	22.4	22.0	18.7	20.0

Data is based on Lower layer Super Output Area (LSOA) datasets, except for: * Data is based on Travel-To-Work-Area level datasets; ** Data is based on Local Authority level datasets *** Data is based on MSOA level datasets. See report entitled 'Coastal Typologies: detailed method and outputs' provide for details of the indicators used here and elsewhere in the report.

Labour utilisation

- 5.14 In recent years, population growth in coastal areas has been somewhat slower than in non-coastal areas. The Cosmopolitan Coast areas (C1 and C2) have experienced the largest population growth of any of the groups (faster than the coastal and national average). Population growth has been slower in Working Hard (D2) and each of the coastal challenge groups, with the population actually declining in the Striving Communities Group (B3) in contrast to increases in each of the other typology groups.
- 5.15 In general, a lower proportion of people in coastal areas are qualified to degree level than across non-coastal areas. Skill levels are highest in Rural Chic (A3), Prosperous Suburbia (D1) and Coastal Professional (C1) areas. At the other end, skill levels are lower in the Coastal Challenges (B1, B2 and B3) areas.
- 5.16 Jobs growth in coastal areas is lower than growth levels across non-coastal areas, however this varies across the different typology categories. Jobs growth has been fastest in Rural Chic (A3). New Towns and Ports (B2), Coastal Professionals (C2) and Silver Seaside (A1)²¹⁰ have also experienced faster jobs growth than national and coastal averages. By contrast, jobs growth has been slowest in Structural shifters (B1) and Striving Communities (B3) groups.
- 5.17 The proportion of people receiving key benefits (Jobseeker's Allowance, Incapacity Benefit and Income Support) in coastal areas is higher than across non-coastal areas. Benefit claimant rates are highest in Striving Communities (B3) and Reinventing Resorts (C1). Claimant rates are lowest in Rural Chic (A3) and Prosperous Suburbia (D1).
- 5.18 Self employment rates are lower in coastal areas than non-coastal areas, and lowest in the Coastal Challenges areas especially Striving Communities (B3). Self employment levels are high in each of the Coastal Retreat areas (A1, A2 and A3) and the Prosperous Suburbia (D1) areas.

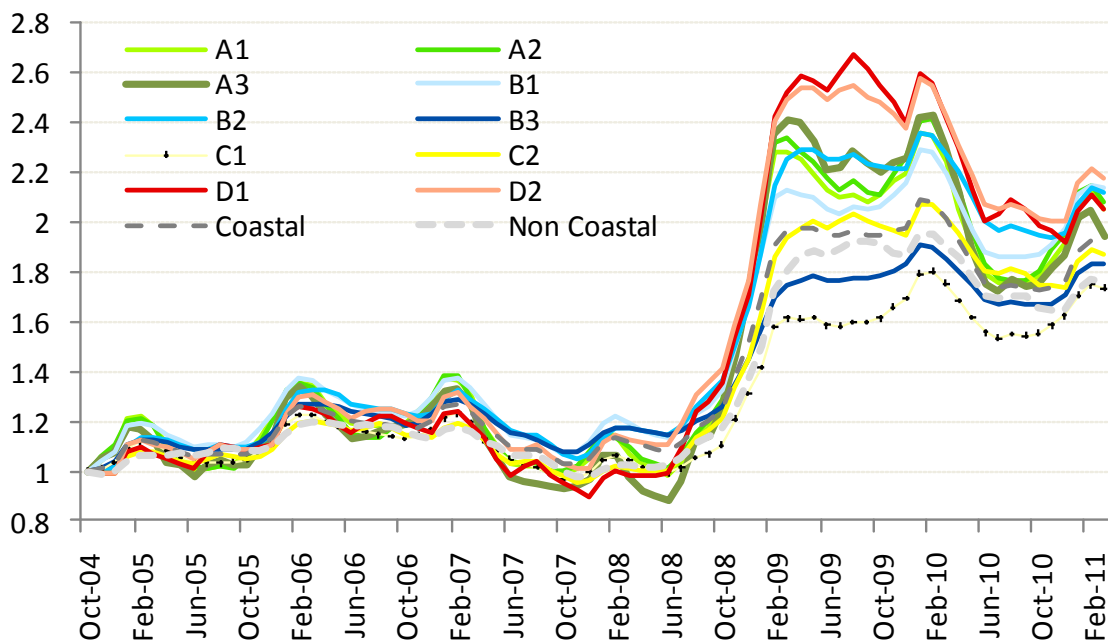
Labour utilisation rates have been harder hit in coastal areas by recession

- 5.19 The figure below shows the change over time in Jobseeker's Allowance claimants for 2004-2011, baselined to 1.0 in October 2004. There has been a significant increase in the proportion of people receiving Jobseekers Allowance claimants following the recession in 2008. Each of the typology groups experienced an increase following the recession.
- 5.20 Coastal areas have generally been hit harder than non-coastal areas, with nine of the ten coastal cluster groups experiencing a larger percentage increase in JSA claimants than the average across non coastal areas between 2004 and 2011.

²¹⁰ Although Silver Seaside areas contain a higher proportion of older people than other area types, they are not exclusively retirement areas. These areas tend to have relatively low levels of deprivation, and strong economies, likely to underpin the observed higher job growth.

- 5.21 The Working Hard (D2) cluster group has seen the largest increase in relative claimant rate, with the % of people receiving Jobseekers Allowance in March 2011 2.2 times the proportion in October 2004.
- 5.22 The Reinventing Resorts (C1) group has experienced the smallest relative increase (the 2011 rate is 1.7 times higher than the 2004 rate in these areas). Reinventing resorts are the only typology cluster to out-perform the average across *non-coastal* areas over the period.
- 5.23 In addition, the chart shows the impact of seasonal fluctuation in many areas, with peaks in the claimant count in February showing up strongly for the Coastal Retreats groups (A1, A2 and A3).

Figure 5.3 Change over time in unemployment claimant levels



Change in the proportion of people receiving Jobseeker's Allowance, 2004-2011
Baselined to 1.0 in October 2004.

Productivity drivers

- 5.24 A lower proportion of people in coastal areas are employed in the knowledge industries than across non-coastal areas. Employment in knowledge industries is spread across the main groups with the highest levels in the New Towns and Ports (B2), Coastal Professional (C1) and Prosperous Suburbia (D1) types. By contrast the Coastal Retreat (A1, A2 and A3) areas have lower proportions of jobs connected with knowledge industries.
- 5.25 In general, there are lower levels of businesses per head in coastal areas than across England as a whole. The level of businesses per head are highest in the Coastal Retreat areas (however, as many of these areas are rural, they are likely to comprise a greater number of smaller businesses). The lowest levels of businesses per head are in the Coastal challenge areas, particularly the Striving Communities group (B3).

5.26 The Coastal Retreat (A1, A2 and A3) areas have the lowest level of dynamism with relatively few start ups or closures in a given year. By contrast, the Striving Communities (B3) areas have the highest levels of start-ups (as a % of total stock) and among the highest levels of closures.

Outcomes / deprivation

5.27 Almost all areas in Coastal challenges: Striving Communities (B3) are ranked among the most deprived 20% on the 2010 Index of Multiple Deprivation. Cosmopolitan coast: Reinventing resorts (C1) also has a high proportion of LSOAs ranked as deprived, with more than half of LSOAs ranked in the most deprived 20% of areas across England across this category. Coastal challenges: Structural shifters (B1) is the only other coastal typology group with a higher than average proportion of areas ranked as deprived.

5.28 By contrast, Coastal retreats: Rural chic (A3), Coastal fringe: Prosperous suburbia (D1) and Coastal fringe: Working hard (D2) have no areas ranked among the most deprived 20% in the Indices of Deprivation (or indeed the earlier 2004 and 2007 versions of the Index).

Change over time in deprivation levels

5.29 Analysis of the 2004, 2007 and 2010 Indices of Multiple Deprivation by typology category is shown in the table below. Although not a direct measure of deprivation, this gives a relative perspective on how coastal areas fared in terms of deprivation levels relative to other English areas.

Table 5.4 Change in multiple deprivation by typology

LSOAs in the most deprived 20% of all areas in England on the Index of Multiple Deprivation (IMD)	IMD 2004		IMD 2007		IMD 2010	
	Number of LSOAs	%	Number of LSOAs	%	Number of LSOAs	%
A1 Coastal retreats: Silver seaside	3	0.4%	3	0.4%	1	0.1%
A2 Coastal retreats: Working countryside	1	0.2%	2	0.4%	3	0.6%
A3 Coastal retreats: Rural chic	0	0.0%	0	0.0%	0	0.0%
B1 Coastal challenges: Structural shifters	278	29.3%	265	27.9%	282	29.7%
B2 Coastal challenges: New towns and ports	220	18.1%	214	17.6%	210	17.3%
B3 Coastal challenges: Striving communities	1,183	95.1%	1,195	96.1%	1,210	97.3%
C1 Cosmopolitan coast: Reinventing resorts	363	57.4%	342	54.1%	359	56.8%
C2 Cosmopolitan coast: Coastal professionals	28	2.6%	14	1.3%	9	0.8%
D1 Coastal fringe: Prosperous suburbia	0	0.0%	0	0.0%	0	0.0%
D2 Coastal fringe: Working hard	0	0.0%	0	0.0%	0	0.0%
Coastal	2,076	20.6%	2,035	20.2%	2,074	20.6%
Non-Coastal	4,420	19.7%	4,461	19.9%	4,422	19.7%
England	6,496	20.0%	6,496	20.0%	6,496	20.0%

- 5.30 In general, there was little change in the proportion of coastal areas ranked as highly deprived (in the most deprived 20% across England) over the time period.
- 5.31 However, there was some variation at typology level. There is evidence of improvement in New towns and ports (B2) and Coastal professionals (C2), with the numbers of LSOAs ranked as deprived lower in ID 2010 than in ID 2004 and ID 2007. By contrast, the number of LSOAs ranked among the most deprived in B1 Coastal challenges: Structural shifters is higher in ID 2010 than ID 2004 and ID 2007.

Risks

- 5.32 There is little evidence of concentrations in single industries across any of the typology groups.
- 5.33 Coastal areas in general have higher levels of people employed in public sector organisations than across non-coastal areas. There is little variation across the typology groups, however the Striving Communities group (B3) has the highest concentrations of people in public sector employment, with higher than average concentrations in Structural shifters (B1) and Reinventing Resorts (C1).

Profile of local coastal communities

- 5.34 The analysis above paints a broad brush picture of how the different types of coastal community (as defined by the coastal typology) are faring. We also provide greater detail in excel datasets provided with this commission.
- 5.35 This datasets show, for each coastal LSOA in England, the datasets analysed above as well as those used to create the typology, details of which typology category the LSOA lies in, and other location details such as the Local Authority, settlement, rural-urban category and so on. Filters have been setup to enable marine planners to identify data for particular Local Authorities and settlements.
- 5.36 This provides marine planners with data targeted at a range of specific economic subjects (for example, local skills, low income or unemployment levels) at a tightly defined spatial scale (as an indication, LSOAs typically contain around 1,500 people).

6 THE POTENTIAL FIT BETWEEN AREAS AND MARINE ACTIVITIES

Introduction

6.1 By this stage, we have a view on

- the different causal economic and social processes that are at work in coastal areas around the UK;
- The different socio-economic character of the coastal communities, as demonstrated by their statistical performance and typology; and
- How marine economic development opportunities now and in future might impact on socio-economic circumstances of coastal communities.

6.1 Having reached this stage, we use the following table to pull these threads together, and to use the analysis to drive some generic conclusions about how successfully different marine activities might fit in the different typology areas.

The summary table

6.2 We have used a “traffic light” system for ease of reference. Green shading suggests an outline good fit between a marine activity and an area typology. At the other end, red suggests a potentially poor fit. Amber suggests a partial fit.

6.3 We are looking at this analysis from the point of view of local residents. Our analysis works from the central understanding that what might be considered a positive impact in one place might be considered very negative in another. How change is viewed depends absolutely on who you are, or where you are. There can be no “one size fits all” approach.

6.4 **It is important to understand that this is a necessarily schematic overview of the potential fit between marine activities and the different types of location. It is certainly not a substitute for detailed investigation of potential sites with local authorities and investors, and no activities should be ruled in or out on the basis of this analysis.**

Table 6.1 Summary table C: How well might marine activities fit in each of the coastal town typology areas? A schematic overview

Marine activity	A1 Coastal retreats: Silver seaside A2 Coastal retreats: Working countryside A3 Coastal retreats: Rural chic	B1 Coastal challenges: Structural shifters B2 Coastal challenges: New towns and ports B3 Coastal challenges: Striving communities	C1 Cosmopolitan coast: Reinventing resorts C2 Cosmopolitan coast: Coastal professionals	D1 Coastal fringe: Prosperous suburbia D2 Coastal fringe: Working hard
Defence	Probable partial fit. Assuming that defence activity involved would be naval/port activity, then small scale development may be appropriate, particularly to local facilities which are seen as an asset to the local character of the area.	Probable good fit. Assuming that defence activity involved would be naval/port activity, development is likely to be welcomed and is likely to be a good fit with existing population profiles and geographical character.	Probable partial fit. Assuming that defence activity involved would be naval/port activity, then small scale development may be appropriate, particularly to local facilities which are seen as an asset to the local character of the area.	Probable partial fit. Assuming that defence activity involved would be naval/port activity, then small scale development may be appropriate, particularly to local facilities which are seen as an asset to the local character of the area.
Energy production and infrastructure	Probable partial fit. Assuming infrastructure is located a reasonable distance offshore, then energy infrastructure will be appropriate. However, the residential nature of many of these areas will mean that associated land-side infrastructure (such as sub-stations) may be difficult to site.	Probable good fit. Energy development is likely to be welcomed. These areas have the labour markets and infrastructure to make development attractive to investors - although we caution that local economic impacts may be limited due to the national and international supply lines involved in this business. Much will depend on the extent to which the location is able to capture wider elements of the supply chain processes within the local economy.	Probable partial fit. Assuming infrastructure is located a reasonable distance offshore, then energy infrastructure will be appropriate. However, the residential nature of many of these towns will mean that associated land-side infrastructure (such as sub-stations) may be difficult to site.	Probable partial fit. Assuming infrastructure is located a reasonable distance offshore, then energy infrastructure will be appropriate, particularly in the “working hard” areas. These areas have the labour markets and infrastructure to make port development attractive to investors - although we caution that local economic impacts may be limited due to the national and international supply lines involved in this business. Areas classified as “prosperous suburbia” may be a less good fit for energy production and infrastructure. The residential nature of many of these areas will mean that associated land-side infrastructure (such as sub-stations) may be difficult to site.

Marine activity	A1 Coastal retreats: Silver seaside A2 Coastal retreats: Working countryside A3 Coastal retreats: Rural chic	B1 Coastal challenges: Structural shifters B2 Coastal challenges: New towns and ports B3 Coastal challenges: Striving communities	C1 Cosmopolitan coast: Reinventing resorts C2 Cosmopolitan coast: Coastal professionals	D1 Coastal fringe: Prosperous suburbia D2 Coastal fringe: Working hard
Ports and shipping	<p>Probable partial fit. Small scale development may be appropriate, particularly to local facilities which are seen as an asset to the local character of the area. However, significant port development is likely to be less appropriate in these areas given potential noise and traffic concerns. These areas typically value their current strong environments; they are unlikely to always find this type of industrial development a good fit.</p>	<p>Probable good fit. Port development is likely to be welcomed and is likely to be a good fit with existing population profiles and geographical character. These areas typically have the labour markets and infrastructure to make port development attractive to investors.</p>	<p>Probable partial fit. Small scale development may be appropriate, particularly to local facilities which are seen as an asset to the local character of the area. However, significant port development is likely to be less appropriate in these areas given potential noise and traffic concerns. These areas typically value their current strong environments; they are unlikely to always find this type of industrial development a good fit.</p>	<p>Probable partial fit. Port development is likely to be welcomed and is likely to be a good fit with existing population profiles and geographical character. These areas typically have the labour markets and infrastructure to make port development attractive to investors.</p> <p>Areas classified as “prosperous suburbia” may be a less good fit for these activities. Some residential areas will be sensitive to potential noise and traffic concerns.</p>
Marine aggregates	<p>Probable poor fit. The activity itself takes place at sea, but the proximity by local storage of any scale and potential noise and traffic increases from lorry movements may not fit well with these areas.</p> <p>These areas typically value their current strong environments; they are unlikely to always find this type of industrial development a good fit. Small scale development may be appropriate.</p>	<p>Probable good fit. Aggregates development is likely to be welcomed and is likely to be a good fit with existing population profiles and geographical character.</p> <p>Suitable sites and infrastructure are likely to already exist. These areas typically have the labour markets and infrastructure to make development attractive to investors.</p>	<p>Probable poor fit. The activity itself takes place at sea, but the proximity by local storage of any scale and potential noise and traffic increases from lorry movements may not fit well with these areas.</p> <p>These areas typically value their current strong environments; they are unlikely to always find this type of industrial development a good fit. Small scale development may be appropriate.</p>	<p>Probable poor fit. The activity itself takes place at sea, but the proximity by local storage of any scale and potential noise and traffic increases from lorry movements may not fit well with these areas.</p> <p>These areas typically value their current strong environments; they are unlikely to always find this type of industrial development a good fit. Small scale development may be appropriate.</p>
Marine dredging and	<p>Probable good fit. These activities generally take place at sea, and</p>	<p>Probable good fit. These activities generally take place at</p>	<p>Probable good fit. These activities generally take place at sea, and</p>	<p>Probable good fit. These activities generally take place at sea, and are</p>



Marine activity	A1 Coastal retreats: Silver seaside A2 Coastal retreats: Working countryside A3 Coastal retreats: Rural chic	B1 Coastal challenges: Structural shifters B2 Coastal challenges: New towns and ports B3 Coastal challenges: Striving communities	C1 Cosmopolitan coast: Reinventing resorts C2 Cosmopolitan coast: Coastal professionals	D1 Coastal fringe: Prosperous suburbia D2 Coastal fringe: Working hard
disposal	<p>are unlikely to cause difficulties on land. Some beach replenishment activities take place, but these would likely be seen as a good fit.</p> <p>However, if applied to estuarine areas dredging can have an impact that is not well received by those expecting a tranquil environment free of intervention, particularly if the dredged material is re-deposited to support habitat creation (visual and aural impacts).</p>	<p>sea, and are unlikely to cause difficulties on land. Some beach replenishment activities take place, but these would likely be seen as a good fit.</p> <p>However, if applied to estuarine areas dredging can have an impact that is not well received by those expecting a tranquil environment free of intervention, particularly if the dredged material is re-deposited to support habitat creation (visual and aural impacts).</p>	<p>are unlikely to cause difficulties on land. Some beach replenishment activities take place, but these would likely be seen as a good fit.</p> <p>However, if applied to estuarine areas dredging can have an impact that is not well received by those expecting a tranquil environment free of intervention, particularly if the dredged material is re-deposited to support habitat creation (visual and aural impacts).</p>	<p>unlikely to cause difficulties on land. Some beach replenishment activities take place, but these would likely be seen as a good fit.</p> <p>However, if applied to estuarine areas dredging can have an impact that is not well received by those expecting a tranquil environment free of intervention, particularly if the dredged material is re-deposited to support habitat creation (visual and aural impacts).</p>
Telecommunications cabling	<p>Probable good fit. The marine activity of laying telecoms cable would have negligible onshore impacts. Cables are buried at the point they come onshore. Onshore infrastructure is small scale. It is therefore a good fit in all typology areas.</p>	<p>Probable good fit. The marine activity of laying telecoms cable would have negligible onshore impacts. Cables are buried at the point they come onshore. Onshore infrastructure is small scale. It is therefore a good fit in all typology areas.</p>	<p>Probable good fit. The marine activity of laying telecoms cable would have negligible onshore impacts. Cables are buried at the point they come onshore. Onshore infrastructure is small scale. It is therefore a good fit in all typology areas.</p>	<p>Probable good fit. The marine activity of laying telecoms cable would have negligible onshore impacts. Cables are buried at the point they come onshore. Onshore infrastructure is small scale. It is therefore a good fit in all typology areas.</p>
Fisheries	<p>Probable good fit. Fisheries are frequently seen as an important distinguishing feature for local towns, and are a link to cultural heritage. Small scale development</p>	<p>Probable good fit. Fisheries are frequently seen as an important distinguishing feature for local towns, and are a link to cultural heritage. Small scale</p>	<p>Probable good fit. Fisheries are frequently seen as an important distinguishing feature for local towns, and are a link to cultural heritage. Small scale development</p>	<p>Probable good fit. Fisheries are frequently seen as an important distinguishing feature for local towns, and are a link to cultural heritage. Small scale development (which in reality is</p>

Marine activity	A1 Coastal retreats: Silver seaside A2 Coastal retreats: Working countryside A3 Coastal retreats: Rural chic	B1 Coastal challenges: Structural shifters B2 Coastal challenges: New towns and ports B3 Coastal challenges: Striving communities	C1 Cosmopolitan coast: Reinventing resorts C2 Cosmopolitan coast: Coastal professionals	D1 Coastal fringe: Prosperous suburbia D2 Coastal fringe: Working hard
	<p>(which in reality is the most that can be expected) is likely to be seen as appropriate, particularly to local facilities which are seen as an asset to the local character of the area.</p> <p>Fish processing activities may need careful siting, however.</p>	<p>development (which in reality is the most that can be expected) is likely to be seen as appropriate, particularly to local facilities which are seen as an asset to the local character of the area.</p> <p>All ancillary activities such as fish processing are also likely to be sought, in view of the jobs that they provide.</p>	<p>(which in reality is the most that can be expected) is likely to be seen as appropriate, particularly to local facilities which are seen as an asset to the local character of the area.</p> <p>Fish processing activities may need careful siting, however.</p>	<p>the most that can be expected) is likely to be seen as appropriate, particularly to local facilities which are seen as an asset to the local character of the area.</p> <p>All ancillary activities such as fish processing are also likely to be sought, in view of the jobs that they provide.</p> <p>Fish processing activities may need careful siting, however, particularly near residential areas.</p>
Aquaculture	<p>Probable partial fit. Much would depend on the nature of proposals. For example, whilst oyster beds may be viewed positively, large fish farming activities may be seen less positively due to possible visual intrusion from jetties, piers and ancillary buildings. However, Scottish planning policy guidelines notes that visual intrusion can be often avoided.²¹¹</p>	<p>Probable good fit. The employment opportunities that this sort of development might afford would be most likely viewed positively in these areas.</p>	<p>Probable partial fit. Much would depend on the nature of proposals. For example, whilst oyster beds may be viewed positively, large fish farming activities may be seen less positively due to possible visual intrusion from jetties, piers and ancillary buildings. However, Scottish planning policy guidelines notes that visual intrusion can be often avoided.²¹²</p>	<p>Probable good fit. The employment opportunities that this sort of development might afford would be most likely viewed positively in these areas.</p>

²¹¹ Scottish Planning Policy: SPP 22: Planning for Fish Farming (para 31) <http://www.scotland.gov.uk/Publications/2007/03/29102058/4>



Marine activity	A1 Coastal retreats: Silver seaside A2 Coastal retreats: Working countryside A3 Coastal retreats: Rural chic	B1 Coastal challenges: Structural shifters B2 Coastal challenges: New towns and ports B3 Coastal challenges: Striving communities	C1 Cosmopolitan coast: Reinventing resorts C2 Cosmopolitan coast: Coastal professionals	D1 Coastal fringe: Prosperous suburbia D2 Coastal fringe: Working hard
Surface water management and waste water treatment and disposal	<p>Probable partial fit. The development of types of waste water treatment plants are likely to be viewed unfavourably anywhere, but impacts can be carefully managed so that community benefits can be shown to outweigh costs. The maintenance of good quality bathing water is also likely to be seen as locally important – particularly in areas with an important tourism industry.</p> <p>Works to defend locations against storm water drainage are likely to be seen as welcome at most locations.</p>	<p>Probable partial fit. The development of waste water treatment plants are likely to be viewed unfavourably anywhere, but impacts can be carefully managed so that community benefits can be shown to outweigh costs. The maintenance of good quality bathing water is also likely to be seen as locally important.</p> <p>Works to defend locations against storm water drainage are likely to be seen as welcome at most locations.</p>	<p>Probable partial fit. The development of waste water treatment plants are likely to be viewed unfavourably anywhere, but impacts can be carefully managed so that community benefits can be shown to outweigh costs. The maintenance of good quality bathing water is also likely to be seen as locally important – particularly in areas with an important tourism industry.</p> <p>Works to defend locations against storm water drainage are likely to be seen as welcome at most locations.</p>	<p>Probable partial fit. The development of waste water treatment plants are likely to be viewed unfavourably anywhere, but impacts can be carefully managed so that community benefits can be shown to outweigh costs. The maintenance of good quality bathing water is also likely to be seen as locally important.</p> <p>Works to defend locations against storm water drainage are likely to be seen as welcome at most locations.</p>
Tourism and recreation	<p>Probable partial fit. We note that a number of towns in this category are likely to value non-marine initiatives that move these towns from what is sometimes perceived</p>	<p>Probable good fit. The extent to which this marine activity will be a good fit for these typology areas will depend to a great degree on local conditions. City</p>	<p>Probable good fit. Many of these areas in this typology have done relatively well in modernising and rebranding their tourism offer.</p>	<p>Probable partial fit. The extent to which this marine activity will be a good fit for these typology areas will depend to a great degree on local conditions. City break markets have performed</p>

²¹² Scottish Planning Policy: SPP 22: Planning for Fish Farming (para 31) <http://www.scotland.gov.uk/Publications/2007/03/29102058/4>



Marine activity	<p>A1 Coastal retreats: Silver seaside</p> <p>A2 Coastal retreats: Working countryside</p> <p>A3 Coastal retreats: Rural chic</p>	<p>B1 Coastal challenges: Structural shifters</p> <p>B2 Coastal challenges: New towns and ports</p> <p>B3 Coastal challenges: Striving communities</p>	<p>C1 Cosmopolitan coast: Reinventing resorts</p> <p>C2 Cosmopolitan coast: Coastal professionals</p>	<p>D1 Coastal fringe: Prosperous suburbia</p> <p>D2 Coastal fringe: Working hard</p>
	<p>to be an overdependence on seasonal tourism, and refocus on the needs of residents.</p> <p>However, targeted coastal tourism development is likely to be a better fit. Moves to reposition these towns up-market, and out of the mass tourism bracket are likely to be most popular.</p>	<p>break markets have performed relatively well over the past decade, and a number of industrial cities have seen strong hotel growth and an (at least partially) successful development of their tourism offer.</p> <p>The jobs brought by any development would prove particularly popular in these areas.</p>	<p>Further tourism development, particularly of types which encourages a niche approach to particular market segments is likely to be popular. Tourism will be valuable in these areas due to the associated leisure and lifestyle benefits that it creates.</p>	<p>relatively well over the past decade, and a number of industrial cities have seen strong hotel growth and an (at least partially) successful development of their tourism offer.</p> <p>The jobs brought by any development would prove particularly valuable for these areas.</p>

7 HOW PLANNING PROCESSES CAN BE USED TO DELIVER IMPROVEMENTS

Introduction

- 7.1 Marine planning is likely to best maximise socio-economic benefits when it works effectively with terrestrial planning and economic development activity.
- 7.2 This section is intended to help marine planners understand when, where and how they might interact with terrestrial planning in the preparation of plans²¹³, with a view to ensuring marine activities can maximise benefits for coastal communities.
- 7.3 To help in developing this understanding we:
- Review the components of key documents within the Local Development Framework (LDF) to highlight where the most useful information for marine planners relating to socio economic benefits is likely to be found;
 - Highlight some of the changes currently taking place nationally that are impacting on the shape of local spatial planning and economic development;
 - Identify key routes where socio economic circumstances feed into terrestrial Plan preparation;
 - Review the flow chart for preparation of LDF documents to give some indication of when and how marine planners might engage with their terrestrial counterparts.

How the marine and terrestrial planning systems can work together

- 7.4 Terrestrial planners are being asked to discuss spatial planning with implications for marine planning with their marine planning counterparts and vice-versa.²¹⁴
- 7.5 Both the Marine Policy Statement²¹⁵ and the Marine Planning for England document²¹⁶ highlight the need for aligning and mutually reinforcing marine and terrestrial planning with suggested ways to achieve this including:
- Liaison between the respective planning authorities;

²¹³ This section does not deal with planning application and marine licensing which are the development management dimension of spatial and marine planning. However work on the East Marine Area Plan has identified significant interest from spatial planners in this aspect of planning work, which the MMO is addressing separately through marine planning, licensing and coastal liaison officers.

²¹⁴ In a letter to Chief Planning Officers dated 21st March 2011, DCLG brought the adoption of the UK Marine Policy Statement to the attention of LPA Chief Planning Officers. It particularly brought the requirement that all authorisation and enforcement decisions by public bodies that affect the marine environment must be accordance with the adopted MPS. It advised LPAs that there is now a requirement on them to consult with the MMO on environmental impact assessments for terrestrial projects that affect the marine environment. Conversely there is a requirement on marine licensing authorities to notify relevant LPAs of applications for marine licences.

²¹⁵ HM Government/Northern Ireland Executive/Scottish Government/ Welsh Assembly Government (March 2011). *UK Marine Policy Statement*. Page 8, Section 1.3

²¹⁶ Defra (March 2011). *A Description of the Marine Planning System for England*. Page 76, Chapter 6

- Sharing of evidence;
- Learning lessons from the implementation of integrated coastal zone management principles; and
- ‘marine proofing’ of terrestrial planning policies and ‘terrestrial proofing’ of marine planning policies.

7.6 Beyond this, there is no specific guidance on how terrestrial planners could link into marine planning. Finding ways to bring both processes together is important and needs to be based on an understanding of both marine and terrestrial planning, both in terms of their respective scope and how it might happen in practice.

How the Local Development Framework can help marine planners

7.7 Marine planning is modelled on its terrestrial counterpart of LDFs (soon to be called Local Plans, as proposed in the Localism Bill). Although the marine plan is a single document and the LDF is a suite of documents, the structure of documents is to have a strategy, a policy map which is a spatial presentation of the strategy, an implementation plan and a monitoring plan. Appendix 2 provides a more detailed discussion of LDFs and marine plans, with diagrams.

7.8 Key documents in the LDF for marine planners, to help understand how marine planning might support coastal communities are:

- The Core Strategy
- Area Action Plans (AAPs)
- The Proposals Map

7.9 Other documents providing background evidence to support Plan policies might also be useful. The following table looks at which parts of Development Plan Documents (DPDs) and which evidence base background documents could be most helpful to marine planners and why.

Table 7.1 Core Strategy/DPD policy areas and evidence based documents for Marine Planners to focus on, in relation to coastal communities

Core Strategy, Area Action Plans (AAPs) and other Development Plan Documents (DPDs)	
Area based policies	Core strategies may include specific policies relevant to an area rather than a topic, often because it is an area targeted for housing/employment growth or for an area regeneration programme. These will be particularly important for marine planners, indicating opportunities to link with wider development initiatives for coastal communities and also highlighting where AAPs and Site Allocations DPDs may subsequently be developed which marine planners should try and link into. Area based initiatives should offer marine planners the opportunity for direct links into socio economic benefits for coastal communities.

<p>Economic and Regeneration Policies</p>	<p>Reviewing these policies will be key for marine planners linking back to the drivers for growth discussed in Chapter 7. They can highlight employment development and diversification intentions (for example if new business clusters are being developed; or if certain business parks are targeted at particular employment sectors); key allocations of land to settlements/broad locations (to meet employment growth targets); approaches to safeguarding existing employment land (which might include port areas for example); and particular approaches for economic development in rural areas (where development needs to align with its rural nature; and which can include policies relevant to ‘exceptional circumstances’ when there is an overriding need for a rural location, nuclear power stations being an example)</p>
<p>Tourism strategies</p>	<p>Tourism may be included as part of economic policies or in its own right and can be an important economic driver. There is an increasing emphasis on sustainable tourism developments where considerations include accessibility by means other than car. Policies often focus on tourism accommodation and tourism facilities/attractions as two aspects of development relevant to tourism. Explanatory text with the policies usually emphasises the important assets on which tourism is based. In a coastal context this is the physical assets of the coastline and countryside, the reputation of the seaside resorts of an area and other factors which make up its tourism qualities such as historic and cultural features (including links with other coast related activities such as fishing, important in the context of small coastal communities in Cornwall for example). This is valuable knowledge for marine planners indicating the importance of tourism to coastal communities and highlighting where fit with tourism activity will be important considerations. It should also show the extent to which tourism is built on vital natural assets (which themselves will be subject to policy considerations in the natural resources policies of a Core Strategy), again a key consideration for marine planners to pick up. The wider marine planning process and its evidence base will need to look at the inter-relationship between environmental and socio economic impacts.</p>
<p>Transport</p>	<p>Transport policy is particularly influenced by Local Transport Plans developed at County level and which identify strategic infrastructure improvements e.g. to the road or rail network, as well as sustainable transport approaches such as promoting use of walking and cycling as alternatives to car use. Marine planners will look at strategic transport links for obvious reasons e.g. access to strategic ports and their development opportunities, supporting marine activities. However an awareness of the sustainable transport approaches in Core Strategies would also be important as part of understanding the opportunities for socio economic benefits for communities e.g. if new locations for</p>

	onshore facilities are needed to support marine activities, then how could sustainable transport policy work with the marine activity needs to support local residents in accessing new local job opportunities
Evidence Base documents	
Employment Land Reviews	These include discussion of a range of economic indicators about a local authority area and its sub areas, key existing and emerging employment sectors, market conditions and issues around supply of employment land and premises.
Sustainable Community Strategies	Sustainable Community Strategies (SCS) are intended to set out a vision for an area, but the Government intends to repeal the duty to produce them ²¹⁷ . DPDs usually provide a summary of SCS vision and objectives as part of describing the context for the DPD. This should provide a quick and sufficient overview of the SCS.
Economic Development Strategies and Sustainability Appraisals (from Local Authorities or Local Enterprise Partnerships)	Local authorities may produce economic development strategies which may be of use to marine planners. Equally, the Local Enterprise Partnerships (where constituted) may have published strategies. The documents available are not the same across local authorities. Key ones to look for would be: <ul style="list-style-type: none"> - Economic Development Strategy – setting out aims, objectives and potential actions - Regeneration strategy (in some cases these are developed as AAPs in the LDF) - Local Economic Assessments – a requirement on LAs to produce and which provide a factual portrait of economic circumstances - Sustainability appraisals which underpin DPDs may contain economic data and baselines - LEP documents (when produced) - Masterplans, feasibility studies or other development plans for

²¹⁷ The Planning and Compulsory Purchase Act in 2004 made very clear that local authorities must have regard to their Community Strategies (now Sustainable Community Strategies) when preparing Local Development Documents (paragraph 19(2f)). PPS12 also emphasised this in paragraph 4.23 where it noted that SCSs provide a key community input into Core Strategies, whilst communities should be taken as businesses as well as residents. LDFs – and specifically Core Strategies – have responded to this by integrating SCS vision and key objectives with those of the Core Strategy so that the Core Strategy vision pulls out the spatial implications of the SCS vision. Government intentions are to repeal the duty on Local Authorities to prepare a SCS, (DCLG, April 2011, Best Value – New Draft Statutory Guidance Consultation page 2). an intention raised in a current consultation paper running to June 2011. Whilst the Equalities Impact Assessment accompanying the consultation paper suggests Local Authorities are likely to continue preparation of SCSs (the consultation proposed removing the ‘duty’ to prepare but does not intend to prevent their preparation), it could raise a question about the extent of the link between the SCS and LDF in the future.

	economic initiatives, for example a masterplan for a waterfront site development or a feasibility study into establishing a marina
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Housing and community services/facilities have not been included

- 7.10 Housing and community services/facilities have not been included in the table above. Housing is an important indicator of socio economic circumstances in a number of ways ranging from issues of second homes, extent of affordable housing through to housing conditions and different types of tenure.
- 7.11 However, marine activities are more likely to have an indirect than a direct impact on housing indicators, for example through provision of local employment opportunities thus generating income into the local economy and increasing people’s purchasing power in the local housing market. Reviewing housing evidence base documents may not directly help marine planners unless there is a specific need to do so.

What is changing at National Level?

- 7.12 There are a number of quite fundamental changes to planning and economic development policy being proposed nationally. The following gives a very brief summary of those which seem particularly relevant to marine planners and more information is set out in Appendix 2. It should be read as an introduction only, relevant at the time of preparation of this document (June 2011).
- 7.13 Key changes include:
 - A National Planning Policy Framework, to be published for consultation in summer 2011
 - Continued development of the National Policy Statements
 - Continued progress of the Localism Bill through its parliamentary stages towards enactment and which includes:
 - Abolition of Regional Strategies, which has caused some delay and uncertainty in LDF preparation
 - Introduction of a Duty to Co-operate to fill the gap left by RS abolition, as a key driver for strategic working across boundaries
 - Neighbourhood development plans which would be part of the Development Plan if they pass examination and referendum and could provide both opportunities and challenges to marine planners
 - Neighbourhood Development Orders (including Community Right to Build Orders) which would grant planning permission for specified uses/areas
 - Local Enterprise Partnerships intended as locally owned partnerships between local authority and businesses

Where are the opportunities for marine planners to work with spatial planners?

- 7.14 Core strategies and other DPDs are produced to a timetable set out in an LPA’s local development scheme. As of the end of May 2011, nearly a third of local authorities had

adopted core strategies and over a half had prepared drafts ready for examination in public²¹⁸.

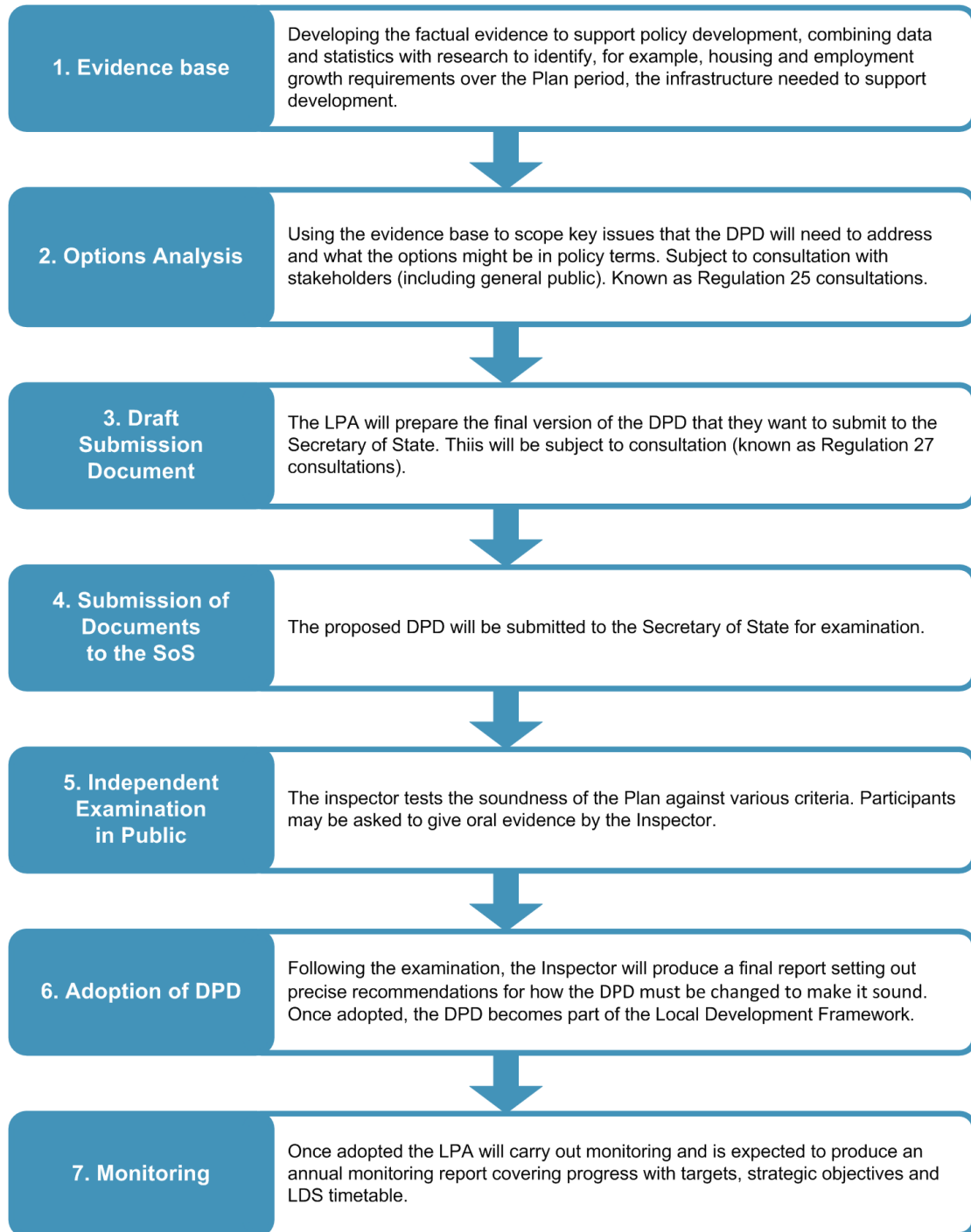
- 7.15 It is inevitable that an area marine plan will always start at a point where spatial plans for coastline LPAs are at different stages.²¹⁹
- 7.16 What is more relevant is to scope the stages reached by LPAs and working out how best to link, given the stage that they are at.
- 7.17 The following diagram at Figure 7.1 sets out a very simplified flow chart of the process of preparing a DPD, based on a typical approach²²⁰.
- 7.18 We then set out the basic process for marine plans in Figure 7.2. What it indicates is that there are several stages, with consultation points at each. When viewed alongside a similar diagram for the marine planning process, it also shows a lot of similarities in terms of process.

²¹⁸ Update provided by CLG.

²¹⁹ Just as an example, of 20 LPAs reviewed along the coastline of the East Marine Plan Area: Five had adopted Core Strategies; three were at the examination stage; one was a Submission Draft; three had been through a process of amendments to a draft Core Strategy; one was a Draft for Consultation; two were at 'Preferred Options' stage ; three were at 'Issues and Options' stage; two were at early stages of considering joint development of a Core Strategy

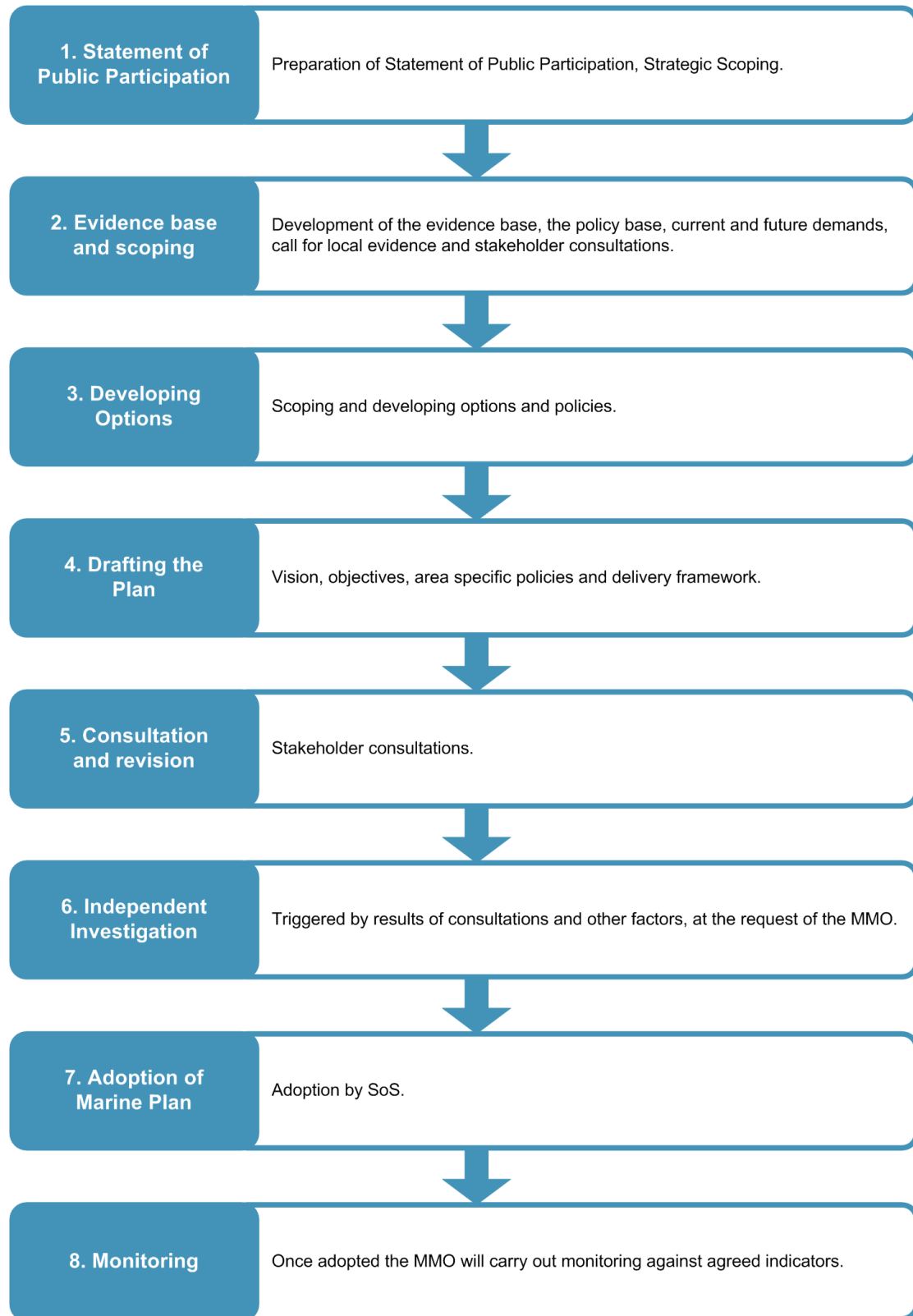
²²⁰ The Localism Bill proposes amendments to the adoption stage

Figure 7.1 Indicative LDF process for preparing a Development Plan Document (DPD)²²¹



²²¹ The Localism Bill proposes a revision to procedures for adoption of DPDs which will amend Stage 6 of the diagram on Adoption of DPD giving LPAs greater powers at that point.

Figure 7.2 the Marine Planning Process for preparing an Area Marine Plan



At what points in the process can marine planners get involved in terrestrial planning (and vice versa)?

- 7.19 As the *Marine Planning for England* document points out, liaison between marine and terrestrial planning authorities will be important, as will ‘marine proofing’ of terrestrial planning policies and ‘terrestrial proofing’ of marine planning policies.
- 7.20 Information will therefore need to flow both ways: marine planners may need to inform the terrestrial plan; and terrestrial planners may need to inform the marine plan.
- 7.21 The following two diagrams use the same flow chart as in Figures 6.1 and 6.2, to illustrate when and why marine planners could link into preparation of DPDs, with a view to achieving beneficial socio economic outcomes for coastal communities.
- 7.22 As the diagrams indicate, linking into the earlier stages of work opens up greater opportunities for liaison and input, as options are still being discussed and evidence collected through consultation processes and background strategies. Equally, linking into monitoring stages would also be very valuable, particularly as significant changes in circumstances evidenced through monitoring can be a trigger for review and updating of DPDs.

Figure 7.3 How marine planning can best be involved with terrestrial DPD processes

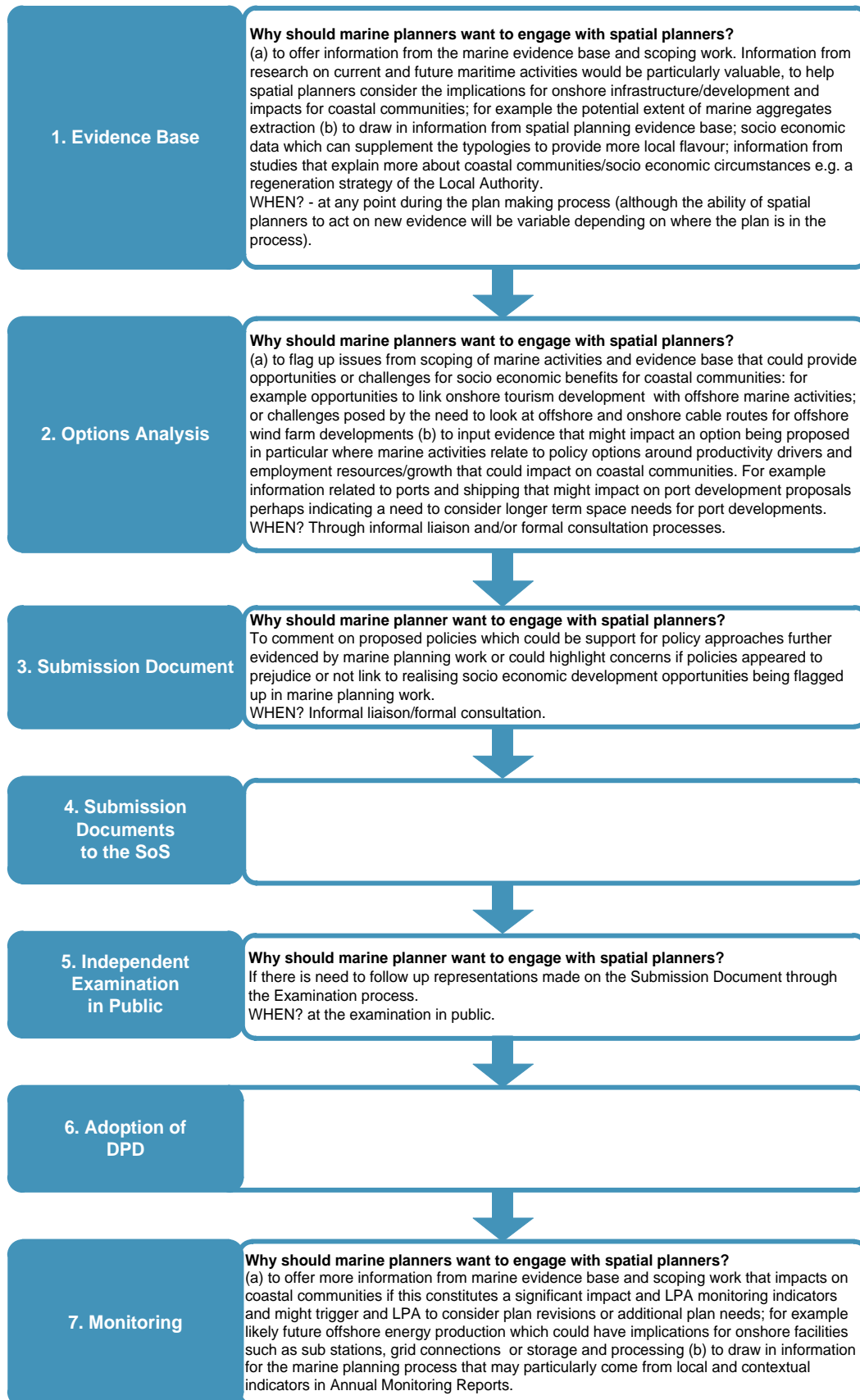
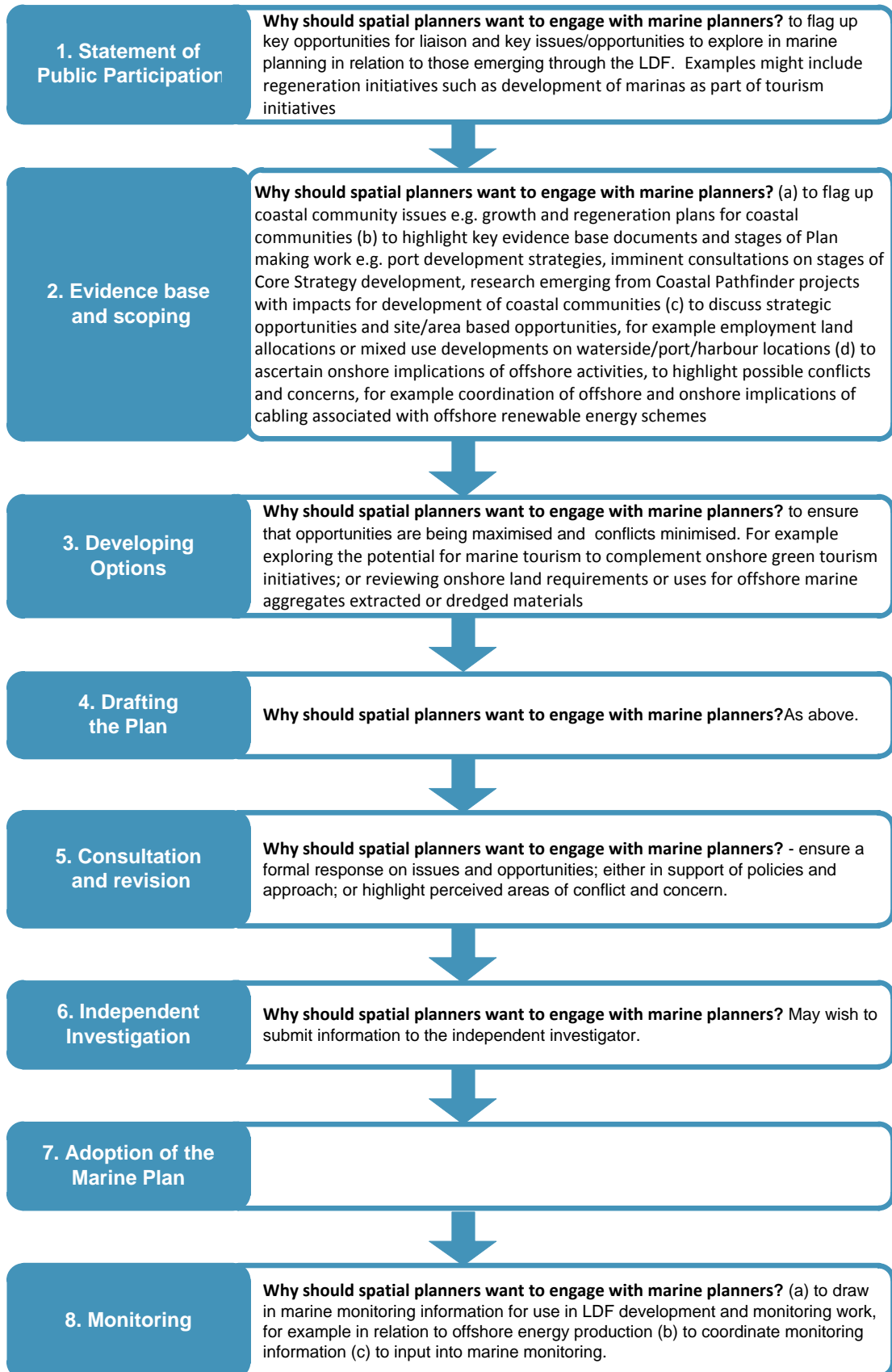


Figure 7.4 How spatial planners can best be involved with marine planning processes



How to apply this analysis in a marine area

Step 1: Reviewing stage of spatial plan making and relevance of plan policies

7.23 The first stage will be an understanding of the different stages of plan making that LPAs have reached in the Marine Plan area. These can be scoped through review of LPA websites and set out in a table as in the table below. It gives a quick perspective on the types of DPDs and other planning documents an area might have. The Planning Inspectorate website also keeps a cumulative list of DPDs submitted for examination and their outcome.²²²

Table 7.2 Stages of LDF plan making

Authority ²²³	Core Strategy Document	Site Allocations DPD	Other DPDS e.g. Area Action Plan	Supplementary Planning Documents ²²⁴	Local Plan ²²⁵	Other relevant planning documents
District, Borough, Unitary	Note stage of development reached and date	Note stage of development reached and date	Note stage of development reached and date	Note adopted SPDs and date	Note adopted Local Plan and date	Note relevant evidence base documents e.g. port development plan, regeneration strategy

7.24 On the same basis, a template can be used to review key policy areas in Core Strategies and Area Action Plans, that will help marine planners understand change and development proposed relevant to coastal communities and therefore where marine planning might fit with this. Table 7.3 is a suggested template for reviewing Core Strategies whilst Table 7.4 is for Area Action plans.

7.25 We have carried out this process for the East Marine Plan area. Please see the document under separate cover entitled, *The East Marine Plan area: maximising the socio-economic benefits of marine planning*.

²²² http://www.planningportal.gov.uk/uploads/pins/dpds_submitted.pdf

²²³ Additionally County Councils if minerals/waste plans need to be included for non unitary councils

²²⁴ These may be relevant so worth noting for the sake of completeness. Our East Area Review also included Supplementary Planning Guidance but we concluded these are unlikely to be useful. .

²²⁵ These are the old style Local Plans where policies will be increasingly superseded as Core Strategies are completed and adopted.

Table 7.3 Core Strategy Review template

Authority ²²⁶	Core Strategy Document	Spatial Vision/ Key objectives	Key issues	Community Strategy references Other strategy references	Settlement hierarchy	Specific Coastal Policies	Area Specific Policies	Theme specific Policies
District, Borough, Unitary	Note stage of development reached and date	Quick overview. Objectives most relevant to coastal communities set out	Quick review e.g. key employment sectors relevant to coastal areas/marine communities with deprivation issues	Note of key SCS priorities Note of other relevant strategies	Note of proposed settlement hierarchy from Core Strategy (if none developed, refer to adopted Local Plan)	Note any specific coastal policies (often environmental but could also be related to specific types or locations of developments e.g. coastal nuclear power stations)	Note any area specific policies relevant to coastal communities/marine activities e.g. areas for regeneration	Note any specific policies in relation to employment, tourism, transport. Other topics might be relevant e.g. renewable energy

Table 7.4 Area Action Plans template

Authority ²²⁷	Area Action Plan	Spatial Strategy	Key employment and economic policies	Key education and training policies	Sites for regeneration and change	Policies for ports and harbours	Other relevant policies or strategies referred to
District, Borough, Unitary	Note stage of development reached and date	Note key elements of spatial approach e.g. planning for XX new houses and XX jobs	Note relevant policies e.g. business park development supporting port activities	Note relevant policies e.g. Development of FE/HE facilities	Note key waterside sites and potential for uses	Note relevant policies e.g. marina development in the harbour	Note other policies which could be relevant e.g. transport infrastructure needed to unlock development potential. Note other relevant strategies referred to e.g. needs study for a marina development.

²²⁶ Additionally County Councils if minerals/waste plans need to be included for non unitary councils

²²⁷ Additionally County Councils if minerals/waste plans need to be included for non unitary councils

- 7.26 Having quickly scoped policy areas relevant to Coastal Communities and potential for socio economic development which might link to marine activities in Core Strategies and Area Action Plans, it is then clearer how and when marine planners might want to engage with terrestrial plan making given the issues arising from marine planning and the potential for links with and impacts on coastal communities.
- 7.27 We should caution that this review will only represent a snapshot in time. Spatial plan making (and marine planning) is a continual process and plans will be moving through their different stages. Where spatial plans are in early stages and there are policy areas of interest to marine planners it is worth keeping track of progress with plans/ensuring the Local Planning Authority has the MMO registered to receive notification of formal consultations on draft plans.

Step 2: Reviewing settlement hierarchies

- 7.28 A second stage is overlaying the coastal community typologies with the spatial strategy and settlement hierarchy in Core Strategies. This will provide an immediate visual picture of which settlements are planned for growth and which are intended for more limited or restricted development. It will enable marine planners to quickly grasp where opportunities might arise (particularly when taken together with knowledge about where AAPs might be proposed/in place).
- 7.29 It will also highlight where there may be tensions between spatial development strategies and marine activities, and where liaison with terrestrial planning colleagues could be valuable in developing approaches to engagement with communities (knowledge of parish plans and community partnership documents might be valuable information here which spatial planners could advise on). All of this should help marine planners identify opportunities to contribute to socio economic benefits for coastal communities.

Step 3: Looking for further local detail

- 7.30 Having got the basic information on stages of plan making and overall spatial strategy approach, marine planners are then in a good position to know where they may want to look further into specific types of policies in LDFs, given the types of issues that are emerging from marine planning work and where there may be opportunities for beneficial impacts on coastal communities.
- 7.31 In terms of evidence base information, and whilst scoping the LDF documents that LPAs have, it might also be useful to scope the evidence based documents that LPAs publish as this would help identify useful socio economic data and other information. This will also inform review of typologies in the local context and help to identify sources of information which indicate more local factors.
- 7.32 Background evidence documents can vary between Local Planning Authorities but ones which might be useful include regeneration/economic development strategies (as previously noted) and development documents for specific areas such as ports, or feasibility/masterplan documents for areas/sites e.g. waterfront development proposals including a pier. Any of these would help marine planners understand strategic and more site specific development aspirations.

- 7.33 Local Planning Authorities have to produce Annual Monitoring Reports. Although Government proposes to drop a requirement to report on specific core reporting indicators, LPAs will still need to produce AMRs. The extent of reporting will vary between LPAs from fulfilling basic requirements to more extensive work. However they can be a useful note of changes taking place in a local area. Where significant changes are flagged up in AMRs, this can also be a prompt for considering DPD reviews. Reviewing AMRs could therefore provide marine planners with a useful additional platform for liaison with a local planning authority, especially if marine planning flags up potentially significant issues relevant to onshore planning.
- 7.34 Finally LPAs will be aware of and making use of more local knowledge through parish plans and plans/strategies developed through, for example, community regeneration partnerships, market town partnerships (and soon, neighbourhood planning groups). These could all provide local intelligence if there is a need for a marine planner to look more locally.

Step 4: Developing discussions with spatial planners

- 7.35 All of the above can then be used to structure liaison and information sharing between marine and terrestrial planners. Discussion during development of the East Marine Planning Area sister document to this one shows key marine activities spatial planners and economic/regeneration officers are particularly interested in as:
- Ports and harbours; from the perspective of their importance as local economic drivers and potential for development
 - Energy production and infrastructure; in terms of onshore opportunities for servicing and supporting offshore energy production, and onshore impacts from its infrastructure needs
 - Tourism and recreation; both from the perspective of additional opportunities related to marine tourism; and a concern that impact of offshore activities does not hit the tourism economy

Understanding the marine planning timetable

- 7.36 Whilst this section has concentrated on how marine planners might link to spatial planners it would be valuable for each LPA to understand the timetable and tasks for marine planning as this is a more certain timescale. Actions of the MMO in making evidence information available through its web portal, supporting local dialogue through coastal liaison officers will all help develop a dialogue between marine planners and terrestrial planners to help achieve a good result for coastal communities and spatial planners need to be aware of this.

Marine Licensing

- 7.37 Finally, we emphasise that this section has focused on linking between spatial planning policy and marine planning. It has not covered the links between spatial planning development management and the marine licensing process, both of which provide the management mechanisms for their respective planning policies.

- 7.38 It is apparent from our work in the East area that there is a keen interest amongst spatial planners to understand how and when marine licensing is required, when spatial planners need to refer development to the MMO and vice versa and particularly how to ensure coordination of development management processes. These are important points that the MMO is addressing and where work is ongoing, outside of this study.

A tabular summary

- 7.39 Table 7.5 below summarises why spatial planners and others would be interested in marine activities, drawing the threads of this section together and showing where planning policy information can help inform discussion.

Table 7.5 Linking marine activities with spatial planning

Marine Activities	Examples of why spatial planners and regeneration/economic development officers have interests in the marine activities, for socio economic benefits	Where planning policy might provide relevant information	What other information from the spatial planning perspective might be useful
Defence	<ul style="list-style-type: none"> Major employer and economic driver for a limited number of coastal communities e.g. Plymouth Use of offshore locations for training can impact on tourism potential and have environmental consequences e.g. offshore bombing ranges for practice Historic military defences are/have potential to be part of the tourism offer but can raise issues around ability to conserve and access if in vulnerable coastal locations 	<ul style="list-style-type: none"> Economic policies might identify the importance of a defence presence through safeguarding sites for defence use and development in coastal communities Area based policies might also identify locations for defence related developments and/or locations where defence sites might be released for redevelopment in coastal communities Tourism and area policies will highlight key locations for coastal tourism activity indicating where there might be tensions with defence uses Tourism policies can set out the type of tourism being encouraged and key locations, where there may be opportunities to integrate the military heritage into the tourism offer 	<ul style="list-style-type: none"> LDF evidence base might include review of skills, training and business sectors as part of the Local Economic Assessment, Economic Development Strategy or Employment Land Review and flag up the role of the defence sector locally and its future prospects
Energy production and infrastructure	<ul style="list-style-type: none"> Economic opportunity area for development to support offshore energy production, currently offshore wind farms in particular. Potential for supplying, servicing and maintenance and wider supply chain developments to maximise local benefits Opportunity to link employment training into energy sector development initiatives, to maximise local benefits; in turn with potential to link to developing FE/HE provision Possible tensions/conflicts around location of onshore facilities to support offshore energy production 	<ul style="list-style-type: none"> Economic policies might identify strategic sites for employment growth which might include business parks linked to energy technology uses, or proposals to develop business clusters in support of developing particular sectors such as environmental technologies Economic or area based policies might identify proposals for HE/FE provision. These would not list types of specialist education likely to be available but will show if FE/HE facilities will be available locally Policies for development in the countryside (which may be part of the settlement hierarchy) which could be relevant to onshore sites for facilities supporting offshore energy production 	<ul style="list-style-type: none"> LDF evidence base might include review of skills, training and business sectors as part of the Local Economic Assessment, Economic Development Strategy or Employment Land Review and flag up the business potential in the energy sector Annual Monitoring Report might include reference to training and business development, supporting energy sector development LDF evidence base might include masterplans or development plans for strategic sites for onshore developments
Ports and shipping	<ul style="list-style-type: none"> Potential for economic benefit from growth of port activity Could be linked to job opportunities for local neighbourhoods in need of regeneration 	<ul style="list-style-type: none"> Economic policies for ports and harbours clarify expectations about their growth and development Regeneration and development policies in AAPs can link employment locations into wider 	<ul style="list-style-type: none"> LDF Evidence base might include port development plans, providing further detail on its need to develop and what activities might be in the



Marine Activities	Examples of why spatial planners and regeneration/economic development officers have interests in the marine activities, for socio economic benefits	Where planning policy might provide relevant information	What other information from the spatial planning perspective might be useful
	<ul style="list-style-type: none"> • Potential for development of support services to the offshore energy sector based in ports, with downstream supply chain benefits locally • Developing the logistics sector linked to port activity • Need for transport infrastructure improvements to secure continued port development • Potential for releasing surplus port and harbour space for other uses to support local regeneration and growth • Need for dredging to maintain ongoing shipping access 	<p>regeneration activities</p> <ul style="list-style-type: none"> • Area based policies in Core Strategies and AAPs may set out locations for re-use of water frontages for mixed use developments (and so flag up where water frontage may be lost from its original water related use) • Economic policies might identify strategic sites for employment growth which might include business parks linked to port activities, emphasising the important economic role of the port locally 	<p>future</p> <ul style="list-style-type: none"> • LDF evidence base might include masterplans or development guides for waterfront locations proposed for development • LDF evidence base might include regeneration strategies with more detail about the socio economic issues being addressed
Marine aggregates	<ul style="list-style-type: none"> • Understanding requirements for landing and processing aggregates and therefore what the onshore implications might be • Coordinating across land and marine aggregates extraction to minimise adverse impacts on communities • Developing the potential for marine aggregates extraction to support local onshore development needs, to minimise transportation • Concerns about the impact of marine aggregates extraction and dredging on coastal erosion and subsequent impacts on communities 	<ul style="list-style-type: none"> • Policies for development in the countryside (which may be part of the settlement hierarchy) which could be relevant to onshore sites for landing and processing aggregates • Settlement hierarchies identifying areas for growth which might generate a need for a supply of aggregates • Policies for port and harbour maintenance and development and therefore where there might be infrastructure for landing aggregates • Transport policies which indicate ability to transport aggregates onward once landed and which could influence landing points 	<ul style="list-style-type: none"> • LDF evidence base Port development plans might help identify long term landing opportunities for aggregates
Marine dredging	<ul style="list-style-type: none"> • Dredging necessary to support ongoing productive economic use of ports and harbours; new waterside developments in regeneration areas; or new economic development opportunities e.g. opening up access to marinas and moorings • Exploiting opportunities to use dredged materials for onland development opportunities e.g. saltmarsh creation with some productive agricultural potential • Concerns about the impact of marine aggregates extraction and dredging on coastal erosion and subsequent impacts on communities 	<ul style="list-style-type: none"> • Policies for development in the countryside (which may be part of the settlement hierarchy) which could be relevant if onshore sites for landing and dealing with dredged material are needed • Policies for port and harbour maintenance and development where there might be a requirement to dredge to support development proposals; and equally a location to land dredged materials 	<ul style="list-style-type: none"> • LDF evidence base might include Shoreline Management Plans where proposals might be able to use dredged materials • LDF evidence base Port development plans might help identify long term landing opportunities for aggregates
Telecommunications	<ul style="list-style-type: none"> • Onshore requirement for landing of cables 	<ul style="list-style-type: none"> • Area regeneration policies might identify opportunities where undergrounding of cables might 	



Marine Activities	Examples of why spatial planners and regeneration/economic development officers have interests in the marine activities, for socio economic benefits	Where planning policy might provide relevant information	What other information from the spatial planning perspective might be useful
		link into onshore redevelopment proposals <ul style="list-style-type: none"> • Tourism and area policies will highlight key locations for coastal tourism activity which might either hinder or aid the landing of cables 	
Fishing	<ul style="list-style-type: none"> • Fishing is a locally important employer to be maintained • Opportunities to develop sustainable fisheries, products and value added • Importance of the fishing fleet in providing part of the character of coastal communities that is in turn important for tourism • Issues around managing fishing activities alongside tourism e.g. beaching of fishing boats and storage of nets in a tourist locations 	<ul style="list-style-type: none"> • Economic policies might be in support of maintaining harbours and onshore facilities to support fish landing and selling • Economic policies might also be in support of fish processing or other business services to the fishing sector through provision of workspace e.g. on industrial parks or through harbourside facilities • Tourism policies might support the tourism development of coastal communities where fishing is also important and inter linked with its tourism character • Tourism policies might flag up developments which may cause tensions or conflicts with fishing activity e.g. marina developments alongside a working fishing harbour • Economic policies for development in the countryside might be relevant to provision of onshore sites for landing, and maintaining fishing boats and equipment 	<ul style="list-style-type: none"> • LDF evidence base Port or harbour development plans might help identify onshore fish landing and marketing facilities • Community Partnerships/parish councils might have local plans inclusive of fishing initiatives, which LAs could advise on • LDF evidence base might include review of skills, training and business sectors as part of the Local Economic Assessment, Economic Development Strategy or Employment Land Review and flag up the future prospects and aspirations for the fishing sector
Aquaculture	<ul style="list-style-type: none"> • Opportunities for contribution to the tourism offer e.g. oyster festival utilising farmed oysters • Potential impacts on other factors e.g. water quality, and subsequent impact on tourism 	<ul style="list-style-type: none"> • Tourism policies can set out the type of tourism being encouraged and key locations, where there may be opportunities to link aquaculture products into tourism • Economic policies might be in support of maintaining harbours and onshore facilities to support fish landing • Economic policies might also be in support of fish processing through provision of workspace e.g. on industrial parks or through harbourside facilities 	<ul style="list-style-type: none"> • LDF evidence base might include review of skills, training and business sectors as part of the Local Economic Assessment, Economic Development Strategy or Employment Land Review and flag up the future prospects and aspirations for aquaculture
Surface water and waste water management	<ul style="list-style-type: none"> • Growth and development plans for settlements can generate significant infrastructure requirements for waste water disposal, with possible implications for coastal water quality 	<ul style="list-style-type: none"> • Settlement hierarchies should set out where main areas of housing and employment growth and development is planned and therefore where infrastructure issues around waste water disposal 	<ul style="list-style-type: none"> • LDF evidence base tourism strategies might highlight important coastal tourism locations where high beach and water quality is

Marine Activities	Examples of why spatial planners and regeneration/economic development officers have interests in the marine activities, for socio economic benefits	Where planning policy might provide relevant information	What other information from the spatial planning perspective might be useful
	<ul style="list-style-type: none"> Coastal water quality is important to the tourism sector e.g. maintaining Blue Flag status for beaches and needs to be assured 	<p>might arise</p> <ul style="list-style-type: none"> Tourism and area policies will highlight key locations for coastal tourism activity including the seaside resorts where maintaining and improving coastal water quality will be a concern 	<p>sought</p> <ul style="list-style-type: none"> LDF Infrastructure Delivery Plans may identify key major waste water and surface water infrastructure investment to support housing and employment growth
Tourism and recreation	<ul style="list-style-type: none"> Developing the potential of the coastal tourism offer, either through established seaside resorts and/or through development of new opportunities utilising assets such as the natural environment (where there is a strong emphasis on green tourism, eco tourism specifically; and more generally on sustainable tourism). The marine environment and some marine activities could provide another potential tourism resource Concern to ensure that offshore activities do not adversely impact on the onshore environment and damage the tourism offer Character of coastal communities is part of the tourism offer and can be inter-related with other factors including marine activities e.g. the fishing fleet operating from a settlement. Desire to enhance not diminish these relationships 	<ul style="list-style-type: none"> Tourism policies might identify specific coastal areas targeted for tourism development or restraint Tourism policies can set out the type of tourism being encouraged e.g. green tourism activities Area based regeneration and development policies might set out the tourism development approach in seaside resorts e.g. public realm improvements including for beach and promenade areas; new facilities such as a pier or marina Policies for development in the countryside (which may be part of the settlement hierarchy) might identify the approach for small scale tourism development in rural areas 	<ul style="list-style-type: none"> LDF evidence base might include a tourism strategy; or include tourism development in an economic development strategy LDF evidence base might include seaside town regeneration strategies that identify issues and actions Community Partnerships/parish councils might have local plans inclusive of tourism initiatives, which LAs could advise on LDF evidence base might have masterplans and development guides for specific town waterfront locations e.g. for new harbour developments, marinas or moorings

8 ISSUES

Introduction

8.1 In this section we pull the key issues and consequences arising from our research.

Issues arising

8.2 The MPS effectively sets us a challenge: that is, to maximise the positive socio-economic effects of marine planning.

8.3 This is a pressing issue, particularly given that the terrestrial planning system (which formed the template for the marine planning system) has been criticised for failing to secure maximum economic and social benefits. The Local Growth White Paper listed the (terrestrial) planning system as being one of the “bottlenecks that inhibit growth.”²²⁸ It stated that

“The Government is committed to reforming the planning system, whilst retaining protection of important of environmental and social interests; so that it actively encourages growth by providing the right land in the right place for economic development...we want to transform the planning process from an impediment to economic development into a means of encouraging growth. This must start from a positive assumption about development, to give confidence to people and greater certainty to businesses. A key part of planning reforms will therefore be to introduce a national presumption in favour of sustainable development.”²²⁹

8.4 Even without this White Paper, we suggest that it would be centrally important for the MMO to be able to tell a clear story about how it is contributing to sustainable development. With the White Paper, it is likely to be critical. Clearly, there are sometimes hard choices to be made between environmental protection and socio-economic benefits. But the framework within which these choices are made needs to be as efficient as possible.

8.5 We think it will be necessary for the MMO to

- focus on important marine activities in order to maximise socio-economic benefits
- build a “Delivery Plan” approach that will proactively direct marine planning to delivering solutions to important problems.

8.6 We deal with each in turn.

²²⁸ BIS (2010) *Realising Every Place’s Potential*

²²⁹ BIS (2010) *Realising Every Place’s Potential* (24)

Prioritisation

knowing when and where to concentrate marine planning effort to maximise socio-economic benefits

- 8.7 The MMO is a planning and licensing organisation. It is not an economic development organisation. It is not a funder of projects as such, and so it does not have budget for making grants to pay for such things as capital works. The MMO will need to continue to provide an across-the-board service when processing licensing applications.
- 8.8 Even so, it is important that the MMO has a clear sense of where to prioritise planning effort, management time, and evidence base development activity in order to make sure that it can demonstrate that it brings a real advantage over the previous system of marine management.
- 8.9 There is already evidence to suggest that the new system is more efficient than the previous one. Our work in the East Marine Plan area (available under separate cover) has complemented this new approach by providing a series of considerations for the MMO specifically targeted at the East Marine Plan area. But this is a long-list that would need to be prioritised.
- 8.10 To prioritise properly, the MMO might evolve a series of “tests” to judge the level of effort that needs to be devoted to different issues. Together, these would represent a “sieving” process, by which the key issues are identified. This process may need to prioritise both within marine activities (say, prioritising the most important renewables projects) and also *between* marine activity areas (say, deciding to invest management time in port activities, rather than aggregate activities, or vice versa). Whilst the following is not intended to be a fully worked up process, it might involve elements such as:
- Need for intervention: is there a clear requirement for the MMO and partners to get involved? There must be something that the MMO wishes to change for the better (or, conversely, will change for the worse unless something gets done).
 - Impact of intervention: will the MMO’s involvement create sufficient impact to justify its intervention? It has been observed that when pursuing sustainable socio-economic benefits, there needs to be a focus on big issues. As the Natural Environment White Paper acknowledges, “past action has often taken place on too small a scale. We want to promote an ambitious, integrated approach.”²³⁰ On this basis, licensing time and research activity would best be focused on strategic, “game changing” opportunities for genuine, sustainable socio-economic benefit. For example, becoming involved in discussions on a broad range of “coastal issues” would be unlikely to deliver significant benefit. The MMO and partners would need to concentrate on areas that can be translated into policy, actions, or licence decisions. The MMO might wish to consider mechanisms for focusing on short term

²³⁰ Defra (2011) *The Natural Choice: securing the value of nature* (3)

issues in “hot spots.” The rule must be that marine planning would only become involved where it can add value.

- Location of intervention: can marine planning deliver positive impacts in areas that need it? Whilst the marine planning process is explicitly required to deliver socio-economic benefits in coastal communities of all types, the Treasury Green Book notes there is a reason to prioritise effort in deprived communities. These choices would need to be handled carefully. We discuss these issues in paragraph 8.16 onwards.²³¹

8.11 The MMO can use these questions to be realistic about how far marine planning will be able to influence socio-economic conditions in coastal communities. As we have suggested above, marine planners are likely to be able to have a number of positive effects, but not all issues are likely to be within reach. So although the MMO might be able to participate in coalitions and networks to have a broader, positive impact, it is likely to have limited involvement with areas such as, say: tourism marketing strategy; defence matters such as bombing ranges; and broad policy issues affecting coastal communities, such as placement policy for vulnerable people.

Starting the process of prioritisation

8.12 Prioritisation is a process that would need thinking through carefully. This would be a broad question of MMO strategy, and so is outside our brief. But some findings emerge from this study which might help MMO start this internal debate.

The need for intervention and its impact

8.13 Our interviews with the East Plan Area Local Authorities suggest that they see the three big marine issues as being tourism, energy, and ports (in that order). Fishing is the fourth most important issue. The distribution of local authorities’ perceptions of the key issues is shown in the map below.

²³¹ The Treasury Green Book notes that equity objectives (ie, working to counter social inequalities) are one of the two major rationales for Government intervention in the economy. In the words of the Green Book, there is “a social welfare function that links personal utility (or satisfaction) to income....an extra £1 of consumption received by some earning £10,000 a year will be worth twice as much when it is paid to a person earning £20,000 pa.” HM Treasury (2003) *The Green Book: Appraisal and Evaluation in Central Government* (93)

Figure 8.1 Local authorities' perception of the main marine issues in the East marine area (based on RTP analysis of interviews)



8.14 A review of other evidence presented in this study suggests that local authorities' collective view of the major marine issues are not far wrong, at least for the East Plan area. Taking a rough approach to the prioritisation questions in paragraph 10 above, we suggest that the key issues where pro-active treatment by the MMO are as follows.

- Energy. The potential impact of the Round 3 windfarm licences cannot be underestimated: quite simply, this is one of the largest investment programmes undertaken in the UK, ever. It is also footloose in a way that other big investment programmes (such as railways, or the conversion from coal gas to natural gas) have not been, given that manufacture and some maintenance and operations activities could locate abroad unless these industries found an accommodating home. The final factor which contributes to making this a particular priority is the potential importance of this activity to struggling economies on the coast, including areas such as Hull and Grimsby. There would appear to be an urgent need for pro-active consideration of marine planning issues associated with this work. Nuclear energy is also clearly of growing importance. Whilst not a marine activity, nuclear energy will have major marine implications around aggregates abstraction (for construction)

and warm water discharge. In the East Plan area, Sizewell C will be likely to generate some significant issues, and preparatory work could be considered.

- Ports and shipping. This sector will be subject to very significant individual pieces of investment in future. Some of this is already under way: and the Logistics Park and Marine Energy Park at Killingholme, for example, are subject to ongoing application. If future pieces of MMO planning work (for example, research needed for licensing purposes) can be anticipated and delivered early, this would keep marine licensing processes from being bottleneck on the critical path.
- Reshaping local economies to new economic realities. Many areas are looking to move port areas away from traditional port activity, and instead use waterfront areas to bolster urban environments. This process of structural change is likely to be important to the economies of many areas, and (subject to proper process) a proactive and generally positive approach should be taken if socio-economic benefits are to be secured.
- Tourism. Tourism is an important industry to many coastal areas. However, aside from the general principle of doing no harm, in many instances the MMO will have little ability to make positive changes. There will be individual exceptions to this rule, and clearly the MMO will need to take tourism impacts into account when dealing with the siting of power cabling, or when licensing maintenance dredging activity (for example in the River Deben).
- Tourism, and associated fisheries policies. Our review found that fisheries was of declining national economic importance, but was still held as being very important by many local communities. In particular, it was seen as having an important tourism impact, by creating a sense of place and heritage. Given this, it might be best to begin to consider fisheries and tourism questions together. We understand that whilst the MMO has limited influence over the fisheries quota handed to the UK by the EU, it does have influence over where around the English coastline these fish may be caught. To maximise economic benefit, it may be best to look for areas where synergies can be found between the fisheries industry and the tourism industry.

Prioritising the location of intervention

- 8.15 Our work has shown that there are a number of coastal areas that have found it difficult to adjust to structural economic change. These areas can be seen as “path dependent”, and tend to be characterised by high levels of unemployment and high levels of deprivation.
- 8.16 Marine planning may be able to work alongside the terrestrial planning process to influence the location of some marine industries, and to attempt to keep as much activity as possible within coastal areas. It would be important, though, to have a clear rationale as to why certain areas were being preferred: other things being equal, there is no clear rationale why marine planners should express a policy preference for coastal areas. The rights of individuals living in coastal areas to employment, for example, should not be necessarily prioritised over those living elsewhere. However, where coastal areas are more deprived than other areas then the Treasury Green Book points out that it is rational that these areas

be preferred.²³² The extent to which equity considerations are considered important is a policy choice made by democratically elected politicians.

- 8.17 If the policy choice was made to direct activity to worse-off areas, then it would need to be handled carefully. Clearly, the location of number of marine activities are determined by the availability of certain natural resources, and so are not amenable to this sort of policy influence. It needs also to be borne in mind that planning processes (both terrestrial and marine) are essentially permissive rather than directive in nature: they can allow activity to take place, but cannot direct it to take place. Businesses will also have their own locational requirements and preferences.
- 8.18 Even so, liaison between the marine and terrestrial planners may allow the location of some marine-related economic activity to take place in those areas of maximum economic need. As this report has discussed, the identification and delivery of these opportunities will require close liaison between marine and terrestrial planners, Local Enterprise Partnerships, and economic development officers.

Getting a delivery plan

- 8.19 Government policy and strategy suggests that the MMO will best maximise socio-economic benefits if it adopts a particular approach to the way it does business.
- 8.20 Attempts are underway to create a fundamental cultural shift in planning which is likely to encompass marine as well as terrestrial planning. A major reform of the planning system is currently being undertaken, and this is reflected in a raft of policy documents.²³³ This is not an entirely new aspiration. For example, the Killian Pretty review of 2008 sought to deliver a more “positive and proactive approach to shaping, considering, determining and delivering development proposals.”²³⁴
- 8.21 Planning has become increasingly concerned with questions of 'how' development can be delivered, and 'when' - rather than just 'what' development is *desired* and 'where'. With this shift comes a focus on the *means* of securing development rather than simply the ends, and an increasing focus on delivery issues.
- 8.22 The implications of this change should not be underestimated. Major marine activities that need pro-active involvement from all planning authorities must be actively viewed as

²³² The Treasury Green Book notes that equity objectives (ie, working to counter social inequalities) are one of the two major rationales for Government intervention in the economy. In the words of the Green Book, there is “a social welfare function that links personal utility (or satisfaction) to income....an extra £1 of consumption received by some earning £10,000 a year will be worth twice as much when it is paid to a person earning £20,000 pa.” HM Treasury (2003) *The Green Book: Appraisal and Evaluation in Central Government* (93)

²³³ See, for example, DCLG (2011) Draft National Planning Policy Statement (out to consultation at the time of writing); the Natural England White Paper (Defra, 2011, *The Natural Choice: Securing the Value of Nature*), the Localism Bill (published 2010 and about to enter the Report Stage in the House of Lords at the time of writing); and BIS (2010) Local Growth White Paper (BIS (2010) *Realising Every Place's Potential*).

²³⁴ The Killian Pretty Review (2008) stated that planning and development process could be accelerated, and suggested that “there should be a clear statement by Communities and Local Government about the key principles underpinning a move from development control [seen as a passive process] to a development management approach.”

projects in themselves – not as an application that will materialise at some point in future. Work must make clear what named organisations or individuals must do, by when, and with what results. The authorities involved in marine planning will need to

- play an active role in enabling marine development and planning infrastructure, or research, or running applications more carefully to ensure that what is needed is provided when it is needed.
- get an understanding of what investors need to see happen; and seek to understand, and then bring about the right marine planning response. That means a more proactive approach, working alongside developers to ask questions like: how do we fix the barriers to positive change? What do we do next? When? Who is responsible? What is the right marine planning role? The right response might be to “do nothing” – but that needs to be a positive choice, rather than a default position.
- Understand how to solve real-life issues on the critical path. The project management concept of the “critical path” is used to understand which issues form a barrier to progress on an individual project. The issues on the critical path are those which directly impact the planned project completion date. Management intervention and funding could be focused on these issues.

8.23 Should an active project management approach be adopted, this could include each “project” comprising the following.

- A project sponsor. This needs to be a senior officer who has the experience and line management authority to break through internal organisational silos.
- A clearly defined project manager. This individual would be held responsible for project progress and delivery.
- A clearly defined project team and project management structures.
- Excellent links between the MMO project team and developers/investors. Clearly, the MMO and other stakeholders exist in order to further the public interest. We are not saying that any development should be waved through. But the public interest is not necessarily inimical to the private interests of the developers. The MMO needs to operate as a joint delivery partner alongside the developer in assisting delivery.
- Excellent links between the project team and the wider public sector. The project team would be likely to include terrestrial planners and economic development officers, the Environment Agency, and Natural England.

Other considerations

Using marine planning to accentuate local distinctiveness

8.24 Some marine activities – such as fisheries and shipping – provide a central animating force to some coastal urban environments, and are very valuable assets. Marine planners can have an important role in defending and expanding these heritage and cultural assets which do so much to create positive local economic externalities. Equally, some projects may damage these assets. A careful look at the individual circumstances of a place will be required to understand the local context. Care must be taken to ensure that the expansion of marine activities does not create net negative impacts on a coastal economy.

Using marine perspectives to develop new strategies

- 8.25 Research by NESTA points out the importance of policies that facilitate the emergence of high-growth firms without requiring the government to try to pick winners; secondly, the literature emphasises the importance of local distinctiveness.
- 8.26 Marine planners bring a particular perspective to partnerships on innovation, new business areas, and emerging trends.
- 8.27 Bridlington, for example, is the UK's largest lobster port in the UK by weight.²³⁵ This high value catch is exported to high class restaurants across the UK and Western Europe. This element of local distinctiveness is being picked up by local regeneration strategies, in the way that oysters have created a separate "brand identity" for Whitstable. Similar opportunities might exist for seascapes. Marine planners may be able to flag up these and other opportunities which may remain unnoticed by others.

An open-minded approach to changes of use

- 8.28 There will be competing demands between terrestrial and marine considerations. Marine planners should take a permissive approach to the emergence of opportunities to allow the creation of environments and economic opportunities for high value activity. At times, for example, that may mean that underused wharves and underused port facilities would be more productive if redeveloped for housing or other employment uses; at other times, marine interests will prevail.
- 8.29 Marine planners, like terrestrial planners, will need to take a dispassionate and educated view of the benefits and disbenefits of different courses of action, rather than fighting for a particular sectoral point of view.²³⁶

Pro-active working with local authorities to integrate marine planning with terrestrial planning, and participate in the creation of "marine aware" networks and partnerships to help deliver the maximum potential of marine activities

- 8.30 The effectiveness with which marine planning can be combined with terrestrial planning and economic development processes will be important to the success of marine planning's efforts to develop onshore sustainable development.

²³⁵ Yorkshire and Humber Seafood Group (2008) *A Yorkshire Lobster Hatchery Feasibility Study*
http://www.scarborough.gov.uk/pdf/YORKSHIRE%20COAST%20LOBSTER%20HATCHERY%20FEASIBILITY%20STUDY%20-%20SUMMARY%20REPORT_1.pdf

²³⁶ Working together marine planners and terrestrial planners will need to overcome the problems described by Margerum and Born (1995). They argued that "decision makers at all levels have become dissatisfied with the outcomes resulting from narrowly focused, incremental, and disjointed environmental management" and that traditional approaches have usually "failed to deal with interconnections, complexities, multiple perspectives, multiple uses and the resulting cross cutting externalities". Margerum, R, and Born, S. (1995) *Integrated Environmental Management: Moving from Theory to Practice*, *Journal of Environmental Planning and Management*, 38, 371-391 quoted Scottish Executive Social Research (2002) *University of Aberdeen Scottish Coastal Socio-Economic Scoping Study* (18)

- 8.31 Given the importance of skills to the future of the coastal economy, there will be a need for marine planners to help local authorities' economic development teams and local Higher and Further Educational Institutions stay abreast of the skills demands coming from marine development opportunities. However, we are aware that the MMO resources are limited, so the MMO may wish to consider ways to doing this strategically, perhaps through the UK Commission for Employment and Skills, or the individual sector skills councils.
- 8.32 The review indicates that marine planners need to help areas develop strong, distinctive coastal environments across both towns and rural areas. It is this strong environment that may be one of the coast's key strategic and competitive advantages in future, given that much of future economic growth will depend on the development, retention and attraction of a skilled and knowledgeable workforce. This workforce will be able to live in coastal communities but overcome peripherality problems by using modern broadband and videoconferencing facilities to work nationally and internationally in both marine and non-marine activities.

Monitoring the effects of marine planning

- 8.33 The brief asks us to remark on how the effects of marine planning can be monitored. This is a subject fraught with methodological difficulty. We explain the problem, and possible responses, below.

Difficulties in isolating the economic effects of marine planning

- 8.34 The argument for any type of planning are that
- It (partly) corrects for what is known as market failure, which includes many kinds of externalities both negative and positive, as well as imperfect information and expectations.
 - It makes for more equitable (fairer) distribution.
 - It furthers or protects aspects of human welfare, or quality of life, which are 'non-economic' – or at least not reflected in GDP and productivity as traditionally measured. Protection of the heritage and cultural assets come under this heading.
- 8.35 The DEFRA Regulatory Impact Assessment (RIA) for the Marine Planning System²³⁷ identifies that the Marine Planning system will have various benefits which are justified by information market failures. Government intervention through marine planning will ameliorate this failure and reduce costs by improving co-ordination efficiency for government organisations; reducing transaction costs such as information, negotiation, monitoring and enforcement costs.
- 8.36 The RIA uses an EU study to assume that the Marine Planning process saves an assumed percentage of these costs, and arrives at a potential economic benefit. However, it accepts that this current analysis is "speculative". Neither the costs nor the benefits of the terrestrial

²³⁷ DEFRA Impact Assessment IA No. DEFRA 1010 para 1.31 onwards

planning system have been quantified; nor can we see how they might be in future, given that impacts would be hard to denominate and notionally priced. Any attempts to isolate the exact economic impacts of marine planning would likely suffer from the same confounding problems.

Difficulties in monitoring impacts

- 8.37 Because there is little hard evidence of the impact of the marine plan itself, impacts are hard to ascribe directly to the marine plan process itself. In Treasury Green book parlance, there would be too much “deadweight” (deadweight measures what would have happened anyway) to reliably undertake this process.

Use of this work

- 8.38 Rather than having “proof”, investigating Marine Plans’ impacts could be done by association. For example, in areas which have had a marine plan, it would be possible to look at change of the area relative to other areas in the same typology on the key indicators identified and analysed. The typology could help provide a framework for monitoring trends and performance across different coastal communities. Rather than comparing local trends against national ones, each area can be benchmarked against the average trend for all areas in the same category. As these areas have similar characteristics, differences in trends are more likely to reflect real differences in performance between areas, rather than the impact of background change.
- 8.39 For example, unemployment rates for a particular LSOA can be monitored over time (eg, on the basis of Jobseeker’s Allowance claimant levels), and benchmarked against the average change over time for all areas in the typology category that this area belongs to.

Evidence base gaps

- 8.40 The brief asks us to remark on where there are gaps in the evidence base.
- 8.41 It would be easy to call for further work on the relationship between marine planning and social values, or health impacts, or wellbeing. But we are not sure that this would make for a greatly improved marine plan. There is no such thing as a perfect evidence base, and the MMO is now likely to have sufficient socio-economic information to write a good plan in the East marine area.
- 8.42 However, it may be useful to carry out work on those datasets used in the project that do not currently differentiate between marine and terrestrial considerations. Examples have been found in section 4 of this report, where we have at times been unable to either a) properly identify marine industries themselves in the statistics, or b) to isolate the specifically marine component of industries that are identified.
- 8.43 One point that may be worth pursuing is that statistical benchmarking work previously done appears to have compared coastal areas to the English average. But, given that the coastal component will make up a significant component of the English average itself, it may be arithmetically better to compare the English coastal average to the English non-coastal average. This is what our statistics allow us to do, and allow the clearer isolation of

how coastal conditions differ from those elsewhere. This work may be of use to others in future, particularly those allocating any future coastal regeneration funding.

APPENDIX 1

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APPENDIX 2

Spatial Planning Summary

Linking Marine and Terrestrial Planning

Both the Marine Policy Statement²³⁸ and the Marine Planning for England document²³⁹ highlight the need for aligning and mutually reinforcing marine and terrestrial planning with suggested ways to achieve this including:

- Liaison between the respective planning authorities
- Sharing of evidence
- Learning lessons from the implementation of integrated coastal zone management principles
- ‘marine proofing’ of terrestrial planning policies and ‘terrestrial proofing’ of marine planning policies

Research undertaken for the Local Government Association Coastal Special Interest Group in 2010²⁴⁰, indicated that 86% of coastal Local Authorities responding to a survey considered the Marine Policy Statement and Marine Plans to be relevant to them. The responses came from 75 coastal Local Authorities indicating a high level of interest in marine planning. However 68% anticipated a challenge in coordinating marine plans with terrestrial plans and strategies, not least due to different timescales for different strategy timetables as well as the need to balance different factors such as coastal defence, leisure, commercial and nature conservation interests.

In the meantime, terrestrial planners are being asked to discuss spatial planning with implications for marine planning with their marine planner counterparts and vice versa. In a letter to Chief Planning Officers dated 21st March 2011, CLG brought the adoption of the UK Marine Policy Statement to the attention of LPA Chief Planning Officers. It particularly brought the requirement that all authorisation and enforcement decisions by public bodies that affect the marine environment must be in accordance with the adopted MPS. It advised LPAs that there is now a requirement on them to consult with the MMO on environmental impact assessments for terrestrial projects that affect the marine environment. Conversely there is a requirement on marine licensing authorities to notify relevant LPAs of applications for marine licences.

The following provides an overview of the terrestrial planning process and changes that are currently being proposed, in order to aid marine planners to make connections.

²³⁸ HM Government/Northern Ireland Executive/Scottish Government/ Welsh Assembly Government (March 2011). *UK Marine Policy Statement*. Page 8, Section 1.3

²³⁹ Defra (March 2011). *A Description of the Marine Planning System for England*. Page 76, Chapter 6

²⁴⁰ Atkins Ltd, July 2010, *An Assessment of Local Authority Capacity to Implement relevant Areas of the Marine and Coastal Access Act*

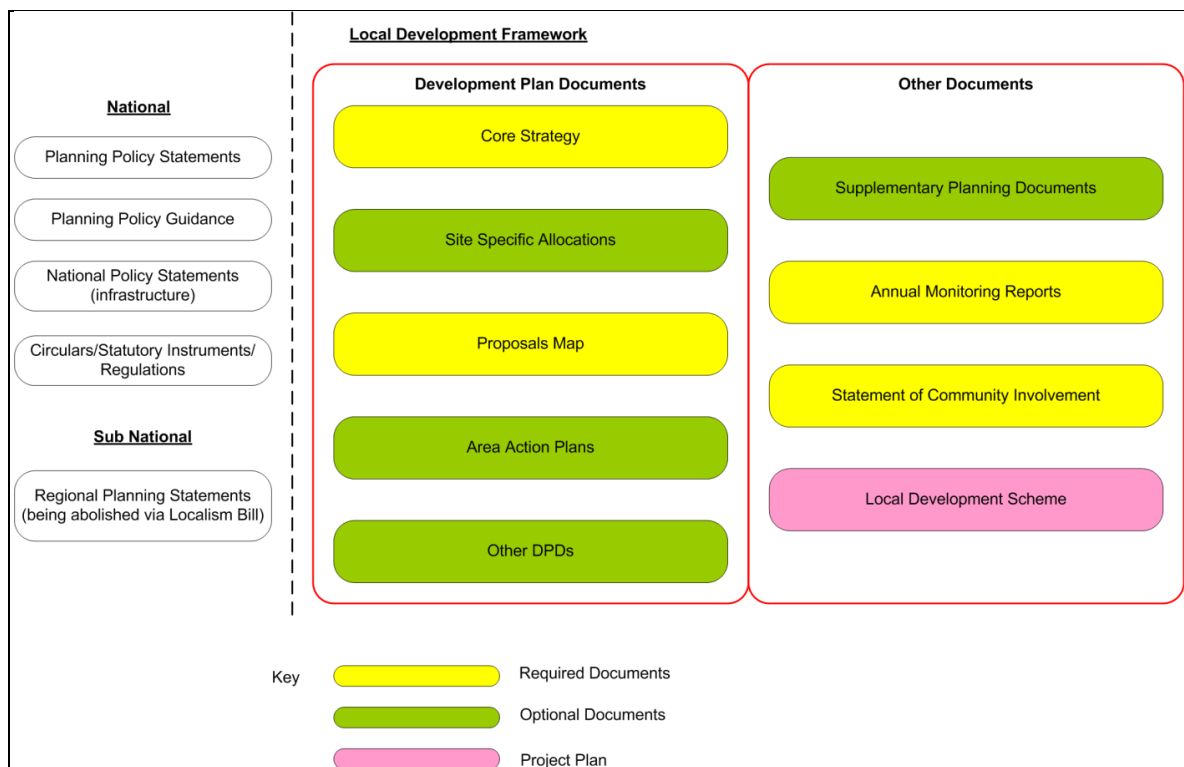
Spatial Planning – Local Development Frameworks

The objectives of the planning system

PPS 12 ‘Creating Strong, Safe and Prosperous Communities through Local Spatial Planning’ sets out that ‘the spatial planning system exists to deliver positive social, economic and environmental outcomes and requires planners to collaborate actively with the wide range of stakeholders and agencies that help shape local areas and deliver local services’ (paragraph 1.5). The LDF is the collection of local development documents which deliver the spatial strategy for an area²⁴¹.

The LDF process is set out on the following diagram.

Figure A2.1 Local Development Framework Structure



What is the Local Development Framework?

The LDF is the system of spatial planning introduced in England through the Planning and Compulsory Purchase Act 2004 (and since updated through the Planning Act 2008). It replaces the system of County level Structure Plans. District Local Plans and Unitary Development Plans.

The LDF is a suite of documents some of which are essential to include (shown yellow in Diagram A2.1 above) and others of which are optional (shown green in Diagram A2.1).

²⁴¹ The proposed Localism Bill intends to call LDFs Local Plans in future, as part of changes intended to simplify the plan making process.

Some of the documents are statutory Development Plan Documents which provide the formal planning policies. Others are non statutory planning guidance documents or other documents that are needed for plan making such as annual monitoring reports and the Statement of Community Involvement.

What are the key documents in the LDF?

The essential Development Plan Documents (DPDs) for the LDF are as follows.

The Core Strategy provides a strategic framework for all other DPDs

The Core Strategy sets out a vision, key objectives, a delivery strategy with key policies; and management and monitoring arrangements.

The Core Strategy will set out a spatial strategy for its area. This will be particularly important for marine planners as it will indicate where the main settlements for growth and development are; and how development in smaller villages and the open countryside is likely to be viewed. This information, put together with coastal community typologies and other supporting socio economic information will help to indicate where and how development opportunities and issues may arise from marine activities for coastal communities.

The Core Strategy will indicate important strategic locations, necessary to deliver its strategy (which may be related to employment land, areas for housing or strategic transport infrastructure, for example). These will be shown on the Core Strategy Key Diagram and will be a useful and quick visual tool for marine planners in identifying key locations for development which might link to marine activities and can then be followed back into the relevant policies in the Core Strategy

Other elements of Core Strategies are scoped for relevance in Table 8.1 below.

The Proposals Map sets out policy's relationship to local geography

There should be one proposals map for all DPDs to show protected areas (e.g. national landscape designations); areas at risk of flooding; sites allocated for particular uses; and areas where specific policies apply. It is often available as an online resource

Other potential DPDs

Site Specific Allocations DPD set out what housing and employment can happen in particular places

This identifies sites allocated to meet housing and employment numbers targets, in line with the settlement strategy and development policies in the Core Strategy, together with sites for other uses e.g. schools.

Site Specific Allocations will be valuable for marine planners at the point they need to become site specific. However the Core Strategy spatial strategy for settlements will already have set out how development is broadly planned across settlements

Development Management DPD guide decision making

Implementation of planning policy is through the development management process of planning applications and enforcement activity. Core Strategies or a separate Development

Management DPD set out a range of development management policies alongside the strategic spatial planning policies. These are used to guide decision making on planning applications along with other planning documents including any ‘saved’ local plan policies.

Area Action Plans (AAP) are produced for areas likely to experience significant change

The LDF may also include Area Action Plans (AAP) as a DPD. AAPs are produced for areas where there is likely to be significant change, or there is a strong conservation need. These are likely to be important documents for marine planners in coastal areas as they will have a clear local focus and socio economic implications for local communities. Planning Policy Statement 12 (PPS 12)²⁴² identifies that AAPs are likely to be produced to:

- Deliver planned growth in specific areas
- Stimulate regeneration
- Protect areas particularly sensitive to change
- Resolve conflicting objectives in areas subject to development pressures
- Focus delivery of area based regeneration initiatives

Supplementary planning documents provide greater detail about policies. Supplementary Planning Documents (SPDs) are prepared by LPAs and go through the appropriate stages of development including consultation, although a public examination (involving a Planning Inspector) is not required. Supplementary guidance might also be prepared by others (although it would not be a SPD; see paragraph 6.3 of PPS12). SPD or supplementary guidance might be useful if marine planners and terrestrial planners have a particular spatial issue to address.

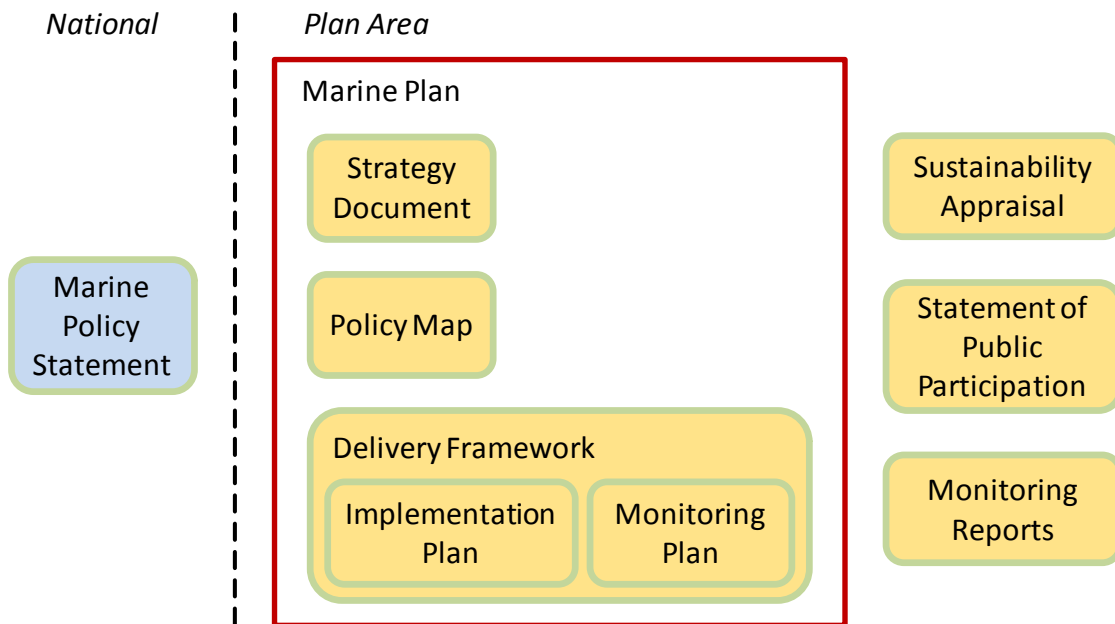
How does marine planning compare to the terrestrial system?

The main differences between the two systems are that the marine plan is anticipated as a single document whilst current policy refers to the LDF as a suite of documents; the area covered by a marine plan is considerably larger than that for an LDF; development management methods are different (planning applications/licensing, bye laws and regulations); and statutory requirements for LDFs in terms of process and content are much greater than for marine plans.

However, marine plans take a similar approach to the Core Strategy in LDFs in that they are intended to have a strategy, a policy map which is a spatial presentation of the strategy, an implementation plan and a monitoring plan, indicated in the diagram below. Note that there will be an accompanying Sustainability Assessment for each marine plan produced. These run alongside plan-making as a balance and check for the planning process and the final version will be available at the end of the two year planning process (though the Sustainability Assessment will be consulted on throughout the process).

²⁴² Department for Communities and Local Government (DCLG) 2008, *Planning Policy Statement 12: creating strong, safe and prosperous communities through local spatial planning*

Figure A2.2 Marine Planning Structure



Source: Defra; A Description of the Marine Planning System for England. Defra March 2011

What about Sustainability Appraisals?

Sustainability appraisal is an integral part of the terrestrial and marine plan making process, running alongside plan making. It is intended to appraise the social, environmental and economic effects of the Plan and ensure that decisions taken in the light of the Plan's policies will contribute to sustainable development. It is also intended to interact with the plan making processes at all its stages and be subject to consultations in the same way as the plans themselves. It includes stages of evidence gathering including socio economic data and socio economic impact on coastal communities could be one of its important considerations in the marine planning context.

Whilst this guidance has not included a detailed scoping of sustainability appraisals, it is important to recognise the value of the sustainability appraisal process, particularly the opportunity it presents to 'check and challenge' the putative socio economic benefits for coastal communities presented by marine planning. It could act as a prompt during the marine plan making process, to ensure coastal community socio economic benefits are being effectively considered.

How relevant are Local Plans and Structure Plans?

The Development Plan as a whole consists of adopted DPDs and any saved policies from local and structure plans. As DPDs are adopted it expected that they will supersede saved old policies. Where a local authority has not adopted a core strategy, the policies from the previously adopted local plan constitute the strategic framework for the area against which planning decisions will be made.

Local authorities could therefore have some 'saved' policies from their local plans and structure plans which continue to provide the statutory development plan context whilst they

are preparing their Core Strategy and any other DPDs. However it should be noted that the Localism Bill proposes to abolish all directions which save policies from Structure Plans on the premise that they are now outdated²⁴³.

Gaining an overview of where LPAs are, in terms of plan making

Reviewing LPA websites provides a quick way to establish the stage reached in preparation of DPDs (although it is necessarily a snapshot in time). The table at the end of this Appendix was used to provide a quick analysis of plan making for coastal authorities in the East Marine Plan Area. This is a model that could be used for analysis for other regions. Note that saved Local Plan policies will become increasingly less relevant over time, as Core Strategies and other DPDs are adopted.

What is changing at National Level?

There are a number of quite fundamental changes to planning and economic development policy being proposed nationally. The following gives a very brief summary of those which seem particularly relevant to marine planners and their potential for linking with terrestrial planning and linked economic activity. It should be read as an introduction only, relevant at the time of preparation of this document. Developments in legislation and policy are changing quite rapidly and will doubtless move on from what is written here – so updated information will always need to be checked. However it gives a flavour of the new directions in which policy is moving.

A new National Planning Policy Framework is proposed

LDFs are set within the context of national planning guidance and national policy statements in the same way that marine planning is set within the context of the Marine Policy Statement. Work by the MMO is scoping which national Planning Policy Statements are relevant to marine planning and it is not the intention to repeat that work here.

However it is important to flag up that in 2010, the Government announced its intention to start work on and create a streamlined and consolidated National Planning Policy Framework (NPPF), as promised in the Coalition Agreement. The NPPF will replace all existing PPS and PPGs. It is intended to have policies that support the Government's priorities for economic growth, to help LPAs to plan for the sustainable development of their areas. It should set out the Government priorities for environmentally and socially sustainable development. A full public consultation on the draft NPPF will take place this summer (2011) and the Government will invite Parliament to hold a Select Committee inquiry on it.

²⁴³ These saved policies stem from Structure Plans which were prepared prior to the Planning and Compulsory Purchase Act 2004. The policies are seen as outdated and although they form part of the development plan they are considered to no longer provide an effective basis for the preparation of local plans or used by LPAs.

National Policy Statements are intended to give clarity on major infrastructure proposals

National Policy Statements are also an important national policy context. The 2008 Planning Act introduced a new system for planning applications to build nationally significant infrastructure facilities in England and Wales²⁴⁴. National Policy Statements are intended to give clarity on the need for major infrastructure, whilst a new body (the Infrastructure Planning Commission (IPC)) was established to take over responsibility for decision making on major infrastructure applications.

Although subsequent proposals by the Coalition Government are to abolish the IPC, establish a major infrastructure planning unit within the Planning Inspectorate and return responsibility for determining major infrastructure planning applications to Ministers²⁴⁵, National Policy Statements are in preparation with some published for consultation. A number will be of specific relevance to marine planners (e.g. ports, nuclear power, renewable energy, oil and gas supply and storage), particularly if reference is made to specific locations for development as is the case in the nuclear power draft NPS.

The Localism Bill has a number of implications for marine planning

The Localism Bill promoted by the Government and published in December 2010 introduces a number of potential changes to spatial planning, including the following which could be very pertinent to marine planning:

The abolition of Regional Spatial Strategies may delay LDF preparation, and may raise complexities due to the lack of a "larger than local" perspective

Regional Strategies (replaced RSSs on 1 April 2010, Part 5 of the Local Democracy, Economic Development and Construction Act 2009) have currently formed one part of the two tiers of what makes up the statutory Development Plan for spatial planning an area, the other being the LDF. Whilst there have been challenges to the way in which revocation of RSSs has taken place so far, it seems clear that the Coalition Government proposes to abolish RSSs and will do so through the Localism Bill. The Government will abolish Regional Strategies through the Localism Bill (Clause 94) by repealing Part 5 of the Local Democracy, Economic Development and Construction Act 2009.

Immediate implications for marine planning are that it has brought some uncertainty and delay into LDF preparation with some LPAs reviewing housing and employment targets they are working with and revising Core Strategies in preparation as a result. It also raises other questions about the achievement of integration of spatial planning at the 'larger than local' level and a concern about the vacuum that loss of a regional spatial perspective has left. The 'larger than local' perspective is important to marine planners as marine planning areas interface with a number of LPAs and the onshore implications of some marine

²⁴⁴ HM Government 2008. *Planning Act 2008* Chapter 29. The new requirements relate to major energy generation infrastructure projects, railways, ports, major roads, airports, and water and waste infrastructure

²⁴⁵ Set out in the Localism Bill published 13th December 2010, Clauses 107 - 109

activities could have quite strategic impacts that need coordination across a number of LPAs. The Localism Bill introduces a ‘duty to co-operate’, to fill the gap left by abolition of RSSs, although it is not yet clear how it may work in practice and achieve joint working across LPA areas²⁴⁶.

Neighbourhood planning brings both opportunities and challenges

The Localism Bill introduces the right for neighbourhoods to get together and prepare Neighbourhood Development Plans which, if approved through a process of independent examination and subsequent local referendum, would have to be put into force by LPAs. The Localism Bill does not give any detail on requirements for how a neighbourhood development plan should be prepared or what it should cover (although there are some basic tests that must be passed – for example that the plan should be in general conformity with the strategic policies of the LDF (soon to be called local plan), comply with EU law and appropriately fit with national policy). Further detailed procedural requirements (e.g. consultation, publicity) will be set out in subsequent regulations and guidance. Neighbourhood development plans could have a powerful influence on planning at a very local level, as once they have passed examination and referendum the intention is they would be part of the Development Plan and therefore used in determining planning applications²⁴⁷.

The concept of neighbourhood planning has provoked considerable discussion for various reasons including concerns about how it might be used in areas where developments are opposed and, very practically, how it can be financed and resourced at a time when local authority budgets are being reduced.

For marine planners it could bring both opportunities and challenges:

- Opportunities in that it could open up channels for direct liaison and working with coastal communities, alongside spatial planners, where neighbourhood development plans and orders are proposed (with plans and orders being instigated either by parish/town councils or designated neighbourhood forums). The Coalition Government has recently announced²⁴⁸ 17 neighbourhood planning frontrunners testing the neighbourhood planning approach either through preparation of a neighbourhood plan or neighbourhood development order. Interestingly, of the 17, four are coastal communities/locations (Dawlish, Lynton, Cockermouth and North Shields Fish Quay).

²⁴⁶ The new Duty to Cooperate (Clause 95) (formally clause 90) will require LPAs and public bodies to engage constructively, actively and on an ongoing basis in preparing local plans. The duty will be a key element of the Government’s proposals for strategic working once Regional Strategies are abolished. Working alongside the incentives such as the New Homes Bonus and reformed Community Infrastructure Levy.

²⁴⁷ DCLG Press release, 6th December 2010. *Planning Power from Town Hall and Whitehall to People*

²⁴⁸ Announced 1st April 2011 by Decentralisation Minister, Greg Clark; see <http://www.communities.gov.uk/news/communities/1879465>

- Challenges if neighbourhood development plans inhibit ability to integrate marine planning benefits at a later date (although this is a challenge that would apply to any planning document); or (from a practical perspective) require marine planners to engage with a number of neighbourhood plans as well as the LPA's main LDF documents

Neighbourhood Development Orders (NDOs) apply to very local uses

Neighbourhood Development Orders (NDOs) are also initiated by parish/town councils or neighbourhood forums. NDOs would grant planning permission for specified uses within a neighbourhood or on particular sites within a neighbourhood (subject to caveats and exclusions) which, as with neighbourhood plans, would need to go through a process of independent examination and local referendum. It is expected that NDOs will bring similar opportunities and challenges for marine planners as those presented by Neighbourhood Plans.

Community Right to Build Order is again site specific

This is one specific version of an NDO which would be a community led, site specific Order. Whilst this gets very site specific (and perhaps more so than an Area Marine Plan might normally get) it could be relevant in some situations, for example in small fishing communities if there were a scheme for a community led initiative combining fish landing with other community facilities; a fish landing facility/fish market with small community enterprise workshops adjoining it for example

There is a new Duty to Cooperate between terrestrial planners and other public bodies

The Localism Bill also introduces a specific Duty to Co-operate' (Clause 95, formerly Clause 90) for local planning authorities and other proscribed public bodies including the MMO, intended to be a key driver for strategic working across boundaries once Regional Strategies are abolished. Clause 95 refers to co-operation in relation to local development documents and other activities that support planning of sustainable patterns of development. How far this might lead to joint planning of strategic spatial issues such as infrastructure planning will vary by local authority. However, a local authority will need to demonstrate at examination that it has fulfilled its duty to cooperate with bodies specified in forthcoming revised local planning regulations which will include the MMO, as part of the test of soundness of its development plan.

Local Enterprise Partnerships (LEPs) may be in place in some areas, and may publish strategies

LEPs are intended to be locally owned partnerships between local authorities and businesses, based on functional economic areas rather than local authority boundaries.

The Local Growth White Paper²⁴⁹ which, among other things indicated that LEPs could take on a role on 'making representation on the development of national planning policy and

²⁴⁹ Department for Business, Innovation and Skills, October 2010. *Local Growth: Realising Every Place's Potential*

ensuring business is involved in the development and consideration of strategic planning applications'

Thirty five LEPs have currently been approved by Department for Business, Innovation and Skills so far, of which 11 include coastal areas; North East Partnership, Cumbria LEP, Tees Valley LEP, Liverpool City Region, Lincolnshire, New Anglia, Kent and Greater Essex, Coast to Capital, Solent, West of England and Empowering Enterprise – Cornwall and the Isles of Scilly.

APPENDIX 3

Table of acronyms

Table of acronyms

The table below explains the meaning of some of the more technical acronyms used in this report.

GVA	Gross Value Added	Non-technically, this figure measures the size of an economy. Technically, “Gross value added is the difference between output and intermediate consumption for any given sector/industry. That is the difference between the value of goods and services produced and the cost of raw materials and other inputs which are used up in production”. ²⁵⁰
LSOA	Lower-layer Super Output Area	A statistical unit created by ONS. Typically an LSOA covers a population of about 1,500 people
NUTS3	A pan-European classification of territorial units for statistics	In UK terms this equates to county level.
NVQ	National Vocational Qualification	Standardised rating of qualifications levels. Roughly approximate levels are as follows. Level 1 is basic BTEC (old CSE) Level 2 is GCSE A*-C Level 3 is A level Level 4 is degree Level 5 is further degree/ qualification. A new qualifications framework has been published which updates this structure, but statistics are still published using the old system. ²⁵¹
ONS	Office of National Statistics	
SIC	Standard Industrial Classification	The United Kingdom Standard Industrial Classification of Economic Activities (SIC) is used to classify business establishments and other standard units by the type of economic activity in which they are engaged. ²⁵²

²⁵⁰ http://www.statistics.gov.uk/about/glossary/economic_terms.asp

²⁵¹ <http://www.ofqual.gov.uk/qualifications-assessments/89-articles/250-explaining-the-national-qualifications-framework>

²⁵² <http://www.statistics.gov.uk/statbase/product.asp?vlnk=14012>

APPENDIX 4

Marine Activities statistics – method overview

Marine sector definitions

The marine sector SIC code definitions used in Chapter 3 are derived from Pugh for Crown Estate (2008) *Socio-economic indicators of marine-related activities in the UK economy* London TSO and DEFRA (2010) *Charting Progress 2: Productive Seas Feeder Report* with additional detail and analysis carried out by Roger Tym & Partners.

Skill levels

The skills level data used in Chapter 3 is derived from the following worksheet in the UKCES (2010) *Employment and Skills Almanac 2010*:

- Share of working age workers (19-59/64) (workplace) in broad sectors by NQF definition

The UKCES analysis draws on data from the Labour Force Survey.

In the absence of more specific skills information, Roger Tym & Partners have aligned each marine sector with the closest fitting broad sector.

Gross Annual Pay

The gross annual pay data in Chapter 3 is derived from the ONS Annual Survey of Hours and Earnings (ASHE). In the absence of more accurate information, Roger Tym & Partners have aligned the marine sectors with the closest fitting broad sectors.

Location Quotients

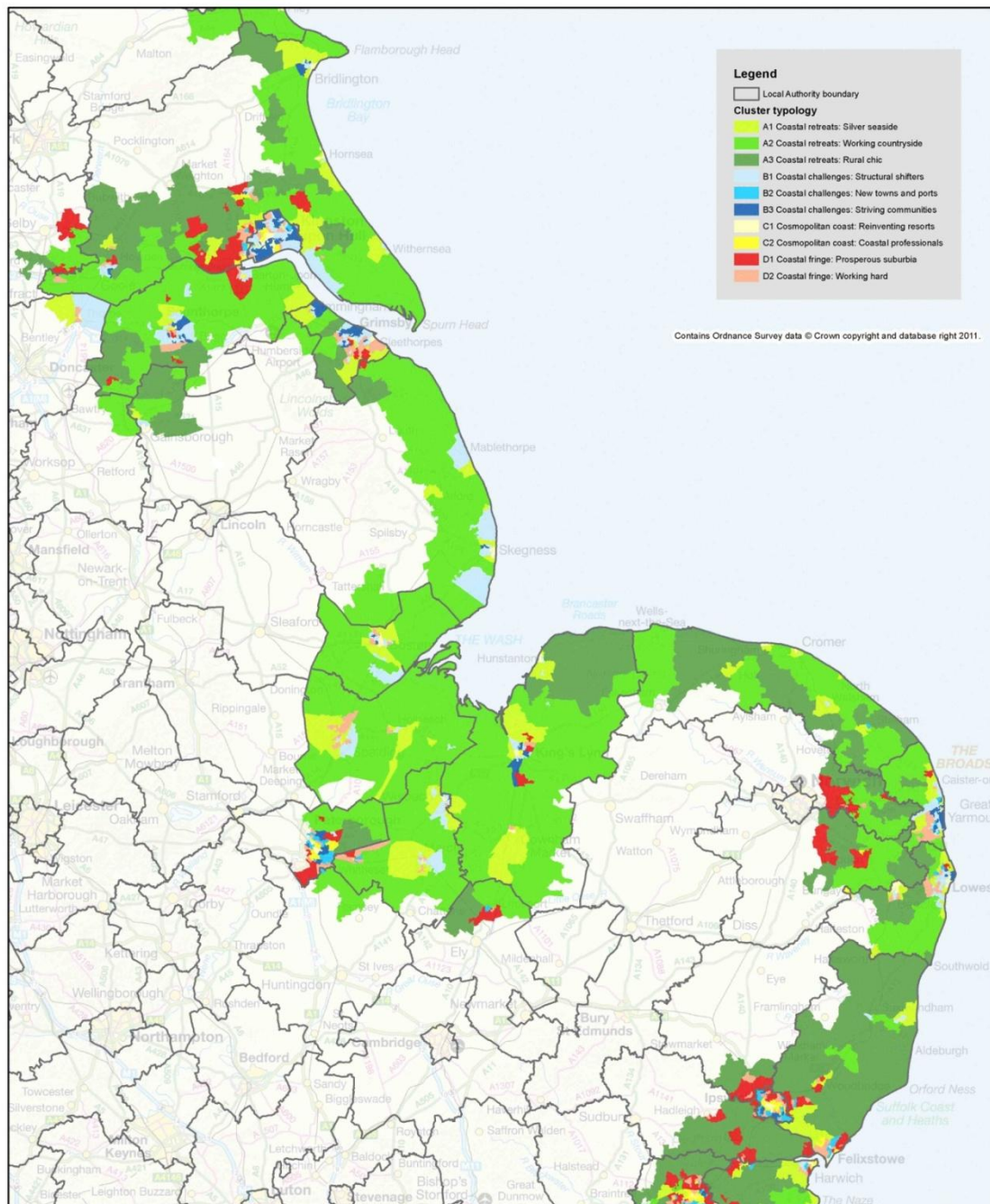
Location Quotients (LQs) are ratios that allow an area's distribution of employment by industry to be compared to a reference or base area's distribution (in this case, England). The LQs at a Lower Super Output Area (LSOA)²⁵³ are calculated by dividing the number of employees in a specific marine sector (based on analysis of the ONS Annual Business Inquiry) by the total number of employees in the LSOA. This figure is then divided by the total number of employees in the same marine sector in England divided by all employees in England.

²⁵³ Lower Super Output Areas (LSOAs) are a geography designed to improve the reporting of small area statistics. There are 32,482 LSOAs in England. These have a minimum population 1000 and a mean population of 1,500.

APPENDIX 5

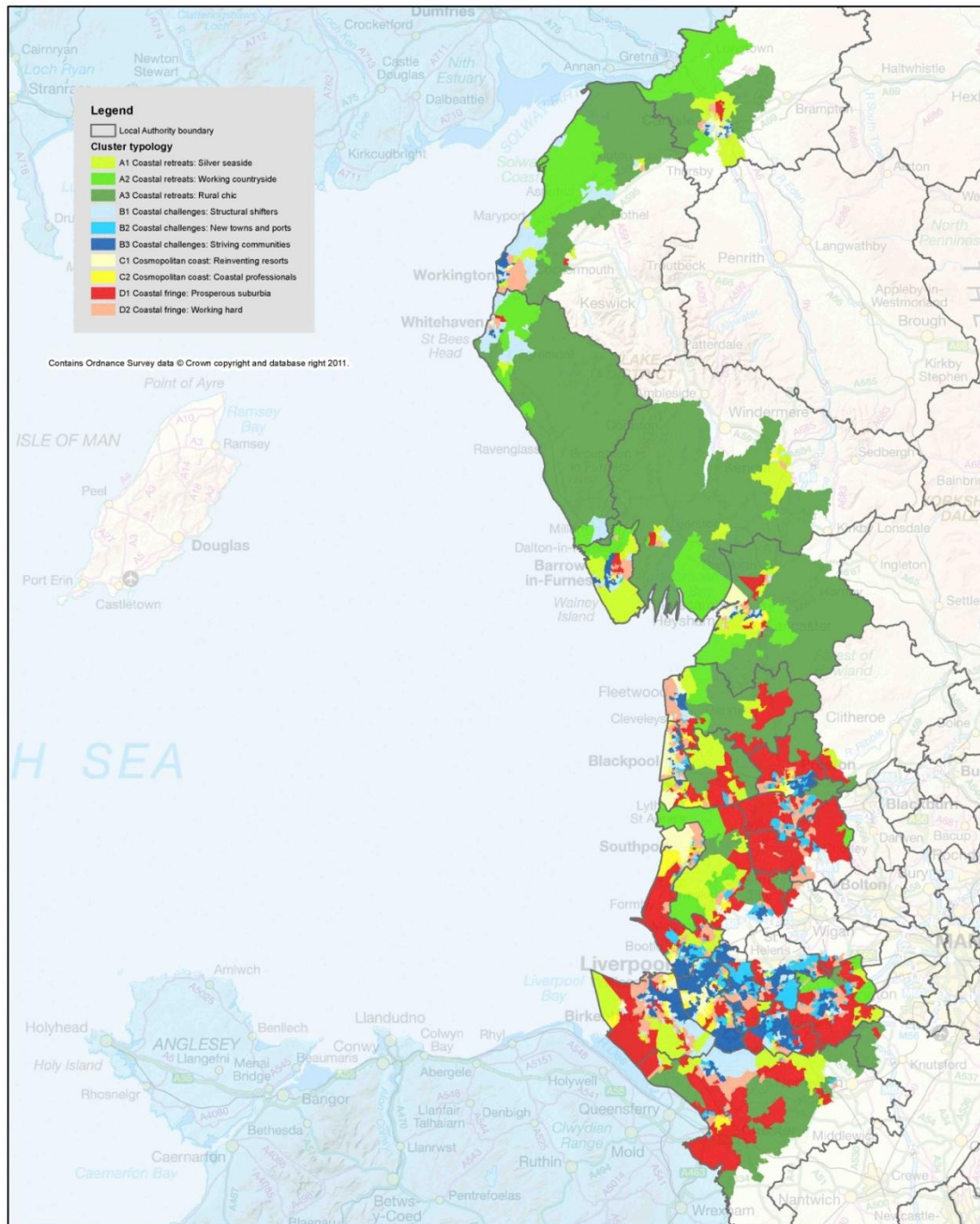
Typology maps

East coast



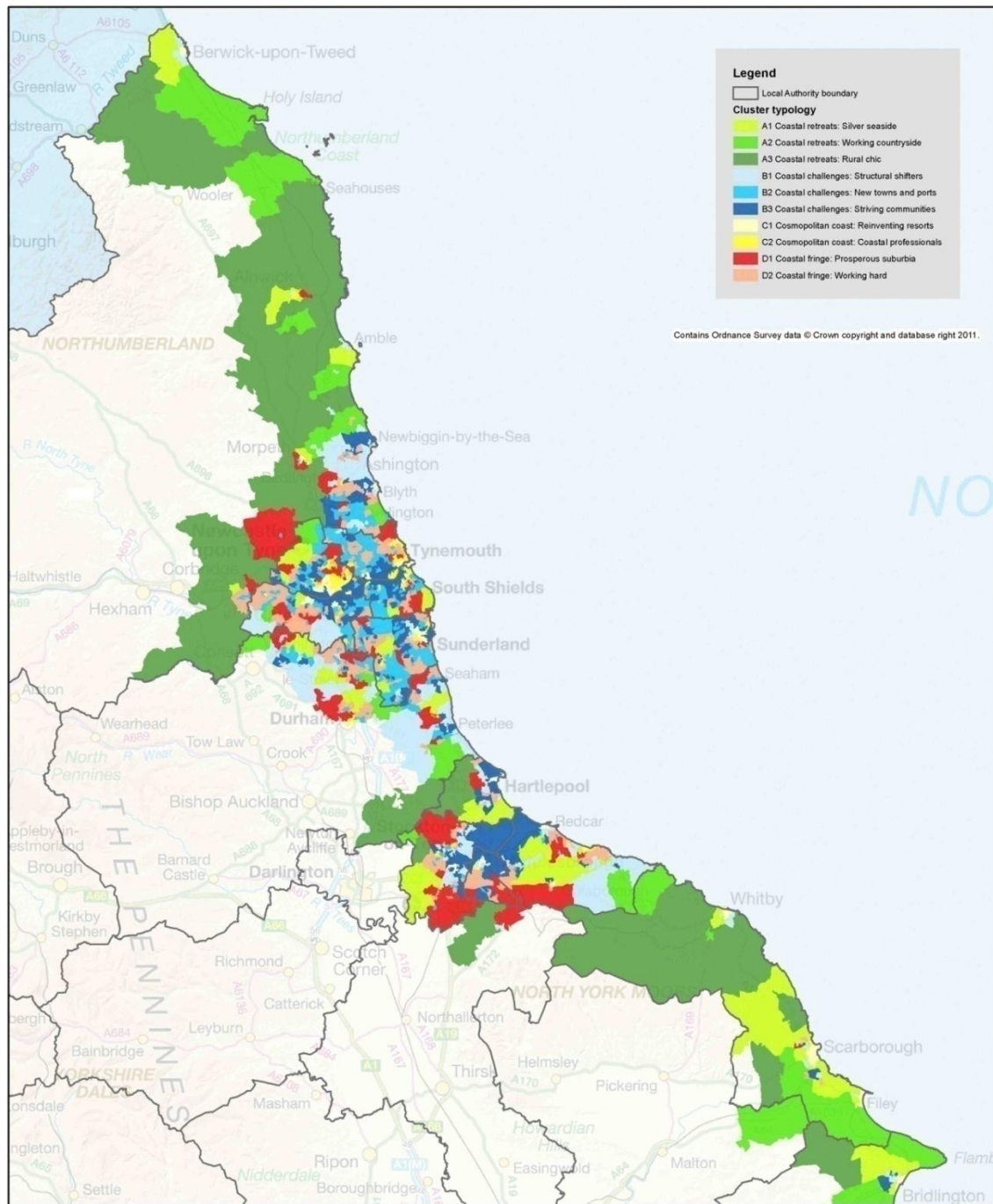
LSOAs are Super Output Areas, a statistical geography developed for the Census
Source: 2001 Census Super Output Area Boundaries Crown copyright 2004, ONS
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North West coast



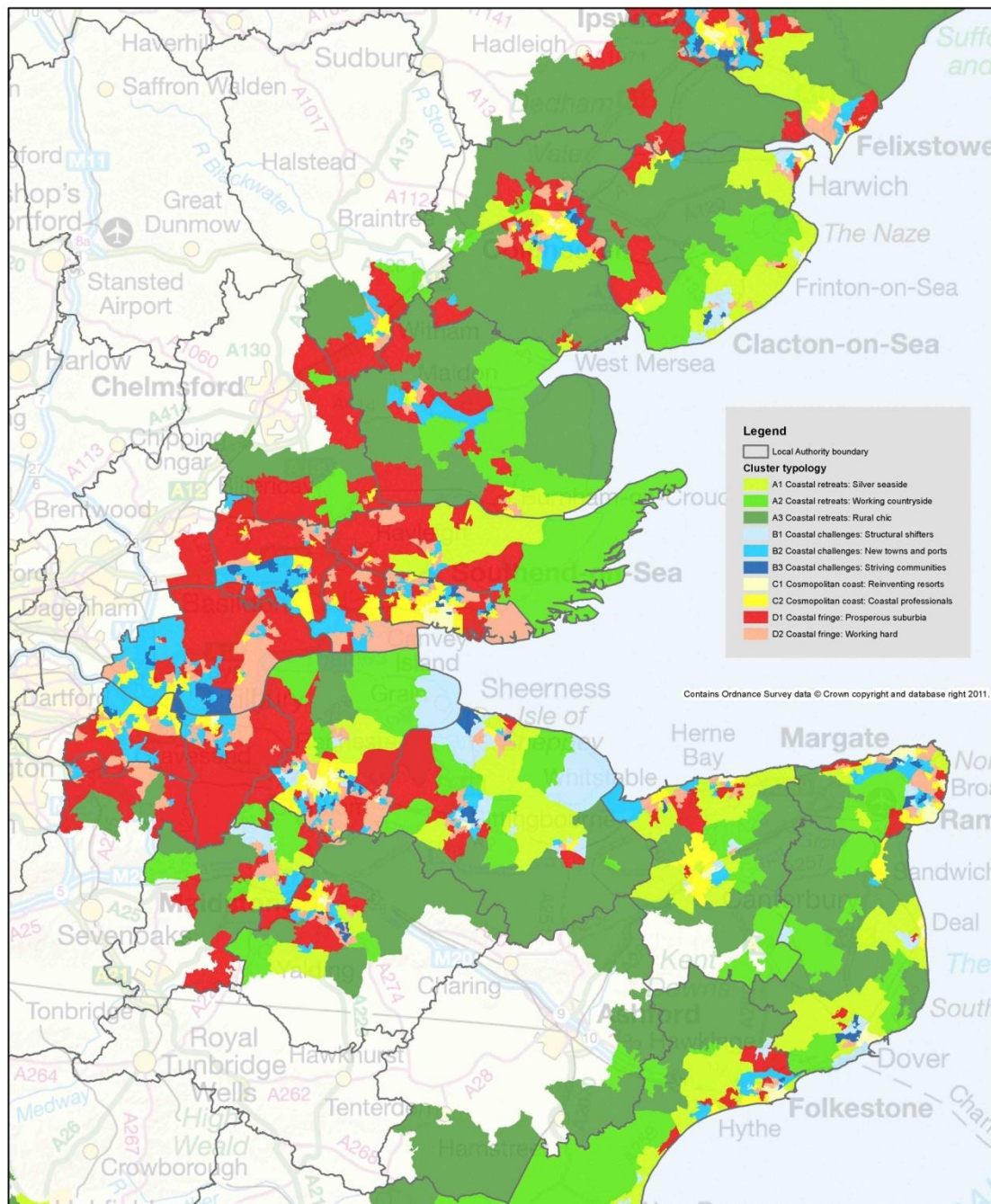
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North East coast



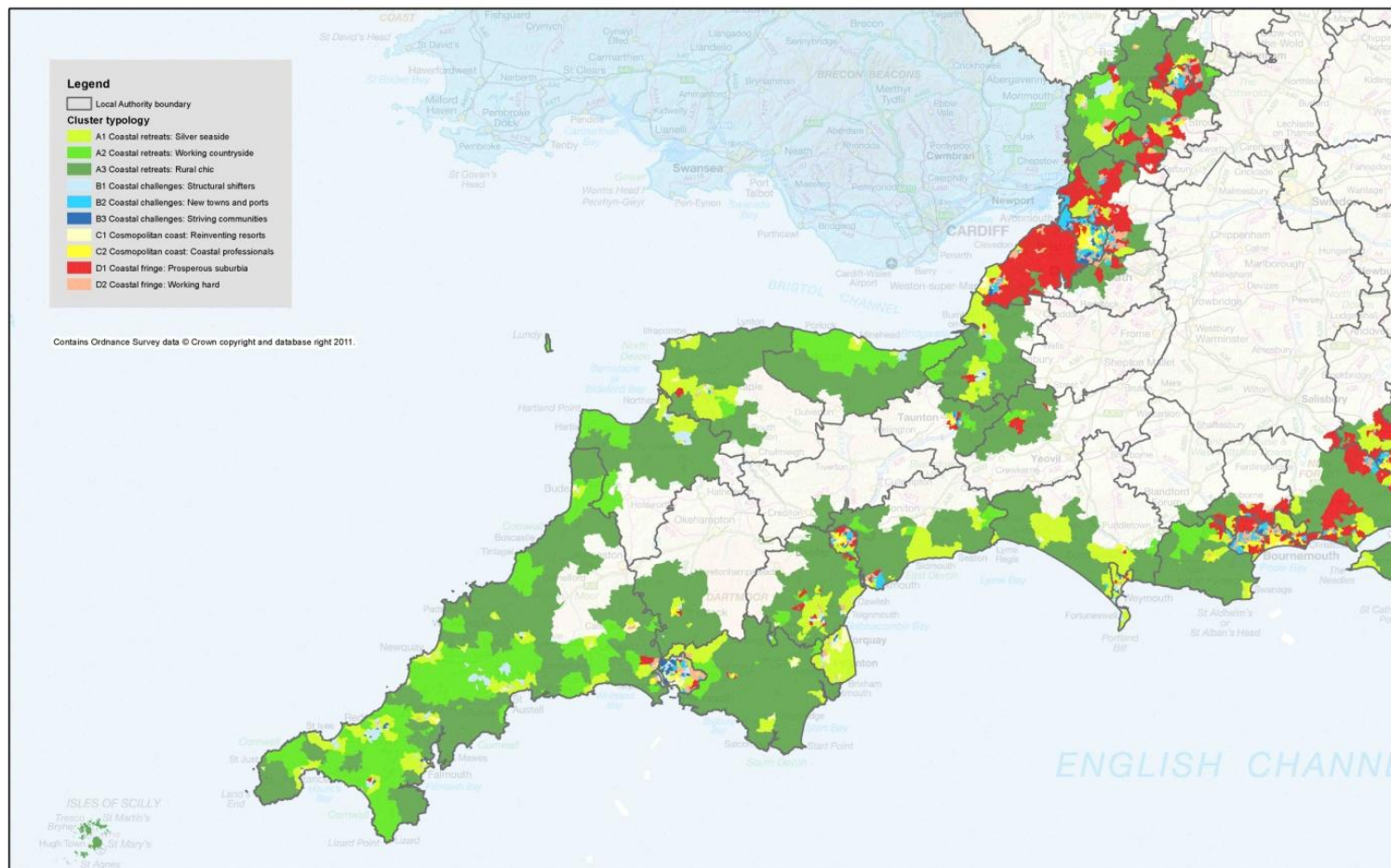
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South East coast



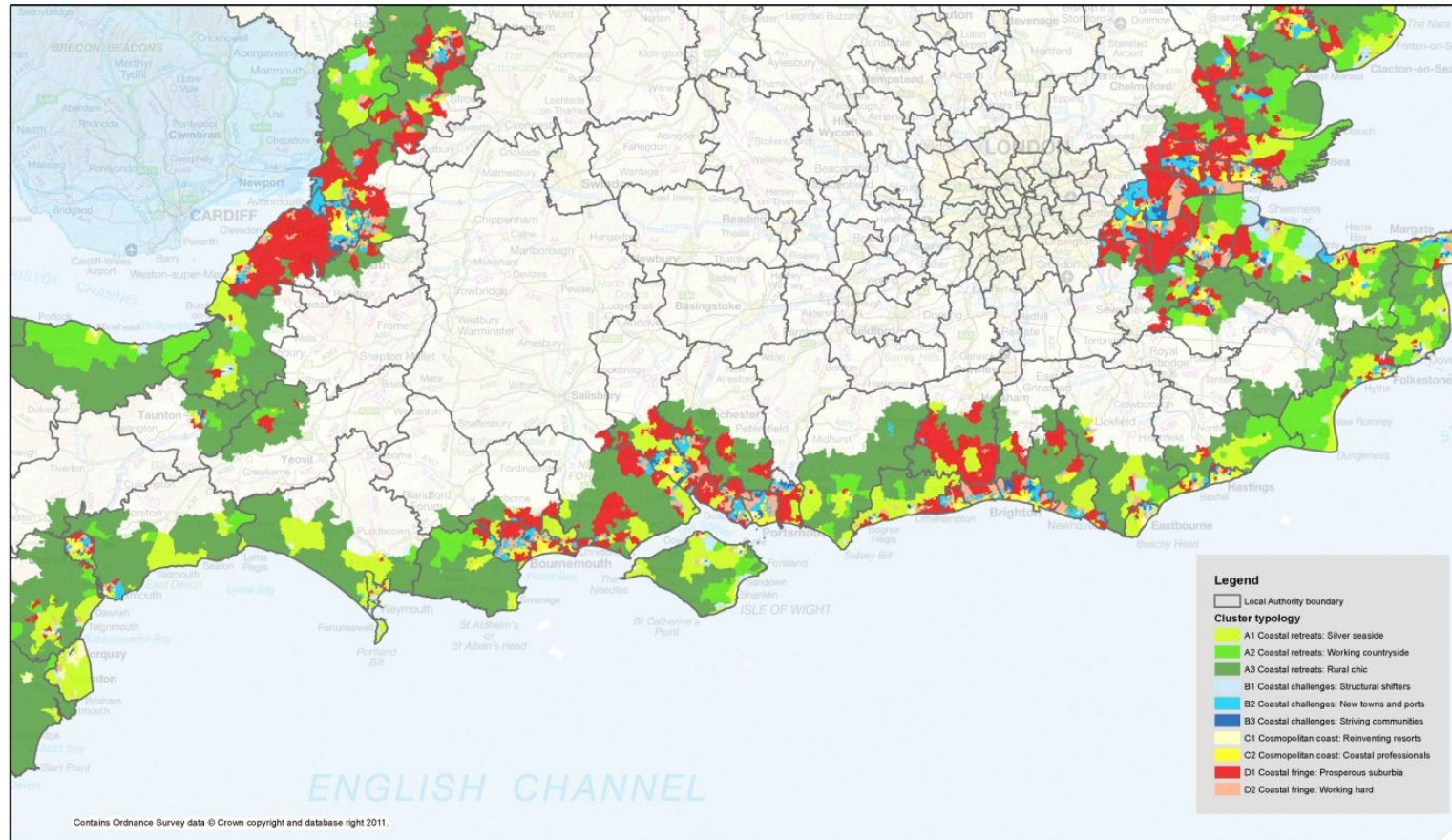
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South Coast



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