Marine Management Organisation

# South Marine Plan
# Technical Annex
# Draft for consultation
## November 2016



Information about this publication and further copies are available from:

Marine Management Organisation
Lancaster House
Hampshire Court
Newcastle upon Tyne
NE4 7YH

Tel: 0300 123 1032
Email: info@marinemanagement.org.uk
Website: www.gov.uk/mmo

If referencing this document, please cite it as: [Marine Management Organisation (2016) South Marine Plan Technical Annex – Draft for consultation ]

## Contents


Chapter 1: Introduction and background ..... 6
1.1 The south inshore and offshore marine plan areas ..... 6
1.2 Overview of plan development ..... 10
1.3 The structure and composition of the plan ..... 11
Chapter 2: Vision ..... 12
2.1 Vision statement ..... 12
2.2 How will the south marine plan areas look in 2036? ..... 12
Chapter 3: Objectives overview ..... 14
3.1 Plan objectives ..... 14
3.3 Contribution to the high level marine objectives ..... 15
3.4 Contribution to the Marine Strategy Framework Directive ..... 16
3.5 Objective structure ..... 17
Chapter 4: Policies overview ..... 18
4.1 Plan policies ..... 18
4.2 Policy structure ..... 19
4.3 Maps ..... 19
Chapter 5: Objectives and policies ..... 22
5.1 Objective 1 Co-existence ..... 22
5.2 Objective 2 Infrastructure ..... 52
5.3 Objective 3 Diversification ..... 66
5.4 Objective 4 Employment and skills ..... 73
5.5 Objective 5 Displacement ..... 79
5.6 Objective 6 Access ..... 93
5.7 Objective 7 Climate change ..... 97
5.8 Objective 8 Heritage assets ..... 111
5.9 Objective 9 Seascape and landscape ..... 117
5.10 Objective 10 Marine protected areas ..... 125
5.11 Objective 11 Marine Strategy Framework Directive and Water Framework Directive ..... 137
5.12 Objective 12 Space for nature ..... 148
Chapter 6 Monitoring, review and reporting ..... 181
6.1 Three yearly reporting ..... 181
Glossary ..... 182
Appendix 1: Marine planning requirements, background and context ..... 189
A 1.1 Marine planning requirements and background ..... 189
A 1.2 Marine planning – national context ..... 190
A 1.3 Marine planning – international context ..... 192
Appendix 2: Evidence base ..... 194

Appendix 3: Direct and indirect contributions of plan policies to Marine Strategy Framework Directive descriptors ..... 200
Appendix 4: Contributions of South Marine Plan policies to objectives ..... 201
Appendix 5: Methodology used to define the high density navigation routes shown in figure 7, ports and shipping policy map ..... 203

## List of figures

Figure 1: South inshore and offshore plan areas ..... 9
Figure 2: Elements making up the South Marine Plan (see glossary for explanation of terms) ..... 11
Figure 3: Defence activity ..... 27
Figure 4: Oil and gas infrastructure and hydrocarbon fields ..... 30
Figure 5: Tidal stream leased areas ..... 33
Figure 6: Offshore wind energy ..... 35
Figure 7: Ports and shipping policy ..... 38
Figure 8: Aggregate marine licenced areas, applications to The Crown Estate, exploration agreements and potential opportunity ..... 43
Figure 9: Licenced dredging and disposal areas ..... 46
Figure 10: South marine plan areas current and potential aquaculture ..... 50
Figure 11 Distribution of subsea cables ..... 62
Figure 12 Socio-economic coastal typologies ..... 76
Figure 13: Recreational boating activity ..... 85
Figure 14: Recreational modelling outputs: boat angling, scuba diving, personal watercraft, motor boating, sailing and beach activities ..... 86
Figure 15: Vessel monitoring system derived cumulative fishing effort (kwh) by UK registered vessels ≥ 15m 2011-2013 ..... 90
Figure 16: Fish landings to UK ports by UK registered vessels 2013 ..... 91
Figure 17: Potential climate change effects ..... 104
Figure 18: Historic environment ..... 115
Figure 19: Visual Resource Mapping (VRM) ..... 121
Figure 20: Marine character areas ..... 122
Figure 21: Nationally designated landscapes ..... 123
Figure 22: Marine protected areas ..... 129
Figure 23: Annual underwater noise exposure above 100dB (hours) ..... 146
Figure 24: Marine habitats ..... 155
Figure 25: Habitats of conservation importance (modelled) east sub area ..... 156
Figure 26: Habitats of conservation importance (modelled) west sub area ..... 157
Figure 27: Habitats of conservation importance (modelled) east sub area ..... 158
Figure 28: Habitats of conservation importance (modelled) west sub area ..... 159
Figure 29: Seasonal seabird density ..... 165
Figure 30: Fish spawning and nursery grounds ..... 168
Figure 31: Essential fish habitats ..... 169
Figure 32: Potential herring spawning grounds ..... 172
Figure 33: Current and predicted ecological water quality ..... 179
Figure 34: District unitary and county authority areas ..... 199

## List of tables

Table 1: Objectives in the South Marine Plan ..... 14
Table 2: High level marine objectives and South Marine Plan objectives ..... 15

Table 3: Good environmental Status (GES) descriptors and link to South Marine Plan objectives ..... 16
Table 4: Objectives and associated policies..... 18
Table 5: Public authority plans cross referenced with the Marine Policy Statement detailed considerations and activities…….....196
Table 6: Contribution of policies to Marine Strategy Framework Directive descriptors ..... 200
Table 7: Policy by plan objective ..... 201

## List of boxes

Box 1: Map types ..... 20
Box 2: Offshore wind energy ..... 34
Box 3: Landscape ..... 119
Box 4: A summary of requirements relating to marine protected areas..... 134
Box 5: Geodiversity ..... 153
Box 6: Sustainable development..... 189
Box 7: Cumulative effects..... 190

## South Marine Plan Technical Annex – draft for consultation

**Please note:**

This document has been produced in collaboration with government departments and stakeholders. It takes into account statutory and policy requirements and the content reflects this, for example it includes information on how to apply and implement plan policies. It is a consultation draft and will be reviewed and amended following full public consultation. Policies and narrative relating to the delivery of EU related legislation within the document will also be reviewed as part of the overall consultation process and any revisions to the draft plan following the consultation. Comments are sought on the value of any such policies and narrative included within the draft plan.

# Chapter 1: Introduction and background

## 1.1 The south inshore and offshore marine plan areas

1. The south marine plan area includes both inshore and offshore waters. The inshore area includes:
    - 1,000km of coastline (Folkestone to the River Dart)
    - 10,000 $km^2$ of inshore waters
    - any area submerged at mean high water spring tide
    - the waters of any estuary, river or channel, so far as the tide flows at mean high water spring tide
    - waters in any area which is closed (permanently or intermittently) by a lock or other artificial means against the regular action of the tide, but into and from which seawater is caused or permitted to flow (continuously or from time to time)

2. The offshore area extends from the seaward limit of the territorial sea (12nm) out to the seaward limit of the UK Exclusive Economic Zone as defined by The Exclusive Economic Zone Order 2013, an area of approximately 10,000 $km^2$ of sea. France and some of the Channel Islands (Guernsey, Sark, Alderney, Herm, Jethou, Brecqhou) border the seaward limit of the south offshore plan area.

3. In preparing the South Marine Plan, adjacent areas (the south east and south west marine plan areas) referred to as reporting areas, have also been taken into account. This includes wider areas of analysis based on the issues being considered and that do not have a defined geographical boundary.

4. The south marine plan areas contain rich and diverse coastlines and marine environments. The coast includes a range of communities, both urban and rural, varying in wealth and opportunities. The areas have a strong historical association with the defence of Britain.

5. Within the south marine plan areas there are a number of marine protected areas, world heritage sites, sites of special scientific interest and Ministry of Defence danger and exercise areas.

6. The south marine plan areas are one of the busiest marine areas along the English coast, with many industries reliant on their space and resources.

7. For more information see figure 1, the South Plans Analytical Report, or visit the Marine information System.

Marine Management Organisation

# SOUTH MARINE PLAN AREAS

9

UNESCO world heritage sites including the only natural site - The Jurassic Coast

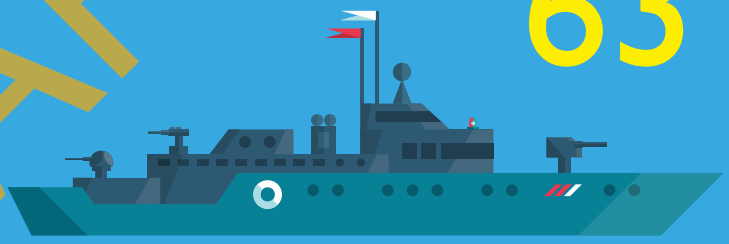
267

Coastal Site of Special Scientific Interest (SSSI), the Isle of Wight has almost all of its coastline under designation

22

Greatest number of Blue flag beaches in English marine plan areas

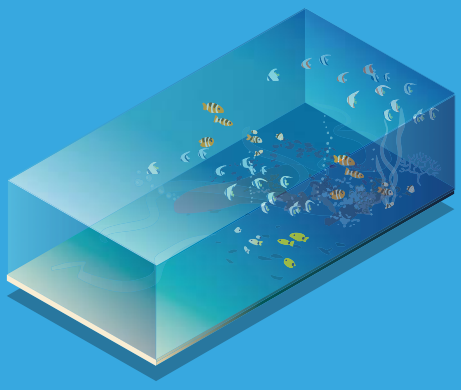
63



MOD danger and exercise areas and home to Royal Navy's surface and submarine fleet

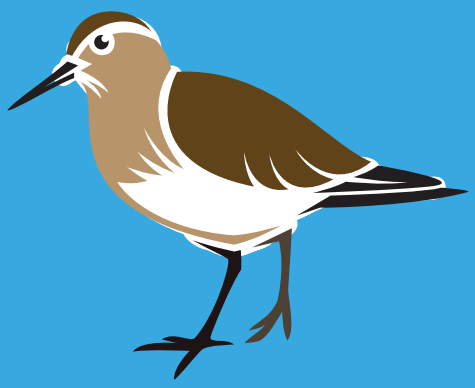


9



Marine Conservation Zones (MCZs)

11



Special Protection Areas (SPAs)

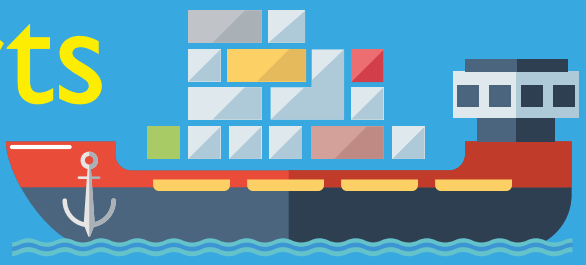
40

Special Areas of Conservation (SAC)

Marine Management Organisation

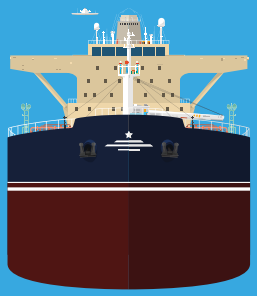
# SOUTH MARINE PLAN AREAS

## Ports



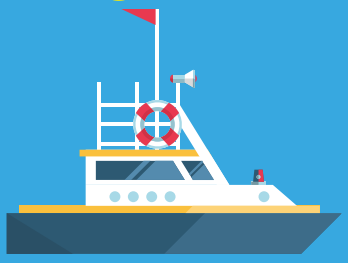
Port of Southampton - 35.8 Mt of traffic in 2013, UK's number one vehicle handling port - 820,000 vehicles each year and UK's second largest container terminal handling more than 1.5 Mt each year. Portsmouth International Port - Britain's most successful municipal port and second busiest Cross Channel ferry port.

## Shipping



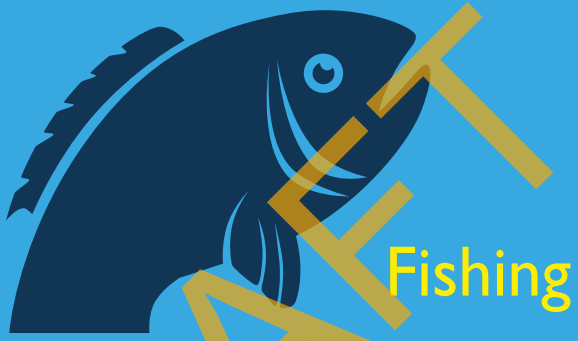
85% of the offshore plan area is transited by over 1000 vessels per year. The area is of strategic importance providing routes through Europe and beyond

## Boating



Highest percentage of boating activity in England (16%) and 67 marinas

## Fishing

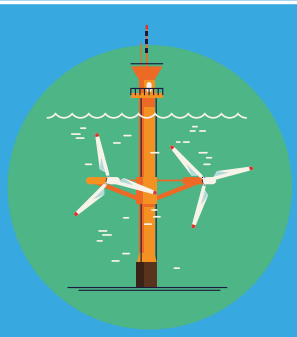


Highest landings by value port in England (Brixham)

## Aquaculture

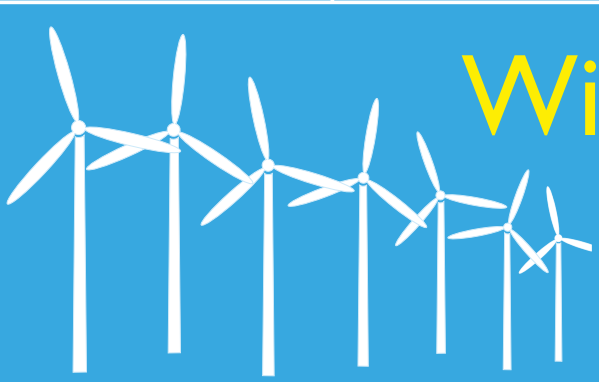
32% of England's aquaculture production (tonnage)

## Tidal



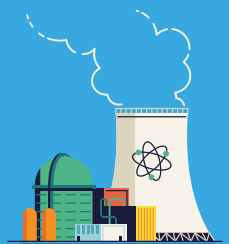
Diurnal and semi diurnal tides create powerful tidal streams. Offshore testing facilities for tidal stream devices - Perpetuus Tidal Energy Centre and Portland Bill.

## Wind



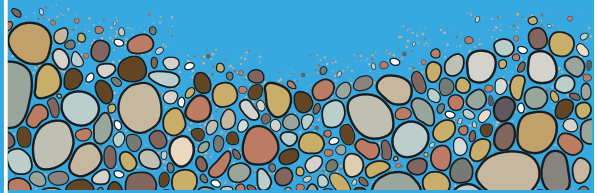
Offshore wind zone: Rampion - lease capacity of up to 400MW - enough energy to power 300,000 homes

## Nuclear



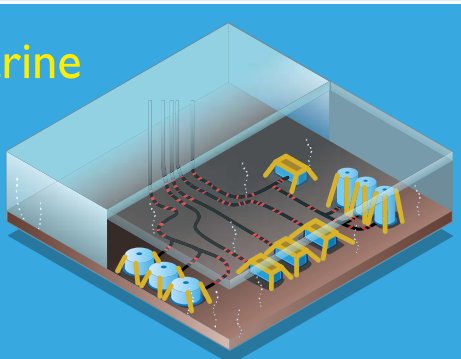
Dungeness B power station has the capacity to generate 1,110MW

## Aggregates



40% of production in England (7Mt in 2014)
50% of the permitted capacity in England (18.85Mt)

## Submarine cables



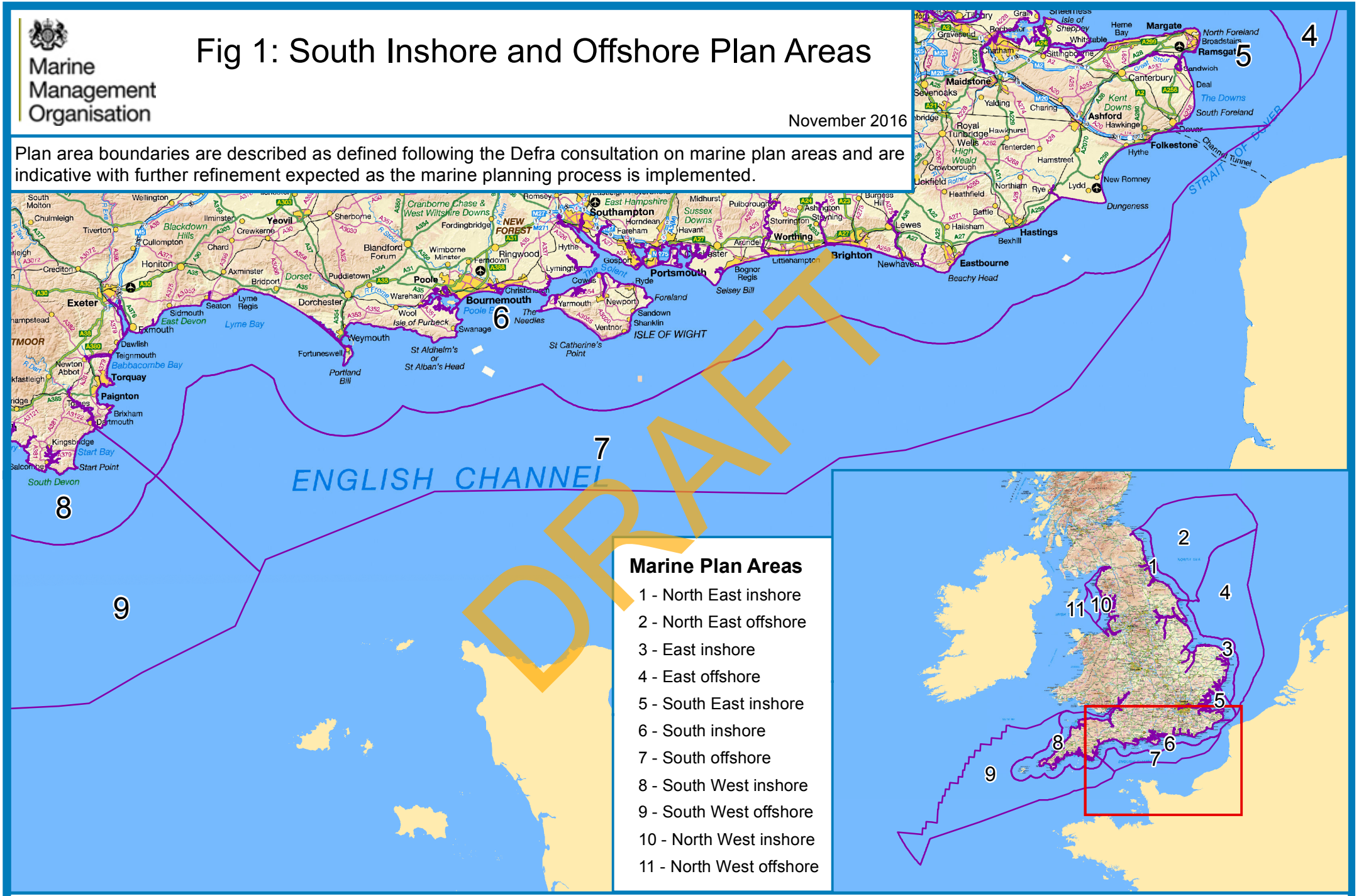
31% submarine cables and 9% of cable length in English waters. Proposals to link South to Channel Islands

Marine Management Organisation

# Fig 1: South Inshore and Offshore Plan Areas

November 2016

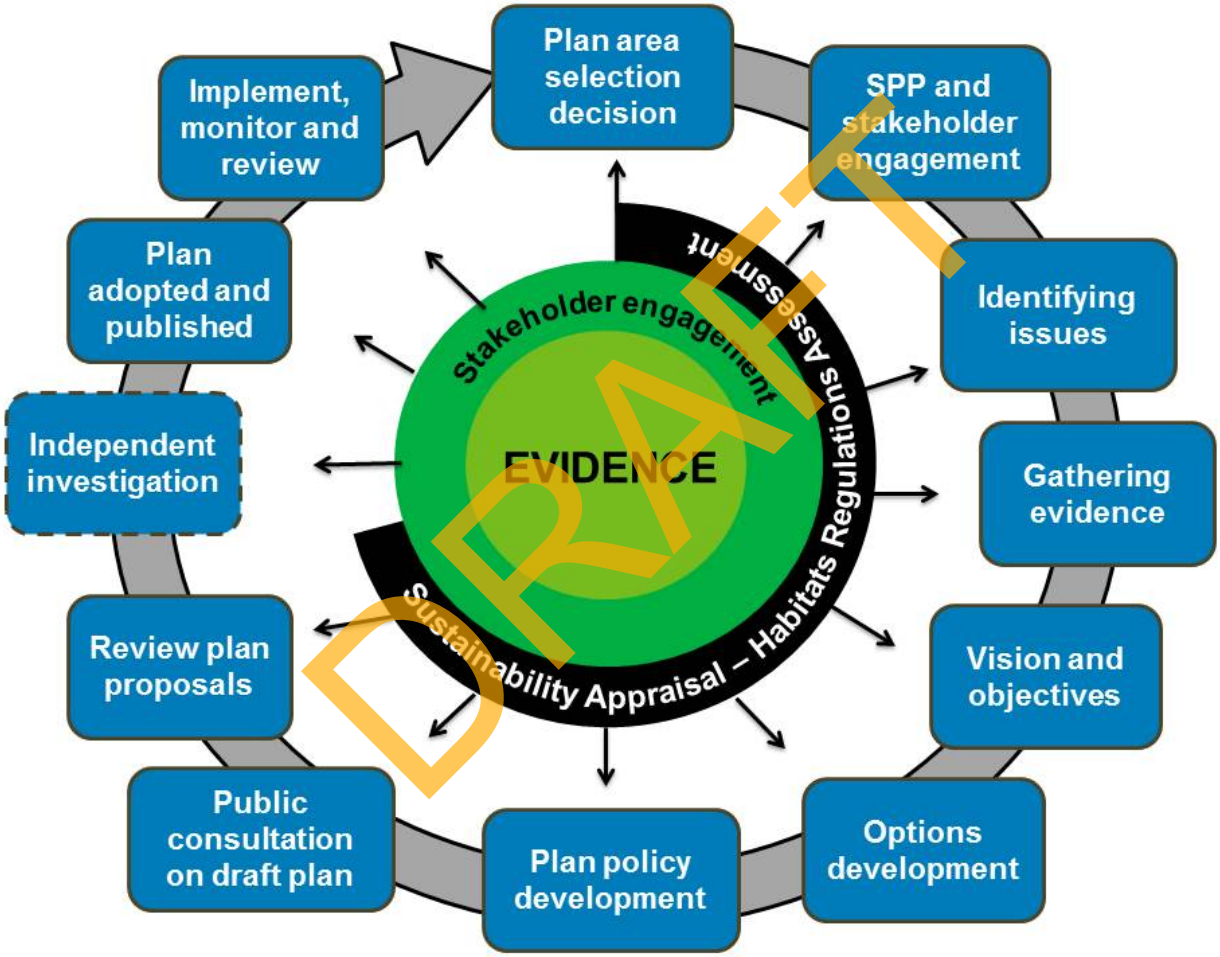
Plan area boundaries are described as defined following the Defra consultation on marine plan areas and are indicative with further refinement expected as the marine planning process is implemented.



## 1.2 Overview of plan development

8. The preparation of the South Marine Plan has included a number of stages which have been supported by ongoing formal and informal public consultation and engagement. Involvement of stakeholders has been central to the development of these plans and full details of engagement activities and approach are set out in the Statement of Public Participation. Learning from the production and implementation of the East Marine Plans has also been applied. For further detail on the evidence base and analysis used to underpin the development of the plan see Appendix 3.

9. The plan making stages involve:[1]




10. Activities undertaken during the plan development process bring wider benefits. For example, sub-national policy analysis should lead to better integration of decision-

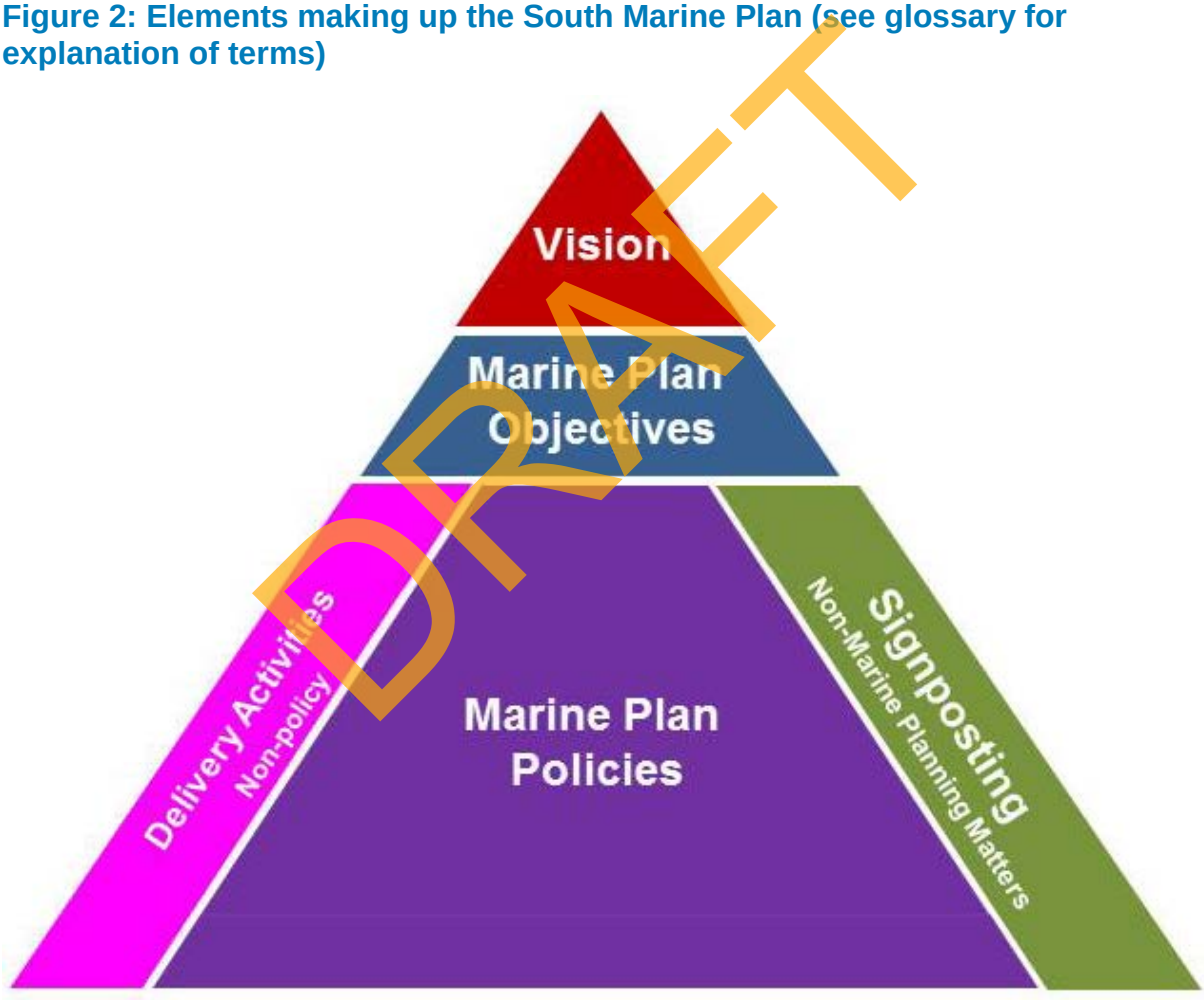
[1] All the relevant documents associated with the stages can be accessed at: https://www.gov.uk/topic/planning-development/marine-planning including the Statement of Public Participation (SPP)

making. Evidence collation and commissioning will improve the marine evidence base to inform decisions. Engagement, including workshops, meetings and training, has increased awareness or improved implementation of existing measures as well as measures within the South Marine Plan and the Marine Policy Statement. Consequently not all issues raised have resulted in a specific South Marine Plan policy as they are already addressed by existing measures. It is important that the benefits of marine planning activities as a whole are recognised and included when measuring the success of the plan.

### 1.3 The structure and composition of the plan

11. The following sets out the 'elements' that make up the South Marine Plan. See figure 2 for the overall structure. For further explanation of terms see the glossary. Refer to chapters 2, 3 and 4 for more information on vision, objectives, policies and signposting.

**Figure 2: Elements making up the South Marine Plan (see glossary for explanation of terms)**



# Chapter 2: Vision

## 2.1 Vision statement

12. The Marine Policy Statement (2.1.1) states that "the UK vision for the marine area is for 'clean, healthy, safe, productive and biologically diverse oceans and seas". The south inshore and offshore marine plan areas will play their part in delivering this vision.

13. The South Marine Plan vision for the next 20 years covers significant issues identified in the South Plan Area Analytical Report. The plan aims, through sustainable, effective and efficient use of the south marine plan areas, to manage competing priorities between economic growth, environmental conservation and social benefits, whilst considering the distinctive characteristics of the areas.

**The vision for the south marine plan areas in 2036**

**"Beautiful, busy and beneficial for all"**
The south marine plan areas are distinctive for their dynamic and rapidly changing nature both in terms of the natural and man-made influences and activities. The natural beauty and busyness stand out as qualities that make the south distinctive from other areas. Sustainable economic growth, enhanced protection of the natural and historic environment and improvements in health and wellbeing are beneficial to those who live, work and visit the south coast. By 2036, the areas' iconic, unique qualities, characteristics and culture will be conserved, and where needed enhanced, through the clear and balanced use of its marine space.

## 2.2 How will the south marine plan areas look in 2036?[2]

### Economy

14. By 2036, sustainable economic development is being achieved by new and existing marine activities. The south inshore area has benefited predominantly, but not exclusively, through sectors such as ports, tourism and recreation. Other opportunities are being achieved along the coastline and in the offshore area mainly through fishing, aggregate extraction, shipping and energy production. Competition for space for new or expanding activities is managed and potential for displacement of existing activities is reduced. Integration between land based and marine planning is promoted, helping to enhance the infrastructure supporting sustainable growth. Opportunities for employment for those who work at the coast or at sea has improved due to marine developments in the commercial and service sectors, and diversification of existing activities such as fisheries and ports. Improvements to the health, wellbeing and aspirations of local communities have been made. Marine sectors have taken steps to adapt to and manage the effects of climate change.

### Social

15. By 2036, those who live, work and visit the south marine plan areas continue to have a sense of ownership of them and their attributes. A clean, diverse marine

[2] Not listed in order of priority or preference.

environment alongside improved access has enabled enjoyment and reduced vulnerability of the marine area for local communities and visitors, which in turn improves health and wellbeing. Existing employers in ports, defence, tourism and local government sectors continue to be major employers. Development of some seaside towns has helped attract investment for regeneration, increasing tourism and recreation activities and stimulating local economies. Coastal communities awareness of the effects of climate change, and their capacity to reduce vulnerability, has been enhanced.

### Environment

16. By 2036, the marine and coastal environment is being conserved and enhanced, both for its intrinsic value and for the important role it plays in providing natural resources. Effective protection and management of the natural environment have improved resilience and halted and if possible reversed, the loss of biodiversity leading to recovery of areas currently adversely impacted. Impacts of marine development on the natural environment are being managed, with reduced impacts on birds, fish, cetaceans and seals from pressures such as disturbance, pollution, underwater noise and cumulative effects. Improved protection of species and habitats has enhanced their resilience, and capacity to adapt to the effects of climate change. The important role that the marine environment can play in mitigating climate change has been harnessed, particularly in coastal areas.

# Chapter 3: Objectives overview

## 3.1 Plan objectives

17. The South Marine Plan objectives (table 1) describe how the vision for the South Marine Plan will be achieved. The objectives are drafted in the context of the Marine Policy Statement and the related high level marine objectives. The information below provides an overview of the South Marine Plan objectives and how they relate to the high level marine objectives and Marine Strategy Framework Directive.

### Table 1: Objectives in the South Marine Plan

| Objective | Detail |
|---|---|
| Objective 1 | To promote effective use of space to support existing, and facilitate future sustainable economic activity through the encouragement of co-existence, mitigation of conflicts and minimisation of development footprints |
| Objective 2 | To manage existing, and facilitate the provision of new, infrastructure supporting marine and terrestrial activity |
| Objective 3 | To support diversification of activities which improve socio-economic conditions in coastal communities |
| Objective 4 | To support marine activities that increase or enhance employment opportunities at all skills levels among the workforce of coastal communities, particularly where they support existing or developing industries within the south marine plan areas |
| Objective 5 | To avoid, minimise, mitigate displacement of marine activities, particularly where of importance to adjacent coastal communities, and where this is not practical to ensure significant adverse impacts on social benefits are avoided |
| Objective 6 | To maintain and enhance public access to, and within, the south marine plan areas appropriate to its setting and in a way that is equitable to users |
| Objective 7 | To support the reduction of the environmental, social and economic impacts of climate change, through encouraging the implementation of mitigation and adaptation measures that<br>• avoid proposals' indirect contributions to climate change<br>• reduce vulnerability<br>• improve resilience to climate and coastal change<br>• consider habitats that provide related ecosystem services |
| Objective 8 | To identify and conserve heritage assets that are significant to the historic environment of the south marine plan areas |
| Objective 9 | To consider the seascape and its constituent marine character and visual resource and the landscape of the south marine plan areas |
| Objective 10 | To support the objectives of marine protected areas and the delivery of a well managed ecologically coherent network by ensuring enhanced resilience and the capability to adapt to change |

| Objective | Detail |
|---|---|
| Objective 11 | Activities within and adjacent to the south marine plan areas must contribute to the achievement or maintenance of Good Environmental Status under the Marine Strategy Framework Directive (and Good Ecological Status under Water Framework Directive) with respect to descriptors on marine litter, non-indigenous species and underwater noise, particularly where current measures need to be reconsidered or enhanced and where new measures are under development |
| Objective 12 | To safeguard space for, and improve the quality of, the natural marine environment, including to enable continued provision of ecosystem goods and services, particularly in relation to coastal and seabed habitats, fisheries, estuarine and coastal water quality and cumulative impacts on highly mobile species |

### 3.3 Contribution to the high level marine objectives

18. The South Marine Plan objectives have been aligned with the high level marine objectives in the Marine Policy Statement, to demonstrate how the plan will contribute to their delivery (table 2). The high level marine objectives cover the full scope of sustainable development, integrating themes of achieving a sustainable marine economy, ensuring a strong, healthy and just society and living within environmental limits.

**Table 2: High level marine objectives and South Marine Plan objectives**

| | High level marine objective | South Plan objective |
|---|---|---|
| **Achieving a sustainable marine economy** | Infrastructure is in place to support and promote safe, profitable and efficient marine businesses. | 2, 3 |
| | The marine environment and its resources are used to maximise sustainable activity, prosperity and opportunities for all, now and in the future. | 1, 2, 3, 4, 6 |
| | Marine businesses are taking long term strategic decisions and managing risks effectively. They are competitive and operating efficiently. | 1, 2, 3, 7 |
| | Marine businesses are acting in a way which respects environmental limits and is socially responsible. This is rewarded in the marketplace. | 1, 2, 7, 11 |
| | People appreciate the diversity of the marine environment, its seascapes, natural and cultural heritage and its resources, and act responsibly. | 5, 6, 8, 9 |
| **Ensuring a strong, healthy and just society** | The use of the marine environment is benefiting society as a whole, contributing to resilient and cohesive communities that can adapt to coastal erosion and flood risk, as well as contributing to physical and mental wellbeing. | 5, 6, 7 |
| | The coast, seas, oceans and their resources are safe to use. | 12 |
| | The marine environment plays an important role in mitigating climate change. | 7 |
| | There is equitable access for those who want to use and enjoy the coast, seas and their wide range of resources and assets and recognition that for some island and peripheral communities the sea plays a significant role in their community. | 6, 12 |
| | Use of the marine environment will recognise, and integrate with, defence priorities, including the strengthening of international peace and stability and the defence of the United Kingdom and its interests. | 1 |
| | Biodiversity is protected, conserved and, where appropriate, recovered, and loss has been halted. | 10 |

| | High level marine objective | South Plan objective |
|---|---|---|
| Living within environmental limits | Healthy marine and coastal habitats occur across their natural range and are able to support strong, biodiverse biological communities and the functioning of healthy, resilient and adaptable marine ecosystems. | 10, 12 |
| | Our oceans support viable populations of representative, rare, vulnerable, and valued species. | 10, 11 |
| | All those who have a stake in the marine environment have an input into associated decision making. | 1, 2 |
| Promoting good governance | Marine, land and water management mechanisms are responsive and work effectively together for example through integrated coastal zone management and river basin management plans. | 12 |
| | Marine management in the United Kingdom takes account of different management systems that are in place because of administrative, political or international boundaries. | 2, 3 |
| | Marine businesses are subject to clear, timely, proportionate and, where appropriate, plan led regulation. | 1, 2, 7, 11 |
| | The use of the marine environment is spatially planned where appropriate and based on an ecosystems approach which takes account of climate change and recognises the protection and management needs of marine cultural heritage according to its significance. | 1, 2, 7, 8 |
| Using sound science responsibly | Our understanding of the marine environment continues to develop through new scientific and socio-economic research and data collection. | All objectives |
| | Sound evidence and monitoring underpins effective marine management and policy development. | All objectives |
| | The precautionary principle is applied consistently in accordance with the United Kingdom government and devolved administrations' sustainable development policy. | All objectives |

### 3.4 Contribution to the Marine Strategy Framework Directive

19. The Marine Strategy Framework Directive focusses on delivering the environmental pillar of the European Union's maritime policy whilst acknowledging the importance of wider social and economic use of our seas. It sets out a framework whereby member states aim to achieve or maintain Good Environmental Status (GES) by 2020. It is wide ranging and defined by 11 'Descriptors' as set out in table 3.



### Table 3: Good environmental Status (GES) descriptors and link to South Marine Plan objectives

| | GES Descriptor | South Plan objective |
|---|---|---|
| 1 | Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions. | 7,11,12 (10)* |
| 2 | Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems. | 11 |
| 3 | Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock. | 12 |
| 4 | All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long term abundance of the species and the retention of their full reproductive capacity. | 11, 12 |
| 5 | Human induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters. | 12 |

| | GES Descriptor | South Plan objective |
|---|---|---|
| 6 | Seafloor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected. | 12 (7,10) |
| 7 | Permanent alteration of hydrographical conditions does not adversely affect marine ecosystems. | (7, 12) |
| 8 | Concentrations of contaminants are at levels not giving rise to pollution effects. | 12 |
| 9 | Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards. | (12) |
| 10 | Properties and quantities of marine litter do not cause harm to the coastal and marine environment. | 11 |
| 11 | Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment. | 11 (12) |

*indirect links are in brackets

20. The Marine Policy Statement (2.6.1.3) states 'Marine planning will be a key tool for ensuring that the targets and measures to be determined by the UK for the Marine Strategy Framework Directive can be implemented'. This is reiterated in the Marine Strategy to implement the directive in the UK (Marine Strategy Framework Directive consultation: Programme of Measures). The South Marine Plan objectives contribute either directly or indirectly across all of the descriptors (table 3).

21. The South Plan Analytical Report and subsequent consultation through the planning process highlighted a particular need to aid delivery of descriptors 2 (non-indigenous species), 10 (marine litter) and 11 (underwater noise) in the South Marine Plan. As such, Objective 11 is supported by specific policies to help address these issues.

### 3.5 Objective structure

22. The South Marine Plan objectives are structured to provide a clear idea of:
    - what: the **context** on what the objective covers, and core issue(s) to be addressed based on the South Plans Analytical Report and subsequent steps, including consultation
    - why: the **rationale** as to why an objective is needed, and why the core issue will not be addressed without the plan.
    - who: **who does this interest** including an indication of lead government departments (as national policy owners) and an overview of relevant public authorities or the principal public authority where appropriate.

# Chapter 4: Policies overview

## 4.1 Plan policies

23. The policies support the delivery of the South Marine Plan objectives and address issues outlined and support sustainable development within the plan areas. Where gaps in the achievement of an objective have been identified, new plan policies have been drafted to clarify existing requirements or make them relevant to the plan areas.

24. Under each objective, the policies are structured with general policies first, followed by sector or topic specific policies (table 4).

25. All policies sit under an objective, making it clear how they will guide decisions, leading to the achievement of that objective. Most policies are relevant, even if indirectly, to a number of objectives. Where this is the case, the policy text will highlight the linkages across the South Marine Plan. For further details on for how policies directly and indirectly link to the objectives see Appendix 4.

**Table 4: Objectives and associated policies**

| Objective | Associated policies | |
|---|---|---|
| **Objective 1** Co-existence | S-CO-1 (co-existence)<br>S-DEF-1 (Defence)<br>S-OG-1 (Oil and gas)<br>S-TIDE-1 (Tidal energy)<br>S-PS-1 (Ports and harbours) | S-AGG-1 (Aggregates)<br>S-AGG-2 (Aggregates)<br>S-AGG-3 (Aggregates)<br>S-DD-1 (Dredging and disposal)<br>S-AQ-1 (Aquaculture) |
| **Objective 2** Infrastructure | S-INF-1 (Infrastructure)<br>S-PS-2 (Ports and harbours)<br>S-PS-3 (Ports and harbours) | S-CAB-1 (Cables)<br>S-CAB-2 (Cables)<br>S-AQ-2 (Aquaculture) |
| **Objective 3** Diversification | S-REN-1 (renewables)<br>S-AGG-4 (Aggregates) | S-FISH-1 (Fishing)<br>S-TR-1 (Tourism and recreation) |
| **Objective 4** Employment and skills | S-EMP-1 (Employment) | S-EMP-2 (Employment) |
| **Objective 5** Displacement | S-SOC-1 (Social)<br>S-TR-2 (Tourism and recreation) | S-FISH-2 (Fishing)<br>S-FISH-3 (Fishing) |
| **Objective 6** Access | S-ACC-1 (Access) | S-ACC-2 (Access) |
| **Objective 7** Climate change | S-CC-1 (Climate change)<br>S-CC-2 (Climate change) | S-CC-3 (Climate change)<br>S-CC-4 (Climate change) |
| **Objective 8** Heritage assets | S-HER-1 (Heritage) | |
| **Objective 9** Seascape and landscape | S-SCP-1 (Seascape) | |
| **Objective 10** Marine protected areas | S-MPA-1 (Marine protected areas)<br>S-MPA-2 (Marine protected areas) | S-MPA-3 (Marine protected areas)<br>S-MPA-4 (Marine protected areas) |

| Objective | Associated policies | |
|---|---|---|
| **Objective 11**<br>Marine Strategy Framework Directive and Water Framework Directive | S-NIS-1 (non-indigenous species)<br>S-ML-1 (Litter)<br>S-ML-2 (Litter) | S-UWN-1 (Underwater noise)<br>S-UWN-2 (Underwater noise) |
| **Objective 12**<br>Space for nature | S-BIO-1 (Biodiversity)<br>S-BIO-2 (Biodiversity)<br>S-BIO-3 (Biodiversity)<br>S-BIO-4 (Biodiversity) | S-DIST-1 (Displacement)<br>S-FISH-4 (Fishing)<br>S-FISH-4-HER (Fishing – herring)<br>S-DD-2 (Dredging and disposal) |

### 4.2 Policy structure

26. Each policy has a reference code, for example S-BIO-1. Where two policies are closely related they are presented alongside each other, with shared supporting text, for example S-ACC-1 and S-ACC-2. It is also stated to which marine plan area the policy applies.

27. Plan policies are structured in such a way as to provide a clear idea of:
    - **what and why** - including the policy subject and why the policy is needed. These outline the basis for the policy, such as requirements set out in national policy and/or issues specific to the south plan areas.
    - **how and where** - including detail on how and by whom the policy should be implemented, and where appropriate, the main public authorities relevant to the policy. Further detail is provided to clarify or define terms used in the policy, with examples where appropriate. Reference is made to maps or other information that indicate where the policy applies in the marine plan areas or where resources and activities are located.

### 4.3 Maps

28. Some maps included in the South Marine Plan Technical Annex have supporting text on how the map was derived, analysis undertaken, limitations in the evidence, or analysis used. For ease of reference, three types of map are used and are indicated by coloured text. These are (see Box 1 for details):
    - policy map – green text
    - indicative map – red text
    - information map – purple text

29. The maps are based on the most recent data available to the Marine Management Organisation and are available on the marine planning evidence base . While efforts will be made to ensure that the information provided here is up to date, some data is owned by third parties, therefore it cannot be guaranteed that all maps reflect the current position. Relevant data holders and regulatory authorities (as under existing requirements) should always be consulted to ensure the most up to date evidence is used when considering where plan policies apply.

### Box 1: Map types

**Policy maps**

Policy maps define a spatially discrete area to which a policy applies. These policy boundaries are derived from analysis of third party data by the Marine Management Organisation. As such, any changes to these maps will be undertaken by the Marine Management Organisation. Policy maps are also included for policies that refer to discrete areas of activity, resource, designations, leases or licences defined by a third party. Where a policy map is provided, the policy applies specifically to the area defined on the map.

Updates or changes made to data supporting these policy maps following publication of the South Marine Plan, may be a 'relevant consideration' and enable deviation from the plan by a public authority. Should substantial revisions be made to data supporting the policy maps, for example a significant change in where the plan policies apply, a revision of the South Marine Plan through the formal review procedure may be required. The Marine Management Organisation is required to review and amend the Plan as appropriate.

**Indicative maps**

Indicative maps are based on the best available data. They are for guidance only. They provide an indication of locations which are particularly relevant and do not set spatially defined boundaries to the related policies. They may not cover all locations to which the policies apply. relevant policies should be applied across the whole of the south marine plan areas.

Additional locally specific data collected in the support and development of proposals will supersede information provided in indicative maps.

**Information maps**

Information maps provide context or signposting. For example, a map showing the boundaries of local authorities and county councils has been included to support consideration of other statutory and non-statutory plans with marine relevance. The information provided in these maps is not exhaustive, and there may be other information available to support the application of policies and existing policies or measures. Applicants should consult other data sources to be able to apply the policy.

**Marine Information System policy groupings in the South Marine Plan**

Table 3 in the South Marine Plan groups similar policy types together and provides a suggested walk through for the Marine Information System policy checking tool. Figures 2-5 in the South Marine Plan provide a snapshot of how the Marine Information System would display the information for the 'definitive', 'existing use', and 'potential future use' policy groupings. No maps have been provided for the 'generic' policy grouping, those which support all policies or those which relate to methods and approaches as these policies apply throughout the plan areas.

It is important to note that many of the activities identified are transient, may be temporal or affected by seasonality and other factors such as market forces. As such, figures 2-5 are included for indicative purposes only.

To enable you to use figures 2-5 to their full potential you must access them in the Marine Information System. In the system you can use tools such as zoom, and assess relevant policy groups alongside other activities and locations in order to support your proposal throughout its evolution from concept to application and delivery.

### 4.4 Additional legislation

30. Additional legislation and regulation relevant to a proposal will be identified through the planning process. The South Marine Plan does not remove the need for a proposal meet the requirements of the Habitats Regulations in accordance with the Habitats Directive and Birds Directive where required. A Water Framework Directive compliance assessment may also be required. Relevant legislation includes, but is not limited to:

- Environmental Impact Assessment Directive
- Strategic Environmental Assessment Directive
- Habitats Directive and the Wild Birds Directive (and their transposing legislation and regulations)
- Water Framework Directive
- Petroleum Act
- Energy Act
- Marine and Coastal Access Act (including chapters other than those on marine planning)
- Electricity Act
- Planning Act
- Flood and Water Management Act,
- Marine Strategy Regulations Harbours Act

# Chapter 5: Objectives and policies

## 5.1 Objective 1 Co-existence

**Objective 1**

**To promote effective use of space to support existing, and facilitate future sustainable economic activity through the encouragement of co-existence, mitigation of conflicts and minimisation of development footprints.**

### Context

31. This objective supports consideration of:
    - opportunities for co-existence with existing activities
    - mitigation of conflict with existing activities
    - minimisation of development footprints

32. To manage available space effectively and maximise the economic, social and environmental benefits of access to space, there is a need to minimise development footprints and consider co-existence of activities where possible.[3] This will enable activities to continue and/or grow, minimise conflict, and meet local, regional and national policy aims including economic development. This is particularly important in the inshore area where many locations are already busy but have aspirations for growth.

33. If growth of industries and other activities is not managed effectively it can lead to degradation in environmental quality (and restrict growth of activities dependent on a high quality marine environment). Unmanaged growth can also squeeze out new or emerging industry if insufficient space is made available for such activities.

### Rationale

34. Competition for space and significant levels of activity exist across the south marine plan areas. Currently, decisions on the use of marine space tend to be made in isolation, with public authorities considering only the current use of space and how the proposal may impact existing activities and vice versa. This objective relates to the need to support sustainable economic growth whilst recognising spatial requirements of existing and future marine activities as set out in national policy Marine Policy Statement (2.5). This includes, but is not limited to, aquaculture, ports and related dredging activities, shipping and shipbuilding/maintenance, aggregate extraction, tourism and recreation and the development of renewable energy. Sustaining and supporting existing activities, some of them longstanding such as fishing,[4] is also important.

35. Core issues relating to co-existence identified through the South Plans Analytical Report are concerned with managing the spatial requirements of activities. This objective will help manage the busy south marine plan areas by:
    - reducing the spatial requirements of developments

[3] HM Government, Marine Policy Statement (2011)
[4] HM Government, Marine Policy Statement (2011), (3.8.1)

- seeking opportunities for co-existence
- clearly setting out where space needs to be managed for a particular use
- minimising conflict between existing activities. manage adverse impacts upon port and harbour expansion, and passenger shipping services potentially leading to their unviability
- avoid conflict with existing authorised areas or exploration areas for aggregate extraction, and existing dredging and disposal areas.

36. Other issues relating to infrastructure and displacement are covered in objective 2 – infrastructure and objective 5 – displacement respectively.

### Who does this interest?

37. The broad nature of the objective and the many activities and resources it covers means it relates to a range of national policy areas for which different government departments are responsible. Departments with specific responsibilities include:
    - The Department for Food and Rural Affairs – aggregates, aquaculture, fishing
    - Department for Business, Energy and Industrial Strategy – oil, gas, carbon capture and storage and renewable energy
    - Department for Transport – ports and shipping
    - Ministry of Defence – defence activity
    - Department for Business Innovation and Skills – economic growth and opportunities
    - Department for Communities and Local Government – overlap at the coast with the land use planning system

38. For the same reasons the objective will be of interest to public authorities, including those making decisions relating to the sectors and resources mentioned above, on activities that interact with those sectors and resources, and those with a wider interest (for example in taking account of the plans in their own planning). Examples include but are not restricted to:
    - The Crown Estate
    - Marine Management Organisation –licensing and advisory role
    - Planning Inspectorate –nationally significant infrastructure projects
    - Oil and Gas Authority
    - Maritime and Coastguard Agency – oil and gas, shipping and ports
    - inshore fisheries and conservation authorities
    - local authorities

39. Objective 1 – Co-existence will be delivered through the implementation of policies S-CO-1, S-DEF-1, S-OG-1, S-TIDE-1, S-PS-1, S-AGG-1, S-DD-1, S-AQ-1.

**Policy S-CO-1**
Proposals will minimise their use of space and consider opportunities for co-existence with other activities.

**Policy S-CO-1 applies to the inshore and offshore marine plan areas**

### What is co-existence?

40. Space is essential for activities to function[5] for example, shipping requires room for transit and anchorage and fishing requires access to grounds. Some activities operate in the same space, such as recreational activities in a marine protected area (depending on the management measures). Others require exclusive use of an area, for example, for reasons of navigational safety. Co-existence is where multiple developments, activities or uses exist alongside or close to each other in the same area or at the same time.[6] This is different to co-location where multiple developments, activities or uses share the same spatial footprint or marine area on a longer term basis.

### Why is this important?

41. Space within the south marine plan areas is limited and required to support social environmental and economic benefits. The Marine Policy Statement[7] promotes compatibility, encouraging co-existence between different activities within the context of social, economic and environmental considerations. Activities that can co-exist should (for example, fisheries and tourism or aquaculture and wind farm developments).

42. Co-existence should be encouraged. Where co-existence is not possible, the potential use of a site over different periods of time should be explored. For example, early negotiation with aggregate extractors prior to the construction of oil and gas infrastructure. Where co-existence or sequential use of a site cannot be achieved, other measures to minimise or mitigate impact should be explored.

43. This policy is required to ensure that proposals seek to minimise the footprint of their development considering co-existence with other activities, where appropriate. Other policies under this objective, manage the spatial requirements of specific sectors.

### How the policy will be implemented

44. Proposals will:

- demonstrate whether and how the footprint could be reduced to minimise use of space
- consider opportunities for co-existence with existing activities or other known planned proposals (for example aquaculture development in an offshore windfarms)[8]
- consider impacts upon existing activities in the proposal area. Existing activities are shown in figures 3 to11 and are outlined in other the policies particularly those under this objective (S-DEF-1, S-OG-1, S-AGG-1, S-AGG-2, S-AGG-3, S-TIDE-1, S-DD-1. S-PS-1, S-PS-2, and S-AQ-1)



[5] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014) Core Issue 11
[6] These terms are defined in the glossary
[7] HM Government, Marine Policy Statement (2011), pg 4, pg 26, and; 3.8.10 (fisheries), 3.9.6 (aquaculture), 3.10.5 and 3.10.6 (waste water)
[8] Seafish (2006) Complementary Benefits of Alternative Energy: Suitability of Offshore Wind Farms as Aquaculture Sites

45. Public authorities will assess proposals to confirm they minimise their use of space. They should also consider the impact on current and known future users of the same marine space. For example, offshore static installations could change mobile sediments to solid substrate resulting in a change in habitat with possible impact on other activities such as recreational sea angling.

46. As well as the need to manage spatial interactions with other marine users, there is also the need to manage interactions with heritage sites (objective 8 – heritage assets), marine protected areas (objective 10 – marine protected areas) and other interests. Examples of how this is being achieved include the aggregates industry which has already adopted a range of best practice measures (including heritage guidance notes, reporting protocols and fisheries liaison codes of practice) together with adoption of regional approaches to assessment, monitoring and management through regional dredging associations and associated marine aggregate regional environmental assessments.

**Policy S-DEF-1**
Proposals in or affecting Ministry of Defence danger and exercise areas should only be authorised with agreement from the Ministry of Defence.

**Policy S-DEF-1 applies to the inshore and offshore marine plan areas**

### What is defence?

47. The Ministry of Defence has the primary role of providing defence and security to the people of the UK and overseas territories. Within UK waters in peacetime military activities comprise practice and training activities, routine patrolling, transporting equipment and personnel in and out of the country, and communications including using radar.

### Why is it important?

48. Marine and land based Ministry of Defence activities are of national importance. There is a prevalence of defence activities and estates in the South Marine Plan areas. Marine infrastructure may have a cumulative or individual effect on their continuity or future use.

49. This policy will avoid conflict between defence activities using the marine environment, and new licensable marine activities within the plan areas. It will ensure that defence interests are not impeded.

50. This policy supports the need for defence activities to take place within the south marine plan areas for the purpose of national security.

### How the policy will be implemented

51. The Ministry of Defence should be consulted in all circumstances to verify whether defence interests will be affected and ensure that national defence capabilities and interests are not compromised (Marine Policy Statement (3.2.9)). Permission from the Ministry of Defence is needed for any proposals that will have a significant adverse impact on defence activities.

52. If the Ministry of Defence objects to a proposal the development or activity will not be authorised.

53. Public authorities should take full account of the individual and cumulative effects of marine infrastructure on both marine and land based Ministry of Defence interests.

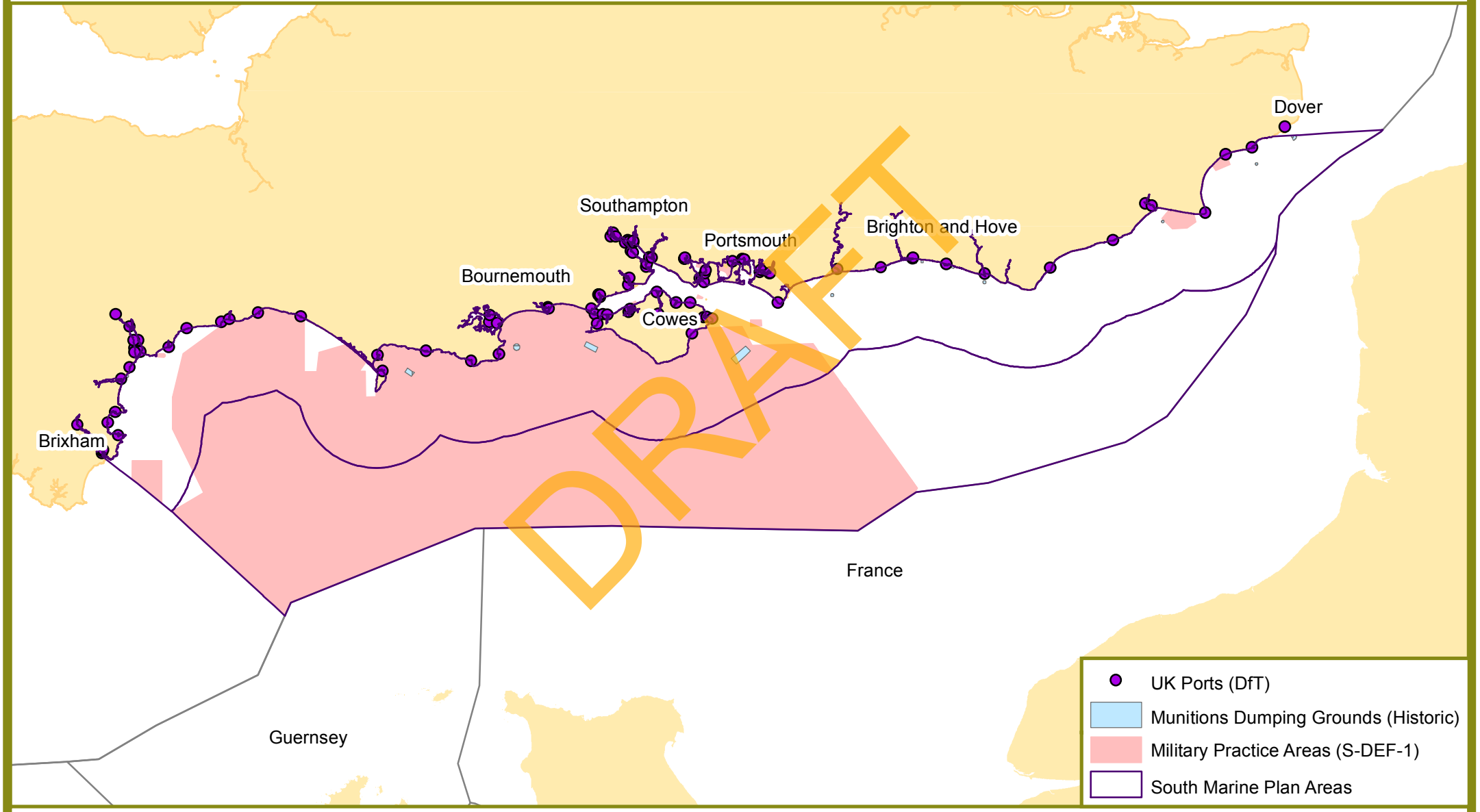
54. This policy adds clarity to existing national policy (National Planning and Policy Framework Section 164) and the section 3.2.9 of the Marine Policy Statement 3.2.9) by identifying Ministry of Defence danger and exercise areas (some regulated by byelaws) within the marine plan areas (see figure 3). It also clarifies the application process and facilitates early intervention in dealing with potential issues or conflicts. It confirms that proposals within danger and exercise areas will not be authorised without appropriate approval from the Ministry of Defence.

Marine Management Organisation

# Fig 3: Defence activity

## Policy map - Please see box 1 for further details

November 2015




Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0.
VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23

**Policy S-OG-1**
Proposals in areas where a licence for oil and gas has been granted or formally applied for should not be authorised unless it is demonstrated that the other development or activity is compatible with the oil and gas activity.

**Policy S-OG-1 applies to the inshore and offshore marine plan areas**

### What is oil and gas activity?

55. In the marine area oil and gas activity could include exploration for and production of oil and gas from below the seabed. Oil and gas deposits are located in spatially discrete areas where the deposits were formed and the associated infrastructure required to explore for or exploit the resource usually has a limited spatial footprint. Rigs are used to drill for hydrocarbons, and production is either via a platform or floating storage facility, where it may be processed prior to being exported ashore via pipelines or using shuttle tankers.

### Why is this important?

56. Oil and gas provides the UK with a significant proportion of its primary energy demand, contributing 73% in 2011.[9]

57. Maximising the recovery (and transmission) of oil and gas sustainably, where it is economic to do so, is a priority for energy supply and security[10] as stated in government's statutory Strategic Security of Supply Reports of 2010 and 2011 and crucial to meeting UK energy needs during the transition to a low carbon economy.

58. Whilst no offshore oil and gas production currently takes place within the south marine plan areas, there are existing licenced blocks within the south inshore plan area (see figure 4). Further licences may also be issued by the Oil and Gas Authority in future licensing rounds. Oil and gas licensed blocks should be safeguarded for the activities identified in the licence until the licence is surrendered, (including completion of any relevant decommissioning activity) unless agreement over co-located use can be negotiated or suitable mitigation such as temporal measures are agreed. More detail on how such issues may be resolved between offshore wind and oil and gas is provided by the written ministerial statement made by the Secretary of State for Energy and Climate Change to Parliament on the 12th July 2011 and the subsequent guidance; Oil and Gas Clause in Crown Estate Leases guidance on procedures for independent valuation where necessary.

59. This policy gives clarity on dealing with potential future conflicts with other users who may want to use the same space. It builds upon Marine Policy Statement (3.3.4 and 3.3.8) which states: 'The UK's policy objective to maximise economic development of the UK's oil and gas resources' and 'maximising the economic recovery of UK oil and gas resource sustainably is therefore a priority in the UK's energy supply and energy security strategies'.

[9] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[10] HM Government, Marine Policy Statement (2011), (3.3.8)

### How the policy will be implemented

60. The potential for interaction between proposed oil and gas activity and current activities is addressed through existing measures, both as part of the process to identify and award licence blocks and to support application for a production licence (both requiring substantial investment) and through arrangements in place where any conflict remains[11]. The policy wording supports that approach.

61. The Oil and Gas Authority (OGA), which was set up in April 2015 and is now responsible for issuing Seaward Production and Exploration Licences and the Department for Energy and Climate Change Oil and Gas Environment and Decommissioning team (BEIS OGED) which is responsible for issuing activity specific approvals, should be consulted when considering whether a proposal has a potential impact on current or future exploration and production of oil and gas.

62. Future oil and gas proposals may require access to the same area of seabed as other proposals. Proposals located in or around a licensed block should demonstrate they could co-locate with any oil and gas activities (see figure 4). Due to the small footprint of oil and gas infrastructure any actual conflict or impact may be minimal.

63. Early engagement is recommended with the oil or gas licence holder especially where a Seaward Production licence exists, as there may be requirement for negotiation between parties involved, the Oil and Gas Authority and the Department for Business, Energy and Industrial Strategy. Where conflict arises public authorities should take account of the full range of benefits and risks, the national policy on development of oil and gas resources and arrangements in place for managing conflicts.



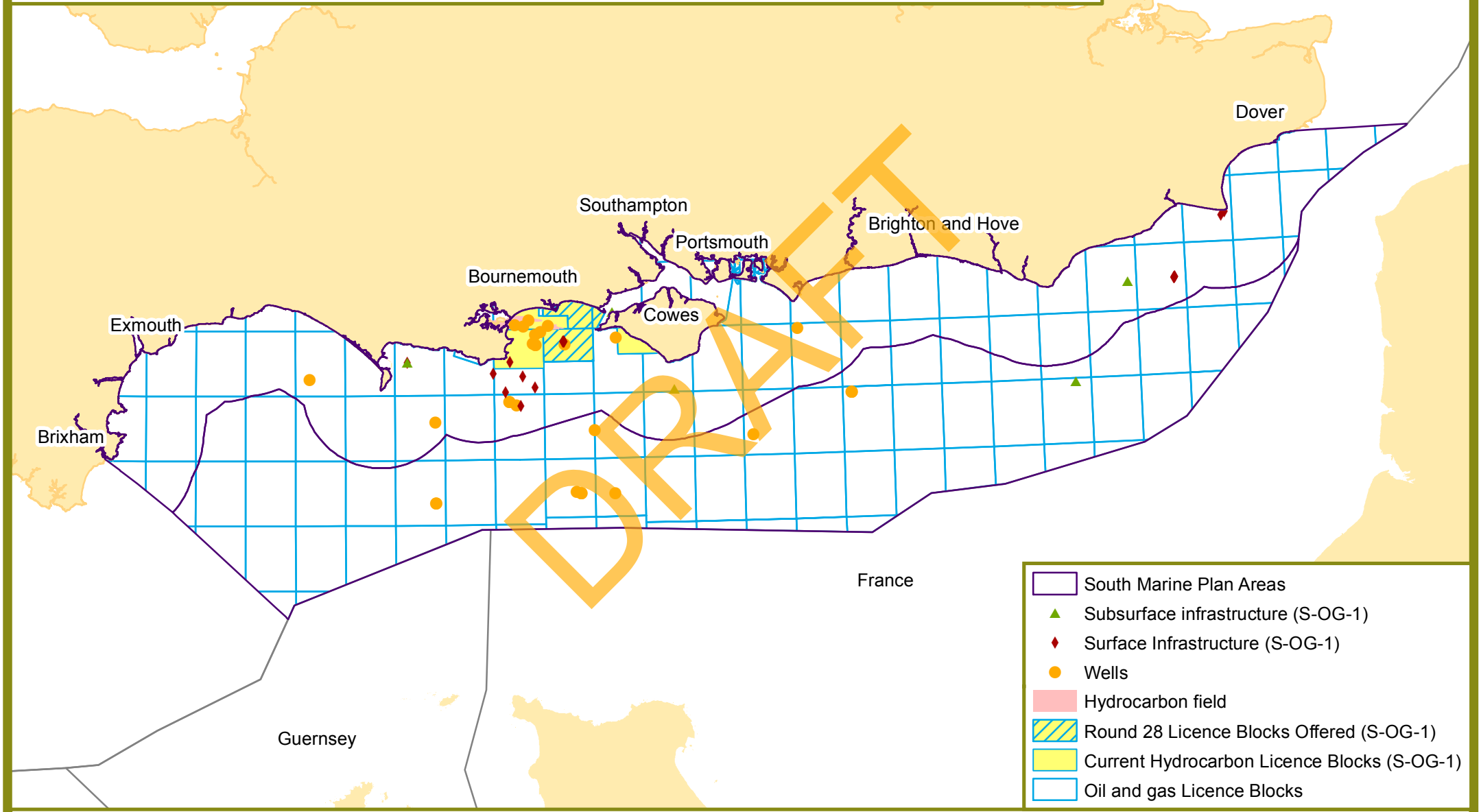
[11] Written Ministerial Statements, Crown Estate Leases for Offshore Renewables Projects(12 July 2011).

Marine Management Organisation

# Fig 4: Oil and gas infrastructure and hydrocarbon fields

## Policy map - Please see box 1 for further details

November 2015



**Policy S-TIDE-1**
Proposals in areas under seabed agreement for tidal energy generation (see figure 5), should demonstrate that they will, in order of preference:

a) avoid
b) minimise
c) mitigate significant adverse impacts
d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.

**Policy S-TIDE-1 applies to the inshore and offshore marine plan areas**

### What is tidal energy generation?

64. Tidal energy generation is where tidal devices generate energy by harnessing the surge of ocean waters during the rise and fall of tides. Tidal energy resource is at its best when there is a good tidal range, defined as the vertical difference between the high tide and the succeeding low tides, and the speed of the current is amplified by the funnelling effect of the local coastline and seabed. Tidal devices work well in narrow straits and inlets, around headlands, and in channels between islands.

### Why is it important?

65. Tidal energy development is limited by the natural features needed to create tidal currents sufficient to drive tidal stream devices. Consequently tidal energy can only be harvested in a limited number of areas in English waters. Proposals are typically constrained to sites around headlands and channels around the coastline. These areas require protection from other new developments and activities which could impact upon the generating capacity of a tidal energy device. Considerable tidal resource exists within the south marine plan areas.

66. The need to protect tidal energy resources is recognised in the Marine Policy Statement (3.3.21) stating 'it is important for marine planning to take account of appropriate locations for such [tidal and wave energy] developments alongside more established uses of marine space'. This is reinforced in the National Policy Statement EN-1 (3.3.10) stating 'As part of the UK's need to diversify and decarbonise electricity generation, government is committed to increasing dramatically the amount of renewable generation capacity. In the short to medium term, much of this new capacity is likely to be from onshore and offshore wind energy projects, but increasingly it may include plants powered by the combustion of biomass, waste, or the generation of electricity from wave or tidal power.'

67. This policy protects locations both inside and outside areas identified for tidal energy developments from other activities or developments that could impact upon the ability to realise energy generation from tidal stream devices. It applies the intent set out in National Policy Statement EN-1 for identified locations.

### How the policy will be implemented

68. Proposals for new developments or activities should demonstrate that they will, in order of preference, avoid, minimise or mitigate impact on tidal stream development. This includes, but is not limited to, hard infrastructure that is installed for five or more years at any point through the water column either on or under the sea bed.

69. Where it is not possible to mitigate significant adverse impacts proposals should state the case for proceeding, including how the proposal supports the South Marine Plan vision, objectives and policies. Inclusion of this information does not indicate that approval of the proposal will follow by default.

70. Information could include:
    - evidence that the proposed activity will be compatible with tidal energy generation
    - evidence showing the footprint of the proposal will not have a negative impact on the tidal energy sites ability to generate energy
    - undertaking the conflicting activity during periods of low energy generation

71. Proposals should demonstrate that relevant public authorities have been consulted in the pre-application phase of the consenting processes and that mitigation and/or minimisation has been discussed with tidal stream project developers, public authorities to ensure any solutions are suitable (this could also include trade bodies). Objective 1 – co-existence sets out arrangements for the update of the area covered by this policy as new information becomes available.

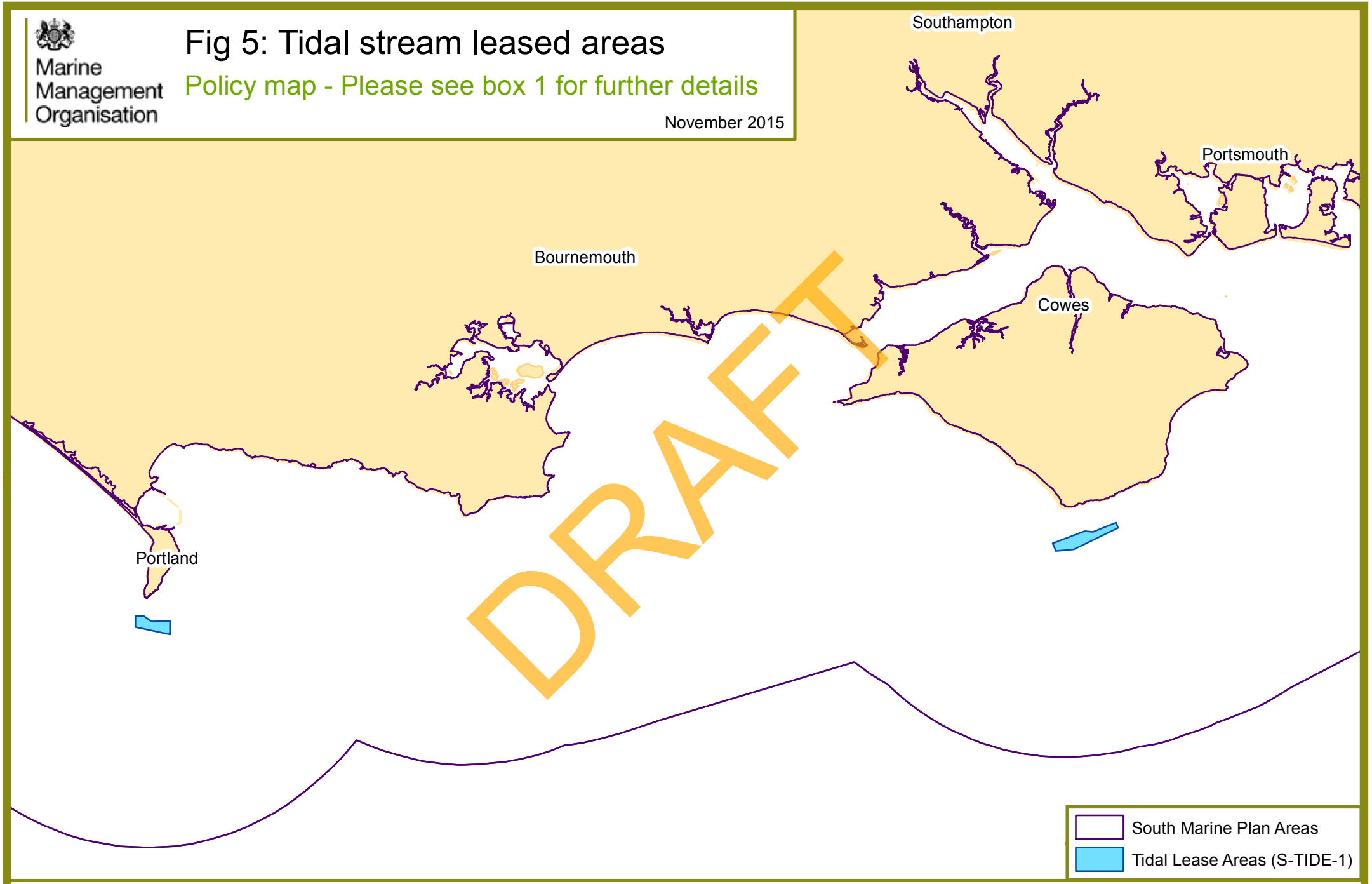
72. Public authorities should take account of a range of relevant considerations including compliance with legislation, regulations, Habitats Regulations Assessment and environmental assessment.

Marine Management Organisation

# Fig 5: Tidal stream leased areas

## Policy map - Please see box 1 for further details

November 2015



### Box 2: Offshore wind energy

The South Plans Analytical Report identifies the range of benefits that offshore wind development can bring, as well as highlighting sub-national policies that provide a level of support for renewable energy. A range of national policy drives the development of offshore wind energy, including

- The Climate Change Act 2008
- Renewable Energy Directive
- Electricity Market Reform
- National Planning Policy Framework
- National Policy Statements EN-1 and EN-3

The Marine Policy Statement (3.3.5) requires marine planning to take account of preferred areas for development of different energy sources, generation and distribution infrastructure. In England, licences for offshore wind energy projects are granted by the Marine Management Organisation (projects <100MW) and the Planning Inspectorate (projects >100MW), developers also require a seabed lease from The Crown Estate. Within the south marine plan areas two projects have been identified as a result of The Crown Estate's round 3 zone appraisal process, one which has received consent (Rampion) and one which has been rejected (Navitus Bay) by the Planning Inspectorate. There is also significant resource potential for offshore wind energy projects within the south plan areas as identified through The Crown Estate's key resource areas (see figure 11).

Development of the offshore wind sector within the 20 year vision of the plan is dependent on a number of factors including:

- continued government support through energy policy (Electricity Market Reform)
- rate of build out for existing projects
- review of existing round 3 zones to be undertaken by The Crown Estate

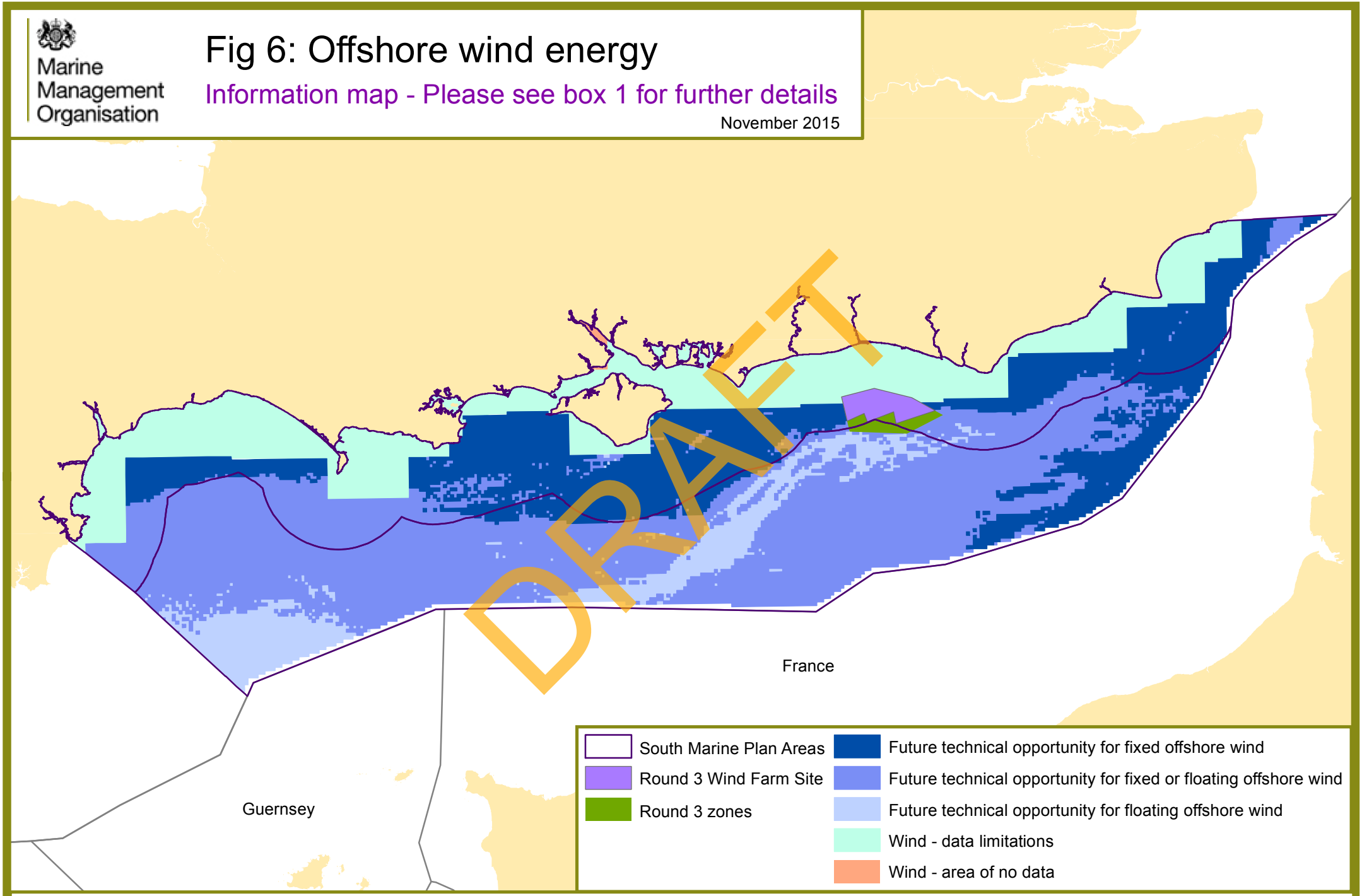
Due to existing national policy, the scale and number of existing projects a specific spatial offshore wind policy has not been included in the South Marine Plan.

Marine Management Organisation

# Fig 6: Offshore wind energy

## Information map - Please see box 1 for further details

November 2015



**Policy S-PS-1**
Proposals that may have a significant adverse impact upon current activity and future opportunity for expansion of port and harbour activities should demonstrate that they will, in order of preference:

a) avoid
b) minimise
c) mitigate significant adverse impacts
d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.

**Policy S-PS-1 applies to the inshore marine plan area**

### What are port and harbour activities?

73. Port and harbour activities in the south marine plan areas range from the transport of cargo (including bulks, containers and roll-on roll-off units) and passengers, facilitating recreational use, the landing of marine aggregates and, fisheries products, fabrication and storage of renewable energy components, hosting of naval and research vessels and waste and recycling management as well as bioenergy centres.

74. Ports and harbours also play a role in managing their local environments (natural and historic) and often play an active role in marine and maritime related events.

75. There are numerous ports and harbours across the south inshore marine plan area ranging from major ports such as the Port of Southampton, to operations based in Areas of Outstanding Natural Beauty such as Chichester Harbour Conservancy. Near the boundaries of the south inshore plan area, Dover is an example of a port which has interest in access through the south inshore marine plan area for vessels in transit.

### Why is this important?

76. Ports and harbours are essential to realising the economic and social benefits of marine resources including ports' and harbours' ability to respond to the demand of users. UK ports compete with each other and with European ports. This helps drive efficiencies and lowers costs for industry and consumers, contributing to the competitiveness of the UK economy (National Policy Statement for Ports). Synchronising ports' and harbours' functions requires careful planning and management to ensure efficient use of space and support future growth.

77. Ports and harbours future growth is directly related to the number of vessels and/or the size of vessels using them making their growth difficult to predict as it is responsive to global markets. Growth is not the aspiration of all ports and harbours, some are committed to maintaining current operations and management practices.

78. This policy provides clarity on how the economic interests of ports and harbours should be protected and ensures new development does not restrict current activities or future growth. This policy protects the efficiency and resilience of continuing port operations, and further port development Marine Policy Statement (3.4.7). This policy also complements the National Policy Statement for Ports, setting provisions for port growth in the context of the management and development of other activities.

### How the policy will be implemented

79. Proposals should demonstrate that they will, in order of preference, avoid, minimise or mitigate significant adverse impacts on current and future opportunities for port and harbour growth. This includes where proposals may alter the main characteristics in Statutory Harbour Authority areas. Where it is not possible to mitigate they should state the case for proceeding with the proposal. Inclusion of this information does not indicate that approval of the proposal will follow by default.

80. Proposals should demonstrate that relevant ports' and harbours' have been consulted and their current activities and future growth considered. As this policy may apply more widely than Statutory Harbour Areas, proposals should identify all ports and harbours that may be affected and engage with them early in proposal development. This should include the matters listed in these plans but may also include other considerations such as anchorages.

81. Figure 7 outlines key areas where this policy should be applied. It includes navigational approaches, harbour administrative areas and anchoring areas. This should not be considered definitive. For example, in understanding where future port or harbour use may need to be accommodated, developments and other activities should also have regard to access and approach channels into ports (see figure 7).

82. Figure 7 should not be considered in isolation and any interpretation should be subject to review with neighbouring port or harbour authorities to ensure navigation channels are considered in their entirety. This is necessary as navigation channels are composed of areas maintained by licenced and natural processes. It may be that areas maintained by natural processes are subject to capital and maintenance dredging in the future as port requirements are identified. Where they exist, port master plans and their descriptions of future development should be referred to.

83. Figure 7 can also be used to identify potential future development as it shows existing licenced dredging and disposal areas, which can indicate future capital dredging and thereby port development. Please visit the marine planning portal for up to date versions of these maps.

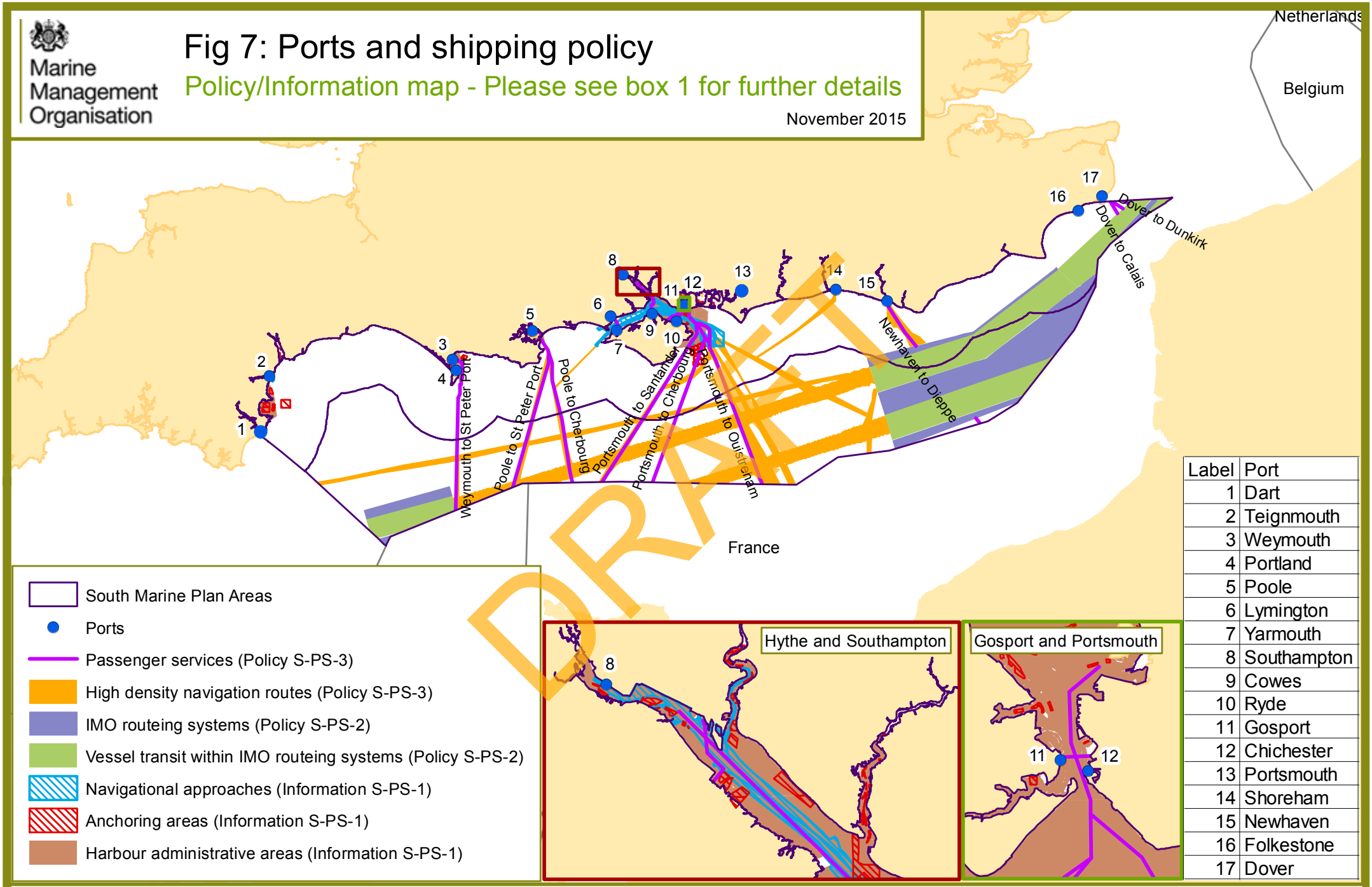
84. Public authorities will take account of a range of relevant considerations including compliance with legislation, regulations and environmental assessment.

Marine Management Organisation

# Fig 7: Ports and shipping policy

## Policy/Information map - Please see box 1 for further details

November 2015




| Label | Port |
|---|---|
| 1 | Dart |
| 2 | Teignmouth |
| 3 | Weymouth |
| 4 | Portland |
| 5 | Poole |
| 6 | Lymington |
| 7 | Yarmouth |
| 8 | Southampton |
| 9 | Cowes |
| 10 | Ryde |
| 11 | Gosport |
| 12 | Chichester |
| 13 | Portsmouth |
| 14 | Shoreham |
| 15 | Newhaven |
| 16 | Folkestone |
| 17 | Dover |

**Policy S-AGG-1**
Proposals in areas where a licence for extraction of aggregates has been granted or formally applied for should not be authorised, unless it is demonstrated that the other development or activity is compatible with aggregate extraction.

**Policy S-AGG-2**
Proposals within an area subject to an Exploration and Option Agreement with The Crown Estate should not be supported unless it is demonstrated that the other development or activity is compatible with aggregate extraction.

**Policy S-AGG-3**
Proposals in areas where high potential aggregate resource occurs should demonstrate that they will, in order of preference:

a) avoid
b) minimise
c) mitigate significant adverse impacts on aggregate extraction
d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.

**Policies S-AGG-1, S-AGG-2 and S-AGG-3 apply to the inshore and offshore marine plan areas**

### What are marine aggregates?

85. Marine aggregates are sand and/or gravel removed from the seabed. Marine aggregate extraction can only take place where commercially viable deposits of sand and gravel occur. In turn, the distribution of these deposits is dependent on the spatially discrete areas where they were formed by geological processes. This extracted aggregate is used in construction principally as a component in concrete.

86. Annual production figures show around 7Mt of aggregates (42% of aggregates extracted from a total of 16.7Mt in England) were extracted from the south marine plan areas.

87. The Marine Management Organisation provides a public register of aggregate licence applications received. Where a marine licence is issued, operators are required to commence works within five years of the date of issue, subject to the completion of any pre-dredge surveys required, otherwise the licence will lapse.

### Why is this important?

88. The National Planning Policy Framework states that 'minerals are essential to support a sustainable economy and that plans (including marine plans) should safeguard areas of marine aggregate extraction that are of local or national importance'.

89. The Marine Policy Statement (3.5.1) highlights that England has some of the best marine aggregate resources in the world. Aggregate extraction also makes a crucial contribution to meeting the UK demand for construction aggregate materials, essential for the development of the built environment.

90. The south marine plan areas are currently the second busiest area in England for marine aggregate extraction with a total licenced area of 155.47 km². The south plan areas' licenced aggregate sites represent 50% of the total permitted tonnage licenced in UK waters.

### How the policies will be implemented

### S- AGG-1

91. This policy protects licenced areas (existing and new, identified at the application stage) against other developments or activities, for example cables, or built infrastructure, whether in or adjacent to an area unless it is demonstrated that the other development or activity is compatible with aggregate extraction. This policy reflects the work by all involved parties, including applicant investment to obtain a licence or reach the point of application for an aggregate extraction licence. It includes any agreement between The Crown Estate and dredging companies that give exclusive rights to for sand and/or gravel extraction for a defined term.

92. Proposals located in or around aggregates licence areas should demonstrate that they would not compromise any aggregate extraction activities, as shown in figure 8.

93. Public authorities should assess proposals for any compromise to, or conflicts with, licenced aggregate extraction. If these are identified, public authorities should consider impacts to existing proposals, developments and activities. This should include assessing the full range of impacts and benefits which could affect marine aggregate extraction licence areas.

94. Public authorities should consult the Marine Management Organisation and The Crown Estate when considering if a proposal has a potential impact on a marine aggregates extraction licence area.

### S-AGG-2

95. Proposals which prevent future extraction of aggregates in exploration areas are unlikely to be supported once an area is awarded 'rights' by The Crown Estate and identified on a map by the Marine Management Organisation (see figure 8).

96. Proposals within an exploration area for aggregates, should clearly demonstrate that they are not compromising access to, nor the licenced extraction of, aggregate resource.

97. Proposals should demonstrate that relevant aggregate companies and others such as The Crown Estate have been consulted, to determine compatibility and to satisfy the public authorities that the policy is met. Early consultation should help to avoid conflict arising after investment – for example, increasing investor certainty at an early stage. Where any potential conflict relates to oil and gas developments please refer to plan policy S-OG1.

98. 'Exploration area' includes what The Crown Estate refers to as the 'act of investigating, through survey techniques for commercially viable aggregate resources within a defined area of seabed, and is subject to the exclusive option agreement'. Aggregate exploration occurs within a defined search area which is larger than the area of the final production agreement. It is crucial that exploration

areas have a level of protection, indicated by this policy to ensure that the smaller (in area) production agreements can be delivered.

99. Exploration and follow up activities are subject to various conditions. The area to which this policy applies will change, as exploration rights are surrendered over time to make way for production agreements. Where exploration areas are considered unsuitable for aggregate extraction and an operator's rights are relinquished, they then fall outside of the scope of this policy.

### S-AGG-3

100. Proposals should assess impacts on aggregate resource extraction identifying mitigation measures that may be required.

101. Proposals should demonstrate that they will, in order of preference, avoid, minimise or mitigate significant adverse impacts on aggregate extraction. Where it is not possible to mitigate they should state the case for proceeding with the proposal. Inclusion of this information does not indicate that approval of the proposal will follow by default.

102. Examples of how to avoid, minimise or mitigate include:
    - avoid - provide data that shows the area does not contain aggregates or providing evidence that their operation will be compatible with extraction activity. Given the uncertainty that applies to some of the mapped areas and the size of the 'area of search', the policy makes allowance for the possibility of other competing proposals to proceed under particular circumstances
    - minimise - include showing that the footprint of the proposal relative to the available aggregate in that location has minimal impact
    - mitigate - include moving the proposal from a more to less favourable area for aggregates, or proposing that prior extraction of aggregates before development is feasible

103. All licences (new or renewal) are subject to project-level assessments including Environmental Impact Assessment or Coastal Impact Study (where relevant) and subsequent conditions.

104. Public authorities will take into account a range of relevant considerations including compliance with legislation, regulations and environmental assessment.

105. The areas defined as high potential aggregate resource are based on mapping undertaken by British Geological Survey on behalf of The Crown Estate and identify the locations with the greatest potential for aggregate resource shown in figure 8.

106. Where it is not possible to mitigate significant adverse impacts proposals should state the case for proceeding, including how the proposal supports the South Marine Plan vision, objectives and policies. Inclusion of this information does not indicate that approval of the proposal will follow by default.

107. This policy assesses how proposals and activities within areas of high potential aggregate resource, as defined by British Geological Survey, may impact the ability

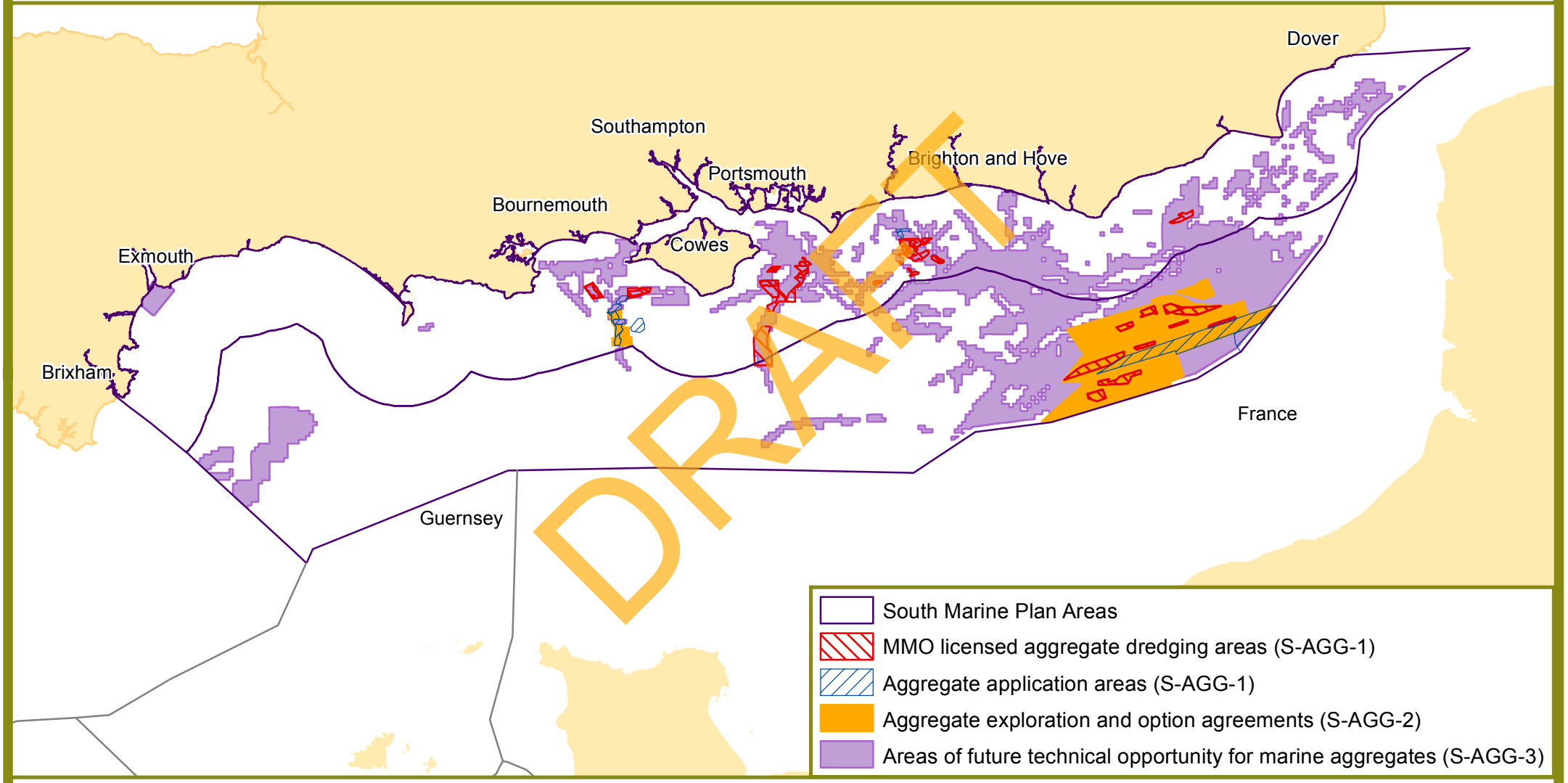
to access commercially viable marine sand and gravel resources in the future helping to secure access to sufficient supply of aggregate resources.

Marine Management Organisation

# Fig 8: MMO aggregate marine licensed areas, applications to The Crown Estate, exploration agreements and potential opportunity

## Policy map - Please see box 1 for further details

November 2015




Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0. VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23. © Crown copyright and database right 2015.

Note: The areas of future technical opportunity do not include the presence of hard constraints posed by existing uses of the marine estate or other factors including natural & cultural resources, marine users, economics & market appetite and policy drivers required for the opportunity to be supported. Cables and pipelines outside of the territorial waters limit (other than export cables) are not shown as they are not subject to The Crown Estate's permission

**Policy S-DD-1**
Proposals within or adjacent to licenced dredging and disposal areas should demonstrate that they will, in order of preference;

a) avoid
b) minimise
c) mitigate significant adverse impacts on licenced dredging and disposal areas
d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.

**Policy S-DD-1 applies to the inshore and offshore marine plan areas**

### What is dredging and disposal activity?

108. Dredging and disposal activity involves the removal of sediment from water ways and the sea bed. Continued navigational access to ports and harbours would not be achieved without maintenance dredging. Capital dredging enables new activities to proceed by creating new, deeper and wider channels, and berths.

109. The Marine Policy Statement (3.4.1)states 'ports are an essential part of the UK economy, providing the major conduit for the country's imports and exports. Ports also provide key transport infrastructure between land and sea. Ports and shipping are critical to the effective movement of cargo and people, both within the UK and in the context of the global economy' and that 'dredging is an enabling activity which is essential to the functioning of ports and marinas' Marine Policy Statement (3.6.3).

110. There are a substantial number of existing maintenance dredging and disposal sites within the marine plan areas. These are mainly focused within the south inshore plan area. See figure 9 for a map showing licenced areas.

### Why is this important?

111. Dredging activities play a vital role in both maintaining and expanding the socio-economic benefits that port development attracts through direct and indirect job creation. Dredging also supports terrestrial infrastructure as well as imports, exports and tourism. When considered alongside port expansion proposals and the growth in offshore renewable energy developments, there is scope for expansion for the sector.

112. Increased shipping activity and larger vessels are likely to result in applications to dredge deeper, wider and more frequently. This will have a direct effect on the amount of disposal material to be managed at sea and a possible increase in the number of licence applications within the plan areas.

113. This policy protects dredging and disposal activities in or adjacent to licenced dredging and disposal areas against other new proposals, cables or built infrastructure that would compromise the continued access to ports and harbours for the shipping industry.

114. This policy identifies where dredging and disposal areas exist within the plan areas. It clarifies requirements and encourages early consideration of impacts to avoid issues or conflicts arising during the application process.

### How the policy will be implemented

115. Proposals should include supporting information illustrating potential impacts. This may include consultation to identify issues at scoping stage, and suggested measures to avoid, minimise or mitigate them. Where it is not possible to mitigate they should state the case for proceeding with the proposal. Inclusion of this information does not indicate that approval of the proposal will follow by default.

116. Public authorities will establish whether the intent of this policy has been achieved through the determination of any applications. Public authorities will take account of a range of relevant considerations including compliance with legislation and regulations detailed in the maintenance dredging protocol and from the applicable environmental impact assessment.

117. A licence to dispose of dredged material at sea must be obtained from the Marine Management Organisation. Information on exemption guidance and the licensing application process exists and where The Crown Estate, or another party, own the bed of the harbour their permission for dredging operations is also likely to be needed. As per the Marine and Coastal Access Act (Section 73) all maintenance and navigational dredging requires consent through a marine licence unless specifically exempted

118. Where it is not possible to mitigate significant adverse impacts proposals should state the case for proceeding, including how the proposal supports the South Marine Plan vision, objectives and policies. Inclusion of this information does not indicate that approval of the proposal will follow by default.

Marine Management Organisation

# Fig 9: Licensed dredging and disposal areas

## Policy map - Please see box 1 for further details

November 2015

South Marine Plan Areas

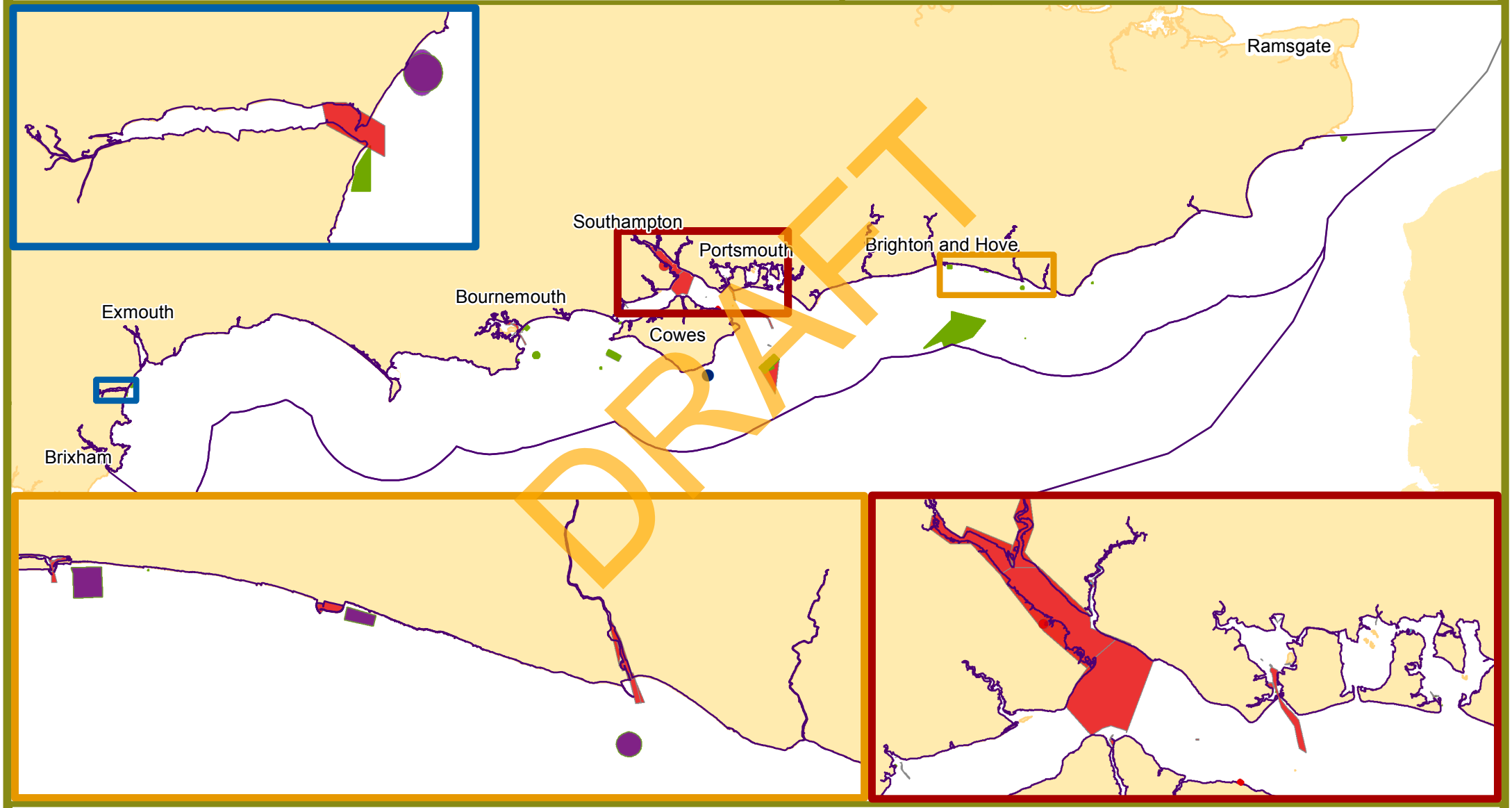
Disused Muntions Disposal Sites

Open Marine Disposal Sites (S-DD-1)

Licensed activity

Disposal of dredged material (S-DD-1)

Navigational dredging (S-DD-1)



**Policy S-AQ-1**
Proposals for aquaculture in identified areas of potential aquaculture production will be supported.

Proposals in existing or within potential aquaculture production areas must demonstrate consideration of and compatibility with aquaculture production. Where compatibility is not possible, proposals must demonstrate that they will, in order of preference:

a) avoid
b) minimise
c) mitigate significant adverse impacts on aquaculture
d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.

**Policy S-AQ-1 applies to the inshore and offshore marine plan areas**

### What is aquaculture?

119. Aquaculture covers the cultivation of algae, shellfish, finfish and the restocking of wild populations for example lobster using hatcheries.

### Why is this important?

120. Aquaculture is a key area for development due to its potential to contribute to the sustainability and security of the UK's food supply. Common Fisheries Policy reform has led to a detailed inclusion of aquaculture, including foreseeing greater aquaculture infrastructure development within the European Union. In 2013 in the south inshore marine plan area 2352 tonnes of shellfish were harvested from aquaculture sites including 1537 tonnes of mussels.[12]

121. Aquaculture relies on good water quality and the control of pollution within areas of aquaculture cultivation. In many areas poor water quality can lead to reduced growth and an increased risk of disease to both the farmed species and human consumers. Water quality is poor within many of the estuaries in the south inshore marine plan area. With high water quality status minimal processing of harvested shellfish is required. Where water quality is reduced, aquaculture costs for shellfish processing increase. This is due to a need to meet safety standards of clean aquaculture production, therefore they are also unable to command as high a market price. The main shellfish species cultured in the south plan areas (mussels, oysters etc) are filter feeders and can actually improve water quality. [13]

122. This policy will enable aquaculture to continue, and to realise new opportunities within legislative requirements. This policy focuses on maintaining space for the industry. The policy also links to objective 5 – displacement, and policy S-FISH-2 and S-FISH-3 regarding reducing displacement of industries and access to sites.

[12] Data from river basement management plan area and individual Several Order returns as collated for EU requirements under (EC) No 762/2008
[13] Marine Management Organisation (2015), Evidence Supporting the Use of Environmental Remediation to Improve Water Quality in the south marine plan areas, MMO1105, In press

123. This policy is in line with Descriptors 3, 5 and 9 of the Marine Strategy Framework Directive, which are relevant to aquaculture.

### How the policy will be implemented

124. Non-aquaculture proposals within current and potential aquaculture production areas must consider significant adverse impacts on:
    - water quality within the site where common adverse impacts could include pollutant release or increases in turbidity
    - the culture species and its immediate environment - more information on culture species can be found in species profiles
    - the wider water column – for example could pollutants or invasive species released by your proposal flow towards an aquaculture site?

125. Relevant organisations it may be beneficial to consult to determine whether there are aquaculture developments (including proposed developments) in the area, and the potential impacts of the proposal include:
    - the Centre for Environment, Fisheries and Aquaculture Science, who can advise on water quality and wider species requirements in relation to aquaculture,
    - Inshore Fisheries and Conservation Authorities if your proposal is within 0-6nm as they will be aware of aquaculture operations here,
    - The Crown Estate if your proposal is outside 6nm as they will be aware of any aquaculture lease proposals here

    The information gained here will enable proposals to evidence how they meet the requirements of policy S-AQ-1

126. Where it is not possible to mitigate significant adverse impacts proposals must state the case for proceeding, including how the proposal supports the South Marine Plan vision, objectives and policies. Inclusion of this information does not indicate that approval of the proposal will follow by default.

127. In developing proposals for aquaculture activity it will be useful to engage with:
    - local fisheries interests,
    - tourism and recreation representatives for example the Royal Yachting Association and Cruising Association

    Evidence of engagement should be provided within the proposal. These activities in particular use the same geographical areas as aquaculture and early engagement may increase local support for sustainable aquaculture

128. Public authorities will apply this policy when determining proposals for development including new aquaculture proposals. Current and future potential aquaculture must be considered (see figure 10 or visit the Marine Information System for up to date versions of these maps). Given the uncertainty on the exact location of future aquaculture developments, the policy makes allowance for the possibility of other, competing developments to proceed under particular circumstances.

129. Where proposals for finfish culture risk water quality, each proposal will be assessed in an individual marine licence application. Therefore any negative impacts on the environment would be assessed and conditions that might be required would be

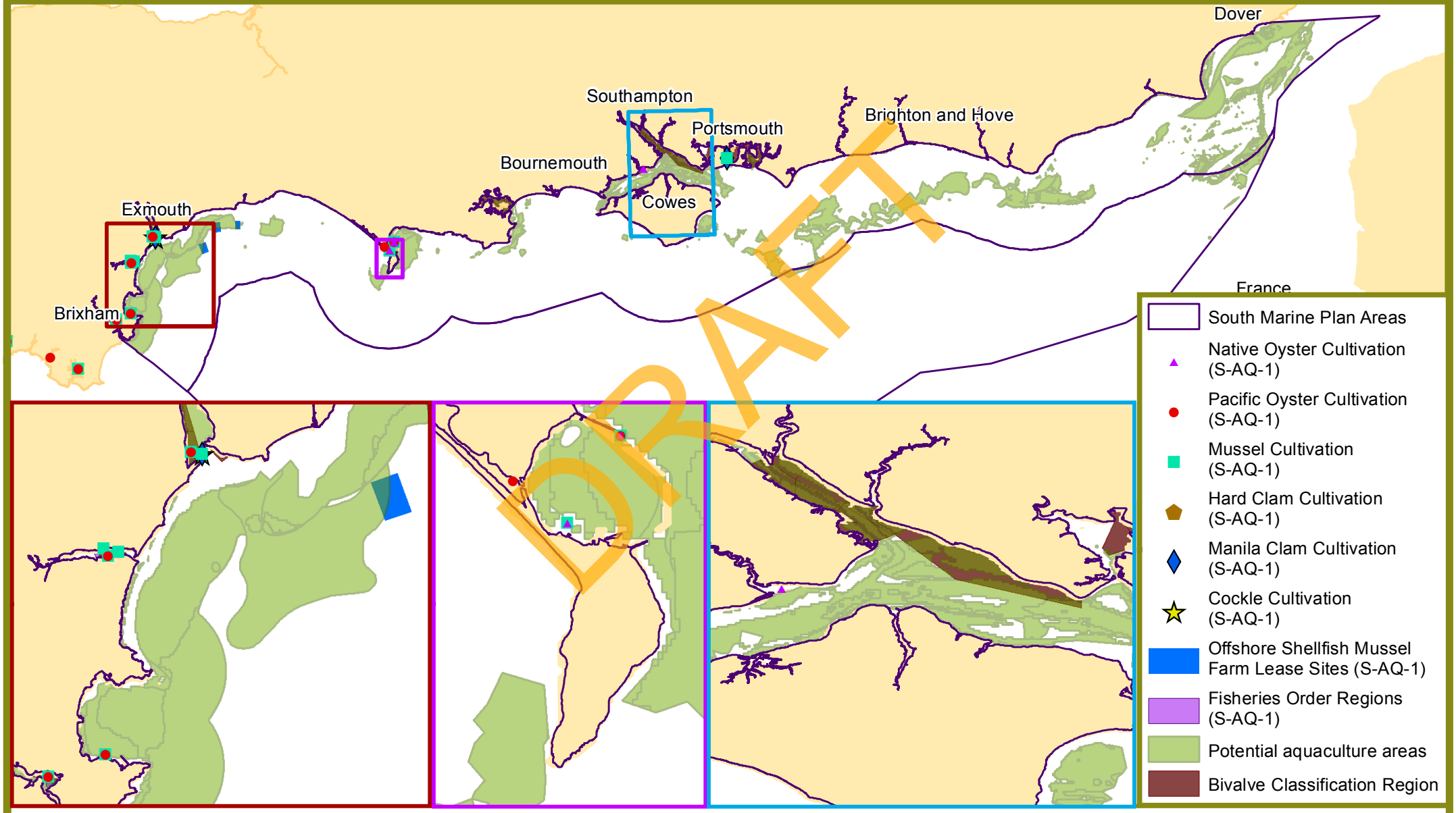
determined. For example, remediation of water quality by combining with algae cultivation to soak up excess nutrients.

Marine Management Organisation

# Fig 10: South plan current and potential aquaculture

## Policy map - Please see box 1 for further details

November 2015




Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0.
VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23

### Signposting – objective 1 – co-existence

130. Existing measures which relate to, and may contribute to the achievement of this objective include:

- Sub-national plans and strategies (see South Plans Analytical Report)
- Common Fisheries Policy
- Marine Policy Statement (3.9.1), (3.9.4) and (3.9.6)
- National Planning Policy Framework (S-CO-1, S-AGG-1, S-AGG-2, S-AGG-3)
- National Policy Statement for Ports (S-CO-1)
- National Policy Statement EN-1 (S-CO-1)
- National Policy statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) (S-CO-1)
- The Petroleum Act 1998 (Policy S-OG-1)
- Planning Act (2008)
- Marine and Coastal Access Act (2009)
- Statutory Strategic Security of Supply Reports of 2010 (S-DEF-1)
- The Water Framework Directive and River Basement Management Plans (S-AQ-1)

Further information and guidance that may help in implementing the objective include:

- Exemption guidance (S-DD-1)
- Licensing application process (S-DD-1)
- Marine planning portal
- Licensing procedure for oil and gas (S-OG-1)

## 5.2 Objective 2 Infrastructure

**Objective 2**
**To manage existing, and facilitate the provision of new, infrastructure supporting marine and terrestrial activity.**

### Context

131. This objective emphasises the need to consider infrastructure provision and its location in decision making, to support marine and terrestrial activity (or vice versa). This adds further to existing legislation to enable land based and marine authorities to work together.

132. In developing this objective the Marine Management Organisation has liaised and consulted with a number of organisations and stakeholders, as stated in the Marine Policy Statement (1.3.4) and the National Planning Policy Framework (S 162). The Localism Act 2011 (Section 110) also emphasises the 'duty to co-operate' obligation for marine and land based authorities during the preparation of plans.

133. A diverse range of industries and sectors (cabling, ports, renewables, aggregates, fisheries, recreation and tourism) have existing infrastructure within the plan areas and may require new infrastructure (South Plan Analytical Report 2014). Infrastructure is important for both marine and terrestrial activities and for delivering a sustainable marine economy (box 1 of the high level marine objectives, within the Marine Policy Statement).

134. The word 'manage' is used to recognise that in some cases existing infrastructure may no longer be appropriate, should not be maintained in its current form or may require removal or enhancement.

135. Approaches to infrastructure development should be long term, recognising that some decisions will have longer term impacts than others on any given space. For example, development at the coast varies in terms of intended period of use, therefore creating opportunities for other uses at the end of the intended lifespan.

### Rationale

136. This objective and its associated policies highlight the importance of marine and land based infrastructure and how together they support activities. To achieve appropriate levels of infrastructure provision, marine and land based planning authorities are required to work together to support integration to avoid conflicts between these two decision-making processes. The objective promotes the identification of appropriate locations for infrastructure to support existing activities and future proposals.

137. This objective has been developed to clarify and strengthen the provisions of the Marine Policy Statement, and the National Planning Policy Framework providing more detail and prescription for public authorities when making decisions and developing plans in relation to the provision of infrastructure.

### Who is this of interest to?

138. The broad nature of the objective and the many activities and resources it covers means it relates to a range of national policy areas for which different government departments are responsible. Departments with specific responsibilities include:
    - Department for Communities and Local Government – local authorities
    - Department for Environment Food and Rural Affairs
    - Department for Energy and Climate Change and the Planning Inspectorate – nationally significant infrastructure projects
    - Department for Transport – harbour and navigation authorities

139. For the same reasons the objective will be of interest to public authorities, including those making decisions relating to the sectors and resources mentioned above, on activities that interact with those sectors and resources, and those with a wider interest, for example in taking account of the plans in their own planning. Examples include but are not restricted to:
    - The Crown Estate (a range of interests)
    - Marine Management Organisation (particularly as a relevant licensing authority and adviser to other public authorities)
    - The Planning Inspectorate (in relation to nationally significant infrastructure projects),
    - Oil and Gas Authority
    - Maritime Coastguard Agency (oil and gas, shipping and ports)
    - local authorities

**Policy S-INF-1**
Land based infrastructure which facilitates marine activity (and vice versa) should be supported.

**Policy S-INF-1 applies to the inshore and offshore marine plan areas**

### What is infrastructure?

140. Infrastructure is a physical structure or facility which could be in the form of, but not limited to, landing, storage and processing facilities for catch or freight, aggregates handling, slipways, boat repair facilities, passenger transfer or electricity transmission.

141. The South Plan Analytical Report identified marine activities located in the south plan areas dependent on some form of infrastructure whether it be marine or land based. Additional infrastructure to maintain and support current and future activity will be required. Some examples are:
    - aggregate wharfs located at the Isle of Wight, Shoreham harbour, and Southampton
    - sea defences at Bournemouth, Chichester, Portsmouth, Bognor Regis, Brighton and Eastbourne
    - port development at Newhaven and Shoreham to facilitate Rampion offshore windfarm

### Why is this important?

142. Infrastructure is critical to realising the economic and social benefits of activities in the marine area, which only accrue when brought on land. For example, offshore

renewable energy requires cabling and collector or convertor stations to feed into the national grid onshore. Conversely, some developments on land require marine infrastructure (such as cables or outfall pipes) to operate. This infrastructure may be located in another marine plan area or on land adjacent to the south marine plan areas (for example, facilities to land and process marine aggregates).

143. This policy promotes integration between marine and land use plans in the provision of adequate infrastructure, especially where that infrastructure will predominantly support activity in the other environment (marine to land or vice versa). It has been developed to clarify the provisions of the Marine Policy Statement, provide more detail and prescription for both land based and marine public authorities, support consideration of proposed activities and measures, as well as in the development and review of plans, for example local development plans.

### How the policy will be implemented

144. Proposals in the marine area that would significantly compromise terrestrial development plans are unlikely to be supported.

145. This policy should be implemented by public authorities when authorising proposals or making decisions which may impact infrastructure supporting marine and terrestrial activity. The Coastal Concordat can be used for decisions on proposals with both terrestrial and marine authorisations providing a co-ordinated process.

146. Public authorities should consider marine activities and their associated infrastructure in the drafting or amendment of their local plans.

147. Public authorities should also take into account proposals on land that have potential impacts on delivery of marine plan objectives.

**Policy S-PS-2**
Proposals that require static sea surface infrastructure or that significantly reduce under-keel clearance must not be authorised within International Maritime Organization routeing systems unless there are exceptional circumstances.

**Policy S-PS-2 applies to the inshore and offshore marine plan areas**

### What are International Maritime Organization routeing systems?

148. The International Maritime Organization is the United Nations agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships. International Maritime Organization routeing systems are established to maintain navigational safety by managing shipping traffic in busy areas and/or in response to prevailing hydrographic features. International Maritime Organization routeing systems in the south marine plan areas include the Strait of Dover Traffic Separation Scheme and the Casquetts Traffic Separation Scheme (see figure 7).

### Why is this important?

149. The south marine plan areas include routeing systems that ensure international obligations are met with regards to maintaining particular navigational requirements.

150. The Marine Policy Statement (3.4.7 and 2.3.1.1) states that 'marine plan authorities and decision makers should take into account and seek to minimise any negative impacts on shipping activity, freedom of navigation and navigational safety and ensure that their decisions are in compliance with international maritime law.' The National Policy Statement for Renewable Energy Infrastructure (2.6.161) states that a nationally significant infrastructure projects should not be '... grant[ed] development consent in relation to the construction or extension of an offshore wind farm... [if] interference with the use of recognised sea lanes essential to international navigation is likely to be caused by the development'.

151. The policy specifies that developments should not be authorised where use of International Maritime Organization routeing systems may be compromised. This reflects the commitment made by the UK to preserving internationally important navigation routes. Current practice where proposals are agreed that may impact upon use of International Maritime Organization routeing systems are very rare.

### How the policy will be implemented

152. The policy focuses on proposals that result in static infrastructure that may have a presence at the sea surface and/or may reduce under-keel clearance to the extent that it will impact on vessel traffic. See figure 7 for the areas that are included. The areas involved are beyond the intertidal area and outside port and harbour authority limits.

153. This policy recognises existing designations for navigation whilst acknowledging the ability to co-locate with many sea bed related and non-permanent activities.

154. Proposals should demonstrate that they have consulted with the Maritime and Coastguard Agency to define 'significant' reduction of under-keel clearance in relation to their proposal during the scoping process.

155. The policy will mainly be implemented by the Marine Management Organisation. Other government departments may also implement this policy, as per the Planning Act (2008).

156. Mid water structures may also impose restrictions on navigation. Development of such structures or the intent to do so within International Maritime Organization routeing systems in the south marine plan area has not been identified.

157. This policy does not preclude non-permanent static sea surface infrastructure for example jack-up vessels, which are subject to operational requirements such as notifications to mariners to ensure safe operation. The policy does not discount International Maritime Organization routeing and reporting systems changing in the future.

**Policy S-PS-3**
Proposals that require static sea surface infrastructure or that significantly reduce under-keel clearance which encroaches upon high density navigation routes, or that pose a risk to the viability of passenger service, must not be authorised unless there are exceptional circumstances.

**Policy S-PS-3 applies to the inshore and offshore marine plan areas.**

### What are high density navigation routes and passenger services?

158. High density navigation routes are areas at sea along which shipping traffic travels. Passenger services are regular passenger vessels routes (see figure 7, the methodology used to define the high density navigation route in this figure can be found in appendix 5).

159. The location and level of shipping activity is related to the location of ports, harbours and destinations for passenger and commercial traffic. The south marine plan areas are home to nationally significant levels of coastal, short sea and international shipping, with considerable levels of passing traffic in the English Channel, recognised in the Marine Policy Statement (3.4.5).

160. New activities in the south marine plan areas, should afford protection to safe and competitive shipping, particularly where high density navigation routes and/or passenger services are identified.

### Why is this important?

161. Shipping activity is intrinsically linked to the character of the south marine plan areas and plays an important role in shaping of communities. Around 54% of commercial vessels navigating within the south marine plan areas call at UK ports or associated anchorages. Passenger ferry services account for a large proportion of this activity including services to and from the Isle of Wight, international and Channel Island traffic. Levels of shipping activity in the region are particularly high around the eastern entrance to the Solent and the entrance to Portsmouth Harbour.

162. Outside the Solent, the main areas of vessel activity are concentrated along passenger vessel routes between south coast ports and the Channel Islands and France. It is expected that in future, new generations of faster ferries and larger cruise ships will be developed to serve established and possible new international routes.

163. There are other pressures on the industry which may impact on future growth. For example, requirement to reduce sulphur emissions may lead to an increase in sea transport costs, reducing competitiveness of short sea shipping and potentially affecting income for ports. (Marine Management Organisation (2014) South Plans Analytical Report and ABPmer (2013) South Marine Plan Futures Analysis).

164. Vessel diversion, which may arise from direct displacement by permanent or non-permanent development or activities, are likely to have a negative impact on the industry for example increasing operational costs due to increased use of fuel.

165. The policy focuses on minimising negative impacts on shipping activity, protecting the economic interests of ports, shipping and the UK economy overall, affording protection to the areas used by high intensities of traffic (Marine Policy Statement 3.4.2). It also gives effect to provisions in the National Planning Policy Framework (section 37) which aims to encourage sustainable transport. See figure 7 for high density navigation routes and passenger services within the south marine plan areas.

### How the policy will be implemented

166. This policy will be implemented by public authorities for proposals requiring static sea surface infrastructure that may encroach upon high density navigation routes or that may cause a risk to the viability of passenger services (see figure 7). For example, infrastructure at the sea surface and/or that reduces under-keel clearance. This approach recognises the ability to co-locate with sea bed located and non-permanent activities.

167. The policy will mainly be implemented by the Marine Management Organisation. Other government departments may also implement this policy, such as the Department for Energy and Climate Change in the case of energy related nationally significant infrastructure projects where marine plans are a consideration (Planning Act (2008)).

168. This policy should be implemented in high density navigation routes that begin on the landward side at the boundaries of harbour administrative areas and/or areas within International Maritime Organization routeing systems. See figure 7 and the Marine Planning Portal for affected areas - this does not include non-routine traffic such as fishing vessels, military vessels, tugs, dredgers and recreational vessels. Irrespective of the map provided, each proposal will be treated on its own merits, with measures such as navigational risk assessments undertaken as required.

169. Proposals should:
    - be compatible with the need to maintain space for safe navigation, avoiding adverse impacts
    - anticipate and provide for future safe navigational requirements where evidence and/or stakeholder input allows
    - account for impacts upon navigation in combination with other existing and proposed activities.

170. Proposals should demonstrate that they have consulted harbour and other navigation authorities (including Trinity House), public authorities (including the Maritime and Coastguard Agency), and commercial shipping representation (including the UK Chamber of Shipping). Where a proposal may impede navigation or expected growth they should also consult with other relevant navigation and shipping representatives.

171. Proposals should be informed by all relevant bodies that can advise on impact on navigation routes. For example those proposing offshore wind farms should consult with the Nautical and Offshore Renewable Energy Liaison group, who can help identify related impacts on navigation.

**Policy S-CAB-1**
Preference should be given to proposals for cable installation where the method of installation is burial. Where burial is not achievable, decisions should take account of protection measures for the cable that may be proposed by the applicant.

**Policy S-CAB-2**
Proposals that have a significant adverse impact on new and existing landfall sites for subsea cables (telecoms, power and interconnectors) should demonstrate that they will, in order of preference:

a) avoid
b) minimise
c) mitigate significant adverse impacts
d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding

**Policies S-CAB-1 and S-CAB-2 apply to the inshore and offshore marine plan areas**

### What are subsea cables?

172. Subsea cables connect offshore infrastructure to landfall (where they are required). They are used for telecommunications, power distribution, and interconnectors.

173. Subsea cables are subject to differing controls in legislation depending on what the cables are for and where the cables are to be located. All subsea cables are subject to licensing controls within the 12nm UK territorial waters. Outside the 12nm limit telecommunications cables are exempt from licensing, but cables associated with exploration or exploitation of natural resources within the UK Exclusive Economic Zone remain subject to licensing control (for example inter array cables for wind farms or power cables).

174. Licensing controls protect cables to reduce the risk of telecommunications unavailability of service, or lack of power supply.

### Why is this important?

175. Submarine cabling is important to the growth and sustainability of a range of areas including:
- telecommunications
- offshore wind farms
- electricity transmission
- climate change

176. Submarine telecommunications cable connectivity is a vital part of delivering a high quality superfast broadband experience to users. It contributes to the Broadband Delivery UK plans to achieve superfast broadband to 95% of the UK by 2017. Successful implementation of the Broadband Delivery UK plans may well require new infrastructure or upgrades to existing infrastructure. This in turn will contribute to superfast broadband coverage for up to around 90% of the UK by 2016, as well further investment into universal coverage across the UK by 2018.[14] Lack of telecommunications service can have a significant impact upon the financial trading industry and other internet based businesses, with considerable implications for the economy. Also given their support role to the UK, electricity power cables need

[14] Broadband Delivery UK

similar protection measures to ensure the safety and security of the energy supply network.[15]

177. The Marine Policy Statement (3.7.1) and Broadband Delivery UK emphasise the importance of telecommunication and power cabling as vital infrastructure for the domestic and global economy. Timely development of the telecommunications network in all parts of the UK is vital to help ensure government's commitment to the minimum broadband speed promise. Also the National Planning Policy Framework (Section 162) states that 'local planning authorities should work with other authorities and providers to: 'Assess the quality and capacity of infrastructure for ...energy, telecommunications, ...and its ability to meet forecast demands.' It adds 'take account of the need for strategic infrastructure including nationally significant infrastructure within their areas.' National policy continues to support the development of offshore wind energy and the associated subsea cables to connect those installations to land, with continued funding (through the Green Investment Bank) and support set out in the Renewable Energy Road Map.

178. Cables are also important for the future of electricity transmission, including the mitigation of climate change through more efficient electricity transmission, cabling and transmission networks. The mapping of impacts of cables and their mitigation[16] is under consideration by the National Grid.[17] In the south marine plan areas the power cable connecting the Isle of Wight may need to be replaced within the lifetime of the plan. Similarly interconnectors between European countries provide a number of services to electricity markets. The UK has four operational interconnectors[18] one of which is in the south marine plan areas. Recognised by the European Union as a "Project of Common Interest" the FAB project [19] looks to help meet the need for increasing capacity of energy trade between France and England. Work is scheduled to commence in 2018.

179. Landfall sites for subsea cables are not currently protected from other uses, which may prevent these sites being used. Policy S-CAB-2 supports the need to avoid displacement of this economically and socially vital activity. It gives clear direction to public authorities that proposals that constrain or have an adverse impact upon landfall sites, should not be supported.

### How the policies will be implemented

180. Guidance released in summer 2012 as agreed by industry as current best practice in relation to cable proximity and maintenance for offshore wind farms, has been endorsed by government departments with an interest in cables, and other agencies including the Marine Management Organisation. The Crown Estate study (Proximity of offshore renewable energy installations & submarine cable infrastructure in UK waters guideline) supports industry best practice, finding the single most important

[15] North Sea Countries Offshore Grid Initiative is in the process of considering the best way forward for a long term solution to connections in the North Sea.
[16] Climate Change Adaption Report by National Grid Electricity Transmission plc September 2010
[17] Climate Change Adaption Report by National Grid Electricity Transmission plc September 2010
[18] National Grid: Getting More Connected
[19] FAB Project

factor in reaching a successful outcome for any cable project is early and open engagement between key stakeholders, and consideration of this guidance.

181. The policies will be implemented by public authorities including local authorities and the Marine Management Organisation. Proposals should demonstrate how significant adverse impacts on cable operations are in order of preference avoided, minimised or mitigated. This will vary with cable type and purpose.

182. Proposals should consider other interests such as impacts from other marine activities and sectors, and applicable environmental constraints based on the proposed activity, associated risks, and consequences.

183. Proposals should demonstrate how other subsea cables in the vicinity have been taken into account. Relevant legislation and regulations apply including Habitats Regulations Assessment, Environmental Impact Assessment and National Policy Statements where appropriate.

### S-CAB-1

184. This policy supports and encourages cable burial where possible to meet the needs of the sector whilst maximising the potential opportunity for other uses of the marine plan areas. This increases co-existence opportunities, such as fishing, by reducing the risk of equipment becoming caught and any resultant damage. Proposals should consider whether they present a damage risk to the installed cable given the protection methods proposed, and not just seek to minimise the impact the cable sector might have on other seabed users. Burial planning should be considered from a cable operation and protection consideration (how the development would operate) as well as other sector considerations.

185. Proposals for cable burial should be considered on a case-by-case basis, as the installation must be compliant with applicable legislation, in particular with relevant management measures of any designated conservation sites. It is important to note that not all cables will or should be buried.

186. Where seabed conditions are suitable cables should be buried. Proposals should demonstrate that they have considered the potential for cable burial and include a description of how this will be achieved. Reasons for non-burial may include socio-economic, environmental impact reduction, affordability and physical limitation reasons.

187. Where they are not buried, proposals should indicate any alternative protection measures to be applied such as split pipe, grout bags, rock placement, or mattressing, taking account of the circumstances of individual cases including normal depth limitations.[20]

188. Where burial is not possible or practical, public authorities should take account of any protection measures proposed and the circumstances of the individual case

[20] Where using diver applied measures – up to 10-15m water depth, beyond that depth protection measures could take the form of rock placement or mattress application or similar measures which are applied without the use of divers.

through any presented project level assessment in determining the application. Public authorities should note that not all protection measures are appropriate or possible in all circumstances, and may be affected by various project factors, for example cable purpose, type, length, operational installation or maintenance costs.

189. Proposals will still be required to comply with relevant legislation and regulations including Habitats Regulations Assessment, Environmental Impact Assessment and National Policy Statements.
190. Proposals for subsea cable installation should avoid navigation lanes and deep water channels in order to allow for maintenance dredging (see policies on displacement, dredging and ports and shipping). Proposals should also consider ports and marinas, where possible, to allow for future development including capital dredging as set out in ports, shipping, tourism and recreation policies S-PS-2, S-P3-3 and S-TR-2.

191. See also policies on renewables (S-REN-1 and S-TIDE-1 as well as S-OG-1 for pipelines).

### S-CAB-2

192. Proposals should demonstrate they have considered potential impacts on cable landfall within the area of their proposal.

193. Proposals should demonstrate that they will, in order of preference, avoid, minimise or mitigate significant adverse impacts on new and existing landfall sites for subsea cables (telecoms, power and interconnectors). Where it is not possible to mitigate they should state the case for proceeding with the proposal. Inclusion of this information does not indicate that approval of the proposal will follow by default.

194. Examples of how adverse impacts can be avoided, minimised or mitigated include: change in location, provision of space within the proposal area for cables to connect or alternative location for subsea cables to connect.

195. Proposals should also demonstrate consultation with relevant stakeholders.

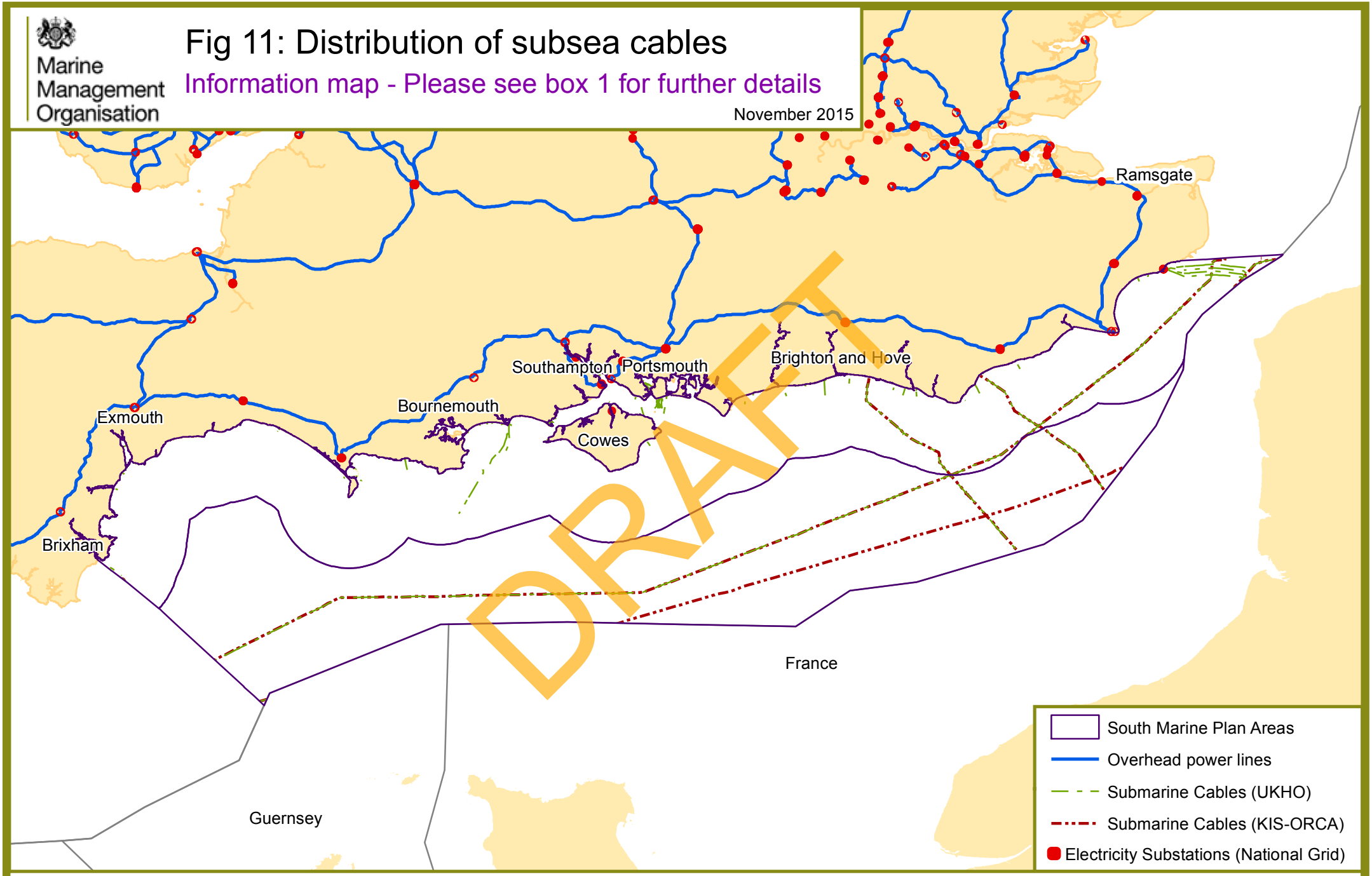
196. Public authorities should take into consideration sensitive seabed habitats, the limited locations of suitable power grid or telecommunications connections as well as other socio-economic constraints and other aspects as identified in the Marine Policy Statement (3.7.4). These further assessments may result in the final landfall site location being amended. Considerations for landfall sites should include the technical opportunity for cable installation, any existing cable activity (see figure 11) and existing power infrastructure shown in the National Grid's Ten Year Electricity Statement (see appendix A displayed on figure 11). The Coastal Concordat and the Marine Management Organisation's Socio-Economic Study can help assess and develop proposals.

Marine Management Organisation

# Fig 11: Distribution of subsea cables

## Information map - Please see box 1 for further details

November 2015



**Policy S-AQ-2**
Proposals that enable the provision of infrastructure for sustainable fisheries and aquaculture and related industries will be supported.

**Policy S-AQ-2 applies to the inshore and offshore marine plan areas**

### What is infrastructure for fisheries and aquaculture?

197. Infrastructure for fisheries supports and enables commercial and subsistence fishing and the wider processing industry. Recreational angling is addressed separately under 'recreation'.

198. Infrastructure for aquaculture supports and enables the cultivation of algae, shellfish, and finfish, and the restocking of wild populations using hatcheries. Aquaculture can use extensive areas. For example, shellfish are often re-layed from natural beds to areas better suited for ongrowing. Shellfish can also be farmed intensively, and for fish and algal aquaculture intensive growing is often the preferred method using ropes, cages and other fixed infrastructure. Both fishing and aquaculture are highly variable industries with the infrastructure required depending on the system in use.

### Why is this important?

199. The south marine plan areas are important for England's fishing industry with more fish (both in terms of tonnage and value) being landed into the south marine plan area than any of the other English marine plan areas (see Strategic Scoping Report). Aquaculture has been identified as an important area for development due to its potential to contribute to the sustainability and security of the UK's food supply.

200. Fisheries and aquaculture industries employ people across a number of different skill sets, including boat handlers, processors, species cultivators and business managers. Both fisheries and aquaculture are seen as industries where development could occur particularly at local levels.

201. Maintenance and enhancement of infrastructure is important for fisheries and aquaculture activity, which are increasingly restricted for space by competing activities such as offshore renewable energy and new marine protected areas. Without the right infrastructure the potential value of fishing and aquaculture cannot be realised.

202. This policy aims to maintain and develop infrastructure for fisheries and aquaculture industries. This could include sharing infrastructure and the responsibility for it, for example, shared slipways or other access points or landing facilities, and maintaining them for example via European Maritime and Fisheries Funding. This policy is particularly important to the south inshore marine plan area as skill development in local communities can benefit from the development of new and existing industries. This policy will help ensure that opportunities for fisheries and aquaculture are realised.

### How the policy will be implemented

203. Proposals and Public Authorities should consider the impacts to infrastructure, and evidence how support can be given via the proposed development. It is positive impacts on such infrastructure (eg increase facilities) that public authorities are looking for when deciding if the proposal can be supported under this policy.

Sustainable aquaculture and fisheries infrastructure to consider under this policy could include (but is not limited to):

- ports and harbours with offloading facilities (vessel berths for dry goods landing),
- storage and processing facilities (including depuration plants for shellfish and storage for wet fish, dry goods and other produce),
- repair and chandlery facilities,
- markets,
- local food establishments,
- transport of produce to shore and once on shore (logistics companies), supporting structures at sea such as ropes or cages or similar fixed structures.

204. Proponents should consider consulting the following organisations to enable greater understanding of how their development could support sustainable infrastructure for aquaculture and fisheries occurring in the location of their proposal. The potential impacts identified through discussions should be evidenced in the proposal.
    - Seafish - can offer advice on the distribution and requirements of capture fisheries and aquaculture industry,
    - Shellfish Association of Great Britain - can offer advice on shellfish specific fisheries and aquaculture requirements,
    Inshore Fisheries and Conservation Authorities - will have detailed knowledge of fisheries and aquaculture operations in their district

205. Aquaculture infrastructure has no more or less an impact on environmental conditions than any other marine structure. During infrastructure development considerations are given towards hydrodynamic regimes, sediment movement and substrate types. Current aquaculture in the south marine plan areas is composed of shellfish facilities that are generally small scale and are not removing large tracts of habitat. Many current aquaculture sites are based around existing natural beds that were once much more extensive in nature. Individual developments of the scale likely to cause impact would undergo marine licensing and where necessary include conditions to mitigate impacts on marine mammals.

206. As with other marine activities the aquaculture industry may increase disturbance for example through vessel traffic, and could displace wildlife through mooring lines etc. Other relevant policies include S-DIST-1, S-UWN-2 and relevant legislation.

207. This policy links to:
    - S-AQ-1 under objective 1 – co-existence - ensuring space is available for aquaculture via co-location
    - S-FISH-2 reducing displacement of fisheries and aquaculture industries
    - S-FISH-3 enhancing access for fisheries and aquaculture

208. This policy indirectly links to objectives 3 – diversification and objective 4 – employment and skills, as diversification of infrastructure would allow for the development of new aquaculture types and fisheries facilities and could lead to an increase in employment.

### Signposting – objective 2 - infrastructure

209. Existing measures which relate to, and may contribute to the achievement of this objective include:
    - National Planning Policy Framework (S-INF-1, S-CAB-1, S-CAB-2 S-PS-2, S-PS-3)
    - Marine Policy Statement (1.3.4, 2.3.1.1, 3.4.2, 3.4.5 and 3.7.4) (S-INF-1, S-PS-2, S-PS-3)
    - Localism Act 2011 (S 110) (S-INF-1)
    - International Regulations for the Prevention of Collision at Sea (S-PS-3)
    - Planning Act (2008) (S-PS-2)
    - The Common Fisheries Policy – This seeks to enable greater infrastructure development for aquaculture within the European Union (S-AQ-2)

210. Further information and guidance that may help in implementing the objective include:
    - Marine Information System
    - Marine planning portal
    - ABPmer (2013) South Marine Plan Futures Analysis (S-PS-3)
    - Coastal Concordat (S-INF-1)
    - Renewable Energy Road Map (S-CAB-1)
    - Socio-Economic Study
    - Ten Year Electricity Statement (S-CAB-1)
    - Broadband Delivery UK plans (S-CAB-1)
    - Green Investment Bank (S-CAB-1)
    - Where considering impacts of climate change on new or existing infrastructure proposals, reference should be made to objective 7(and its associated policies) of the South Marine Plan and chapter 3 of The National Adaptation Programme
    - To manage conflicts in relation to co-existence of infrastructure, proposals should also consider objective 1 – co-existence and its associated policies
    - Proposals compromising or displacing existing marine or terrestrial activity and its associated infrastructure should reference policy S-SOC-1 of the South Marine Plan

### 5.3 Objective 3 Diversification

**Objective 3**
**To support diversification of activities which improve socio-economic conditions in coastal communities.**

#### Context

211. This objective highlights specific opportunities for diversification existing in and around coastal communities over the lifetime of the marine plan.

212. Diversification is important for driving investment to halt the decline of local economies. It relates to establishing new types of activity than have traditionally occurred in a community or new ways to undertake an existing activity.

#### Rationale

213. A number of south marine plan policies contribute to objective 3 – diversification, by supporting opportunities for diversification, reflecting similar policies in subnational plans and strategies on diversification on land. The precise nature and location of marine based diversification opportunities is not always known, usually due to the wide ranging and complex make up of sectors, for example tourism and recreation, but also due to influences outside the marine planning process. As such, this objective highlights sectors expected to influence future diversification.

214. The South Plans Analytical Report identifies some coastal communities within the south marine plan area in economic decline with opportunities for growth through the development of marine sectors. For example, the South Plans Analytical Report highlights the possibility of using tidal streams for energy production, development of tourism opportunities outside of the summer visitor season, and the importance of ensuring opportunities for sustainable growth in relation to marine recreation amongst growth of other marine sectors and activities.

215. Opportunities include:
    - development of supply chains associated with the deployment of renewable energy
    - local sourcing of aggregates for developments
    - sustainable fishing
    - tourism and recreation

216. The South Marine Plan helps provide certainty to the planning system for coastal communities, prioritising marine related opportunities for diversification for socio-economic development.

217. In addition to the policies, this objective will promote diversification by aligning land and marine planning. For example, ensuring participation in relevant consultations, raising awareness of marine plans to local authorities, and checking land plans to identify how they relate to marine activities. This will ensure the planning systems continue to inform one another. Consistency provided through this approach will increase certainty in the outcome of planning decisions where marine and land plans need to be jointly considered and therefore increase the likelihood of related

investment decisions. It should be noted that there will always be some limitations given the differences in scale at which marine and land planning operate.

### Who does this interest?

218. The broad nature of this objective and the many activities and resources it covers means it relates to a range of national policy areas for which different government departments are responsible. Departments with specific responsibilities include:
    - Department for Environment, Food and Rural Affairs – aggregates, fishing
    - Department for Business, Energy and Industrial Strategy– renewable energy
    - Department for Transport – ports and shipping
    - Department for Business, Innovation and Skills – economic growth and opportunities
    - Department for Communities and Local Government – overlap at the coast with the land use planning system

219. For the same reasons this objective will be of interest to a range of public authorities, including those making decisions in relation to the sectors and resources mentioned above, on activities that interact with those sectors and resources, and those with a wider interest, for example in taking account of marine plans in their own planning. Examples include but are not restricted to:
    - The Crown Estate - a range of interests
    - Marine Management Organisation - licensing authority and adviser to other public authorities
    - The Planning Inspectorate - nationally significant infrastructure projects
    - Maritime and Coastguard Agency - oil and gas, shipping and ports
    - inshore fisheries and conservation agencies
    - local authorities

**Policy S-REN-1**
Proposals that support the development of supply chains associated with the deployment of renewable energy will be supported.

**Policy S-REN-1 applies to the inshore and offshore marine plan areas**

### What are supply chains?

220. Supply chains are the movement of material from their source to the end customer. In the marine renewables sectors these include the manufacture, transport and installation of wind turbines, wave and tidal devices, and supporting infrastructure such as foundations and cables.[21]

### Why is this important?

221. The UK supply chain plays an important role in progressing technology, driving down associated costs of infrastructure and realising the economic and social benefits of renewable energy to the UK economy. The Marine Policy Statement (3.3.19) states that 'Expansion of the offshore wind [energy] supply is likely to require significant investment in new high value manufacturing capability with potential to regenerate local and national economies and provide employment'.

[21] Renewables UK (2015) Supply chain

222. The Electricity Market Reform recognises the role of nationally significant infrastructure projects in influencing supply chains and encourages greater competition and diversification in the supply chain by identifying key tender dates for all projects over 300MW through a supply chain plan.

223. Resource mapping completed by The Crown Estate shows harvestable wave energy is not feasible using current technology in the south marine plan areas. Proposals under this policy will also provide benefit to the policies under objective 4 – employment and skills.

### How the policy will be implemented

224. Proposals should demonstrate that they will contribute to the development or creation of supply chains associated with renewable energy. For example, the development of blade manufacturing plants or the provision of facilities or services to test emerging technologies. This does not indicate that approval of the proposal will follow by default. Public authorities also take into account legislation, regulations, Habitats Regulations Assessment and Environmental Assessment.

225. Marine Management Organisation report 'Maximising the socio-economic benefits of marine planning for English coastal communities' identifies and highlights areas of coastal challenge typology that could benefit from renewable energy development. Coastal typologies 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. Typologies identified within the south marine plan areas include B1 structural shifters, B2 new towns and ports and B3 striving communities are a probable good fit for energy development (see figure 12).

226. The above is dependent on the ability of the location to capture wider elements of the supply chain processes within the local economy. Numerous sub-national policy documents offer differing levels of support for renewable energy and associated industries, including the New Forest District Council Local Plan, Eastleigh Borough Council Local Plan and Test Borough Council Local Plan.

**Policy S-AGG-4**
Where proposals require aggregates as part of their construction, preference should be given to using marine aggregates sourced from the South Marine Plan areas. If this is not appropriate, proposals should state why.

**Policy S-AGG-4 applies to the inshore and offshore marine plan areas**

### What is local sourcing of marine aggregates?

227. Local sourcing of aggregates is marine aggregate extracted from the south marine plan areas and then subsequently used within a proposal based in the south plan areas.

228. The National Planning Policy Framework and supporting minerals planning practice guidance (replacing the previous Managed Aggregate Supply System) facilitates long term planning for aggregate supply in England. This ensures mineral planning

authorities have adequate aggregate resource to meet local and national supply requirements. Minerals planning practice guidance requires mineral planning authorities to prepare local aggregate assessments that consider the opportunities and constraints for mineral supply to a specific region.

### Why is this important?

229. Local sourcing will help to encourage sustainable use of marine aggregates and support diversification. It will reduce the amount of aggregates brought in from other areas and contribute to local aggregate supply as identified by mineral planning authorities. Social and environmental benefits would include maintaining jobs in the south marine plan areas related to marine aggregates and reduction of tonnage moved by road transport and associated impacts.

230. Current figures show that 34% of total aggregate extraction in the south marine plan areas is subsequently landed within the south marine plan areas.

### How the policy will be implemented

231. This policy will encourage the use of locally sourced marine aggregates.

232. Proposals should demonstrate how locally sourced marine aggregate will be used. It may not always be appropriate to use locally sourced marine aggregate, where this is the case proposals should state its reasons for not doing so.

233. Proposals should consider use of the most sustainable source of primary aggregate supply, this where use of secondary aggregates is not appropriate, for example recycled aggregates.

234. Public authorities should assess whether locally sourced marine aggregates have been considered within proposals and the reasons for not doing so are justified. Decisions should reflect any emerging local plans, local aggregate assessments and proposals that have a marine and terrestrial element to them.

235. Terrestrial mineral and waste management plans within the south marine plan areas should look to contain policies highlighting the need to safeguard suitable wharf and transport facilities for landed marine aggregates. This is particularly important as areas such as the Isle of Wight, (MMO 1050) Shoreham Harbour Wharves and Southampton have a high level of landing activity.

**Policy S-FISH-1**
Proposals that support the diversification of a sustainable fishing industry and or enhance fishing industry resilience to the effects of climate change should be supported.

**Policy S-FISH-1 applies to the inshore and offshore marine plan areas**

### What is diversification in the fishing industry?

236. Diversification includes changes within the fishing sector, for example new fishing techniques and gear that alter how or what species are targeted, or within the fish value chain for example direct sales, or marketing that adds value to fish products.

237. Diversification also includes undertaking multi-activity, such as continuing to obtain some income from fishing, whilst carrying out complementary activities, such as tourism, or include diversification into sectors unrelated to fishing. Strategic integrated marine and terrestrial planning can encourage coherence and synergies, encouraging new local markets through attracting tourists that facilitate diversification.

### Why is this important?

238. Climate change has significant potential to impact fisheries in the south marine plan areas. Environmental changes are likely to alter availability and growth rates of specific fish as they redistribute to maintain temperature preferences.[22] Climate change is expected to present new opportunities, especially for species in which growth or distribution is currently limited by temperature for example bass and result in loss of some existing fisheries. Climate change may also alter the location of essential habitat, particularly spawning, nursery and feeding areas due to environmental and oceanographic change.

239. The fishing industry will need to adapt to climate change by taking advantage of new opportunities that occur for example changing gear or landward facilities to handle different catch type, or exploiting potential for new markets of warmer water species. The ability to maintain a viable sustainable fleet of smaller fishing vessels is important for persistence of traditional fishing communities. This is particularly important in the south marine plan areas where fisheries for high value, low volume catches have resulted in a greater proportion of smaller vessels than the national average. Predicted increases in unsettled weather under climate change scenarios represent an operational challenge for smaller vessels while restricted ranges limit the ability of a fleet from a particular port to track stock distribution changes.

240. The Marine Policy Statement (2.3.1.1) directs marine planning to be "based on an ecosystem approach" to achieve high level marine objectives such as to "maximise sustainable activity, prosperity and opportunities for all, now and in the future". The need for planning to consider future use therefore necessitates regard to diversification, climate change projections and future climate scenarios. Diversification opportunities are also linked to objectives 2 – infrastructure, in relation to infrastructure provision, objective 4 – skills and employment, particularly where diversification includes non-fishing activities and objectives 1 – co-existence and objective 5 – displacement, the extent for which are important in allowing fishing fleets to change where and when they fish in response to changes in fish distributions.

### How the policy will be implemented

241. Proposals should demonstrate how opportunities for diversification of the fishing industry or development of resilience to climate are supported. Proposals could also demonstrate that they have consulted with the fishing industry during the early stages of project development to enable understanding of industry requirements, and identify where they can support areas that are already diversifying.

[22] Marine Management Organisation (2013) Future trends in fishing and aquaculture in the South Inshore and Offshore marine plan area (MMO 1051)

242. Public authorities should assess adverse impacts in line with relevant legislation.

243. Public authorities should consider the implications and impacts of proposals on diversification of the fishing industry and industry resilience to the effects of climate change, and make decisions enhancing these characteristics. Considerations could include:
    - how proposals might benefit or impact infrastructure provision (objectives 2 – infrastructure) including onshore for example for processing novel species that move into the area with changing sea temperature
    - bring complimentary skills or employment opportunities (objective 4 – skills and employment) or open up opportunities outside of the fishing industry for example as guardship vessels, undertaking surveys or within the tourism sector
    - alter when and where fishing can occur (objective 1 – co-existence, objective 5 – displacement) that and therefore potential ability to adapt

**Policy S-TR-1**
Proposals supporting, promoting or facilitating tourism and recreation activities, particularly where this creates additional utilisation of related facilities beyond typical usage patterns, should be supported.

**Policy S-TR-1 applies to the inshore and offshore marine plan areas**

### What is tourism and recreation?

244. Recreation refers to an activity of leisure, carried out by local residents near where they live and in their discretionary time. Tourism can be defined as the activities of persons (often recreational in nature) travelling to and staying in places outside their usual environment.

### Why are they important?

245. Tourism and recreation are very important and established sectors within the south marine plan areas. However, they need to be more robust, provide a greater range of opportunities for employment and improve resilience to times of economic uncertainty. This can be achieved through diversification. Diversification may also reduce adverse impacts on natural and historic heritage assets which activities are based, and people's experience of them.

### How the policy will be implemented

246. Proposals for tourism and recreation that support diversification of activities and use of facilities beyond typical usage patterns (in both time and location) should be supported.

247. Proposals should demonstrate how different types of activity add value to the offer and identify how diversity will strengthen the sector and increase the sustainable socio-economic benefits for coastal communities.

248. Proposals should encourage and facilitate more frequent recreational use by local populations but should at all times consider maintenance or enhancement of the quality of the natural environment, seascape and heritage assets in line with the other plan objectives.

249. Public authorities should identify where opportunities for diversification exist, including tourism and recreation activities which are outside of established patterns of use and seasons.

250. Public authorities should ensure the development and/or diversification of activities should not be to the detriment of already successful (in some cases seasonal) tourism and recreation. This will avoid adverse effects on existing economic and social benefits for local people and visitors.

### Signposting – objective 3 - diversification

251. Existing measures which relate to, and may contribute to the achievement of this objective include:
    - Local planning authorities (districts, unitary authorities, and counties) set out locally specific plans for activities that enable diversification of economic activity through measures in related statutory plans.
    - Local enterprise partnerships that overlap with the south plan areas: South East, Solent, Coast to Capital, Dorset and Heart of the South West
    - Brighton and Hove Draft City Plan, [23] Havant Borough Core Strategy, [24] Isle of Wight Island Plan, [25] Teignbridge Local Plan, [26] (S-TR-1)
    - National Policy Statement EN-1 (S-REN-1)
    - Electricity Market Reform (S-REN-1)
    - Renewable Energy Roadmap (S-REN-1)
    - New Forest District Council Local Plan (S-REN-1)
    - Eastleigh Borough Council Local Plan (S-REN-1)
    - Test Borough Council Local Plan (S-REN-1)
    - Resource mapping completed by The Crown Estate (S-REN-1)
    - Offshore Wind Industrial Strategy (S-REN-1)
    - UK Offshore Wind Supply Chain review (S-REN-1)
    - Offshore Renewable Energy Catapult (S-REN-1)
    - Common Fisheries Policy Reform (S-FISH-1)
    - European Fisheries Areas Network Guides (S-FISH-1)
    - European Fisheries Fund and European Maritime and Fisheries Fund (S-FISH-1)



[23] Brighton and Hove City Council (2012), Brighton and Hove Draft City Plan.
[24] Havant Borough Council (2011), Havant Borough Core Strategy.
[25] Isle of Wight Council (2012) Isle of Wight Core Strategy.
[26] Teignbridge District Council (2014), Teignbridge Local Plan 2013-2033.

### 5.4 Objective 4 Employment and skills

**Objective 4**
**To support marine activities that increase or enhance employment opportunities at all skills levels among the workforce of coastal communities, particularly where they support existing or developing industries within the south marine plan areas.**

#### Context

252. The south marine plan areas support a range of activities, yet a busy marine area does not guarantee local employment and the quality of local jobs. This objective highlights the need to improve access to employment in and adjacent to the south marine plan areas. It places emphasis on ensuring that local communities can meet the employment requirements of current and future marine activities within the plan areas through appropriate use and development of skills. This objective has scope for improving access to direct employment, through new or existing activities (including offshore wind energy and fisheries), and indirect employment, through supporting industries (such as manufacturing and port services).

253. Skills development that benefit communities in and adjacent to the south inshore plan area should be linked to growth of new sectors and further development of existing industries such as tourism and recreation, aquaculture and renewables.

254. There are many opportunities for skills development. The UK is recognised as a leading centre for education and training for the marine sector, with internationally recognised education providers in a number of universities and colleges offering a wide choice of courses and qualifications.

#### Rationale

255. Marine planning has a role in facilitating growth in new and existing industries which bring associated socio-economic benefits including employment. The Marine Policy Statement (2.5.5) states that marine planning should promote sustainable economic growth that supports local jobs and contributes to strong local economies through integration with terrestrial planning and engagement with coastal communities. Barriers to employment include low quality of local jobs, skills deficit and poor transport connectivity were identified through the South Plans Analytical Report. Contributing factors often mean that the required skills are not available within the existing labour market, include lack of training facilities, an ageing workforce or a lack of employment prospects.

256. Existing skills strategies do not necessarily take account of the opportunities for employment and skills development presented by marine activities. Marine planning can highlight where existing skills for particular marine developments can be/or are being developed, signalling to public authorities the most appropriate sites to maximise local economic benefit.

#### Who does this interest?

257. The broad nature of the objective and the many activities and resources it covers means it relates to a range of national policy areas for which different government departments are responsible. Departments with specific responsibilities include:

- Department for Business, Innovation and Skills – economic growth and opportunities
- Department for Communities and Local Government – overlap at the coast with land use planning system

258. For the same reasons the objective will be of interest to public authorities, including those making decisions relating to the sectors and resources mentioned above, on activities that interact with those sectors and resources, and those with a wider interest, for example in taking account of the plans in their own planning. Examples include but are not restricted to:
    - local enterprise partnerships
    - local authorities

**Policy S-EMP-1**
Proposals that develop skills related to marine activities, particularly in line with local skills strategies, will be supported.

**Policy S-EMP-1 applies to the inshore and offshore marine plan areas**

### What is a skills strategy?

259. Skills strategies address skills issues inhibiting sustainable economic growth, whilst also helping inform negotiations with government to secure support for activities which develop required skills. They run parallel to existing education and training guidance.[27]

260. Skills strategies provide a point of reference for organisations (including large employers) offering education or training relevant to businesses. Implementing these strategies will help inform the work of strategic partners in developing terrestrial plans, and can be used as a basis for ensuring that publicly funded provision and private investment in skills and employment supports local labour market requirements. Delivery of any strategic actions will reflect the needs and priorities of local economies. Local employer led skills and economic groups, such as the Dorset Employment and Skills Board and local enterprise partnerships have an important role to play in ensuring that local skills strategies translate into positive change for learners and employers alike.

### Why is this important?

261. There is a drive from government to bring supply and demand in the skills/labour market closer together.[28] Skills strategies help achieve this by ensuring skills providers make locally informed business decisions that will help align the supply of skills and learning with the needs of employers. Ensuring that marine activities are considered within skills strategies contributes towards increasing alignment between marine and terrestrial plans, while also accounting for the needs of marine activities during the development of future skills strategies.

[27] For example, Dorset Skills Strategy and Solent LEP Skills Strategy
[28] For example, (2011) 'The Plan for Growth' outlines measurable benchmarks for a more flexible workforce

262. Developments where skills opportunities can be enhanced or created also contribute to existing goals in legislation such as the Plan for Growth which aims 'To create a more educated workforce that is the most flexible in Europe: promote skills and employment', as well as contributing towards policy outlined within the Blue Growth agenda.

### How the policy will be implemented

263. Proposals should demonstrate where training opportunities can be identified for new and existing marine activities, throughout the lifetime of the plan. This should be proportionate to the size of the proposal. Where proposals of a smaller scale may not have the scope to meet the policy requirements these should be outlined with reasons why.

264. Proposals should take account of existing skills strategies, as well as other relevant local plans and Marine Management Organisation commissioned reports (for example, see figure 12 and MMO1001: Maximising the socio-economic benefits of marine planning for English coastal communities), in order to improve integration between the marine and terrestrial interface.

265. Public authorities will ensure that marine activities are reflected in skills strategies as they are reviewed and updated in line with their lifecycle and, where a strategy does not currently exist, will be incorporated into the drafting of the document.

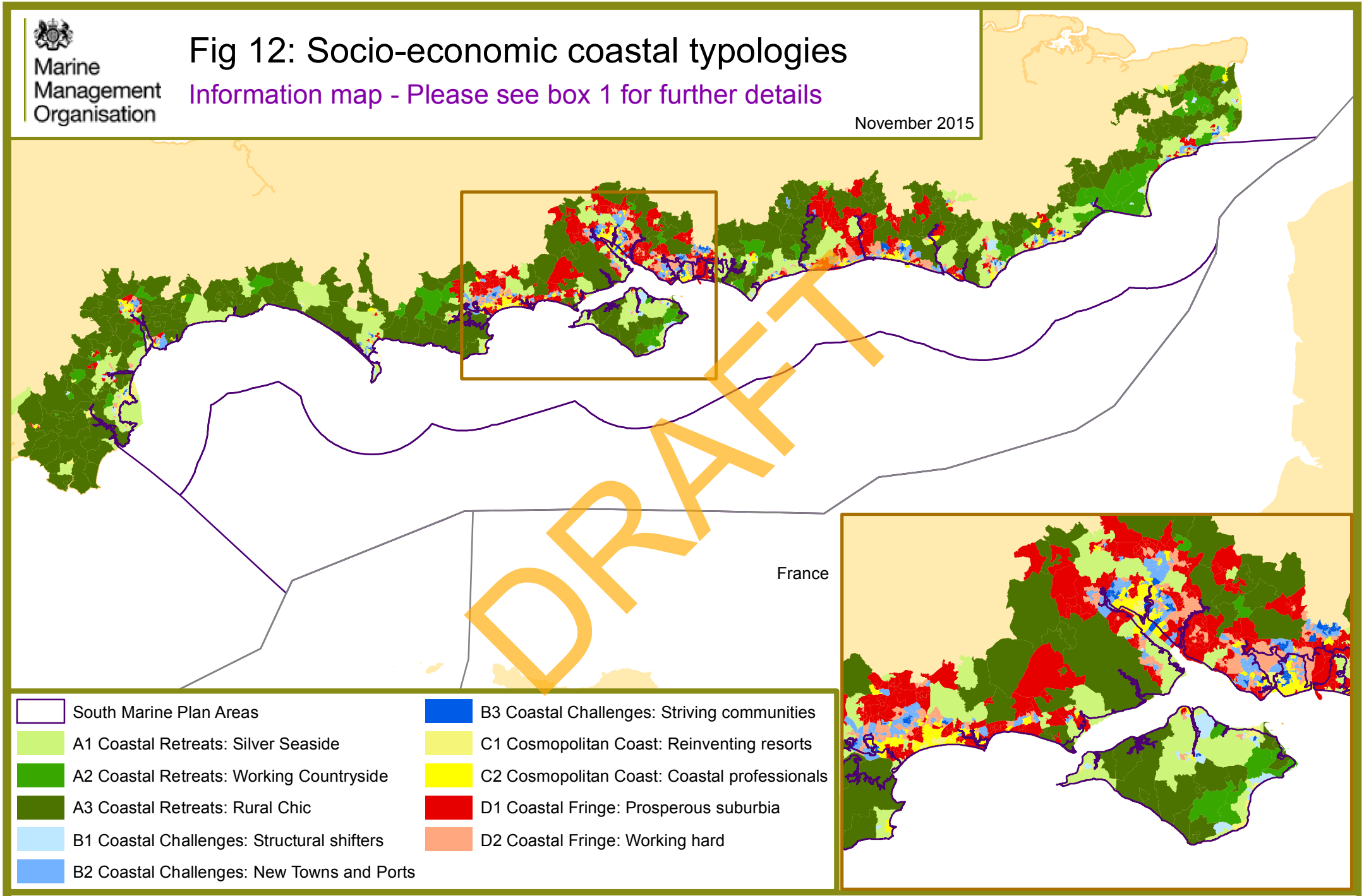
266. Where appropriate, proposals should clearly establish how the intent of this policy will be achieved, drawing on existing skill sets, developing the skills base through training or apprenticeships, links with research/academic facilities, or, if possible, where a proposal may look to develop a new facility in order to support skills base development as part of a wider application.

Marine Management Organisation

# Fig 12: Socio-economic coastal typologies

## Information map - Please see box 1 for further details

November 2015



**Policy S-EMP-2**
Proposals resulting in a net increase to marine related employment will be supported, particularly where they are in line with the skills available in and adjacent to the south marine plan areas.

**Policy S-EMP-2 applies to the inshore and offshore marine plan areas**

### What is a net increase in employment?

267. A net increase in employment is the additional employment benefit delivered by developments or activities, after accounting for any negative impacts on other activities or developments, especially where employment can be accessed by those in localities close to the marine plan areas.

268. The Marine Policy Statement (2.5.3) highlights employment benefits not only from current interests such as fishing and port activity, but also the role of emerging industries such as the renewable energy sector. It also highlights the role of the marine ecosystem in providing economic and social benefits, both nationally and for local communities (2.5.5). National plans such as the Plan for Growth highlight the need to increase employment and re-structure it away from the public sector. Employment also has social benefits, as those in work benefit from improved health and wellbeing.

269. The Marine Policy Statement also recognises the value of existing developments and activities and the characteristics of the marine plan areas, which may not always fit with projects that bring employment opportunities. Employment is not the only consideration in decision-making and should be used appropriately. For some projects direct employment impact may be minimal, but indirect employment impact may be significant (enabling economic activity rather than generate economic benefit itself), or they may achieve other outcomes, such as environmental or social benefits; these should also be considered.

### Why is this important?

270. The south marine plan areas have differing employment structures and needs, with significant variation within and between local authority areas. An areas employment needs should be highlighted in local plans and can be used to determine if a proposal is more or less suited to an area. This policy ensures that the employment needs of the plan areas are met through the appropriate assessment of proposals in line with local planning documents.

271. Increased spatial pressures can force market locations such as an aquaculture processing site or a renewable energy training facility out of the plan areas, removing economic and employment benefits. Appropriately planned and sited development and associated supply chains can help encourage investment and stimulate demand for marine products and services. In turn, investment can create job opportunities which bring primary and secondary socio-economic benefits through improved levels of employment and spending of wages, which may be particularly important to areas currently experiencing deprivation.

272. This policy adds value to existing national policy.[29] It encourages public authorities to consider the additional employment benefits of a proposal and it allows further consideration of the potential for these employment opportunities to be transferred to areas close to the south marine plan areas.

### How the policy will be implemented

273. Proposals should demonstrate where employment opportunities can be identified for new and existing marine activities within the south marine plan areas. This should be proportional to the size of the proposal. Proposals that are not be of sufficient size to meet the policy requirements should outline reasons why. For example, proposals by small/medium enterprises to support the development and generation of renewable energy may lead to a net increase in employment but may be unable to source labour from the local labour pool.

274. Public authorities can use the Marine Management Organisation report Maximising the socio-economic benefits of marine planning for English coastal communities to understand the employment needs and social issues of areas within, and bordering, the south marine plan areas, and consider them in decision making.

275. The Marine Policy Statement (2.5.2) has a presumption in favour of sustainable development and states, 'Properly planned developments can provide environmental and social benefits as well as drive economic development,' (Marine Policy Statement (2.5.2)). This means that, although there is a presumption in favour of economic benefits, proposals should not be approved if there are compelling environmental or social reasons not to do so.

276. This policy applies to all new proposals, be they for continuation of existing interests or relating to new activity.

### Signposting –objective 4 - employment and skills

277. Existing measures which relate to, and may contribute to the achievement of this objective include:
    - Blue Growth (S-EMP-1)
    - Bournemouth, Poole and Dorset Local Transport Plan 3
    - Dorset Skills Strategy (S-EMP-1)
    - East Dorset Local Plan (S-EMP-1)
    - Eastleigh Borough Local Plan 2011-2029
    - Isle of Wight Island Plan
    - National Planning Policy Framework
    - Plan for Growth
    - Poole Core Strategy
    - Shepway Core Strategy
    - Solent LEP Skills Strategy
    - Sovereign Harbour Neighbourhood Policy

[29] For example ambitions in, 'Department for Business Industry and Skills, HM Treasury, (2011)The Plan for Growth' and HM Government(2011) Marine Policy Statement (2.5.3)

### 5.5 Objective 5 Displacement

**Objective 5**
**To avoid, minimise, mitigate displacement of marine activities, particularly where of importance to adjacent coastal communities, and where this is not practical to ensure significant adverse impacts on social benefits are avoided.**

#### Context

278. The south marine plan areas, and the activities they support, provide social benefits for the health, wellbeing and enjoyment of its communities. These include industry focussed activities which provide income and employment such as ports, shipping, inshore fishing and tourism, as well as recreation and the opportunity to interact with the seascape and a well managed marine environment, both natural and historic. The importance of the socio-economic relationship of communities with the coast and marine area is contingent on distance, orientation and history, with coastal communities having the greater dependence for their social benefits than those further inland.

279. Many people gain pleasure from knowledge that the natural and historic environment exists and is being sustained over time, without even the need to visit the places concerned. Where a certain activity has taken place in an area for a long time such as fishing, it can become a strong feature of that community's identity and sense of place and of greater significance relative to other areas. Strong identity and sense of place make these areas distinctive and attractive to live, work and do business in, stimulating economic activity.

280. Social networks between long term workers and residents can help build community cohesion. Social benefits may be indirect or secondary to more direct or primary economic or environmental benefits. Recent Marine Management Organisation research on social impacts and interactions between marine sectors indicates that interactions between marine protected areas, offshore renewable energy projects and commercial fishing have the greatest potential for significant positive and negative social impacts.

281. Public access plays an important role in delivering social benefits for local people and visitors to the south marine plan areas (particularly in support of recreation and tourism). The issues presented in managing it are significance, so a separate objective and contributing policies have been developed (see objective 6 – access). Potential impacts on marine protected areas are addressed under objective 10 – marine protected areas, with potential impacts on ecosystem goods and services and on highly mobile species under objective 11 – Marine Strategy Framework Directive.

282. Opportunities include:
    - Consideration of the need to avoid, minimise or mitigate adverse impacts:
        a) That result in displacement of activities that generate social benefits
        b) on access to, or within, sustainable fishing or aquaculture sites
        c) on tourism and recreation activities
    - enhancing access to, or within, sustainable fishing or aquaculture sites

### Rationale

283. Activities delivering social benefits need to be managed so these benefits are not displaced and any future growth is sustainable. Industry focussed activities also need to be managed to balance growth and potential impact on activities that are delivering social benefits on the south coast.

284. Coastal communities have a greater dependence on the coastal and marine area for social benefits. It is especially important to consider the potential impacts on social benefits for coastal communities from displacement of activities when making decisions about proposals for new, or growth in existing, activities.

285. It is important that when displacement is considered to be unavoidable, proposals and decisions should demonstrate that they have fully considered social costs and benefits alongside those for the economy and environment. This will be achieved through this objective.

286. Benefits to employment, and income from economic restructuring are more easily quantified than more qualitative and indirect social benefits. It is important that proposals more readily document the economic and environmental matters affected than social matters, such as traditional identity and sense of place which are more difficult to evidence and articulate. This will enable public authorities determining proposals to do so from an evidence base. When this is not the case it may mean that social benefits are neglected during the decision-making process.

287. This objective will help ensure impacts on social benefits are considered alongside economic and environmental considerations. In addition to addressing displacement generally this is through this objective's policies addressing impacts on recreation, tourism and inshore fishing.

### Who is this of interest to?

288. The broad nature of the objective and the many activities and resources it covers means it relates to a range of national policy areas for which different government departments are responsible. Departments with specific responsibilities include:
    - Department for Environment Food and Rural Affairs, with input from the Marine Management Organisation – marine fisheries
    - Department for Communities and Local Government – National Planning Policy Framework and relevant to local authorities
    - Department for Culture Media and Sport, with input from Visit England – tourism and recreation

289. For the same reasons the objective will be of interest to a range of public authorities including those making decisions in relation to the sectors and resources mentioned in the previous •, those making decisions on activities that interact with those sectors and resources, and those with a wider interest, for example in taking account of the plans in their own planning. Examples include but are not restricted to:
    - The Crown Estate – range of interests
    - Marine Management Organisation – licensing authority and adviser to other public authorities
    - Planning Inspectorate – nationally significant infrastructure projects
    - Oil and Gas Authority

- Maritime and Coastguard Agency – oil and gas, shipping and ports
- inshore fisheries and conservation agencies
- local authorities public authorities

**Policy S-SOC-1**
Proposals must demonstrate that they will, in order of preference:
a) avoid
b) minimise
c) mitigate significant adverse impacts which result in the displacement of other existing or authorised (but yet to be implemented) activities that generate social benefits.

**Policy S-SOC-1 applies to the inshore and offshore marine plan areas**

### What are social benefits and displacement?

290. Social benefits related to marine activities (and the natural and historic environment on which they are based) include improved health and wellbeing, enjoyment, cultural identity and a sense of place for many.

291. Displacement is when an activity is moved (in time or geographical space) because of the introduction or impact of another activity. It can mean that the activity may no longer be able to take place. There is a recognised need to better understand the potential social impacts (positive and negative, direct and indirect, permanent and temporary, as well as those resulting from cumulative effects) of displacement.

### Why is this important?

292. The large numbers of people living on or near to the south coast gain many social benefits from the marine plan areas. The Marine Policy Statement (3.8.10) focuses on the need to avoid impacts of displacement on fishing in particular. Displacement has been highlighted as a significant concern by many users of the south marine plan areas which are already busy and increasingly so. The need to promote co-existence is essential in minimising or mitigating the negative impacts of displacement (see objective 1 – co-existence).

293. Sustainable development requires balanced assessment of environmental, social and economic cumulative impacts. This policy ensures consideration of social impacts which are particularly problematic to measure as they tend to be more qualitative, indirect and diffuse.

### How the policy will be implemented

294. This policy will be implemented by public authorities assessing proposals. It clarifies the provisions of the Marine Policy Statement, and complements policy S-CO-1 and policies under objectives 11 – Marine Strategy Directive Framework and objective 12 – space for nature.

- Proposals must include a description of potential displacement impacts (including on authorised, but yet to be implemented activities). This may include consultation to identify displacement issues at the pre-planning stage, and suggested measures to avoid, minimise or mitigate them. If these criteria cannot be met by a proposal, where it requires an authorisation decision, it

will only be authorised if there are relevant considerations in line with the Marine and Coastal Access Act (2009) (Section 58(1))

295. Proposals must demonstrate adverse impacts in terms of both space (physical exclusion or removal from an area) and/or in time (preventing an activity taking place at certain times of day or year).

296. Proposals must include all significant adverse impacts which may be direct and/or indirect. Direct adverse impacts, for example, could include preventing the existing use of an area by recreational boating. Indirect impacts could include increased competition in another area, created by fishing activity displaced from the proposal area, with consequential impacts on local ports, tourism, the environment, and recreational users obliged to use an area that was previously only used by shipping.

297. To reduce conflict and enhance compatibility, proposals must show how significant adverse impacts will, in order of preference; avoid, minimise or mitigate significant social impacts of displacement. For example, impacts could be avoided or minimised through adjusting the area used or the times of the day or year when activities are operating. Mitigation may include identification of alternative areas for the existing activity or support for new activities that generate similar social benefits to those displaced.

298. Public authorities should consider compliance with legislation and regulations including environmental impact assessments and social impact assessments where already required.

299. Activities or measures resulting in displacement of activities that provide social benefits are unlikely to be supported. A number of other policies require a proposals to be assessed on the impacts on certain sectoral activities or identified potential resources (see S-HER-1, S-SCP-1, S-AGG-3, S-TIDE-1, S-PS-1, S-DD-2, S-FISH-1, S-FISH-2, S-AQ-1, S-TR-2, S-ACC-1 S-ACC-2, S-WQ-1, S-DIST-1).

**Policy S-TR-2**
Proposals for development must demonstrate that they will, in order of preference:
a) avoid
b) minimise
c) mitigate significant adverse impacts on tourism and recreation activities.

**Policy S-TR-2 applies to the inshore and offshore marine plan areas**

### What is tourism and recreation?

300. Recreation is an activity of leisure, carried out by local residents near where they live and in their discretionary time. Tourism is activities of persons (often recreational in nature) travelling to and staying in places outside their usual environment.

301. Recreational boating (sailing and motor boat) is slightly different in some respects to other forms of recreation, as it requires specific areas providing optimal conditions for racing, regattas, navigation and cruising. These areas need to be maintained and protected to allow this to occur safely. This may equally apply to surfing.

302. Figure 13 can be used to identify some of the well known and well used boating areas, cruising routes slipways, marinas clubs and training centres in the south marine plan areas. This figure is indicative and does not include all activity. For example in estuaries and where there is activity shown at sea, it should be assumed that all navigable parts of the estuary may be used for extensive recreational boating.

### Why is this important?

303. The Marine Policy Statement[30] and a number of studies have suggested that particularly in the south, tourism and recreation are growth industries, which create and maintain a significant number of jobs in comparison to other sectors.[31, 32, 33] The direct and indirect value to the local economy through recreation activities is significant (shops, cafes, clothing, equipment, lessons, repair). There are also important social benefits including health and wellbeing derived from a high quality marine environment. A quality environment is key in not only attracting visitors to the area, but also to the quality of the recreational experience. It is important to ensure that this quality environment is retained and enhanced when taking into account the impact of proposals.

304. New developments, particularly static objects, can pose a risk to vessels and may include objects both on and under the water as well as on the seabed. They could also restrict navigation routes for recreational boating, negatively impacting on a particular area which is used for boating and other tourism and recreational activities.

### How the policy will be implemented

305. Proposals must demonstrate that they will avoid, minimise or mitigate significant adverse impacts on tourism and recreation.

306. If these criteria cannot be met by a proposal, where it requires an authorisation decision, it will only be authorised if there are relevant considerations in line with the Marine and Coastal Access Act (2009) (Section 58(1)).

307. Proposals must include evidence of any recreation and tourism activities taking place in the subject area, or elsewhere which it potentially affects.

308. Proposals must demonstrate how they have considered tourism and recreation industry activities, including boating routes, to ensure existing activities can continue and grow. This should include a stakeholder consultation strategy and should be carried out early on in the process.



[30] HM Government, Marine Policy Statement (2011) (3.11.2) highlights that recreation and tourism "can be a mainstay for many coastal towns, supporting their quality of life, and providing health and well-being benefits". It then recognises (3.11.1) "the important part that (tourism) plays in the national economy and to encourage growth within environmental limits… as Tourism is one of the top three growth sectors of the economy." Furthermore, it notes that "a similar picture exists for recreation"

[31] Beatty, Fothergill & Gore 2014, Seaside Towns in the Age of Austerity – Recent trends in employment in seaside tourism in England and Wales.

[32] British Marine 2014, Economic Benefits of the UK Marine Industry.

[33] Marine Management Organisation 2013 Economic baseline assessment of the South Coast

309. Proposals for change of use of existing static infrastructure that would be subject to relevant licensing and permission processes will need to comply with this policy.

310. Public authorities must assess potential impacts (positive and negative, direct and indirect, permanent and temporary, as well as cumulative effects) on recreation and tourism activities. Adverse impacts may include restricting access to areas where recreation activities take place, reducing the length of the season within which tourists may visit a natural or historic heritage attraction, or any actual physical impact.

311. Public authorities must take into account evidence of consultation with the tourism and recreation industry (including with the recreational boating sector), the outcome of those discussions and any mitigation required.

312. Public authorities, in line with their statutory duties, may need to bring forward proposals to maintain safe navigation within harbour areas or carry out emergency work, such as in response to a marine incident. These activities take precedence over others including recreational activities. See policy S-PS-3 for more information.

313. This policy builds on the requirement in the environmental impact assessment process to identify issues and list receptors that may be affected by the proposal including the Public Right of Navigation. In assessing the impact of development on tourism and recreation including recreational boating, proposals must also include any provisions set out relating to the assessment of commercial shipping in those policy areas.

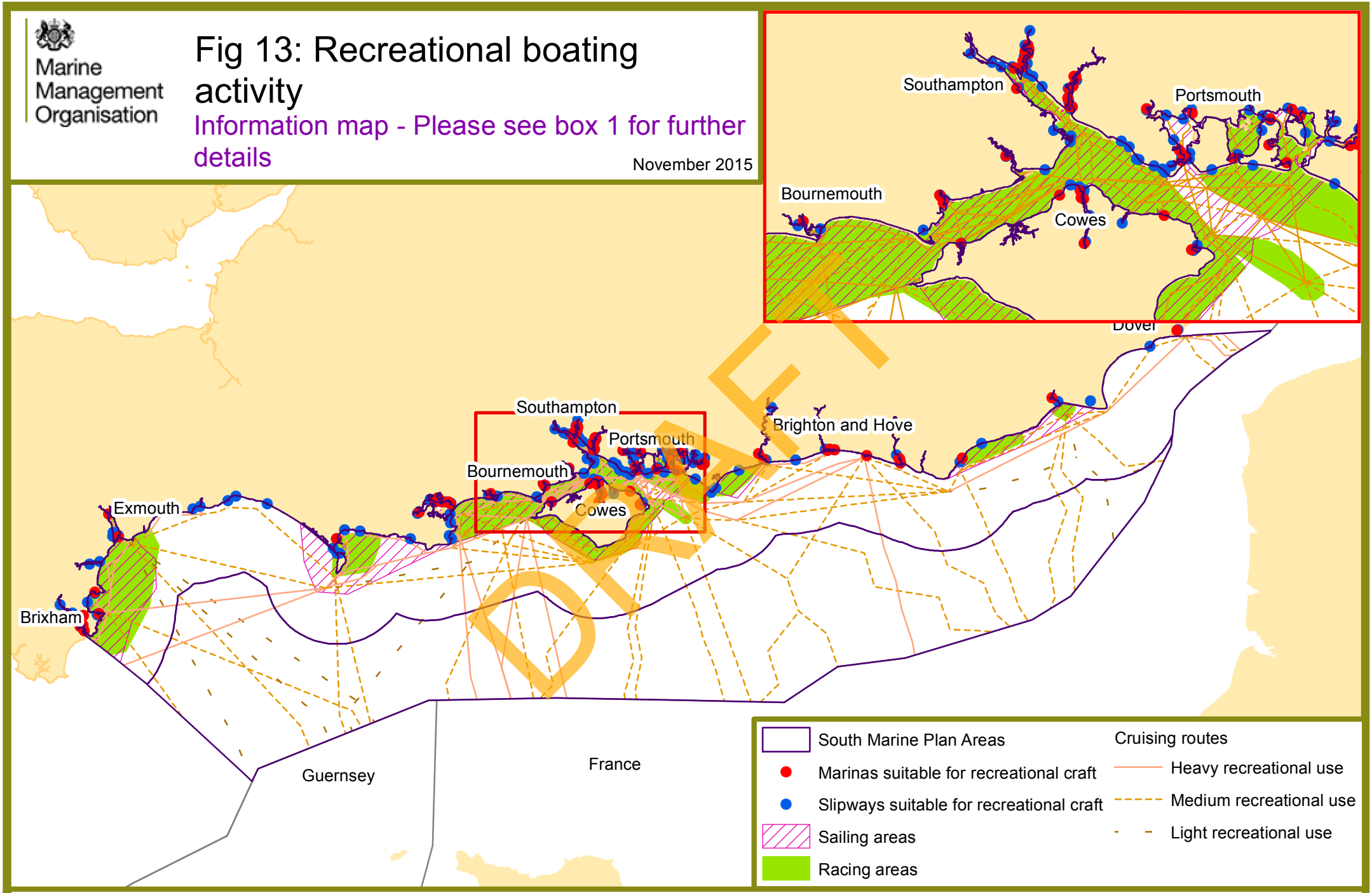
314. As tourism and recreation growth can have a negative impact on the environment, and subsequently a negative impact on itself, its social benefits and associated economic impacts, public authorities and proposals must also consider objectives and policies that seek to protect biodiversity (objectives 10 – marine protected areas, objective 11 – Marine Strategy Framework Directive and objective 12 – space for nature), historic heritage (objective 8 - heritage assets) and seascape (objective 9 – seascape and landscape).

Marine Management Organisation

# Fig 13: Recreational boating activity

## Information map - Please see box 1 for further details

November 2015



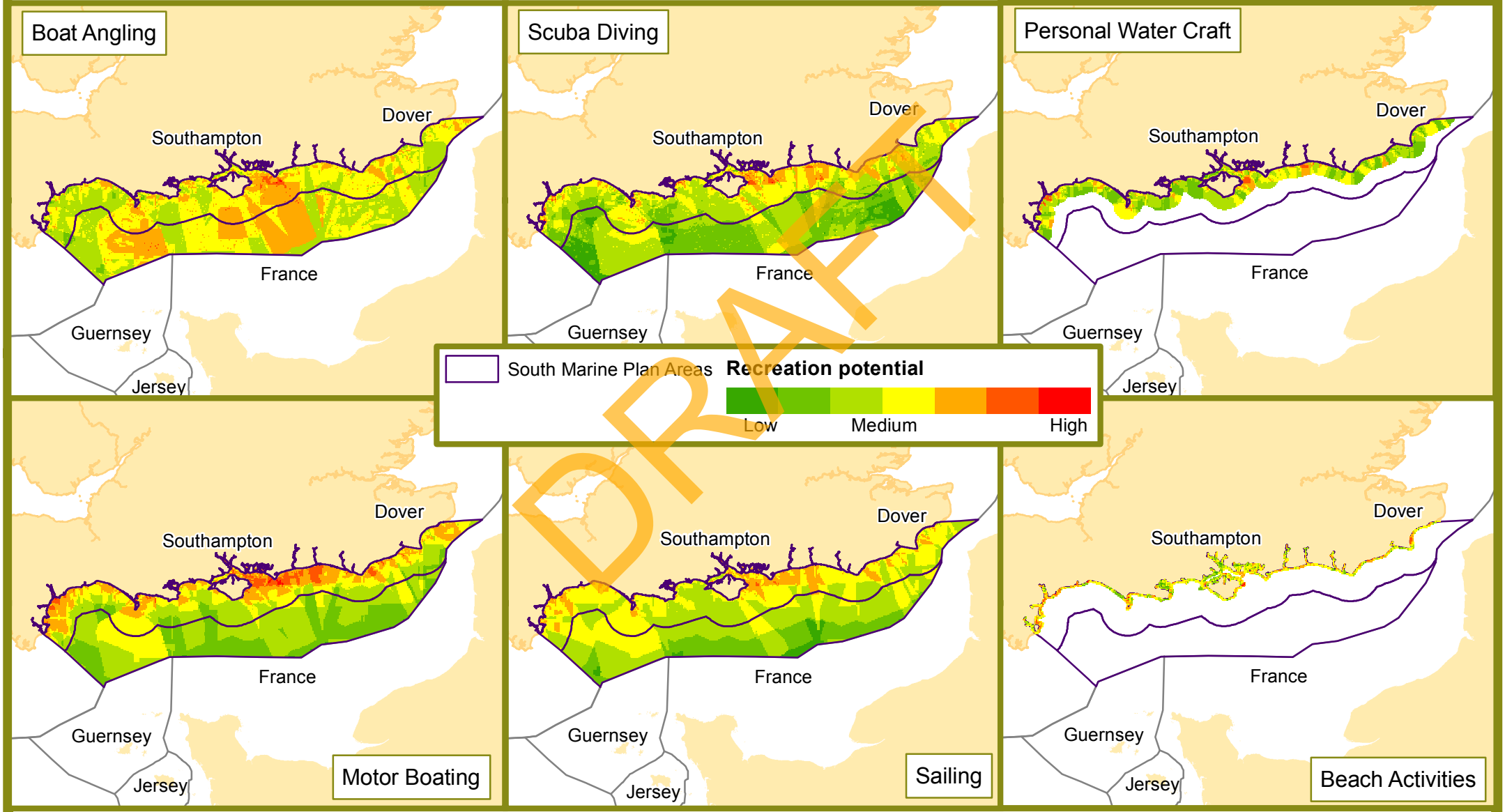
Marine Management Organisation

# Fig 14: Recreational Modelling Outputs : boat angling, scuba diving, personal watercraft, motor boating, sailing and beach activities

(please refer to MMO1064 Modelling marine recreation potential in England for more information regarding the outputs scale)

Information map - Please see box 1 for further details

November 2015




Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0.
VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23

**Policy S-FISH-2**
Proposals that may have significant adverse impacts on access to, or within, sustainable fishing or aquaculture sites must demonstrate that they will, in order of preference:

a) avoid
b) minimise
c) mitigate significant adverse impacts
d) if it is not possible to mitigate the significant adverse impacts, proposals should state the case for proceeding.

**Policy S-FISH-3**
Proposals that enhance access to, or within sustainable fishing or aquaculture sites should be supported.

**Policies S-FISH-2 and S-FISH-3 apply to the inshore and offshore marine plan areas**

### What is access for fisheries and aquaculture?

315. Access for fisheries and aquaculture includes physical access to resource sites such as fishing grounds or viable aquaculture areas, and the wider ability to undertake activity including travel to and from, facilities and markets. Reduced or prevented access to sites of activity may result from physical obstruction, for example, the presence of structures at sea or on the sea floor, closed areas resulting from other uses and loss of access through transit restrictions or poor provisioning of berthing or landing infrastructure.

### Why is this important?

316. The Marine Policy Statement (3.8.7 and 3.9.2) identifies the value of prosperous, efficient and effective sustainable fishing and aquaculture industries in providing 'social, cultural and economic benefits to often fragile coastal communities' including reduction in emigration and maintenance of traditions, culture and identity.[34] Fish are an important part in the delivery of UK food security, with aquaculture making an important and growing contribution.

317. Low volume, high price fisheries for species like sole and plaice occurring in the English Channel has allowed fleets in the south marine plan areas to develop a greater proportion of smaller vessels than the national average (MMO1051) making fleets in the south particularly vulnerable to loss of access and increasing sensitivity to changes in sea use. Shellfish aquaculture is important in the plan areas, particularly inshore, supporting diminished wild stocks for example of oyster. Aquaculture generally is 'a key focus for future development of a sustainable food source'.[35]

318. Reducing or preventing access to fishing sites may redistribute fishing activity from the proposal's footprint. Redistribution of effort can have negative impacts, increasing pressure on other fishing grounds, specific fish stock components like

[34] Marine Management Organisation (2013). Social impacts of fisheries, aquaculture, recreation, tourism and marine protected areas (MPAs) in marine plan areas in England (MMO1035)
[35] HM Government, Marine Policy Statement (2011) (3.9.2)

juveniles, or increasing environmental impacts, particularly if displacement is to sub optimal grounds or previously unfished areas.

319. The fishing industry and its sustainable growth is important for traditional fishing and coastal communities. These policies help to limit adverse impacts to access and seek to enhance access where possible. Policies cover not only the sites of activity (including fishing grounds or sites of current and potential aquaculture - see indicative map figure 9), but also the transit routes to and from sites and any berthing/beaching or landing/loading points (see also policy S-AQ-2).

320. Aquaculture is restricted by site suitability for cultured species, and by technical restriction to mainly inshore areas. Therefore proposals that negatively impact access to aquaculture sites directly impact the potential for growth of the sector.

321. These policies aim to reduce adverse impacts of other marine activities to access. It is not practical to avoid impacts on access across all proposals. Consequently, policy S-FISH-2 slows the rate of access loss where policy S-FISH-3 supports increasing access where practical.

### How the policies will be implemented

#### S-FISH-2

322. Proposals should demonstrate that they will, in order of preference, avoid, minimise or mitigate adverse impact on sustainable fishing or aquaculture sites.

323. Where it is not possible to mitigate significant adverse impacts proposals must state the case for proceeding, including how the proposal supports the South Marine Plan vision, objectives and policies. Inclusion of this information does not indicate that approval of the proposal will follow by default.

324. Proposals will identify potential impacts on access. Identification of impacts and appropriate measure may require consultation with the fishing industry through co-existence and fisheries liaison plans, and relevant regulatory bodies to identify issues at scoping stage.

325. More information on what minimisation or mitigation could include for aquaculture and who to consider contacting in pre-application discussions are covered under S-AQ-1 and S-AQ-2. Opportunities to minimise or mitigate adverse impact can also include co-location. As such these policies should be considered alongside those under objective 1 – co-existence.

326. In deciding on the proposal, public authorities will take account of a range of relevant considerations including compliance with legislation, regulations and environmental assessment.

#### S-FISH-3

327. Proposals should include supporting information, proportionate to any proposal, illustrating how proposals will enhance access to or within sustainable fishing grounds and aquaculture sites.

328. Proposals should demonstrate for areas where fishing and aquaculture activities occur, that they have assessed the extent to which these activities could operate in the vicinity of the same footprint proposed by the development and considered opportunities to enhance access or maximise co-existence by minimising the use of space and mitigating conflicts. The development of co-existence and fisheries liaison plans is one example of how this may be achieved.

329. Opportunities to enhance access can include co-location. This could include developing multiuse of landing facilities available to fishing or aquaculture industry where none were previously present, generating increases in the economic and social potential of such facilities for the local community. Further examples of where co-location can help access particularly for aquaculture can be seen in policy S-AQ-2.

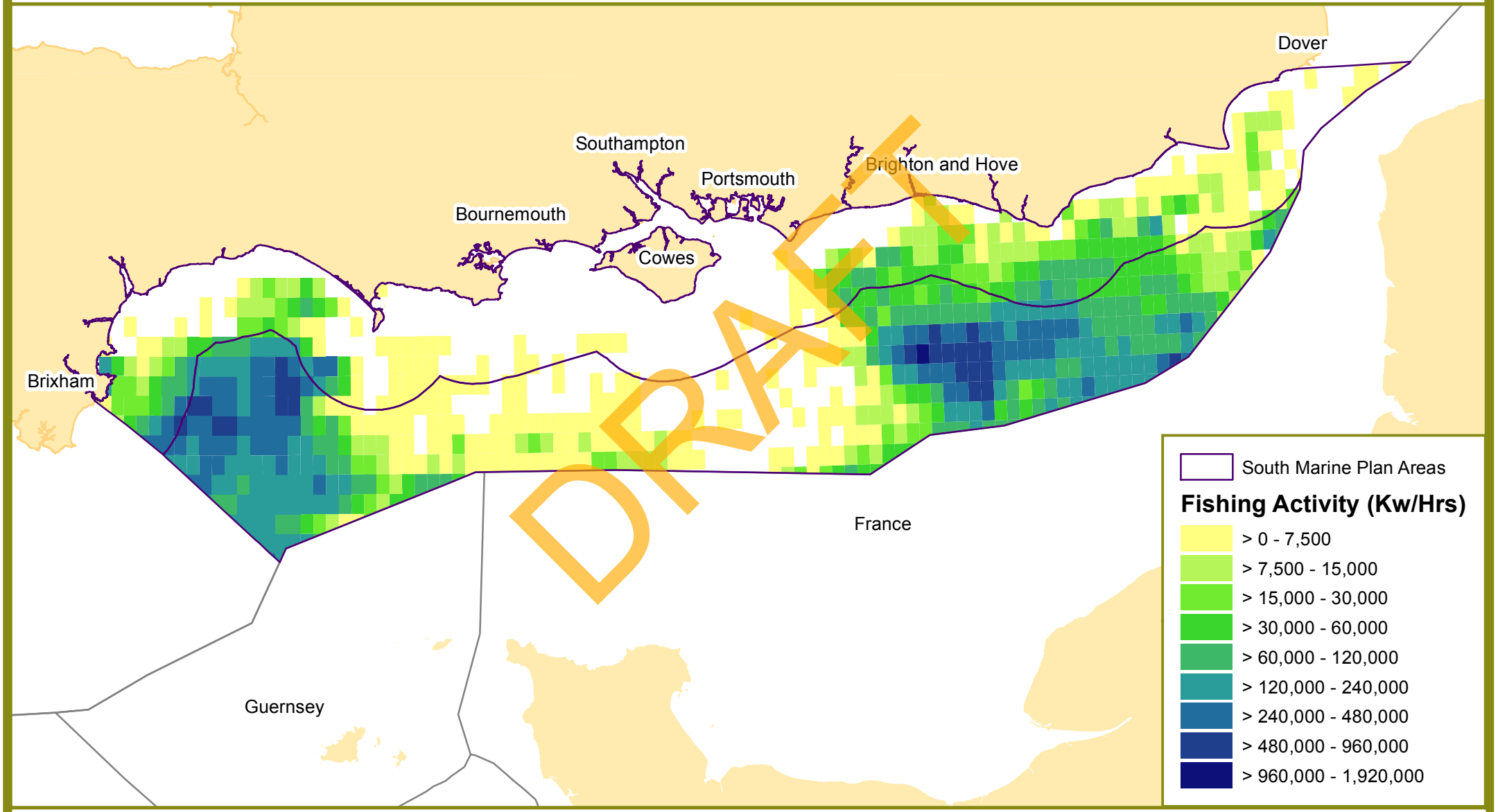
330. Public authorities should also assess proposals for adverse impacts in line with relevant legislation. Enhancement is not a substitute for avoidance, minimisation or mitigation measures.

Marine Management Organisation

# Fig 15: VMS derived cumulative fishing effort (kilowatt hours) by UK registered vessels ≥15m 2011-2013

Information map - Please see box 1 for further details

November 2015



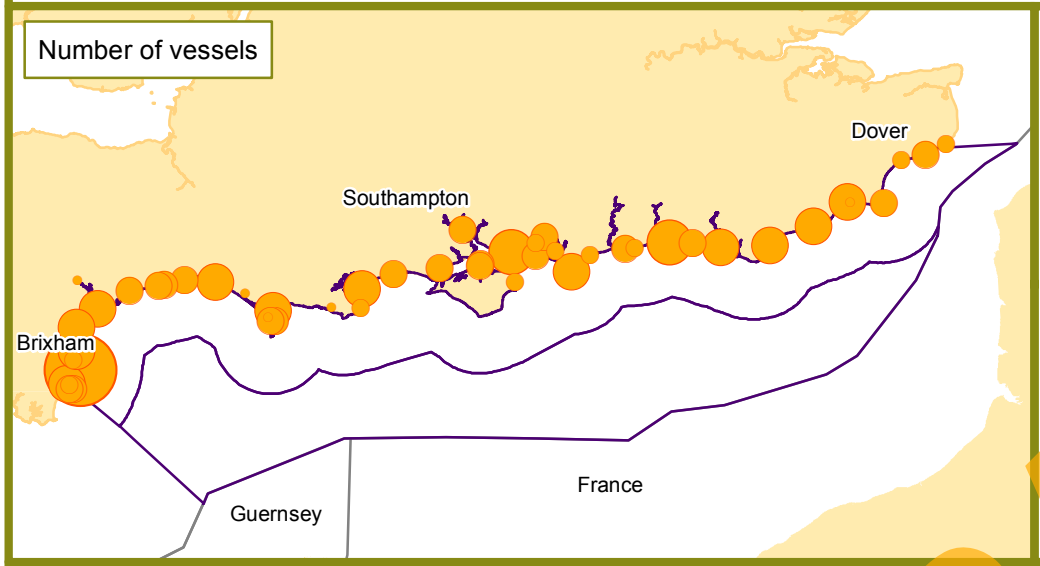

Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0.
VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23

Marine Management Organisation

# Fig 16: Fish landings to UK Ports by UK registered vessels 2013

## Information map - Please see box 1 for further details

November 2015




**Landings by vessel number**
(No. of vessels)

- 1 - 3
- 4 - 12
- 13 - 48
- 49 - 192
- 193 - 729
- 730 - 3,072

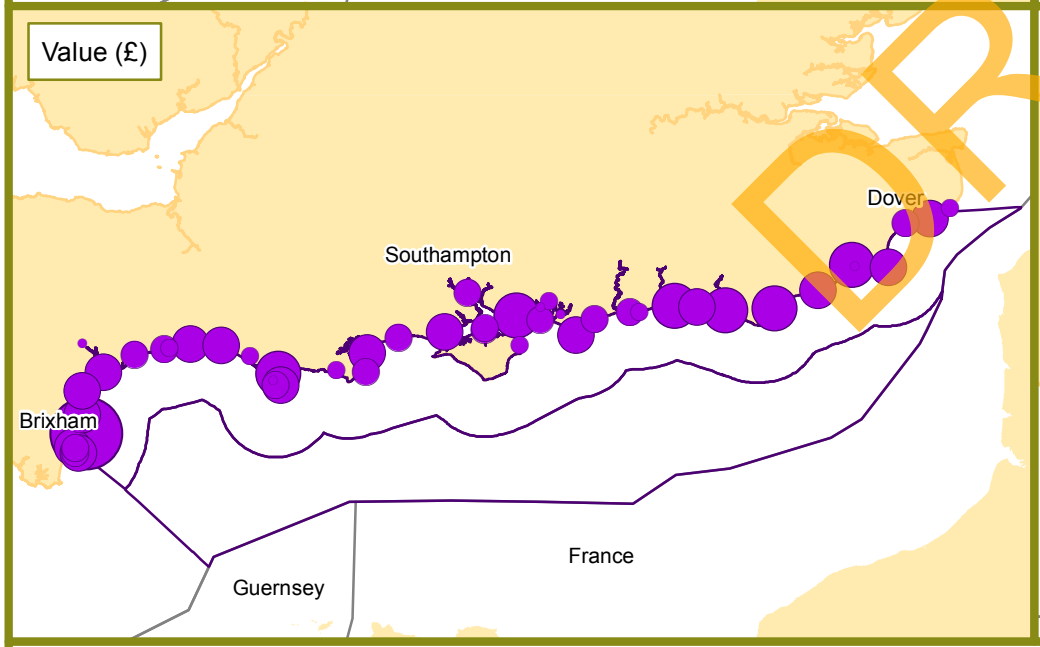
**Landings by value**
(£ Sterling)

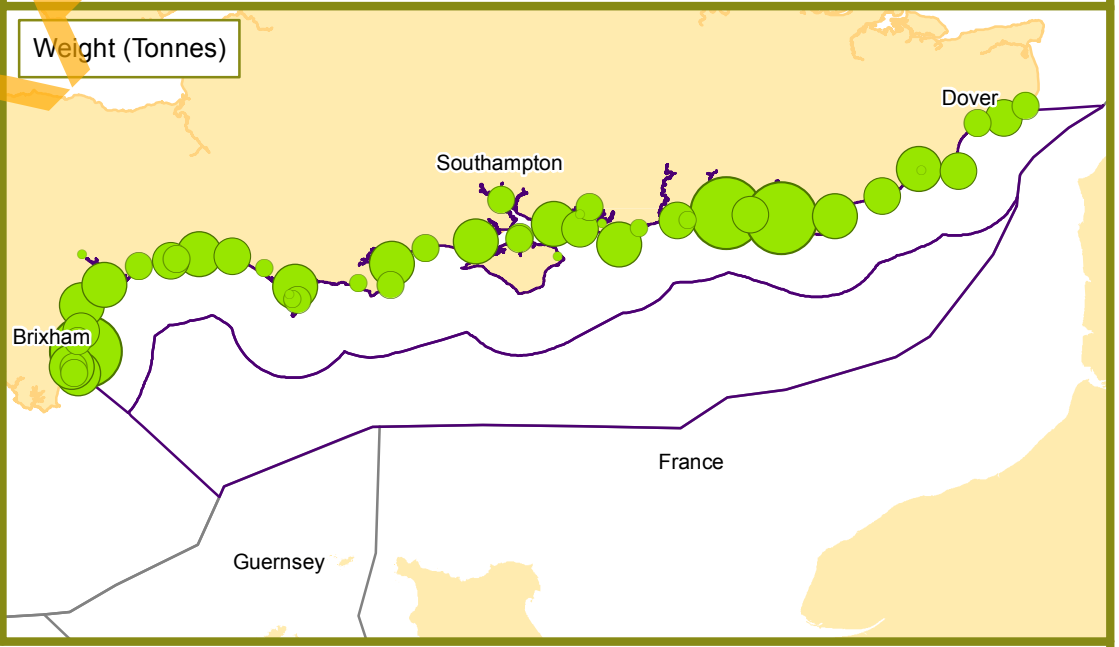
- > £0 - £7,000
- > £7,000 - £42,000
- > £42,000 - £252,000
- > £252,000 - £1,512,000
- > £1,512,000 - £9,072,000
- > £9,072,000 - £54,432,000

**Landings by weight**
(Tonnes)

- > 0 - 2
- > 2 - 12
- > 12 - 72
- > 72 - 432
- > 432 - 2,592
- > 2,592 - 15,552

South Marine Plan Areas






Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0.
VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23

### Signposting - objective 5 - displacement

331. Existing measures which relate to, and may contribute to achievement of this objective include:
    - consideration of co-existence and displacement under the Environmental Impact Assessment Directive (see objective 1 – co-existence)
    - international maritime law, and in particular the United Nations Convention on the Law of the Sea (UNCLOS), in relation to safe navigation
    - good practice guidelines promoting co-existence [36]
    - Bournemouth Local Plan Core Strategy, Christchurch and East Dorset Local Plan, Eastleigh Borough Plan, Isle of Wight Island Plan Core Strategy, all address displacement (with respect to tourism and recreation) stating that development resulting in loss for tourism and recreation will be resisted (S-TR-1)
    - Common Fisheries Policy Reform (S-FISH-2, S-FISH-3)
    - European Fisheries Fund (S-FISH-2, S-FISH-3)
    - European Maritime and Fisheries Fund. (S-FISH-2, S-FISH-3)
    - Co-existence and Fisheries Liaison Plans (voluntary or required) (S-FISH-2, S-FISH-3)

332. Information and guidance that may help in implementing the objective includes:
    - the Green Blue initiative that aims to ensure the environment is taken into consideration for those who use the water for recreation activities or for their associated livelihoods (S-TR-1)
    - best practice guidance for offshore renewable developers (2008), Fisheries Liaison with Offshore Wind and Wet Renewables Group (FLOWW)
    - Department for Business Enterprise and Regulatory Reform (URN 08/935) (S-FISH-2, S-FISH-3).



[36] For example, Department for Business Enterprise and Regulatory Reform (2014); Fisheries Liaison with Offshore Wind and Wet: Recommendations for Fisheries Liaison, Best Practice Guidance for Offshore Renewables Developers; UK Cable Protection Committee (now Subsea Cables UK) (2010), Fishing Liaison Guidelines.

## 5.6 Objective 6 Access

**Objective 6**
**To maintain and enhance public access to, and within, the south marine plan areas appropriate to its setting and in a way that is equitable to users.**

### Context

333. This objective is about maintaining and enhancing access to the marine area for all to enjoy, whilst recognising the importance of the natural environment.

334. Access means access for all, be it physical, virtual or interpretative access so that everyone can benefit from the marine area. The south marine plan areas have a high recreational value and are very popular for activities including pleasure boating, sailing, diving, sea angling, kayaking, surfing, windsurfing and exploration of underwater and coastal heritage assets. [37, 38] The development of a coastal path around England by Natural England through obligations introduced by the Marine and Coastal Access Act, supports access to the coast and marine area.[39]

335. Increased access for tourism and recreation can impact on the very environment that draws visitors to a location. For example, disturbance can impact on achieving conservation objectives of the marine protected areas or harm biodiversity objective 11 – Marine Strategy Framework Directive) and heritage assets (objective 8 – heritage assets). New access, and the infrastructure to support it, needs to be appropriate to its setting to avoid cumulative adverse impacts on existing access, marine character and visual resource (objective 11 – Marine Strategy Framework Directive and objective 9 – seascape). Appropriate access also means safe for the public. A number of specific issues with access provision have been identified in the South Plan Analytical Report.

### Rationale

336. This objective aims to ensure that areas with environmental, historical, or nationally important designations or other sensitive areas are not compromised in order to provide access. It will maintain and enhance social and economic benefits through appropriate new physical and virtual access (such as websites and interactive online access) and new or enhanced signage (policies S-ACC-1 and S-ACC-2). It will also encourage the management and enhancement of existing access, whilst recognising that not all existing access remains appropriate. How appropriate the setting for proposed (either enhanced, existing or new) access should also be considered.



[37] Water sports participation study (2011). British Marine Federation. Decision on selection of third and fourth marine areas for plan production (2012).
[38] Water sports participation study (2011). British Marine Federation.
[39] Separately from the work of marine planning, Natural England is working on ensuring a right of access around all our open coast of England
This right of access underpins an England coast path. As this is being managed by another agency and principally relates to space above mean high water springs, this should not be a focus for marine planning, though it will increasingly play an important role in how people access the marine area. The development of the path should be highlighted by the plans for consideration by those carrying out activity near the marine area.

### Who does this interest?

337. The nature of this objective and the activities and resources it covers means it is of interest to a range of policy areas for which different government departments are responsible. Departments with specific responsibilities include:
    - Department for Environment Food and Rural Affairs
    - Department of Communities and Local Government – local authorities

338. For the same reasons this objective will be of interest to a range of public authorities including those making decisions in relation to the sectors and resources mentioned in the previous paragraph, those making decisions on activities that interact with those sectors and resources, and those with a wider interest, for example in taking account of the plans in their own planning. Examples include but are not restricted to:
    - the Marine Management Organisation
    - Natural England
    - Environment Agency Planning Inspectorate

**Policy S-ACC-1**
Proposals, including in relation to tourism and recreation, should demonstrate that they will, in order of preference:
a) avoid
b) minimise
c) mitigate significant adverse impacts on public access.

**Policy S-ACC-2**
Proposals demonstrating enhanced public access to and within the marine area will be supported.

**Policies S-ACC-1 and S-ACC-2 apply to the inshore and offshore marine plan areas**



### What is access?

339. Access includes “physical” access to the marine area to participate in recreational activities, or associated facilities and infrastructure on land to enable and support activities in the marine area (for example paths, benches, slipways and marinas, see also objective 2 – infrastructure). Access also includes ‘interpretative’ and ’virtual’ access that increase awareness and understanding of the marine area (for example interpretation boards, viewpoints, signage, films, literature and web based interpretation tools).

### Why is this important?

340. Provision for marine access is essential to realising the economic and social benefits, opportunities for protecting the environment and raising environmental awareness. This policy directly supports requirements in the Marine Policy Statement (3.11.5).

341. The issue of coastal access is also set out in the National Planning Policy Framework (S73 and S114) which states ‘access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the

health and wellbeing of communities.' It also notes that local planning authorities should 'improve public access to and enjoyment of the coast.

342. Tourism and recreation is a growth sector with the potential for future economic development. Many statutory plans discuss access as an important consideration (South Plans Analytical Report). Managing the challenges faced by developers and communities will help realise this potential without degrading the environment that access relies on.

### How the policies will be implemented

#### S-ACC-1

343. Proposals should demonstrate that they will in order of preference avoid, minimise or mitigate the significant adverse impacts of construction, operation and decommissioning on existing public access.

344. Established developments should be maintained to a suitable standard to make access available to as wide a range of users as practical.

345. Where this is not possible proposals must outline mitigation such as development of alternative access opportunities off site.

346. Public authorities should assess the potential impacts (positive and negative, direct and indirect, permanent and temporary, as well as cumulative impacts) on the access. Adverse impacts may include physically excluding access to parts of the marine area at all times or some times of the day or year. It is then necessary to confirm that the proposal will (in order of preference):
    - not adversely impact on public access
    - have minimal adverse effects - this may be due to there being no rights of public access to the proposed site or through scope to provide for public access at certain times

#### S-ACC-2

347. Policy S-ACC-2 builds on S-ACC-1 by requiring proposals to enhance public access. Enhancing public access may include removing unsuitable access in order to improve accessibility to the marine area. To avoid adverse impacts (including temporary and cumulative impacts) new access needs to consider the appropriateness of the setting and potential impacts on biodiversity, heritage assets, seascape, existing access and use for recreation and tourism. Early engagement with land owners and other relevant parties is strongly recommended.

348. Identifying positive impacts of a proposal does not negate the need to assess adverse impacts in line with relevant legislation. Enhancement is not a substitute for avoidance, protection or mitigation measures.

349. Proposals should include evidence of any public access related to the proposal area, or elsewhere which it potentially affects.

350. If these criteria cannot be met by a proposal, where it requires an authorisation decision, it will only be authorised if there are relevant considerations in line with the Marine and Coastal Access Act (2009) (Section 58(1)).

### Signposting - objective 6 - access

351. Measures which will contribute to achievement of the objective and implementation of policies include:
    - The Marine Policy Statement
    - National Planning Policy Framework
    - Several local development frameworks such as:
        - Bournemouth Local Plan
        - Brighton and Hove City LDF
        - Dorset AONB
        - Eastbourne Core Strategy
        - Gosport Borough Local Plan
        - Havant LDF
        - Southampton LDF
        - New Forest National Park Core Strategy and Development Management Policies
        - Isle of Wight Core Strategy

## 5.7 Objective 7 Climate change

**Objective 7**
**To support the reduction of the environmental, social and economic impacts of climate change, through encouraging the implementation of mitigation and adaptation measures that:**

- **avoid proposals' indirect contributions to climate change**
- **reduce vulnerability**
- **improve resilience to climate and coastal change**
- **consider habitats that provide related ecosystem services**

### Context

352. This objective recognises the need to combat climate change within the south marine plan areas through mitigation and adaptation measures. It specifically considers indirect or unintended contributions to the drivers of climate change (greenhouse gas emissions).

353. Combating climate is essential, with the social, environmental and economic costs are already being felt across the south marine plan area and more widely across the UK.[40] For example, increase in storminess which was seen most recently in 2014.[41]

354. The impacts of climate change on the marine environment are wide ranging. They include sea level rise, coastal flooding, increased storminess and rising sea temperatures. For example, projections indicate sea level rise within the south marine plan areas as great as 20cm by 2040, with sea surface temperatures warming by up to 4$^{o}$C by the end of the century.

355. The South Marine Plan's evidence base on the effects of climate change is informed by the best available UK specific data (UK Climate Projections, 2009).[42] The South Plans Analytical Report also outlines potential impacts of climate change in the south marine plan areas.[43] The likely implications of climate change have been assessed by The Climate Change Risk Assessment for the Marine and Fisheries sector. See also figure 17 for potential climate effects.

356. The south marine plan areas must contribute to the requirements of the Climate Change Act. The majority of evidence and scientific projections indicate that the climate will continue to change at pace, well into the 21st century and beyond.



[40] Calculation based on the ratio between the cost of adaptation and the difference between gross and residual damage in Europe table 3 page 24 (3852-2773:254) in de Bruin, K.C., Dellink, R.B. and Agrawala, S. (2009) "Economic Aspects of Adaptation to Climate Change: Integrated Assessment Modelling of Adaptation Costs and Benefits" OECD Environment Working Papers No.6, OECD Publishing
[41] Metoffice (2014) http://www.metoffice.gov.uk/climate/uk/interesting/2014-janwind
[42] MMO Project No: 1077 Potential Spatial effects of climate change in the South and East Marine Plan Areas. In Press

### Rationale

357. There is currently a lack of focus of climate change policy at a marine plan level, with policies existing at national and local level.[44] This objective and associated policies aim to provide that focus and contribute to the overall mitigation of and adaptation to climate change, by encouraging all proposals to consider adverse impacts of climate change and include relevant adaptation and mitigation measures consistent with current legislation.

358. This objective encourages public authorities to only permit or authorise proposals (terrestrial and others) that:
    - avoid increasing the indirect effects of increased emissions – a key driver of climate change
    - are less vulnerable to the effects of climate change
    - have improved resilience to climate and coastal change
    - support avoidance of significant adverse impacts on habitats that provide natural flood defence or carbon sequestration (the process of capturing carbon dioxide from the environment) ecosystem services

359. Through this objective the South Marine Plan will help to ensure that climate change mitigation benefits of a proposal are not undermined by other developments and activities increase in emissions or that their vulnerability or resilience to the impacts of climate change are affected.

360. This objective will help ensure alignment with greenhouse gas protocols and with the reporting requirements of the Climate Change Act. This includes the impact any proposal may have on the efficiency or effectiveness of climate mitigation measures already in place, for example, carbon offsetting measures or incorporation of renewable energy generation (plan policies S-CC-1, S-CC-2 and S-CC-3) and through intelligent design and placement of infrastructure (plan policy S-CC-4).

361. In applying this objective and associated policies, it is expected that more use is made of the best available evidence including the UKCP 09 and the Marine Climate Change Impacts Partnership and information produced by the Marine Management Organisation including the South Plan Analytical Report and research report MMO1077.[45] It will also support other plan objectives where climate change is relevant, in particular objective 10 – marine protected areas, objective 12 – space for nature and objective 3 – diversification.

362. A further benefit of implementing this objective will be better join up and cross referencing between the marine plans and other plans, encouraging proposals in the marine areas to take account of relevant local terrestrial focussed policies and management measures which combat the impact of climate change.

[44] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[45] MMO Project No: 1077 Potential Spatial effects of climate change in the South and East Marine Plan Areas. In Press

### Who does this interest?

363. The broad nature of this objective and the many activities and resources it covers means it relates to a range of national policy areas for which different government departments are responsible. Departments with specific responsibilities include:
    - Department for Environment, Food and Rural Affairs – climate change adaptation, flood and coastal risk management, ecosystem services
    - Department for Business, Energy and Industrial Strategy – energy demand reduction in industry, business and the public sector, greenhouse gas emissions and climate change mitigation
    - Department for Communities and Local Government – overlap at the coast with the land-use planning system
    - Department for Transport – relevant to harbour authorities

364. For the same reasons the objective will be of interest to a range of public authorities including those making decisions relating to the sectors and resources mentioned above, on activities that interact with those sectors and resources, and those with a wider interest, for example, in taking account of the plans in their own planning. Examples include but are not restricted to:
    - Environment Agency – setting the direction of how flood and coastal risk is managed in England working in association with local authorities including through shoreline management plans

**Policy S-CC-1**
Proposals must consider their contribution to greenhouse gas emissions arising from unintended consequences on other activities. Where such consequences are likely to result in increased greenhouse gas emissions, proposals should demonstrate that they will, in order of preference:
a) avoid
b) minimise
c) mitigate unintended consequences on other activities.

**Policy S-CC-1 applies to the inshore and offshore marine plan areas**

### What are unintended emissions?

365. Unintended emissions are when a proposal's activities unintentionally result in further greenhouse gas emissions from another activity. This can occur outside the proposal's direct footprint. For example, a proposal seeking to generate renewable energy might find a suitable location between the coast and a fishing ground. Construction may affect fishing activity causing vessels to navigate around the development, resulting in an increase in fuel consumption and associated emissions. This would negate some of the benefit of the proposal in terms of low carbon energy generation (as well as impacting on the economic viability of the fishing operation).

366. This policy focuses on indirect contributions as the direct contributions are already managed through existing mechanisms and legislation (see signposting). As a result of these existing mechanisms, the South Marine Plan can add the most value in managing the indirect contributions to climate change.

### Why is this important?

367. The majority of evidence and scientific projections indicate that the climate will continue to change at pace, well into the 21st century and beyond.[46] A total of 85% of UK emissions arise from energy production and consumption.[47] Sector specific action has been addressing consumption intensity over a period of years in response to UK carbon budgets.[48]

368. The South Plans Analytical Report sets out direct action to reduce emissions. The South Marine Plan's contribution to mitigating climate change will be small relative to the scale of the problem. However it is important to address specific issues including minimising unintended consequences of proposals and their associated impacts on greenhouse gas emissions.

369. A significant amount of development activity requires or impacts on vessels to transit within the south marine plan areas, which is already one of the busiest areas in English waters. Without consideration of other users and existing activity, proposals may increase unintended emissions, resulting in adverse impacts on climate change.

370. This policy considers and addresses indirect effect on greenhouse gas emissions from a proposals impact on other activities. Direct greenhouse gas emissions are managed through a range of existing requirements and measures as outlined in 'signposting' at the end of this objective.

371. This policy is in line with the Marine Policy Statement (2.6.7) and the National Planning Policy Framework, promoting efficient and effective use of marine space and reduction of conflicts arising from unintended consequences of proposals such as through displacement, as well as being in line with climate change policies.

### How the policy will be implemented

372. Proposals must consider and include available evidence and identify interactions which may result in indirect contributions. In addition to evidence on the location, sources could include but is not limited to the South Marine Plan, the South Marine Plans Analytical Report, and the Marine Planning Portal.

373. Proposals should demonstrate that they will, in order of preference, avoid, minimise or mitigate contributions to indirect emission increases from other activities.

374. Proposals should demonstrate that they have considered the interaction between sectors, particularly in relation to unintended consequences on carbon emissions, such as greater travelling distances of vessels from placement of new marine infrastructure resulting in increased fuel consumption.

---

[46] Marine Climate Change Impacts Partnership MCCIP (2013) Marine Climate Change Impacts Report Card 2013 (Eds. Frost M, Baxter JM, Bayliss-Brown GA, Buckley PJ, Cox M, Withers Harvey N) Summary Report, MCCIP, Lowestoft.

[47] Committee on Climate Change, Mitigation: reducing carbon emissions (accessed 14/04/2015) Emission intensity was reduced 9.95% from 2006-2011.

[48] Carbon budgets are set for 4 year periods as a means of ensuring progress towards the 2050 target. Carbon budgets have been set up to 2027 and require a 50% reduction below baseline by 2025.

375. Public authorities should apply this policy proportionally to proposals that have been identified as being likely to affect activities, interests or locations in ways that may increase greenhouse gas emissions. For example competition for space, economic impact, or environmental impacts.

376. Public authorities should not assume that applying this policy to a proposal of low cost or small footprint would always be disproportionate. There may be cases where such proposals have a relatively large effect, for example a deviation to a busy shipping lane.

377. Public authorities should use the best available advice and evidence in decision-making. For example, local authorities should consult with coastal engineers to consider the interaction between activities and help identify where that may affect emissions.[49]

378. Public authorities should determine on a case-by-case basis which proposals this policy should be applied to, considering the scope of activities and interests affected. The effects should be considered across the proposal's lifetime, so that greenhouse gas emissions are considered cumulatively across the commissioning, operational and decommissioning phases of the project rather than at a singular specific point in time. This approach is important as the south marine plan areas has relatively high overall volume with diversity of activity is set to increase.

379. Public authorities should request relevant information before proceeding further if it is judged that a proposal has not provided the required information. For example, where inadequate information has been provided to make an informed assessment.

380. Proposals should demonstrate that they will in order of preference avoid, minimise or mitigate the unintended consequences on other activities. If a proposal cannot meet these criteria it will only be authorised if there are relevant consideration in line with the Marine and Coastal Access Act 2009 (Section 58(1)).

381. Other related policies include S-TIDE-1 and S-REN-1.

**Policy S-CC-2**
Proposals should demonstrate that for the lifetime of the proposal that:

1) they are resilient to the effects of climate change
2) they will not have a significant adverse impact upon climate change adaptation measures elsewhere

In respect of 2) proposals should demonstrate that they will, in order of preference:

a) avoid
b) minimise
c) mitigate the significant adverse impacts upon these climate change adaptation measures.

**Policy S-CC-2 applies to the inshore and offshore marine plan areas**

[49] Emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity

### What are climate change adaptation measures and resilience?

382. Climate change adaptation measures are developments or activities that reduce or protect against the impact of climate change (Marine Policy Statement 2.6.7.5). They include relocation of a development, reinforcement of existing dune structures or building a storm surge barrier.[50] All of these adaptation measures increase a proposal's its ability to cope with the adverse impacts of climate change.

383. Climate change projections should be considered to ensure the design and operation of a given marine activity and/or proposed management measure (such as a marine protected area designation) are resilient as possible to the effects of climate change, such as coastal change and flooding.

### Why is this important?

384. Climate change adaptation measures help to reduce proposals' vulnerability and other developments and activities to the adverse impacts of climate change within the south marine plan areas.

385. This policy will improve the resilience of developments, activities and ecosystems within the south marine plan areas to the effects of climate change. It will ensure proposals properly consider, and where required incorporate built in resilience to, the effects of climate change. It will also ensure proposals do not compromise other developments, activities and ecosystems in meeting the challenges of climate change.

386. This policy gives effect to the Marine Policy Statement and supports climate change adaptation measures put in place by public authorities adjoining the marine plan areas.

### How will the policy be implemented?

387. Proposals should demonstrate that they have consulted with public authorities on matters identified in this policy at the earliest opportunity, particularly in relation to considering how proposals avoid adverse impacts upon existing adaptation measures.

388. Proposals that are likely to have a detrimental effect on existing climate change adaptation measures, such as those highlighted in reports through the National Adaptation Programme, must demonstrate that they will, in order of preference, avoid, minimise or mitigate significant adverse impacts upon climate change adaptation.

389. Proposals that are likely to be at risk from climate change and do not propose any adaptation measures to make them resilient, should identify existing measures (such as flood defences) that provide the proposal with resilience to any adverse impacts of climate change.



[50] IPCC, Fourth Assessment Report: Climate Change (2007)

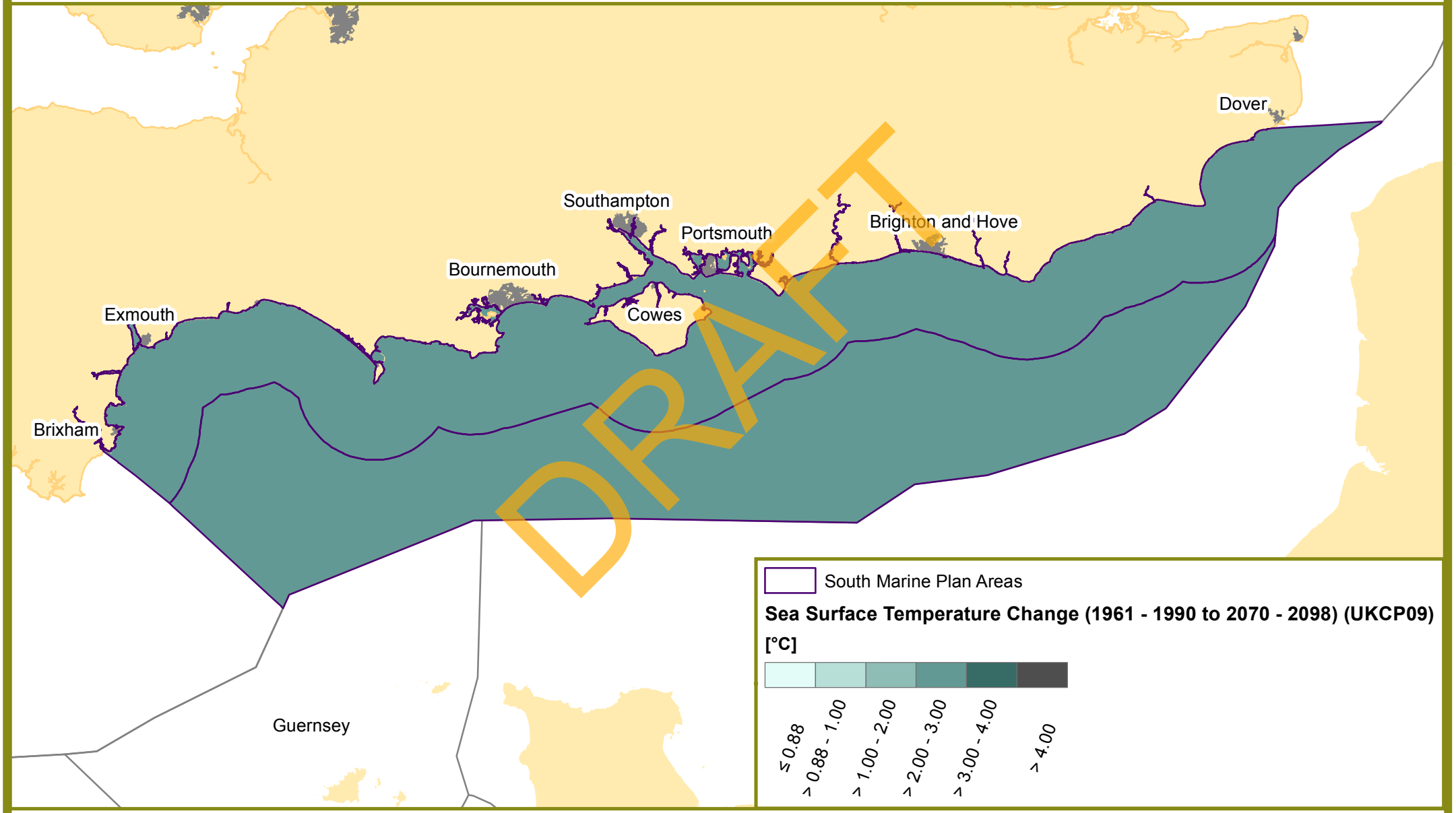
390. Public authorities should request relevant information before proceeding further, if it is judged that a proposal has not provided the required information. For example where inadequate information has been provided to make an informed assessment.

391. Proposals should demonstrate that they will in order of preference avoid, minimise or mitigate the significant adverse impacts upon these climate change adaptation measures. If a proposal cannot meet these criteria it will only be authorised if there are relevant consideration in line with the Marine and Coastal Access Act 2009 (Section 58(1)).

Marine Management Organisation

# Figxx: Draft output from MMO1077 Potential spatial effects of climate change - UKCP09 projected mean sea surface temperature change

August 2015



**Policy S-CC-3**
Proposals in and adjacent to the south marine plan areas that are likely to have a significant adverse impact on coastal change should not be supported.

**Policy S-CC-3 applies to the inshore and offshore marine plan areas**

### What is coastal change?

392. Coastal change is defined as 'physical changes to the shoreline for example erosion, coastal landslip, permanent inundation and coastal accretion'.[51] The effects of climate change will be most prevalent in coastal areas of the south inshore area due to changes in waves, wind and tide which alter dominant coastal processes influencing landforms.[52] Changes may pose a risk to coastal areas and activities identified as vulnerable to this change. [53]

393. Coastal narrowing (or coastal squeeze) is one manageable aspect of coastal change that can be influenced. [54] Areas that are at risk of land instability and mass movements of coastal slopes have been identified in the south inshore marine plan area.[55]

### Why is this important?

394. Coastal change is a particularly important issue in the south marine plan areas given the large proportion of the coastline that is subject to or vulnerable to change. This, in turn, can impact on the people, assets and resources (including natural flood defences such as saltmarsh) in or dependent on, the marine plan areas as outlined in the South Plan Analytical Report. Combating the risks involved, and dealing with impacts when they occur, requires significant resources. A range of measures are in place to achieve successful management in the face of coastal change. Marine plans play an important part in this, including ensuring decisions in the marine area avoid exacerbating detrimental coastal change and do not compromise, and preferably complement, existing measures.

395. This policy will complement other measures to manage coastal change and also support the need for resilience and adaptation along the coastline of the south inshore plan area to benefit all users, in line with the Marine Policy Statement (2.6.7 and 2.6.8) and the UK Climate Change Risk Assessment Report.[56] Adaptation measures are covered explicitly through policy S-CC-2. This policy also gives effect to the Marine Policy Statement (2.6.8.5) and the National Adaptation Programme. [57]



[51] HM Government, Marine Policy Statement (2011) (2.6.8.1)
[32] Marine Management Organisation (In Press) Potential spatial effects of climate change in the South and East Marine Plan Areas. MMO Project no 1077.
[53] HM Government, Marine Policy Statement (2011) (2.6.8.1)
[54] Coastal narrowing can be defined as: "A reduction in the coastal zone width caused by human and/or natural process" Doody, J.P 2013
[55] SCOPAC (2011) Access - adapting to coastal change along England's Southern Shoreline
[56] Climate Change Risk Assessment (CCRA 1.1) analyses key risks and opportunities to the UK, brought about by climate change over the next 80 years
[57] National Adaptation Programme, Objective 2: to provide a clear local planning framework to enable all participants in the planning system to deliver sustainable new development, including infrastructure that minimises vulnerability and provides resilience to the impacts of climate change.

396. A range of existing plans (see table 5) including local development frameworks and local plans contain assessments and measures to address coastal change. Six shoreline management plans, are relevant to the south inshore marine plan area and include projections of coastal change over three epochs (20, 50 and 100 years) and how management can respond to these impacts. This policy complements these plans, particularly for locations identified as coastal change management areas.

397. This policy does not look to restrain coastal defence or flood risk management proposals that will stabilise, reinforce or purposefully alter the coastline (for example managed realignment) reducing vulnerability to coastal change.

### How will the policy be implemented?

398. Proposals should demonstrate they have consulted with public authorities associated with coastal management, such as members of coastal groups[58] or the Environment Agency and/or lead local flood authorities[59] where relevant. Consultation should be carried out at the earliest opportunity, particularly in relation to considering how proposals might help deliver existing coastal adaptation policies.[60]

399. Proposals should demonstrate they have taken into account existing plans, such as shoreline management plans, estuary management plans and other local level plans such as local flood risk management plans and strategies as well as beach management plans where relevant.

400. Proposals should consider relevant shoreline management plan policies to ensure that any impact does not cause unintended consequences further along the coast.

401. Public authorities should always consider proposals that are likely to have a significant adverse impact(s) on coastal change. This may include large proposals such as those requiring an environmental impact assessment or a strategic environmental assessment. This includes when a proposal affects the vulnerability of other users, or if change is on a scale of or above, that of shoreline management plan units (where a coastal management decision has been taken).

402. Public authorities should not give consent for proposals which may affect areas at risk, or those of high probability of coastal change. [61]

403. Public authorities should also apply this policy to proposals in adjacent terrestrial areas due to the interconnected nature of terrestrial and marine processes.



[58] Coastal groups comprise all key partners in coastal management, principally those from the Environment Agency, maritime local authorities and port authorities. The South Marine Plan is covered by the South East, Southern and South West Coastal Groups.
[59] In two tier local government the district council remains responsible for coast protection, while flooding is managed by the county
[60] Management of Coastal change and flood risk management is the responsibility of the Environment Agency, lead local authorities and others as indicated by relevant Shoreline, Estuary or River Basin Management plans.
[61] Areas at risk include Coastal Change Management Areas in addition to other locations that may be identified in relevant local plans or by relevant local authority and/or Environment Agency coastal managers

404. Both public authorities and proposals should consider, where appropriate, the wider benefits of soft coastal defence strategies[62] and managed realignment schemes in place of hard defences. Future proposals in the south marine offshore plan area may have potential significant adverse impacts on coastal change and consideration should be given on a case-by–case basis whether they should not be supported.

**Policy S-CC-4**
Proposals that may have a significant adverse impact on habitats that provide a flood defence or carbon sequestration ecosystem service must demonstrate that they will, in order or preference:

a) avoid
b) minimise
c) mitigate significant adverse impacts.

**Policy S-CC-4 applies to the inshore and offshore marine plan areas**

### What are ecosystem services?

405. Ecosystem services are the benefits people obtain from ecosystems.[63] The classification of ecosystem services adopted by the Millennium Ecosystem Assessment categorises services as follows: provisioning, regulating, cultural and supporting services.[64] Flood defence and carbon sequestration (the process of capturing carbon dioxide from the environment) services are regulating services.

406. Habitats such as saltmarshes, sand dunes, seagrass beds and mudflats, provide a variety of ecosystem services. Saltmarshes and mudflats play an important natural role in protecting the coast from flood events, by reducing wave energy and buffering flood waters. Well developed sand dune systems act to stabilise sediments, therefore reducing coastal erosion.

407. In addition, the above habitats also provide a natural carbon sequestration service. Salt marsh habitat is one of the most productive ecosystems in the world and as such can sequester a large amount of carbon. Importantly due to the anoxic (without oxygen) nature of this habitat, the carbon is often shifted from the short term to the long term carbon cycle. This is a unique capability in many of the world's ecosystems.[65] Seagrass beds are also considered to be an important carbon sink and sediment stabilising habitat within the marine environment.[66]

### Why is this important?

408. Healthy marine ecosystems ensure their own resilience to the effects of climate change, and provide natural resilience for coastal communities. Carbon sequestration by natural habitats is important for the natural carbon cycle and provides a natural carbon sink. Potential future residential and industrial

[62] Soft defences: coastal defence, actions and strategies that work with natural processes
[63] UK National Ecosystem Assessment (2011) Chapter 12: Marine
[64] UN Millennium Ecosystem Assessment (2005) Ecosystems and Human Wellbeing: A Framework for Assessment
[65] Barbier, E.B. et al (2011) The value of estuarine and coastal ecosystem services. *Ecological Monographs* 81: 169 – 193
[66] Barbier, E.B. et al (2011) The value of estuarine and coastal ecosystem services. *Ecological Monographs* 81: 169 – 193

development within and adjacent to the south marine plan areas could conflict with habitats and species important for these two regulatory ecosystem services. The south inshore marine plan area's mudflat and saltmarsh habitats in particular are considered in poor condition and declining.[67]

409. Effective management of marine ecosystems can be considered a climate change adaptation measure necessary to deal with the potential impacts of climate change[68] Preventing adverse impacts of proposals on habitats that provide natural flood defences can also reduce the need for additional artificial and costly flood defences.

410. Implementing this policy will complement plan policies and national commitments relating to biodiversity where habitats providing the ecosystem services are also important for biodiversity. [69] [70] This policy will also aid in the achievement of Good Environmental Status for descriptor 1 of the Marine Strategy Framework Directive[71] (objective 11 – Marine Strategy Framework Directive) and contribute to the UK's high level marine objectives for living within environmental limits.[72]

### How the policy will be implemented

411. Proposals must demonstrate that they have considered available evidence and identified any significant adverse impacts on habitats that provide flood defence and/or carbon sequestration ecosystem services. For example, evidence on the location could include the South Marine Plan (this document), the South Plans Analytical Report and the Marine Planning Portal.

412. Proposals should identify and describe habitat/s within the proposal area and determine whether it provides carbon sequestration or flood defence ecosystem services.

413. Proposals must demonstrate that they will, in order of preference, avoid, minimise or mitigate significant adverse impact on habitats that provide a flood defence or carbon sequestration ecosystem service. For example:
    - minimise – minimising the size of structures (see also objective 1 – co-existence and policy S-CO-1) or the amount of time work is undertaken to ensure natural processes can continue
    - mitigate - innovative engineering design, sediment bypassing to avoid sediment loss or reductions to the overall size and scope of a project

414. If these criteria cannot be met by a proposal, where it requires an authorisation decision, it will only be authorised if there are relevant considerations in line with the Marine and Coastal Access Act (2009) (Section 58(1)).



[67] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[68] HM Government, Marine Policy Statement (2011), (2.6.7.3)
[69] HM Government (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services
[70] HM Government, Marine Policy Statement (2011) (2.6.1)
[71] Marine Strategy Framework Directive Descriptor 1: Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions.
[72] HM Government, Marine Policy Statement (2011), Box 1, page 12.

415. Proposals and public authorities must take into account where relevant, all current publically available evidence relating to habitats providing relevant ecosystem services. Figures 24 to 28 indicate habitats of conservation importance and species and habitats that are particularly threatened, rare, or declining. The figures also indicate the location of several habitats highlighted within this policy - coastal salt marsh and seagrass bed habitats. The absence of evidence does not mean absence of habitats that provide flood defence and carbon sequestration ecosystem services.

416. Additional proposal specific evidence may be required. Where new evidence emerges that improves or changes the evidence provided here, this must be taken account of in applying the policy.

417. Proposals within Natura 2000 sites will require additional assessment measures. The definitions of avoidance, mitigation and compensation are defined under the Birds Directive and Habitats Directive.

418. Proposals are required to be in compliance with relevant legislation and regulations including Habitats Regulations Assessment, Environmental Impact Assessment and National Policy Statements where they apply.

419. Public authorities must apply this policy where the best available evidence indicates that it is appropriate to do so.

420. Public authorities must apply this policy proportionally for proposals that will interact with habitats that provide the listed ecosystem services (flood defence and carbon sequestration).

421. Public authorities must request required information where it is judged that this policy has not been sufficiently addressed before proceeding. For example, inadequate information has been provided to make an informed assessment.

422. This policy will mainly be relevant to the south inshore marine area as current evidence shows that relevant habitats providing the flood defence and carbon sequestration ecosystem services are mainly found in the inshore and are more likely to be impacted by future proposals than offshore habitats.

### Signposting - objective 7 - climate change

423. Existing measures which will contribute to the achievement of the objective and implementation of policies include:
    - The Climate Change Act (2008)
    - Marine Climate Change Impacts Partnership
    - UK Low Carbon Transition Plan (S-CC-1)
    - National Planning Policy Framework (S93 and S95) (S-CC-1)
    - Marine Policy Statement (2.6.7). (S-CC-1, S-CC-2, S-CC-3)
    - Environmental Impact Assessment (S-CC-1, S-CC-3, S-CC-4)
    - Climate Change Risk Assessment, (S-CC-2. S-CC-3)
    - National Adaptation Programme (S-CC-3)
    - Shoreline Management Plans in the south marine plan areas (S-CC-3)

- Section 41 of The Natural Environment and Rural Communities Act (2006) (S-CC-4)
- Habitats Regulations Assessment (S-CC-4)
- Biodiversity 2020 (S-CC-4)

424. In seeking to ensure resilience, proposals are encouraged, where possible, to include elements of 'best practice,' including use of the best available technologies. Numerous resources are available to improve understanding of resilience and how to implement appropriate measures including:

- Climate UK
- Committee on Climate Change
- Green Deal
- Royal Institute of British Architects Climate Change Guidance
- The Carbon Trust
- UK Climate Impacts Partnership
- Climate Change Partnerships (CCPs)
- Coastal Change Management Areas (CCMAs)
- Joint Nature Conservation Committee for habitats and species under threat

425. In determining whether proposal might pose a significant risk to coastal change, proposals should refer to the relevant Shoreline Management Plan, Flood Risk Management Plan and applicable Estuary Management Plans as well as any relevant special planning guidance or Coastal Change Management Area to consider if the potential for coastal change could be of wider detriment.

### 5.8 Objective 8 Heritage assets

**Objective 8**
**To identify and conserve heritage assets that are significant to the historic environment of the south marine plan areas.**

#### Context

426. This objective supports the identification and conservation of heritage assets within the south marine plan areas which are identified as significant to the diverse historic environment (both along the coast and beneath the waves). The features and assets of the south coast are described in further detail in the South Plans Analytical Report.

427. This objective clarifies mechanisms to identify and conserve assets that already have protection as well as new assets not currently protected in the context of new and existing activities and their predicted growth.

428. The Marine Policy Statement (2.6.6.4) states that "some heritage assets have a level of interest justifying statutory designation, the purpose of which is to ensure that they are protected and conserved for the benefit of this and future generations." In coastal/intertidal zones and inshore waters designated heritage assets may include:
    - listed buildings (designated under the Planning (Listed Buildings and Conservation Areas) Act 1990
    - scheduled monuments (designated under the Ancient Monuments and Archaeological Areas Act 1979)
    - protected wreck sites (designated under the Protection of Wrecks Act 1973)
    - sites designated under the Protection of Military Remains Act 1986

429. Jurisdiction of the above are limited in scope to UK territorial waters, which extend up to 12nm.

430. Non-designated sites do not necessarily lack interest or identifiable significance in offshore waters. The Marine Policy Statement (2.6.6.5) states 'many heritage assets with archaeological interest in these areas are not currently designated as scheduled monuments or protected wreck sites but are demonstrably of equivalent significance. The absence of designation for such assets does not necessarily indicate lower significance and the marine plan authority should consider them subject to the same policy principles as designated heritage assets…'.

#### Rationale

431. Current activity and predicted growth in marine industry pose an increasing threat to the historic environment and heritage assets. Safeguarding the historic environment for its intrinsic value, social benefits, services to other activities and access to it is important. Several activities have the potential for significant adverse impacts upon heritage assets. This includes tourism and recreation (such as through footfall on land) and activities at sea such as infrastructure development, dredging and fishing.

432. Designated assets have statutory protection, but this protection is not always matched by conservation management. Heritage assets, which are yet to be

discovered or designated, are even more vulnerable to harm. This is especially the case in the offshore area (over 12 nm) where Historic England has no responsibility to record assets or powers to designate assets.

433. This objective recognises the need for public authorities to consider both designated assets and non-designated assets in regard to their value, and risk of harm. Similarly elements contributing to the significance of the asset should not be compromised or harmed. Where practical, enhancement of the condition of assets should be encouraged in line with the National Planning Policy Framework.

434. This objective is supported by policy S-HER-1, which clarifies the support needed for more vulnerable assets that are newly discovered or yet to be designated. It should be implemented in co-ordination with existing management measures that provide protection to heritage assets. With regards to fishing the inshore fisheries and conservation authorities (IFCAs) must take account of the historic environment in their decision making processes in line with the Marine Policy Statement.

### Who does this interest?

435. The broad nature of this objective and the many activities and resources it covers means it relates to a range of national policy areas for which different government departments are responsible. Departments with specific responsibilities include:
    - Department for Communities and Local Government – overlap with land use planning system
    - Department for Environment, Food and Rural Affairs

436. For the same reasons this objective will be of interest to public authorities including those making decisions in relation to the sectors and resources mentioned above, on activities that interact with those sectors and resources, and those with a wider interest, for example in taking account of the plans in their own planning. Examples include but are not restricted to:
    - Marine Management Organisation – licensing authority and adviser to other decision-makers
    - Historic England – advise on designated and protected wrecks, and provision of advice, guidance and approval to proposals with the potential to impact upon the historic environment.

**Policy S-HER-1**
Proposals that may have a significant adverse impact upon heritage assets should only be supported if they demonstrate that they will, in order of preference:
a) avoid
b) minimise
c) mitigate significant adverse impacts
d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.

**Policy S-HER-1 applies to the inshore and offshore marine plan areas**

### What are heritage assets?

437. Heritage assets are the aspects, such as buildings, monuments, or landscapes that are part of the historic environment, that are considered significant and merit consideration in decision making. The historic environment includes all aspects of an

area that are the result of an interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged (Marine Policy Statement 2.6.6.1).

438. The Marine Policy Statement (2.6.6.8 and 2.6.6.5) continues 'the more significant the asset, the greater should be the presumption in favour of its conservation'. However, 'many heritage assets are not currently designated as scheduled monuments or protected wreck sites but are demonstrably of equivalent significance. The absence of designation for such assets does not necessarily indicate lower significance and the marine plan authority should consider them subject to the same policy principles as designated heritage assets'.

### Why is this important?

439. The south marine plan areas have many significant heritage assets. This includes evidence of early human occupation (800,000 years ago) to more modern military, commercial and cargo wreck sites of the twentieth century. Many of the assets currently are not designated as they are not able to be categorised through existing processes of statutory designations. Therefore they have little protection despite their contribution to the character of the south marine plan areas and to the economy through tourism.

440. The aim of this policy is to ensure proposals do not have a detrimental impact on marine and coastal heritage assets and to extend consideration to those assets that are or have the potential to become significant. It ensures that assets are considered in the decision making process and extends to those assets that are not designated and that are discovered during the course of developments.

### How the policy will be implemented

441. Proposals should demonstrate that they will, in order of preference, avoid, minimise or mitigate adverse impact upon newly discovered heritage assets or non-designated assets that are yet to be assessed for designation.

442. Where it is not possible to mitigate significant adverse impacts proposals should state the case for proceeding, including how the proposal supports the South Marine Plan vision, objectives and policies. Inclusion of this information does not indicate that approval of the proposal will follow by default.

443. Proposals may include plans to avoid locations where heritage assets may be located, to minimise adverse impacts through the use of less invasive construction techniques, or to mitigate adverse impacts through the relocation or cataloguing of assets in consultation with Historic England.

444. Public authorities should consider the potential impact of proposals on heritage assets taking into account the risk of damage to, or degradation of, assets.

445. Public authorities should consult with the relevant regulators and advisors, local authorities and other bodies (such as local civic societies) to ensure that heritage assets, with cultural, social or economic value, are considered in the decision making process. Public authorities should consider evidence for the level of significance of a heritage asset, including information and advice from relevant regulators and

advisors and how they are managed. This applies to both identified heritage assets and the potential for such assets to be discovered**.**

446. Public authorities should consider all heritage assets, including those that are not designated or have been discovered during development, in line with information and advice from Historic England with the aim of avoiding, minimising or mitigating possible adverse impacts.

447. Public authorities should take into account the historic character of the marine plan areas, with particular attention paid to the landscapes, seascapes and groupings of assets that give it a distinctive identity.

448. Designated wreck sites can be found at figure 18. It should be noted that figure 18 does not include all wreck data for the south marine plan areas as such data is incomplete, especially for the offshore area. Further information can be obtained from the United Kingdom Hydrographic Office (UKHO).

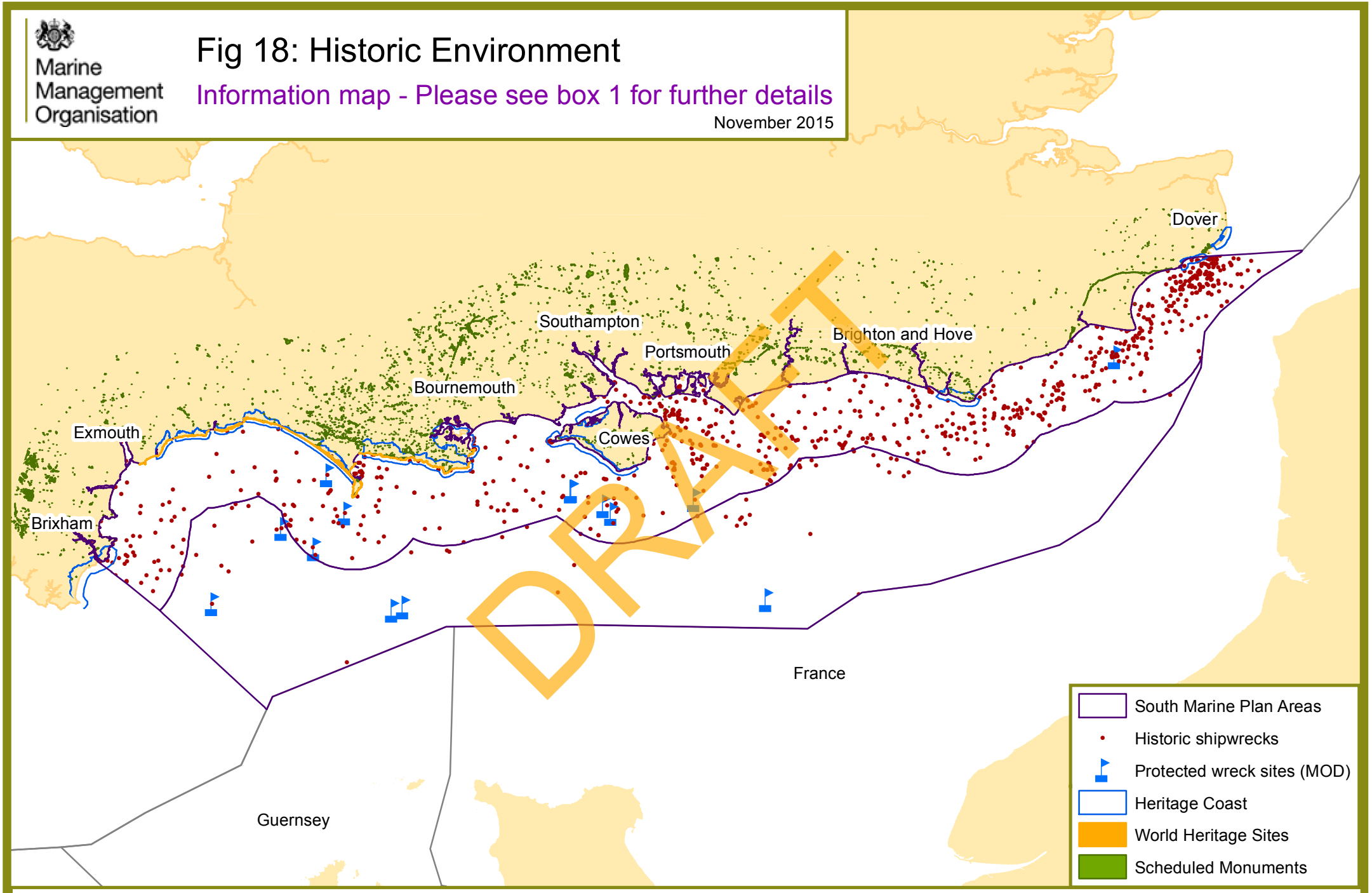
449. Proposals should also take account of geodiversity and its relevance to heritage assets (see box 5).

Marine Management Organisation

# Fig 18: Historic Environment

## Information map - Please see box 1 for further details

November 2015




Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0.
VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23.

### Signposting - objective 8 - heritage assets

450. Existing measures which relate to, and may contribute to the achievement of this objective include:
    - National Planning Policy Framework
    - Marine Policy Statement
    - National Policy Statement EN-1 (5.8)

451. Further information and guidance that may help in implementing the objective include:
    - Protocol for Archaeological Discoveries: Offshore Renewables Projects" (The Crown Estate)
    - Historic England guidance for users of the marine environment, which should be considered by those undertaking activities that may impact upon the historic environment:
        - Morphe Project Managers Guide
        - Conservation Principles
        - Guidance for Divers
        - Marine Licensing and England's Historic Environment
    - United Kingdom Hydrographic Office
    - Historic England Ships and Boats Selection Guide
    - Historic England protecting heritage assets
    - Historic Environment Records provide detailed information on historic assets at a local level
    - Rapid coastal zone assessment reports include assessments of existing terrestrial, shoreline and intertidal assessments as a means of improving understanding of the submerged heritage

### 5.9 Objective 9 Seascape and landscape

**Objective 9**
**To consider the seascape and its constituent marine character and visual resource and the landscape of the south marine plan areas.**

#### Context

452. This objective focuses on the seascape and landscape of the south marine plan areas. It recognises that seascapes and landscapes within the south marine plan areas are inter-linked and ensures that these are considered in conjunction with one another.

453. Areas of landscape designated for their natural beauty can bring direct economic benefits to the tourism and recreation industry through visitor footfall. Designated landscapes provide income to local communities, create jobs and promote health and wellbeing through maintaining high quality coastal and marine environments, Marine Policy Statement (3.11.2).

#### Rationale

454. The south marine plan areas are distinctive for their natural beauty and their diverse range of activities. This objective is important to ensure that the seascape and landscape of the south marine plan areas are considered by proposals. This is not only important for the protection of iconic views and character but also to aid in the process of enabling development where it is most appropriate. The core issues outlined in the South Plans Analytical Report are predominantly focused towards the consideration of seascape, with linkages to landscape, from a social perspective.

455. The effects of development (such as through wind and tidal energy projects, port development, coastal defences, cable landings and pipelines) on an area's seascape and landscape should be considered. This is not only for individual areas, but also for the contributions they make to nationally designated areas and their setting. Increased footfall from tourism and recreation activities may raise the awareness of the area, but it can also change marine character and the visual resource. Links to tourism and recreation and access to marine areas is also covered in objective 6 – access.

456. This objective will be achieved through policy S-SCP-1 which considers an area's character and visual resource. The landscape element of this objective, including those areas with and without designation, will be achieved through signposting and consideration of local plan policy. Proposals should also take account of geodiversity and its relevance to an areas character (objective 12 – space for nature (see box 4)). This objective should also lead to integration across marine and terrestrial planning regimes.

#### Who does this interest

457. The nature of this objective and the activities and resources it covers means it is of interest to a range of policy areas for which different government departments are responsible. Departments with specific responsibilities include:

- Department for Environment Food and Rural Affairs
- Department for Communities and Local Government – local authorities

- Department for Culture, Media and Sport – Historic England's historic characterisation

**Policy S-SCP-1**
Proposals that may have a significant adverse impact upon the seascape of an area should only be supported if they demonstrate that they will, in order of preference:
a) avoid
b) minimise
c) mitigate significant adverse impacts
d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding

**Policy S-SCP-1 applies to the inshore and offshore marine plan areas**

### What is seascape?

458. The Marine Policy Statement (2.6.5.1) states 'In the context of this document, references to seascape should be taken as meaning landscapes with views of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other'.

459. Seascape can be broken down into its constituent visual resource and marine character.

#### Visual resource

460. Visual resource can be interpreted primarily as views of the coast and sea from the land. Views from the sea to land, and sea to sea, are also relevant.

#### Character

461. Character is the perception of an area, the combination of characteristics at the surface, within the water column and on the seabed.

462. The visual resource and character of the south marine plan areas have been described and mapped (figures 19 and 20) in a study carried out for the Marine Management Organisation (MMO1037) The South Seascape Assessment is available to assist public authorities and others when considering proposals.

### Why is this important?

463. Seascape is important due to the prevalence of protected landscapes, their beauty and association with tourism and recreation activities in the south marine plan areas.

464. The Marine Policy Statement (2.6.5.2) states 'at a strategic level visual, cultural, historical and archaeological impacts not just for those coastal areas that are particularly important for seascape, but for all coastal areas' should be considered. This policy adds value to this ensuring that seascape is considered not only in the development of marine plans, but also in decisions, for proposals on developments, activities or management measures. Decisions should aim to avoid, minimise or mitigate possible detrimental effects within the south marine plan areas.

465. This policy adds clarity to existing national policy by identifying the visual resource and key characteristics of the south marine plan areas.

### How the policy will be implemented

466. Proposals which may have a significant adverse impact on seascape, should demonstrate measures taken to avoid, minimise or mitigate the impacts on the area's visual resource or character.

467. Where it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding, including how the proposal supports the South Marine Plan vision, objectives and policies. Inclusion of this information does not indicate that approval of the proposal will follow by default.

468. Proposals should demonstrate that relevant bodies have been consulted, including local authorities, Natural England and Historic England, considering seascape assessments and local plan policy where appropriate.

469. There are a range of policies and measures already in place to address the issues outlined above. For example proposals should take into account nationally designated areas, such as National Parks, Areas of Outstanding Natural Beauty and the Dorset and East Devon Coast World Heritage Site ('Jurassic Coast').

470. Consideration of potential impacts should take into account visibility, weather conditions, angle of views and the temporal or permanent nature of a structure (including its scale, design or activity).

471. Public authorities should consider a proposals impact on seascape, taking into account views to and from the sea, existing marine character and quality, how highly it is valued and its capacity to accommodate change specific to any proposal.

472. In assessing a proposal public authorities should consult with relevant bodies including Natural England and Historic England, considering seascape assessments where appropriate. They should also take account of a range of relevant considerations including compliance with legislation and the applicable environmental impact assessment.



### Box 3: Landscape

Landscape is defined as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". Marine Policy Statement (2.6.5.1). More information can be found at: European Landscape Convention.

There are a number of statutory designations and non-statutory categories protecting England's important landscapes under both national and international law. Many of these designated areas have marine elements. More information about protected landscapes can be found at https://www.gov.uk/topic/planning-development/landscape. In the south inshore marine area these are:

- National Parks - (South Downs and New Forest)
- Areas of Outstanding Natural Beauty - (Chichester Harbour, Dorset, East Devon, High Weald, Isle of Wight, Kent Downs and South Devon), Dorset and East Devon Coast World Heritage Site ('Jurassic Coast')
- heritage coasts (non-statutory)

The Marine Policy Statement (2.6.5.4) addresses proposed development within or relatively close to nationally designated areas, stating: “For any development proposed within or relatively close to nationally designated areas the marine plan authority should have regard to the specific statutory purpose of the designated areas. The design of the development should be taken into account as an aid to mitigation.”

There are links to the National Planning Policy Framework stating that “the planning system should contribute to and enhance the natural and local environment by… protecting and enhancing valued landscapes” and “…maintain the character of the undeveloped coast, protecting and enhancing its distinctive landscapes, particularly in areas defined as heritage coast.” In addition it continues, to state “great weight should be given to conserving landscape and scenic beauty in National Parks, … and Areas of Outstanding Natural Beauty.” Applications for planning permission for major developments “should consider detrimental effect on the landscape…”. It is also noted in regard to the historic environment that “… landscapes, … can better be cherished if their spirit of place thrives”. It also ensures that cumulative landscape and visual impacts” be addressed (in the provision of renewable energy).

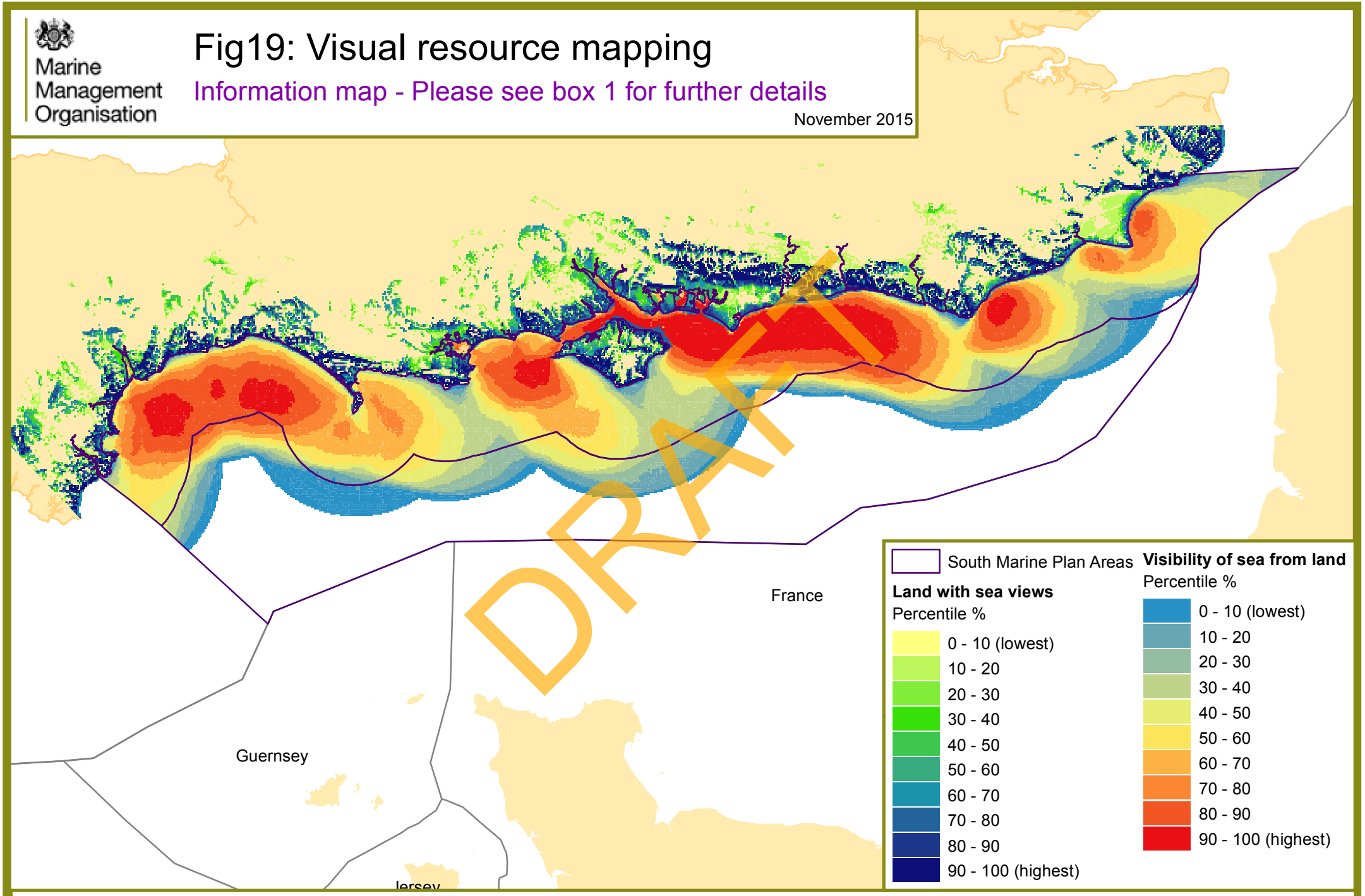
For further detail on designated landscapes see figure 21.

Marine Management Organisation

# Fig19: Visual resource mapping

## Information map - Please see box 1 for further details

November 2015




Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0.
VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23

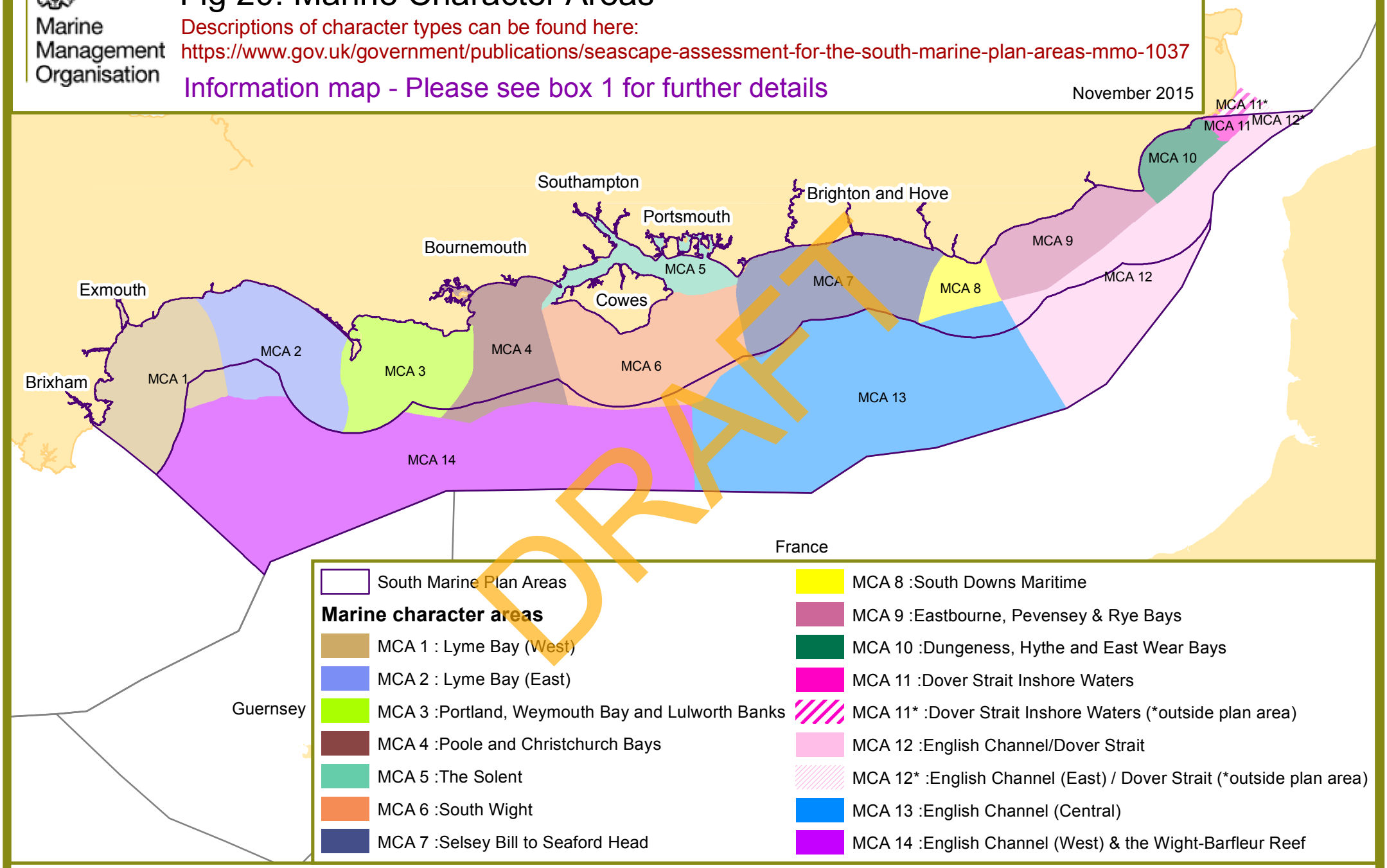
Marine Management Organisation

# Fig 20: Marine Character Areas

Descriptions of character types can be found here:
https://www.gov.uk/government/publications/seascape-assessment-for-the-south-marine-plan-areas-mmo-1037

Information map - Please see box 1 for further details

November 2015




South Marine Plan Areas

**Marine character areas**

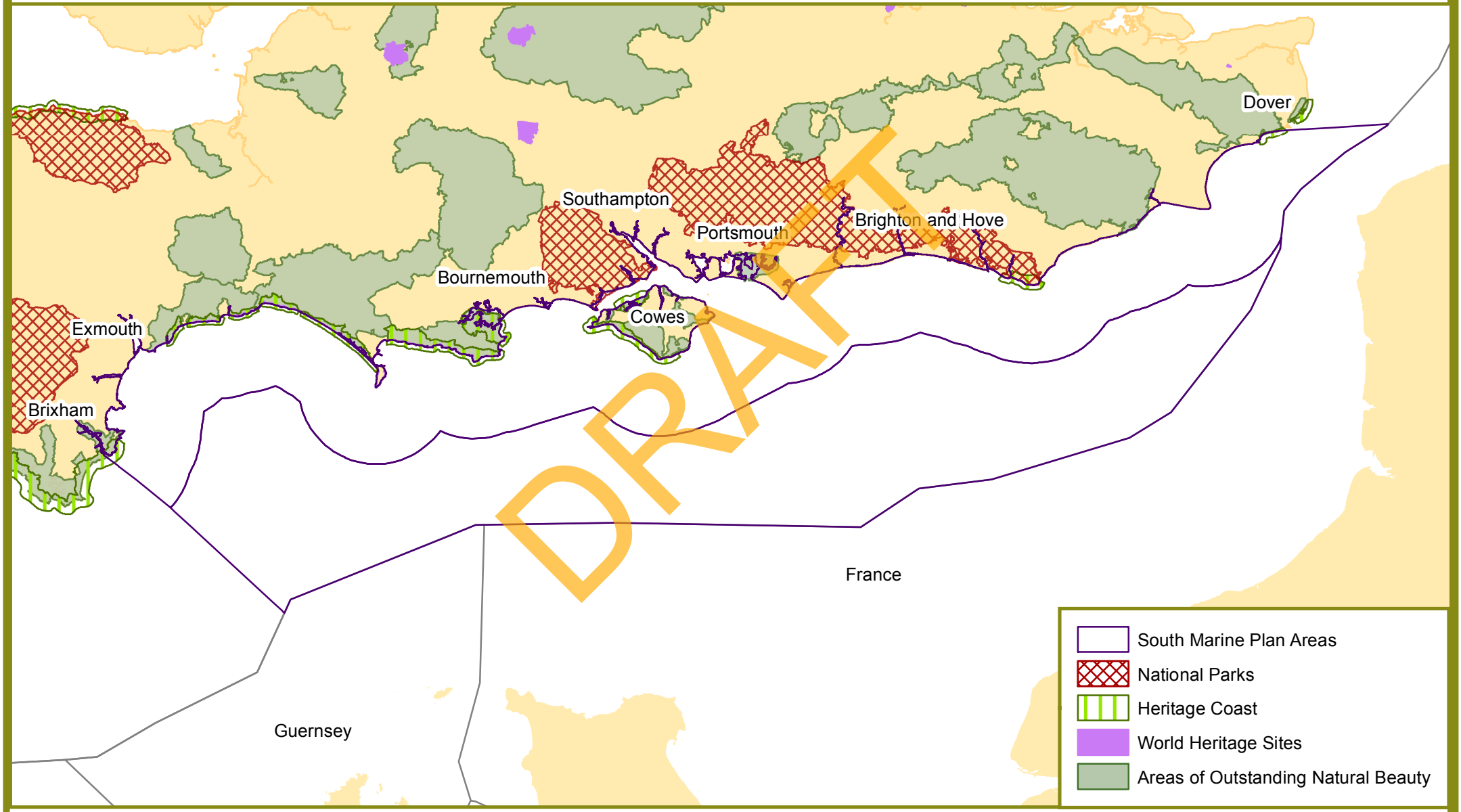
- MCA 1 : Lyme Bay (West)
- MCA 2 : Lyme Bay (East)
- MCA 3 :Portland, Weymouth Bay and Lulworth Banks
- MCA 4 :Poole and Christchurch Bays
- MCA 5 :The Solent
- MCA 6 :South Wight
- MCA 7 :Selsey Bill to Seaford Head
- MCA 8 :South Downs Maritime
- MCA 9 :Eastbourne, Pevensey & Rye Bays
- MCA 10 :Dungeness, Hythe and East Wear Bays
- MCA 11 :Dover Strait Inshore Waters
- MCA 11* :Dover Strait Inshore Waters (*outside plan area)
- MCA 12 :English Channel/Dover Strait
- MCA 12* :English Channel (East) / Dover Strait (*outside plan area)
- MCA 13 :English Channel (Central)
- MCA 14 :English Channel (West) & the Wight-Barfleur Reef

Marine Management Organisation

# Fig 21: Nationally designated landscapes

## Information map - Please see box 1 for further details

November 2015




Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0.
VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23.

### Signposting - objective 9 - seascape and landscape

473. Existing measures which relate to, and may contribute to the achievement of this objective include:
    - Marine Policy Statement (2.6.5) (S-SCP-1)
    - National Planning Policy Framework (Section 11) (see box 3)

474. Further information and guidance that may help in implementing the objective include:
    - An Approach to Seascape Characterisation (S-SCP-1)
    - South Seascape Assessment (S-SCP-1)
    - European Landscape Convention (see box 3)
    - Areas of Outstanding Natural Beauty
    - Heritage coasts
    - Historic Seascape Characterisation (S-SCP-1)
    - Historic Landscape Characterisation (see box 3)
    - National Parks
    - Dorset and East Devon Coast World Heritage Site

## 5.10 Objective 10 Marine protected areas

**Objective 10**
**To support the objectives of marine protected areas and the delivery of a well managed ecologically coherent network by ensuring enhanced resilience and the capability to adapt to change.**

### Context

475. This objective relates to marine protected areas and other sites designated for conservation purposes. It supports protection of the presence, extent and favourable condition of designated features, and highlights the importance of resilience and the ability to adapt to change. It also focuses on the value of the areas beyond site boundaries as well as features protected within marine protected areas and the need to ensure flexibility, such as the ability to move boundaries of designated sites.

476. A marine protected area is an area of sea where specific activities are managed or avoided for a conservation purpose, typically to protect natural or cultural resources. Areas beyond the marine protected area boundary that are important to the feature given protection are also protected in the Birds and Habitats Directives and Marine and Coastal Access Act.

477. The UK is committed to having a well managed network of marine protected areas by 2016[73] [74] under international agreements, Marine Policy Statement (2.6.7.8). The network will be a key measure towards achieving Good Environmental Status as required by the Marine Strategy Framework Directive.

478. The Marine Policy Statement[75] indicates that marine plans should build in "sufficient flexibility to take account of climate change impacts, for example by introducing criteria for the selection or de-selection of marine protected areas, changing or moving current uses and spatial allocation, or safeguarding areas for future uses". Adaptation could be recovery (if already impacted), opportunity for habitat migration if necessary (for example due to sea level rise) or amendment to site boundaries.

### Rationale

479. The incremental loss of coastal habitats and transitional communities are an issue in the south inshore plan area due to human activity and the effects of climate change. Coastal habitats can, and do, adapt to change, however if for example development or hard defences prevent migration, coastal squeeze is inevitable.

480. The loss of coastal habitats could also have a direct impact on species.[76] This is particularly relevant for sensitive habitats that are not formally protected but important to the coherence of the network, and/or may be needed to fill gaps in the network in the future.

[73] HM Government, Marine Strategy Framework Directive - consultation Programme of Measures, (2015)
[74] Joint administration statement, Defra, DOE, Scottish Government, Welsh Government,
[75] HM Government, Marine Policy Statement (2011), (2.6.7.8 and 3.1.7)
[76] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)

481. The effects of climate change on habitats and migration of species also pose a challenge to designated sites. Adaptive management is essential to help mitigate this so as to maintain the unique and valuable nature of the marine environment in the south marine plan areas.

482. This objective encourages proposals and public authorities to support the objectives of marine protected areas and the delivery of a well managed ecologically coherent network by:
    - taking account of any adverse impacts on the objectives of marine protected areas and coherence of the network
    - accounting for impacts on individual marine protected areas ability to adapt to climate change
    - ensuring flexibility by the ability to move boundaries of designated sites
    - focusing on areas beyond protected sites
    - signposting (see box 4) to existing measures for individual sites, including where they apply outside of a site
    - increase the resilience of marine protected areas to adapt to the impacts of climate change (Marine Policy Statement 2.6.7.5 and 2.6.7.8)

483. One aspect of managing a marine protected area is enabling the features for which a site is designated to be able to adapt to climate change, for example through a boundary change or even a new site location. It is important to raise the potential for such changes as the process of identifying, designating and providing conservation advice for sites is still underway. This aligns with requirements set out in Marine Policy Statement (2.6.7.5 and 2.6.7.8) to increase the resilience of the marine environment to adapt to the impacts of climate change.

484. In supporting the delivery of the marine protected area network, it is important to ensure that possible locations for further marine protected areas which are needed to complete the network remain in sufficient condition to merit designation.

### Who is this of interest to?

485. The broad nature of the objective and the many activities and resources it covers means it relates to a range of national policy areas for which different government departments are responsible. Departments with specific responsibilities include:
    - Department for the Environment, Food and Rural Affairs
    - Statutory nature conservation bodies

486. For the same reasons the objective will be of interest to public authorities, including those making decisions relating to the sectors and resources mentioned above, on activities that interact with those sectors and resources, and those with a wider interest, for example in taking account of the plans in their own planning. Examples include but are not restricted to:
    - Marine Management Organisation – licensing authority and advisor to other public authorities
    - Department for Business, Energy and Industrial Strategy – Oil and Gas Environment and Decommissioning
    - Oil and Gas Authority
    - inshore fisheries and conservation authorities

- local authorities

**Policy S-MPA-1**
Proposals must take account of any adverse impacts on the objectives of marine protected areas and the coherence of the overall marine protected area network, with due regard given to any current agreed advice[77] on an ecologically coherent network.

**Policy S-MPA-1 applies to the inshore and offshore marine plan areas**

### What is an ecologically coherent network?

487. An ecologically coherent network is well managed marine protected areas linked together, guided by the Oslo/Paris Convention for the Protection of the Marine Environment of the North-East Atlantic. The UK is committed to forming a network of marine protected areas, including the designation of Marine Conservation Zones alongside other 'relevant conservation sites' (Marine and Coastal Access Act (Section 117)).

488. This is reinforced through a commitment to 'substantially complete an ecologically coherent network as part of a broad based approach to nature conservation' (Marine Policy Statement (3.1.26)), and through the National Planning Policy Framework which defines the need to establish 'coherent ecological networks that are more resilient to current and future pressures'. See figure 22 for individual sites within the marine protected area network.

489. Characteristics of a 'network' have been set out in the Marine Conservation Zone consultation document. It highlights the need to consider wider network coherence and the objectives of individual sites. The coherence of the network is based on five principles agreed by the UK and others through the Oslo/Paris Convention for the Protection of the Marine Environment of the North-East Atlantic; features, representativity, connectivity, resilience and management.

### Why is this important?

490. Marine protected areas are an important tool for protecting biodiversity and habitat loss. They hold benefits for the protection of threatened species, provide research and have health and wellbeing benefits from marine tourism.

491. This policy highlights working towards an ecologically coherent network of well managed marine protected areas can support 'wider environmental management measures than those of individual sites alone'. [78] The south marine plan areas will make a significant contribution to the marine protected area network, through the many existing and proposed marine protected areas located in the south marine plan area.

### How the policy will be implemented

492. Impacts on individual marine protected areas must be addressed through policy S-MPA-1 and other required assessments such as environmental impact assessments.

[77] As agreed by government
[78] Joint administration statement, Defra, DOE, Scottish Government, Welsh Government,

It is anticipated that factors to be taken into account will be considered in regional environmental assessments, strategic environmental assessments or in assessments and measures brought forward in support of the Marine Strategy Framework Directive.

493. Any adverse impacts will be identified, avoided, minimised and mitigated in line with requirements of Habitats Regulations Assessment monitoring. The Department for the Environment, Food and Rural Affairs is working with the Joint Nature Conservation Committee and Natural England to develop the English contribution to the ecologically coherent network. Statutory guidance on how a network is considered in decision-making is yet to be agreed by government.

494. Public authorities should consider adverse impacts on individual sites and the overall network. This should be undertaken at strategic level and project level, this addressed through mechanisms such as Environmental Impact Assessments. Further assessments that should be taken into account include:
    - regional environmental assessments
    - Strategic Environmental Assessments
    - assessments and measures to achieve Good Environmental Status with regard to support of the Marine Strategy Framework Directive

495. Proposals must demonstrate that they 'take account' of the marine protected area network. They must refer to the most current government guidance. This must be done at a strategic level rather than at a project level which is more relevant to individual marine protected areas.

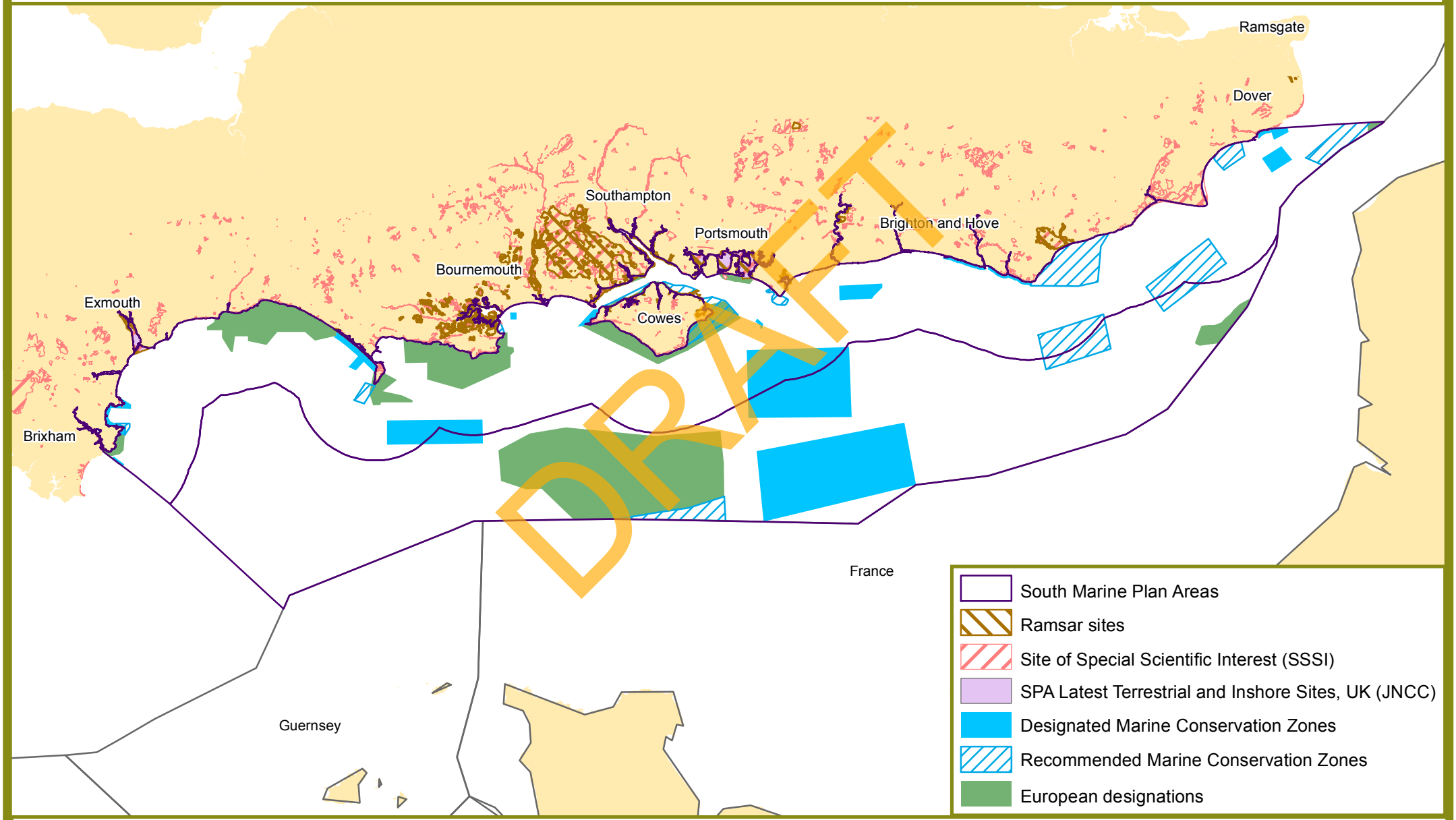
496. In light of this and in order to consider ecological coherence, this policy must be applied throughout the whole of the south marine plan areas.

Marine Management Organisation

# Fig 22: Marine protected areas

## Indicative map - Please see box 1 for further details

January 2016




Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0. VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23.

**Policy S-MPA-2**
Proposals that may have adverse impacts on an individual marine protected area's ability to adapt to climate change and so reducing the resilience of the marine protected area network, must demonstrate that they will, in order of preference:

a) avoid
b) minimise
c) mitigate adverse impacts.

**Policy S-MPA-2 applies to the inshore and offshore marine plan areas**

### What is resilience and the ability to adapt to climate change?

497. Resilience is the ability of an ecosystem to recover from disturbances within a reasonable timeframe as defined within the Oslo/Paris Convention for the Protection of the Marine Environment of the North-East Atlantic.[4] The marine protected area network includes some built-in resilience measures, such as having sites for similar habitats replicated in an area in case the distribution of species dependant on that type of habitat moves due to climate change. However, it is too early to determine if that will be sufficient to achieve full resilience, for example sites may be too far apart for some species depending on their dispersal strategies.

### Why is this important?

498. Potential climate change impacts such as sea level rise and flooding are considered to be significant in the south marine plan areas. Climate change may have implications for the protection of habitats, as detailed within objective 7 – climate change.

499. This policy highlights how adaptive management is important for the protection of sites and species. This is highlighted within local authority plans by having more spatially specific policies. For example, within the Poole Core Strategy, the importance of considering species migrations and habitat creep caused by climate change is flagged.

### How the policy will be implemented

500. Following advice from Statutory Nature Conservation Bodies, proposals must demonstrate that they will, in order of preference, avoid, minimise or mitigate adverse impact on the ability of individual marine protected areas to adapt to climate change.

501. Public authorities must consider and account for adaptation in the face of potential impacts from climate change.[79]

Public authorities must also take into account other relevant projects, programmes and plans, and matters (including those outlined in the Marine Policy Statement 2.6.8.6). [80]

502. The Marine Policy Statement (2.6.7.5) sets out that decisions on and proposals for marine and coastal developments should take account of climate change

[79] HM Government, Marine Policy Statement (2011) (2.3.2.2, bullet 9).
[80] HM Government, Marine Policy Statement (2011) (2.3.2.2, bullet 4)

projections.[81] There are a number of sources of advice available, including the Climate Change Risk Assessment, United Kingdom Climate Projections (UKCP09) and Marine Climate Change Impact Partnership reports.

503. For Special Areas of Conservation and Special Protection Areas designated under the Habitats and Birds Directives respectively, the impact can be considered in the determination of 'likely significant effect' and subsequent appropriate assessment if required.

504. If these criteria cannot be met by a proposal, where it requires an authorisation decision, it will only be authorised if there are relevant considerations in line with the Marine and Coastal Access Act (2009) Section 58(1)).

**Policy S-MPA-3**
Where statutory advice is provided that marine protected area site condition is deteriorating due to climate change, a suitable boundary change will be supported where consistent with other policies in the plan.

**Policy S-MPA-3 applies to the inshore and offshore marine plan areas**

### What is site condition?

505. Site condition is the condition of feature/s the site has been designated for. Condition may be reported as favourable (maintained or recovered), unfavourable (recovering, no change or declining), or destroyed (partially or completely).[82] It is monitored by Statutory Nature Conservation Bodies who provide advice to government, in relation to marine protected areas. Advice given is dependent on the feature/s the site has been designated to conserve and protect.

506. Climate change can affect and impact the features of sites, in particular through habitat and species migrations and dispersal. The loss of features from a site, or a decline in their condition due to climate change may result in unfavourable site condition. Boundary changes are an important consideration to allow adaptive site management.

### Why is this important?

507. Site condition monitoring is important to give a clear indication of the state of the designated site and the feature/s is it protecting and conserving.

508. Within the south marine plan areas, marine protected areas are generally small in size (in particular inshore sites) and so have larger boundary effects which are more susceptible to changes caused by climate change.

509. This policy gives effect to the Marine Policy Statement by looking at how the marine protected area network can respond to climate change through boundary changes. The Marine Policy Statement (2.6.7.8 and 3.1.7) requires marine plans to build in

[81] Climate change projections can be found in UK Climate Projections (UKCP09) with Strategic Flood Risk Assessments produced by planning authorities providing further detail with regards to flooding in relation to climate change (Environment Agency (2013), Strategic Flood Risk Assessments - Guidance to support the National Planning Policy Framework).
[82] JNCC, Key aspects of Common Standards Monitoring (CSM)

sufficient flexibility within the network to take account of climate change impacts. That includes the possibility of introducing criteria for selection or deselection of protected areas.

### How the policy will be implemented

510. The 'trigger' for applying policy S-MPA-3 will be acceptance by Department for Environment, Food and Rural Affairs (the government department responsible for marine protected areas) of statutory advice (based on condition assessments) from the Statutory Nature Conservation Bodies that a boundary change is required. Advice may include deselection of an existing site and selection of a replacement site.

511. Relevant authorities (Statutory Nature Conservation Bodies) will flag condition assessments showing a loss of habitat extent or deterioration in feature condition for example a change in species abundance or assemblage. If climate change is found to be the causing factor, a suitable boundary change should be put in place

512. Where it is not possible to alter the sites boundary due to hard constraints (for example a sea wall), public authorities should consider actions to remove barriers where possible to enable the features of the site to adapt.

513. In certain cases the removal of barriers will not be possible due to their usage for protection of coastal communities as flood defences. The policy supports use of soft defences in preference to hard defences where coastal defence is necessary. Soft defences facilitate easier boundary changes should the need occur through condition assessments. Further consideration regarding the removal of barriers to enable range shifts and boundary changes to occur should be applied in light of policy S-CC-3.

514. This policy focuses on deterioration of site condition and requirements for suitable boundary changes to be put in place. This should be considered alongside policy S-MPA-2 which details the level of consideration needed of individual marine protected areas ability to adapt to climate change.

**Policy S-MPA-4**
Until it becomes possible to assess the coherence of the marine protected area network, proposals should demonstrate they will not prevent the future inclusion of identified features within the network.

**Policy S-MPA-4 applies to the inshore and offshore marine plan areas**

### What is an identified feature?

515. Identified features are the features of marine protected areas that have been designated in order to protect and enhance. Features can be habitats, species, ecological processes, geological or geomorphological in nature.

516. The Marine Policy Statement (3.1.7) highlights the identification of additional areas for future designations in order to complete the network. As highlighted in policy S-MPA1, considering an ecologically coherent network in decision-making is yet to be agreed. Until such time, characteristics of a marine protected area network have been set out in the marine conservation zone consultation document. It highlights the

need to consider wider network coherence in addition to considering the objectives of individual sites. This is based on principles agreed by the UK.

517. Figure 22 shows the locations of individual sites within the marine protected area network. Figures 24 to 28 display habitats of conservation importance; for example species and habitats that are particularly important because they are threatened, rare, or declining. This policy will encourage proposals to consider ecological coherence, throughout the whole of the south marine plan areas.

### Why is this important?

518. Designated features are important in assessing the ecological state of the site. Protecting a representative range of features that are connected and replicated in more than one site are all principles of an ecologically coherent network.

519. A coherent network is a key measure towards achieving Good Environmental Status as required by the Marine Strategy Framework Directive, this policy will aid the achievement of the UK's objectives in the Marine Strategy Part One descriptor 1 – biodiversity and descriptor 6 – seafloor integrity, in particular.

### How the policy will be implemented

520. Proposals should demonstrate that they will not prevent the future inclusion of features within the marine protected area network, which may be required to enhance network coherence.

521. Coherence of the UK marine protected area network is currently assessed at a bio-geographical, regional sea scale. A network stocktake of the level of protection is required. Until this is complete it is unclear if there are shortfalls within the network. Proposals therefore should demonstrate they have applied precaution to enable inclusion of features in future should they be required.

522. Public authorities should consider impacts on individual sites and the overall ecological coherence of the marine protected area network.

523. Public authorities should consider Features of Conservation Importance[83] when assessing proposals, as they can be more sensitive to pressures (for example affects from climate change).[84] Focusing on these will allow easier assessment of where more immediate action is needed in order to complete the network.

524. Public authorities should also consider – annex 1 habitats, and species listed under S41 list and Oslo/Paris Convention for the Protection of the Marine Environment of the North-East Atlantic. The Natural Environment and Rural Communities Act (S41), requires the Secretary of State to publish a list of habitats and species of principal importance for the conservation of biodiversity in England. The S41 list should be used to guide public authorities in implementing their duty under the Natural Environment and Rural Communities Act (S40), to have regard to the conservation of biodiversity in England when carrying out their functions.

[83] JNCC, Marine Conservation Zone Features
[84] JNCC, Marine Conservation Zone Features

525. Public authorities should also use the S41 list to identify which habitats and species should be given priority when applying the requirements of section 11 of the National Planning Policy Framework to create, protect, enhance and manage networks of biodiversity.

### Signposting - objective 10 - marine protected areas

526. Existing measures which relate to, and may contribute to the achievement of this objective include:
    - Environmental Impact Assessment/ Strategic Environmental Assessment/ Habitats Regulations Assessment
    - Birds and Habitats Directives
    - Conservation of Habitats and Species Regulations 2010
    - Offshore Marine Conservation Regulations (amendment) 2007
    - Marine and Coastal Access Act (Section 125 and Section 26)
    - Marine Strategy Framework Directive
    - National Planning Policy Framework

527. Further information and guidance that may help in implementing the objective is provided in box 4.

### Box 4: A summary of requirements relating to marine protected areas

A well managed ecologically coherent marine protected area network is yet to be assessed. As new marine protected areas are designated or proposed, relevant maps in the marine plans will be updated to reflect this (see section 4.7). Public authorities and applicants should ensure that they consider the following:

**Individual marine protected areas**

On-going activities and new developments must continue to abide by legislation and policy that applies to different designated sites, consistent with the management measures set out for each site[85] These include:

i) Special Protection Areas and Special Areas of Conservation (including candidate Special Areas of Conservation, and Sites of Community Importance**)**

ii) Competent authorities[86] have a legal obligation to exercise their functions relevant to nature conservation in a manner so as to secure compliance with the Birds and Habitats Directives, as implemented through the Conservation of Habitats and Species Regulations 2010 and the Offshore Marine Conservation Regulations (Amendment) 2007. One specific requirement is that any plan or project (within or outside a site boundary) that is likely to have a significant effect on the site, alone or in combination with other plans or projects must undergo an appropriate assessment of its implications for the site's conservation objectives. Conservation objectives and advice to

[85] HM Government, Marine Policy Statement (2011) 3.1

[86] Organisations with legally delegated powers from the UK government to perform a designated function.

managing authorities are issued by the Statutory Nature Conservation Bodies for Special Areas of Conservation and Special Protection Areas. [87]

iii) Proposed Special Protection Areas/Special Areas of Conservation: For the purposes of considering development proposals, competent authorities should consider potential Special Protection Areas and possible Special Areas of Conservation in the same way as if they had already been designated. [88]

iv) Future Special Protection Areas/Special Areas of Conservation: Applicants are advised to consult with Statutory Nature Conservation Bodies to ensure they are aware of these sites as areas in possible need of protection.

v) Marine Conservation Zones: In November 2013 the Department for the Environment, Food and Rural Affairs designated the first tranche of 27 Marine Conservation Zones. The second tranche was announced in January 2016. As set out in Marine and Coastal Access Act (Section 125 and Section 126), public authorities have general and specific duties in relation to Marine Conservation Zones. For example, in assessing marine licence applications the Marine Management Organisation will be required to follow the procedure, which relates to the authorisation of any act that is capable of affecting (other than insignificantly) the protected features of a marine conservation zone or any ecological or geomorphological process on which the conservation of any protected feature of a marine conservation zone is (wholly or partly) dependant (Section 126).

A third tranche of marine conservation zones is planned for consultation in 2017 and designation in 2018. Together with other marine protected areas they will aim to complete the English contribution to an ecologically coherent network.

The evidence base associated with the marine conservation zone will be relevant and material to any licensing decision made by the Marine Management Organisation. Any proposal will be subject to the licensing provisions of the Marine and Coastal Access Act (and other relevant legislation), including to assess any environmental impacts, which should take account of the enhanced evidence base associated with the recommended sites. In recognising the ongoing evidence gathering process, decisions should apply precaution by considering the level of uncertainty associated with the evidence, the risk associated with the proposal, and the likelihood of future designation.

**Areas outside marine protected areas that are important to features for which a marine protected area has been designated**



[87] For links to Statutory Nature Conservation Bodies advice visit: http://www.marinemanagement.org.uk/protecting/index.htm

[88] The following wildlife sites should be given the same protection as Special Areas of Conservation and Special Protection Areas: i) potential Special Protection Areas and possible Special Areas of Conservation; ii) listed or proposed Ramsar sites; and iii) sites identified, or required, as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

i) Special Protection Areas/Special Areas of Conservation: The Birds Directive requires public authorities and applicants to take the ecological needs of the species and habitats outside of special protection areas into consideration, where proposals in such locations have a likely significant effect on species which are the reasons for their designation, (for example areas outside of Special Protection Areas that are important foraging grounds for birds). This also applies to locations that have a likely significant effect on protected species as a whole. The Habitats Directive requires that where it is deemed necessary, public authorities and applicants should consider features of the landscape (or locations) outside Special Areas of Conservation which are of major importance for flora and fauna within sites, (such as those which by virtue of their linear and continuous structure, or their function as stepping stones to and from the site, are essential for the migration, dispersal and genetic exchange of wild species), so as to improve ecological coherence.[89] Favourable conditions may only be achieved where the specific structure and functions necessary for a habitat's long-term maintenance exist.

Protected sites in the South Marine plan area include the following Marine Conservation Zones, proposed Special Protection Areas and recommended Special Areas of Conservation:

- Marine Conservation Zones; Dover to Folkestone, Offshore Brighton, Offshore Overfalls, The Needles, and Utopia.
- Proposed Special Protection Areas; Solent and Dorset Coast, and Poole Harbour.
- Recommended Special Areas of Conservation; Southern North Sea for harbour porpoise.

The condition monitoring and review, already under taken by Statutory Nature Conservation Bodies, could be the basis for strategic decisions to move current boundaries of marine protected areas, and/or to safeguard areas for future protection. The Association of Inshore Fisheries and Conservation Authorities have recognised the need for a flexible approach to byelaws and management measures. One example of practical management comes from the east inshore marine plan area where the Eastern Inshore Fisheries Conservation Authority introduced a flexible byelaw enabling them to close and open areas to specific fishing activity as the *Sabellaria* reef the byelaw is protecting naturally moves. This type of management measure is something that could be used within the south plan areas if appropriate.



[89] Article 10
http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1992:206:0007:0050:EN:PDF

## 5.11 Objective 11 Marine Strategy Framework Directive and Water Framework Directive

**Objective 11**
**Activities within and adjacent to the south marine plan areas must contribute to the achievement or maintenance of Good Environmental Status under the Marine Strategy Framework Directive (and Good Ecological Status under the Water Framework Directive) with respect to descriptors on marine litter, non-indigenous species and underwater noise, particularly where current measures need to be reconsidered or enhanced and where new measures are under development.**

### Context

528. The Marine Strategy Framework Directive requires EU member states to put in place measures to achieve or maintain Good Environmental Status, as defined by 11 descriptors, by 2020. Government has set out characteristics, targets and indicators for Good Environmental Status in our waters[90] and a programme of measures to achieve them.[91] The South Marine Plan contributes to measures for a number of the descriptors – for example, policies found under objective 7 – climate change, objective 10 – marine protected areas and objective 12 space for nature).

529. This objective focuses on three aspects of the Marine Strategy Framework Directive with associated policies for each to support delivery of the objective.[92]
    - non-indigenous species – descriptor 2
    - marine litter – descriptor 10
    - underwater noise – descriptor 11

530. This is because:
    - there is some uncertainty that targets defined in the UK for these descriptors will be met through current and proposed measures
    - the topics were raised as issues of concern and/or requiring attention in the south planning process[93]
    - it is necessary to indicate the responsibility of others in decisions affecting the marine area as a whole as well as authorisation and enforcement decisions, and their role in meeting relevant targets. That includes locations adjacent to the south plan areas that influence it and the plans and strategic documents that cover those measures.



[90] HM Government Marine Strategy Part One: UK Initial Assessment and Good Environmental Status (2012)
[91] HM Government Marine Strategy Framework Directive consultation: Programme of Measures (2015)
[92] The Marine Strategy Framework Directive is the environmental pillar of the European Union maritime policy approach. It provides a framework by which the UK (and other Member States) will seek to achieve Good Environmental Status by 2020.
[93] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)

531. In estuaries and coastal waters there is an overlap between the Marine Strategy Framework Directive and the Water Framework Directive. A key objective of the Water Framework Directive is to prevent deterioration of water bodies, including coastal, marine and transitional waters. Through the delivery of river basin management plans, all water bodies should meet Good Ecological Status or Potential and Good Chemical Status, defined by a set of biological, chemical and physical standards.

### Rationale

532. The Marine Policy Statement recognises that marine plans will contribute to meeting the objectives of the Directives[94] and states 'marine planning will be a key tool for ensuring that the targets and measures to be determined by the UK for Marine Strategy Framework Directive can be implemented.'

533. There is a need to highlight the requirement to consider issues and to adopt appropriate measures to avoid the introduction of non-indigenous species. There is also a need for clear direction across all interests and to join up the sector-specific guidance that already exists.

534. River basin management plans are not required to consider litter in the marine environment.[95] In addition to this there is a limited understanding about the current quantities and properties of marine litter, which means that until the Marine Strategy Framework Directive monitoring programme has begun it will not be possible to assess the effectiveness of current measures.[96] Consequently marine litter requires a plan-wide and cross-sectoral approach by public authorities.

535. The introduction of Marine Strategy Framework Directive descriptor 11, represents a growing concern over the addition of noise in the marine environment from human activity. Although considerable uncertainty exists around the spatial and temporal elements of noise as well as the magnitude of it and resulting impacts, the English Channel and Dover Strait (within the south marine plan areas) has some of the busiest shipping traffic worldwide alongside noise caused by other activities such as dredging and piling.

536. Delivery of this objective will help ensure these collective pressures are considered in line with the Marine Strategy Framework Directive providing greater certainty that targets will be met under the relevant descriptors.

### Who does this interest?

537. The broad nature of this objective and the many activities and resources it covers means it relates to a range of national policy areas for which different government departments are responsible. Departments with specific responsibilities include:



[94] HM Government, Marine Policy Statement (2011) (2.5.14).
[95] South East River Basin District https://consult.environment-agency.gov.uk/portal/ho/wfd/draft_plans/consult?pointId=s1405418101234#section-s1405418101234
[96] HM Government Marine Strategy Framework Directive consultation: Programme of Measures (2015) https://consult.defra.gov.uk/marine/msfd-programme-of-measures

- Department for Environment Food and Rural Affairs (as the lead department for the Marine Strategy Framework Directive and the Water Framework Directive)
- Department for Communities and Local Government – local authorities
- Department for Transport – harbour authorities
- Department for Business, Energy and Industrial Strategy – oil and gas installations

538. For the same reasons this objective will be of interest to public authorities, including those making decisions relating to the sectors and resources mentioned above, on activities that interact with those sectors and resources, and those with a wider interest, for example in taking account of the plans in their own planning. Examples include but are not restricted to:
    - Environment Agency – leads on the delivery of the Water Framework Directive
    - Joint Nature Conservation Committee - leads the Marine Noise Register that supports the UK's implementation of Descriptor 11 of the Marine Strategy Framework Directive

**Policy S-NIS-1**
Proposals must put in place appropriate measures to avoid or minimise significant adverse impacts on the marine area that would arise through the introduction and transport of non-indigenous species, particularly when:
1) moving equipment, boats or livestock (for example fish and shellfish) from one water body to another
2) introducing structures suitable for settlement of non-indigenous species, or the spread of invasive non-indigenous species known to exist in the area.

**Policy S-NIS-1 applies to the inshore and offshore marine plan areas**

### What are non-indigenous species?

539. The Convention on Biological Diversity defines non-indigenous species as species whose introduction or spread threatens biodiversity. Non-indigenous species are species introduced outside their natural past or present range, which might survive and subsequently reproduce. In many cases non-indigenous species do not harm the regional ecology and economics. However, in certain cases, non-indigenous species can become "invasive" species if they expand their range rapidly and have enormous and long-lasting impacts on the region. Highly invasive species often have fast reproduction, adapt quickly to a broad range of situations (water quality, food availability), have a diverse gene pool and/or are associated to human activities.

540. Invasive species can dominate a local area, reducing natural biodiversity and making ecosystems less resilient to changes. Through lack of natural predators, competition for space, food or other factors, non-indigenous species can impact local food webs, replace or prey on indigenous species in the area, or introduce diseases to a local system, to which indigenous species are not resistant.

541. Another important impact of the invasion of non-indigenous species is the economic damage it causes if the introduced species impacts upon or outcompetes

commercially valuable species. Management measures taken to control invasive species are costly. Therefore invasive non-indigenous species potentially pose one of the most significant threats to marine biodiversity, especially in light of climate change.

### Why is this important?

542. The proximity of the south marine plan areas to the continent and the fact that the south offshore marine plan area is one of the busiest shipping channels in the world means that the risk of the introduction and spread of invasive non-native species is high.[97]

543. Several human activities form pathways for the introduction of non-indigenous species. The main methods by which non-indigenous species are introduced are: [98]
    - hull fouling (attachment to the bottom of boats/ships)
    - trans-shipment through ship ballast water discharge
    - unintentional effects of aquaculture activity
    - 'hitchhiking' of species with goods transported for trade
    - changing climatic conditions that allow species to extend their range

544. There is also potential for new pathways to develop which enable the introduction of non-indigenous species over the lifetime of the plans. For example, offshore structures providing 'stepping stones' for species migration.

545. A changing climate could make conditions more favourable alongside increases in activities that can introduce non-indigenous species.[99] This may mean that the number of invasive and non-indigenous species increases in the future.

546. This policy targets high risk pathways within the south marine plan area.

### How the policy will be implemented

547. Proposals must consider the targets for Good Environmental Status under descriptor 2 of the Marine Strategy Framework Directive which are that 'non indigenous species introduced by human activities are at levels that do not adversely alter the ecosystem'. Also particular attention must be given to reducing risk of introduction through the 'improved management of high risk pathways and vectors; and the development of action plans for key high risk species by 2020'.[100]

548. Proposals are required to be in compliance with relevant legislation and regulations including Habitats Regulations Assessment, Environmental Impact Assessment and National Policy Statements where they apply.

[97] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[98] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[99] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[100] HM Government Marine Strategy Framework Directive consultation: Programme of Measures (2015)

549. Public authorities must assess new proposals for measures to avoid or minimise adverse impacts on the marine area from the introduction and transport of non indigenous species or the spread of invasive non indigenous species known to exist in the area.

550. Marinas and ports are encouraged to promote awareness of non indigenous species amongst users. Including awareness of the potential of artificial structures to become platforms for the settlement of non indigenous species and act as a 'stepping stone' for the spread of invasive non indigenous species.

551. Examples of how the potential spread of non-indigenous species is avoided or minimised include:
- providing freshwater wash down facilities in new marinas, clubs and training centres with appropriate training facilities
- using power wash or brush systems for in-water cleaning if boats are not regularly moved
- maintaining boat hulls clear of fouling organisms, particularly when moving to and from new areas
- cleaning boats and equipment (for example, aquaculture cages, fouled buoys and lines) before transporting them from one water body to another[101]
- cleaning and drying recreational gear (for example dive and fishing gear) after use
- minimising the amount of vessel traffic to offshore platforms

552. For a list of invasive non-indigenous species known to occur in the south marine plan areas please see South Plans Analytical Report.

**Policy S-ML-1**
Public authorities should ensure adequate provision for and removal of beach and marine litter on amenity beaches.

**Policy S-ML-1 applies to the inshore marine plan area**

**Policy S-ML-2**
The introduction of litter as a result of proposals should be avoided or minimised where practicable and activities that help reduce marine litter will be supported.

**Policy S-ML-2 applies to the inshore and offshore marine plan areas**

### What is marine litter?

553. Marine litter covers any solid material which has been deliberately discarded, or unintentionally lost on beaches and on shores or at sea, including materials transported into the marine environment from land by rivers, draining or sewage systems or winds. It includes any persistent, manufactured or processed solid material.[102] There is evidence that plastic based litter is the most abundant type. As a durable material, plastics persist in the marine environment for a considerable time creating long term environmental and economic problems.

[101] For example from one plan area to another or from another country
[102] OSPAR Marine Litter Regional Action Plan

### Why is this important?

554. Coastal and marine litter and debris is an aesthetic, ecological and economic problem. Marine litter can result in wildlife mortality, provide a method of transportation for invasive non-indigenous species, and larger items can cause damage to marine structures, vessels and their propulsion systems.

555. It is generally agreed that a significant proportion of the debris found in the marine environment is originally released on land. The coastal environment is the interface between the land and sea and so avoiding littering and reducing litter here will aid in the overall reduction of marine litter. Anticipated increases in development of coastal areas and recreational use will likely result in corresponding increases in litter levels in the south marine plan areas. The south inshore plan area's natural landscapes and wildlife attract many visitors making it a popular tourist destination, therefore ensuring beach and marine litter levels are reduced is particularly relevant.

### How the policies will be implemented

556. To achieve Good Environmental Status for marine litter under the Marine Strategy Framework Directive Descriptor 10 states that 'Properties and quantities of marine litter do not cause harm to the coastal and marine environment'. Three targets have been identified to achieve this, the most relevant for these targets policies is an overall reduction in the number of visible litter items within specific categories on coastlines.[103]

### S-ML-1

557. Public authorities should ensure the collection of litter on amenity beaches (which are already identified by local authorities as part of the Code of Practice on Litter and Refuse under the Environmental Protection Act 1990). This includes the provision of waste receptacles (bins) and other infrastructure (for example signage and information boards).

558. As a minimum standard, under current requirements amenity beaches (as identified by local authorities) should be kept clear of all types of litter and refuse between 1 May and 30 September inclusive. Due to changing holiday and climatic patterns, beaches are increasingly being used outside of the traditional bathing season of May – September. Although the duty does not extend beyond the bathing season, it is recommended as good practice that duty bodies are aware of the different nature of beaches within their area, that they carry out a regular monitoring programme of those beaches and develop an appropriate cleansing regime.[104]

559. Land below mean high water springs is not treated as relevant land of principal litter authorities, or as relevant Crown land by virtue of the Litter (Relevant Land of Principal litter authorities and Relevant Crown Land) Order 1991(S.I.1991/476), a potential gap in current measures arising.

[103] HM Government Marine Strategy Framework Directive consultation: Programme of Measures (2015)
[104] HM Government (2006) Code of Practise on Litter and Refuse

560. Public authorities should aim to prioritise beaches which are not currently amenity beaches, but are impacted by long-shore drift, leading to large amounts of litter deposition, and increase the provision as required.

561. As a guide, only litter comprising manufactured or processed items of materials that have been discarded, disposed of or abandoned, by intent or accident, should be removed. Litter includes processed food items and excludes seaweed, twigs or other biological debris which contribute to maintaining the local ecosystem. Removal of litter includes bin emptying and beach cleans.

### S-ML-2

562. Proposals should avoid and minimise introductions of litter to the marine environment during the construction period and throughout the lifetime of the proposal.

563. Proposals should also, where possible, support activities which reduce marine litter. Examples of such activities include, but are not limited to, voluntary beach clean schemes, such as run by Marine Conservation Society and the Fishing For Litter voluntary, unpaid litter by-catch removal scheme by commercial fishermen.

564. Public authorities should encourage voluntary activities to reduce marine litter.

565. The current regulatory regime includes provisions for reducing and removing litter. In addition licensing requirements for marine related activities are required, where relevant, to put in place a waste management plan, which includes measures to minimise the risk of litter escape.

**Policy S-UWN-1**
Proposals generating impulsive sound, must contribute data to the UK Marine Noise Registry as per any currently agreed requirements. Public authorities must take account of any currently agreed targets under the UK Marine Strategy part one descriptor 11.

**Policy S-UWN-2**
Proposals that generate impulsive sound and/or ambient noise must demonstrate that they will, in order of preference:

a) avoid
b) minimise
c) mitigate significant adverse impacts on highly mobile species
d) if it is not possible to mitigate significant adverse impacts, proposals must state the case for proceeding.

**Policies S-UWN-1 and S-UWN-2 apply to the inshore and offshore marine plan areas**

### What is under water noise?

566. All marine activities introduce noise into the marine environment to a greater or lesser extent during construction, operation or decommissioning. Underwater noise occurs either as ambient noise (including shipping propulsion, operational vibrational noise, induced turbulence) or as discrete impulsive sounds (including explosives, seismic surveys or construction piling).

567. There are natural sources of impulsive sound and ambient noise in the marine environment, such as lightning and wave action respectively, but growing human use has increased ambient noise levels over the last 50 years.[105] While impulsive sound has also increased, less is known about its temporal and spatial distribution and the magnitude of trends.

### Why is this important?

568. Underwater noise, resulting from activities and developments can have adverse impacts on marine life[106] and is a growing concern, with chronic noise disturbance having the potential to result in long-term negative impacts[107] particularly for highly mobile species.[108] Ambient noise impacts may include masking communication, disruption of navigational ability, impaired hunting ability and disorientation. At higher levels, noise may change behaviour resulting in avoidance of areas including important feeding and breeding areas[109] or present chronic stress. [110] Impulsive sounds may also cause temporary or permanent hearing damage to individuals and at high intensities can result in death.

569. Marine noise can also 'negatively impact human quality of life, health, and reduce use and enjoyment of marine and coastal areas'. [111] Management of noise and its sources can bring additional benefits for example in human working environment and efficiency, integrity and life of vessels and structures.[112]

### How the policies will be implemented

#### S-UWN-1

570. The UK Marine Strategy sets a target 'to establish a noise registry' to 'record, assess, and manage the distribution and timing of anthropogenic sound sources'. The contribution of data to the Marine Noise Registry on impulsive noise will help determine current baseline levels of impulsive noise, including providing the spatial and temporal distribution of impulsive noise generating activities.

571. Proposals must provide information to the Marine Noise Register on the projected and actual noise generation of their activity prior to consent being granted and after completion. For small[113] developments this contribution is not compulsory.



[105] Joint Research Centre (2010) Marine Strategy Framework Directive Task Group 11 Report; Underwater noise and other forms of energy (Ed: N. Zampoukas) 64pp
[106] HM Government, Marine Policy Statement (2011) (2.3.6.1)
[107] HM Government (2012), Marine Strategy Part One: UK Initial Assessment and Good Environmental Status
[108] highly mobile species include fish, birds, cetaceans (whales and dolphins) other marine mammals and turtles.
[109] HM Government (2012), Marine Strategy Part One: UK Initial Assessment and Good Environmental Status
[110] Rolland, RM et al (2012) Evidence that ship noise increases stress in right whales, Proceedings of the Royal Society B 279(1737) 2363-2368
[111] HM Government, Marine Policy Statement (2011) (2.6.3.3)
[112] OSPAR (2009) Overview of the impacts of anthropogenic underwater sound in the marine environment
[113] Submission to the Marine Noise Registry is compulsory for applications in band 3 with complex case characteristics (defined further at. https://www.gov.uk/government/publications/marine-licensing-fees/marine-licensing-fees#band-3) that generate impulsive sound.

572. Proposals must define expected noise types, levels and durations, considering all stages of the development.

**S-UWN-2**

573. Proposals should demonstrate that they will, in order of preference, avoid, minimise or mitigate significant adverse impacts of underwater noise on highly mobile species. Where it is not possible to mitigate they should state the case for proceeding with the proposal. Inclusion of this information does not indicate that approval of the proposal will follow by default.

574. This should use best available evidence and, where knowledge gaps exist, expert judgement.

575. For impulsive sound, measures could include:
    - avoid – marine mammal observers or passive acoustic monitoring that can stop noise generation while species are present
    - minimisation – eliminating or controlling noise at source by enclosing or insulating the noise source
    - mitigation – controlling noise generating activities during sensitive periods (such as breeding, rearing, hibernation, migration) or soft start piling allowing avoidance to occur

576. For ambient noise, these measures could include:
    - avoid or minimise – design specifications or vessel routing, imposing speed restrictions in sites of sensitivity, or via operational vibration reduction (for example, in vessels or infrastructure)
    - mitigation – insulation techniques against noise from on-board or infrastructure machinery

577. In determining the proposal, public authorities will take account of a range of relevant considerations including compliance with legislation and regulations and potential impacts highlighted in project level assessments.

578. Public authorities should use submitted data to improve evidence of the distribution of noise and inform management of cumulative impacts of noise more effectively when considering new proposals.

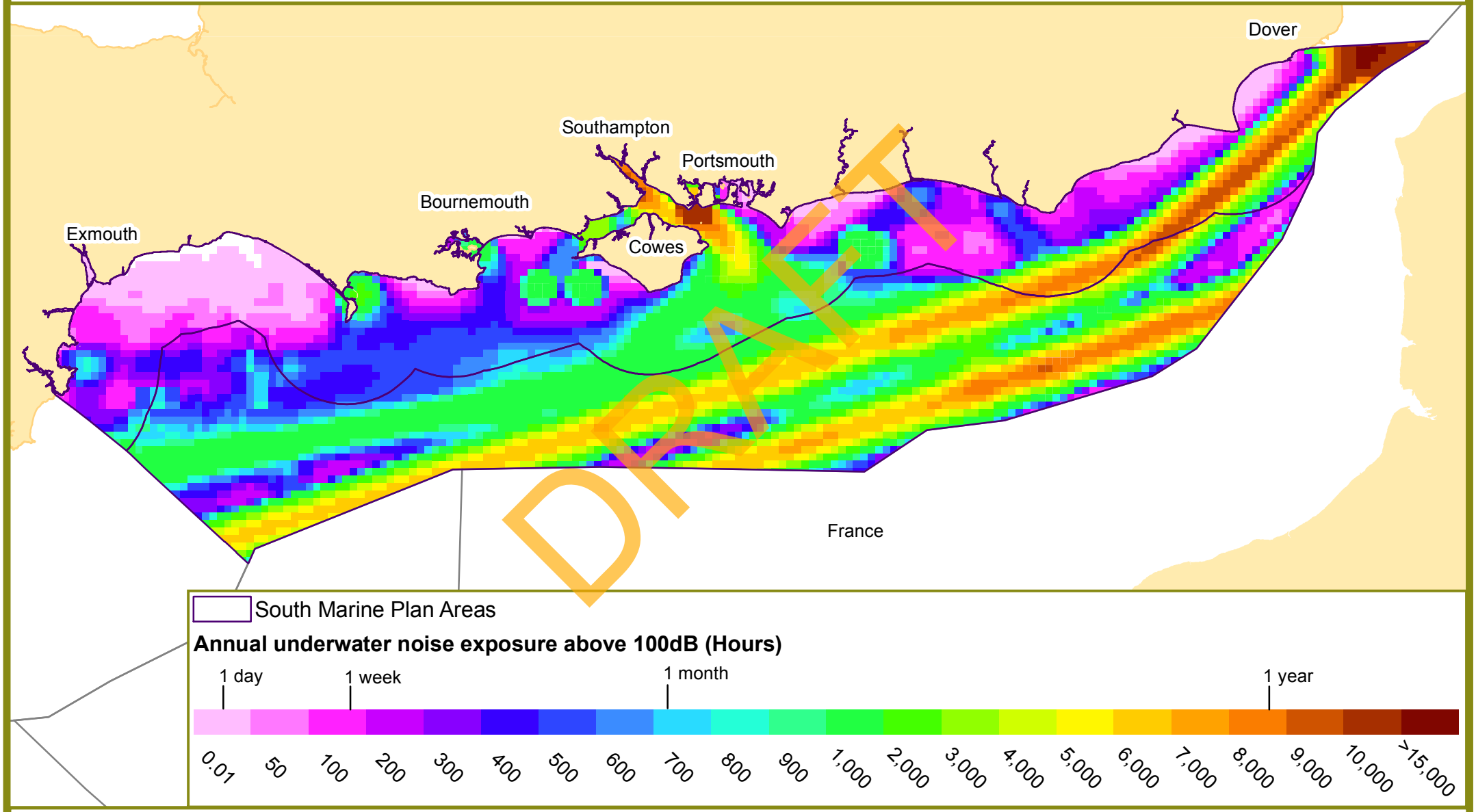
579. The for Business, Energy and Industrial Strategy currently regulate noise associated with oil and gas activities, gas underground storage and carbon capture and storage.

Marine Management Organisation

# Fig 23: Annual underwater noise exposure above 100dB (Hours)

Information map - Please see box 1 for further details

November 2015




Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0. VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23

### Signposting - objective 11 - Marine Strategy Framework Directive

580. Existing measures which relate to, and may contribute to the achievement of this objective include:

- Marine Strategy Framework Directive
- Wildlife and Countryside Act 1981 (S-UWN-1, S-UWN-2)
- OSPAR Regional Action Plan on Marine Litter 2014 (S-ML-1, S-ML-2)
- Environmental Protection Act 1990
- Waste Framework Directive 2008
- Environmental Impact Assessment
- Strategic Environmental Assessment
- Habitats Regulations Assessment
- Sustainability Appraisal for the South Inshore and Offshore Marine Plans
- Ballast Water Convention (S-NIS-1)
- Alien and Locally Absent Species in Aquaculture (England and Wales) Regulations (2011)
- Regulation (EU) No 1143/2014 of the European Parliament and of the Council on the prevention and management of the introduction and spread of invasive alien species (S-NIS-1)
- Infrastructure Act (2015)
- Conservation of Habitats and Species Regulations 2010 (S-UWN-1, S-UWN-2)
- OSPAR Convention on Protection of Marine Environment of NE Atlantic 1992 (S-UWN-1, S-UWN-2)
- European Union Habitats Directive 1992 (S-UWN-1, S-UWN-2)
- European Union Birds Directive 2009 (S-UWN-1, S-UWN-2)
- United Nations Convention on the Law of the Sea
- River Basin Management Plans covering the South marine plan areas.

581. Further information and guidance that may help in implementing the objective include:

- International Maritime Organization guidelines on Noise from commercial shipping and its adverse impacts on marine life (S-UWN-1, S-UWN-2)
- International Maritime Organization guidelines on biofouling (S-NIS-1)
- JNCC Marine Noise Registry (S-UWN-1, S-UWN-2)
- JNCC Guidance (S-UWN-1, S-UWN-2)
- Agreement on the Conservation of Small Cetaceans in the Baltic, North East Atlantic, Irish and North Seas (S-UWN-1, S-UWN-2)
- The Green Blue
- Invasive Non-native Species Strategy for Great Britain (S-NIS-1)
- GloBallast Partnership Programme (S-NIS-1)
- IPIECA, the global oil and gas industry association for environmental and social issues

## 5.12 Objective 12 Space for nature

**Objective 12**
**To safeguard space for, and improve the quality of, the natural marine environment, including to enable continued provision of ecosystem goods and services, particularly in relation to coastal and seabed habitats, fisheries, estuarine and coastal water quality and cumulative impacts on highly mobile species.**

### Context

582. This objective focuses on ensuring space for nature is retained to ensure the continued provision of ecosystem goods and services and enable improvements in the quality of the natural environment. This includes managing current biodiversity and geology.

583. The south marine plan areas have particularly high biological diversity and varied geology (see box 5 – geodiversity). Biodiversity plays an essential role in maintaining healthy, functioning ecosystems, providing ecosystem goods and services, supporting sustainable development and enhancing quality of life, as well as in its intrinsic value.[114]

584. Ecosystem goods and services are the benefits provided by ecosystems that contribute to making human life both possible and worth living.[115] They are broadly classified as:
    - provisioning services (also known as ecosystem goods) – the goods or products obtained from ecosystems, for example food, water, minerals, genetic resources, aggregate material and energy sources
    - regulating services – benefits obtained from the regulation of ecosystem processes, for example climate regulation, regulation of water and air quality, disease and pest regulation
    - supporting services – necessary for the production of other ecosystem services, for example nutrient cycling, water cycling, primary production, sediment and soil formation
    - cultural services – non-material benefits obtained from ecosystems, for example cultural heritage, aesthetic experience, spiritual benefits, recreation and tourism

585. The south marine plan areas are also very busy with a large and diverse range of human activities occurring.[116] Many of the most economically and culturally important activities rely upon a healthy, functioning marine environment, such as tourism, recreation and fishing. However activities also exert pressure on the marine environment. For example:

[114] Department for Environment, Food and Rural Affairs Biodiversity 2020: A strategy for England's wildlife and ecosystem services, (2011)
[115] Ecosystem Assessment
[116] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)

- offshore developments continue to restrict or remove key spawning and nursery grounds for fish and shellfish species
- hard coastal defences and coastal development combined with the effects of climate change are leading to a reduced amount of space for coastal habitats and disturbance to species through reduction of physical space and quality of coastal habitats such as saltmarsh and sand dunes[117]
- saltmarsh and mudflats within the south inshore marine plan areas are considered to be in poor condition and declining as a result of development[118]
- poor water quality as a result of multiple activities is an issue within some estuaries, with impacts on several sectors, such as aquaculture and fishing[119]
- expanding populations along the coast of the south inshore plan area will increase pressures on water treatment works and may lead to water quality issues

586. Ensuring space for nature and managing biodiversity in balance with enhancing and improving access to the coast and marine environment (objective 6 – access) and sustainable economic growth (objective 1 – co-existence) is key to achieving sustainable development of the south marine plan areas.

### Rationale

587. This objective will contribute to the high level marine objectives as set out in the Marine Policy Statement, specifically achieving a sustainable marine economy, ensuring a strong, healthy and just society and living within environmental limits. The policies and the objective will also bring positive change by contributing to a more integrated management approach, and by encouraging those making decisions affecting the marine area to look beyond individual protected sites.

588. Drawing attention to habitats and species of particular importance and the benefits derived from the natural environment should lead to a fuller consideration of the effects of activities and a more integrated understanding of the resulting impacts. Embedding explicit consideration of impacts on ecosystem goods and services in relevant decision-making as well as on the intrinsic value of biodiversity will enable sustainable growth within the south marine plan areas.

589. This objective will achieve this by implementing policies that ensure:
    - habitats and species can naturally adapt, migrate and remain connected
    - space within the coastal area is maintained for the environment
    - cumulative physical disturbance and displacement of highly mobile species are prevented
    - essential fish habitats, particularly specific herring spawning habitat, are not adversely impacted
    - opportunities for the beneficial re-use of dredge spoil are used

[117] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[118] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[119] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)

- habitats and species that provide water quality related ecosystem services are not significantly adversely impacted

### Who does this interest?

590. The broad nature of the objective and the many activities and resources it covers means it relates to a range of national policy areas for which different government departments are responsible. Departments with specific responsibilities include:
    - Department for Environment, Food and Rural Affairs – the natural environment, aggregates and fisheries
    - Department for Transport – ports and shipping
    - Department for Communities and Local Government – overlap with the land use planning system

591. For the same reasons the objective will be of interest to public authorities, including those making decisions relating to the sectors and resources mentioned above, on activities that interact with those sectors and resources, and those with a wider interest, for example in taking account of the plans in their own planning. Examples include but are not restricted to:
    - The Crown Estate (a range of interests)
    - Marine Management Organisation (particularly as a relevant licensing authority and adviser to other decision-makers)
    - The Planning Inspectorate (in relation to Nationally Significant Infrastructure Projects)
    - Inshore Fisheries and Conservation Authorities
    - local authorities

592. The statutory nature conservation bodies of Joint Nature Conservation Committee, Natural England and Environment Agency should be contacted for the requirements of other environmental policies.

**Policy S-BIO-1**
Proposals that may have significant adverse impacts on natural habitat and species adaptation, migration and connectivity must demonstrate that they will, in order or preference:
a) avoid
b) minimise
c) mitigate significant adverse impacts.

**Policy S-BIO-2**
Proposals that incorporate features that enhance or facilitate natural habitat and species adaptation, migration and connectivity will be supported.

**Policies S-BIO-1 and S-BIO-2 apply to the inshore and offshore marine plan areas**

### What is natural habitat and species adaptation, migration and connectivity?

593. Natural habitat and species adaptation and migration includes, but is not limited to, range shifts in response to climatic and other environmental changes and the seasonal migrations of seabirds.

594. Adaptation includes the natural succession of habitats as well as habitats and species adapting to changes in the environment, other than climate change. Connectivity between habitats and populations of the same species allows movements of individuals, juveniles and nutrients.

595. The ability for habitats and species to adapt to climate change is specifically addressed under objective 7 – climate change.

### Why is this important?

596. The ability of habitats to respond and adapt to climatic and other environmental changes ensures resilience in the natural environment. Particular species may also need to adapt to changes in their habitats, predation or competition. The ability of habitats and species to adapt to change is important for biodiversity both within and outside of statutory designations.

597. Connectivity between species, habitats and populations (both within and outside of the south marine plan areas) is important for maintaining genetic diversity and allowing species to undergo seasonal breeding and foraging migrations. Habitat fragmentation and loss as a result of development often has a negative impact such as on population numbers or on the movement of individuals between increasingly isolated populations. This threatens species long term viability.

598. Habitat and species connectivity is particularly relevant for the south marine plan areas, where competition for space and increased levels of development along with the predicted effects of climate change[120] (see also objective 7 – climate change) is likely to lead to habitat fragmentation.

599. Ensuring the connectivity of habitats and species within and outside of the south marine plan areas is also important as it contributes to the maintenance and cohesion of the existing marine protected area network (see objective 10 – marine protected areas).

600. Policies S-BIO-1 and S-BIO-2 will also aid the achievement of Good Environmental Status for Descriptor 1 of the Marine Strategy Framework Directive[121] (see also objective 11 – Marine Strategy Framework Directive) and contribute to the UK's high level marine objectives for living within environmental limits.[122]

### How the policies will be implemented

601. Policies S-BIO-1 and S-BIO-2 are locally and spatially specific. See figures 24 - 28 for the location or distribution of broadscale habitats, and of some habitats and species that are protected or of conservation concern.



[120] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[121] Marine Strategy Framework Directive Descriptor 1: Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions.
[122] HM Government, Marine Policy Statement (2011), Box 1, page 12.

602. It is important to note that where evidence is not available there may still be features that are sensitive or of conservation concern. Proposals may require additional and more specific evidence.

603. It is essential to identify the location of features and sites within the south marine plan areas that are important for enabling habitats and species to adapt, connect and migrate as well as those important for wider biodiversity, including beyond marine protected areas.

604. Where new evidence emerges that improves or changes the evidence provided here, this must be used in applying these policies. Both public authorities and proposals should consider this along with any other evidence gathered.

605. Proposals must include evidence illustrating consideration of policies S-BIO-1 and S-BIO-2. This will enable public authorities make an informed assessment as to whether or not the proposal meets the policies. Evidence could include the South Marine Plan (this document), the South Plans Analytical Report and the Marine Planning Portal.

### S-BIO-1

606. Proposals must consider the available evidence and identify any significant adverse impacts on natural habitat and species adaptation, migration and connectivity.

607. Proposals must demonstrate that they will, in order of preference, avoid, minimise or mitigate any significant adverse impacts on natural habitat and species adaptation, migration and connectivity within the south marine plan areas. Measures could include:
    - avoid - siting developments in a location which does not fragment habitats or create a barrier to habitat adaptation, seasonal migrations or species movements
    - minimise - avoiding operational work during seasonal migrations or the use of temporary or floating structures
    - mitigate - the use of soft infrastructure solutions, novel infrastructure design that allows for juvenile fish shelters and corridors for movement

608. Within Natura 2000 sites additional assessment measures are required. The definitions of avoidance, mitigation and compensation are defined under the Birds Directive and Habitats Directive.

609. If these criteria cannot be met by a proposal, where it requires an authorisation decision, will only be authorised if there are relevant considerations in line with Section 58(1) Marine and Coastal Access Act (2009) (section 58(1)).

### S-BIO-2

610. Proposals should incorporate features which enhance or facilitate natural habitat and species adaptation, migration and connectivity within the south marine plan areas. Examples of such measures include, but not limited to, those cited in paragraph 607 above.

611. Where positive impacts have been identified, proposals must also assess adverse impacts in line with relevant legislation. Enhancement is not a substitute for avoidance, protection or mitigation measures.

612. Proposals are still required to be in compliance with relevant legislation and regulations including Habitats Regulations Assessment, Environmental Impact Assessment and National Policy Statements where they apply.

613. Public authorities must support proposals which enhance or facilitate natural habitat and species adaptation, migration or connectivity.[123]

614. Public authorities may encourage relevant design by providing guidance on good practice incorporating relevant features through their local plans. This should involve working with industry and the statutory nature conservation bodies (including supporting monitoring to assess the predicted benefits).

615. Public authorities should take all current available evidence relating to biodiversity and habitats into account when assessing proposals for the south marine plan areas.

616. Public authorities should apply these policies proportionally on proposals that will interact with natural habitat and species adaptation, migration and connectivity.

**Box 5: Geodiversity**

Geodiversity is the variety of landforms, rocks, minerals, fossils, natural processes, and soils that underlie and determine the character of the landscape, seascape and environment. Geodiversity influences the way people live, resources needed and used and how the planet changes. Understanding and valuing geodiversity is critical to understanding the planet and how the decisions made influence the future of our environment. This recognised by the Council of Europe in the Committee of Ministers recommendation on conservation of the geological heritage and areas of special geological interest.

Geodiversity has an important role to play in ensuring that the natural environment continues to provide important ecosystem services. Geodiversity contributes to the ecosystem services as set out in paragraph 584.

Unsustainable development, changing land use or climate change, may present real threats to geodiversity and can result in significant economic and social cost. Equally, the sustainable management of geodiversity can have positive economic, social, cultural and educational benefits.

In the south marine plan areas there is one Geopark, the English Riviera Global Geopark, which is part of the European Geopark Network (64 Geoparks) and a member of the 114 Geoparks in the Global Network.

[123] HM Government, Marine Policy Statement (2011), 2.6.1.4 'Development proposals may provide, where appropriate, opportunities for building-in beneficial features for marine ecology, biodiversity…as part of good design'

The English Riviera Global Geopark is made up of 32 Geosites. These Geosites are important for their geology and contain 21 geological Sites of Special Scientific Interest and five existing and six proposed Geological Conservation Review (GCR) sites. All sites within the Geopark are protected by the Wildlife and Countryside Act (1981) and the Countryside and Rights of Way Act (2000).

The Marine Policy Statement (2.6.1.4 and 3.5.4) states 'Development proposals may provide, where appropriate, opportunities for building-in beneficial features for marine ecology, biodiversity and geodiversity as part of good design'. Also that aggregate dredging can have 'potential adverse impacts… on geodiversity.' It is also a requirement of the National Planning Policy Framework (section 143) that local authorities consider geodiversity in their local plans.

As policies already exist supporting elements of the Marine Policy Statement (for example policy S-BIO-2 on good design and policies S-SCP-1 and S-HER-1 on seascape and heritage assets respectively), there is no need for an explicit policy in relation to geodiversity in the South Marine Plan. Also effects upon sediment dynamics on geologically qualifying features of protected sites are all considered within an Environmental Impact Assessment as part of any project level assessment.

Marine Management Organisation

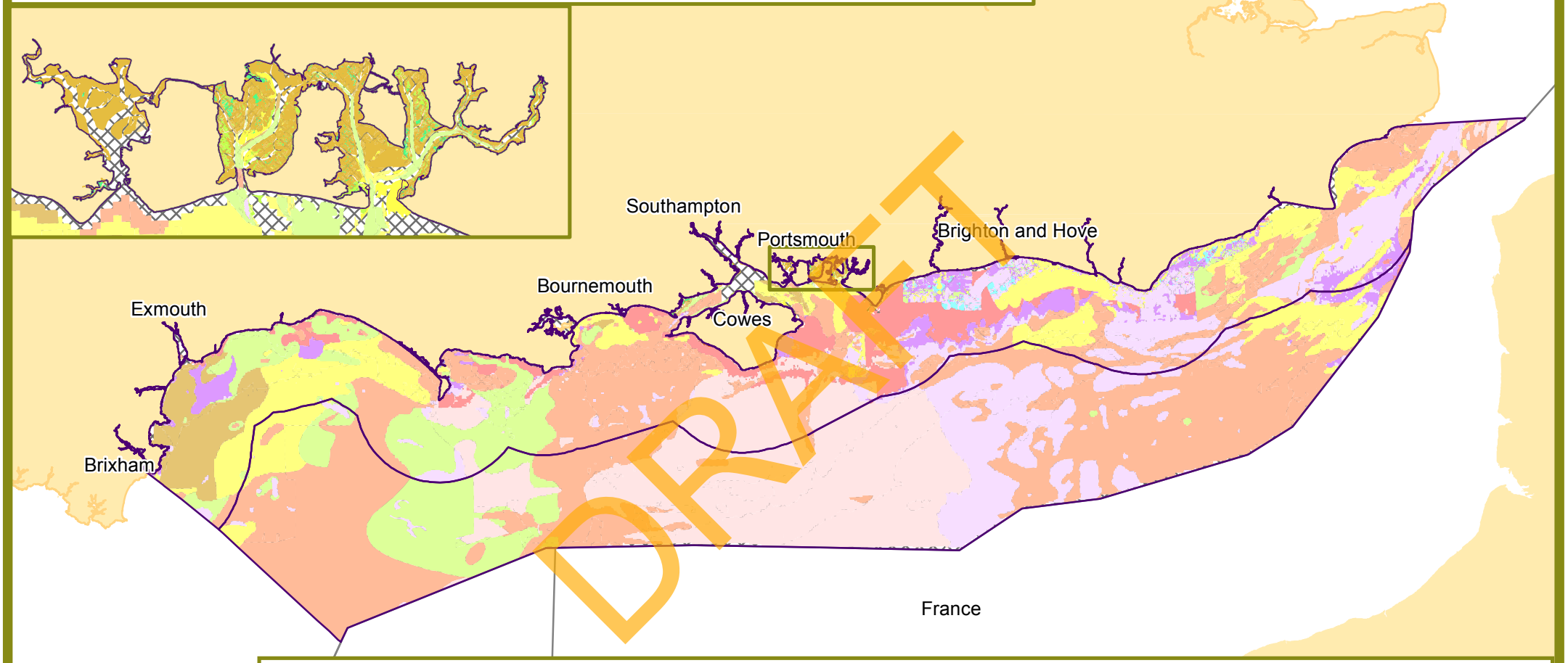
# Fig 24: Marine habitats

Mapped to EUNIS levels 2 and 3

## Information map - Please see box 1 for further details

November 2015






South Marine Plan Areas

No data (considered estuarine habitat)

**Survey/modelled habitat (EUNIS level 3)**

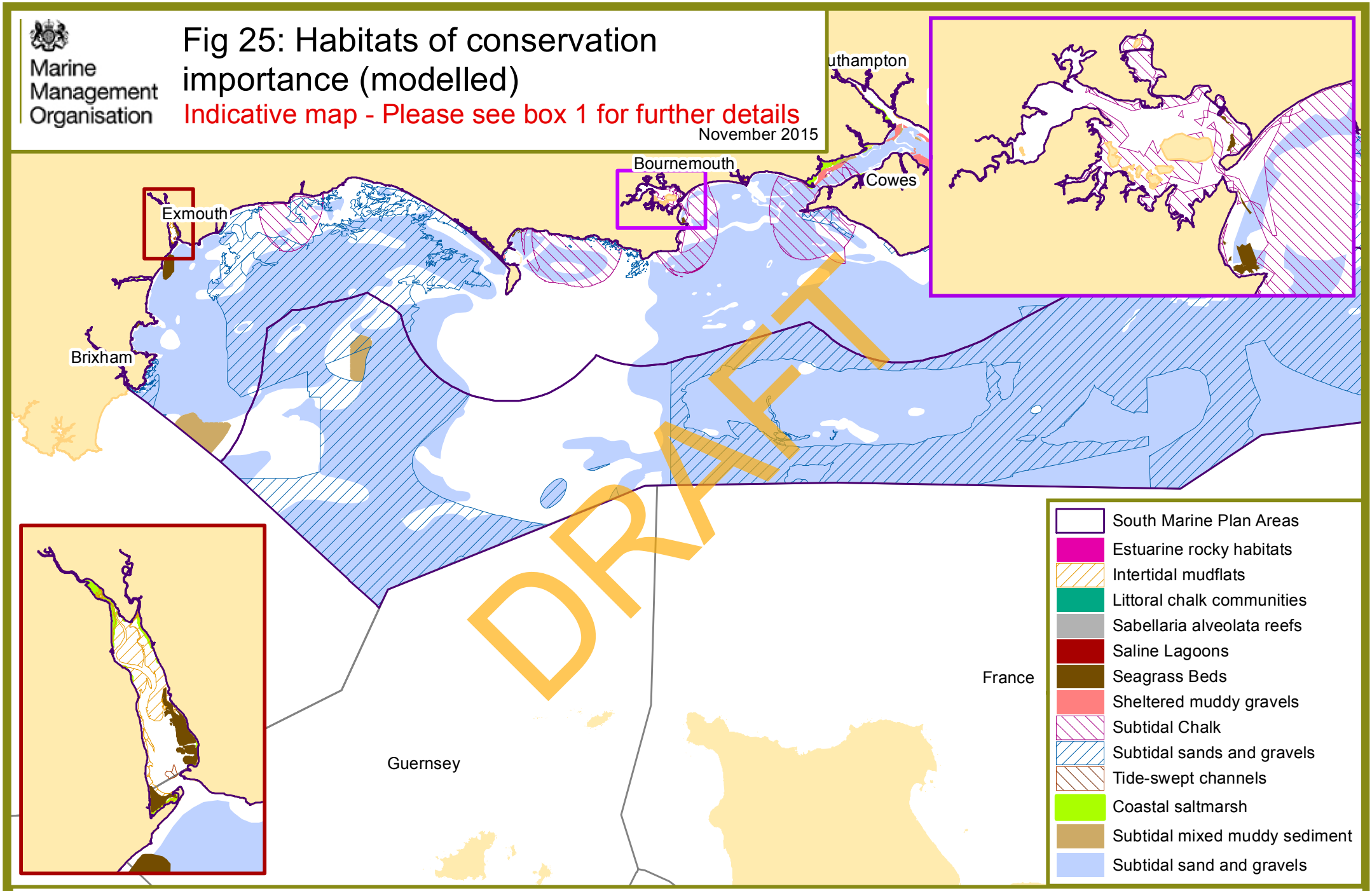
- A1: Littoral rock and other hard substrata
- A2.2: Littoral sand and muddy sand
- A2.3: Littoral mud
- A2.4: Littoral mixed sediments
- A2.5: Coastal saltmarshes and saline reedbeds
- A3: Infralittoral rock and other hard substrata
- A3.1: Atlantic and Mediterranean high energy infralittoral rock
- A3.2: Atlantic and Mediterranean moderate energy infralittoral rock
- A3.3: Atlantic and Mediterranean low energy infralittoral rock
- A4: Circalittoral rock and other hard substrata
- A4.1: Atlantic and Mediterranean high energy circalittoral rock
- A4.2: Atlantic and Mediterranean moderate energy circalittoral rock
- A4.3: Atlantic and Mediterranean low energy circalittoral rock
- A5.1: Sublittoral coarse sediment
- A5.2: Sublittoral sand
- A5.3: Sublittoral mud
- A5.4: Sublittoral mixed sediments
- A5.6: Sublittoral biogenic reefs

Marine Management Organisation

# Fig 25: Habitats of conservation importance (modelled)

Indicative map - Please see box 1 for further details

November 2015

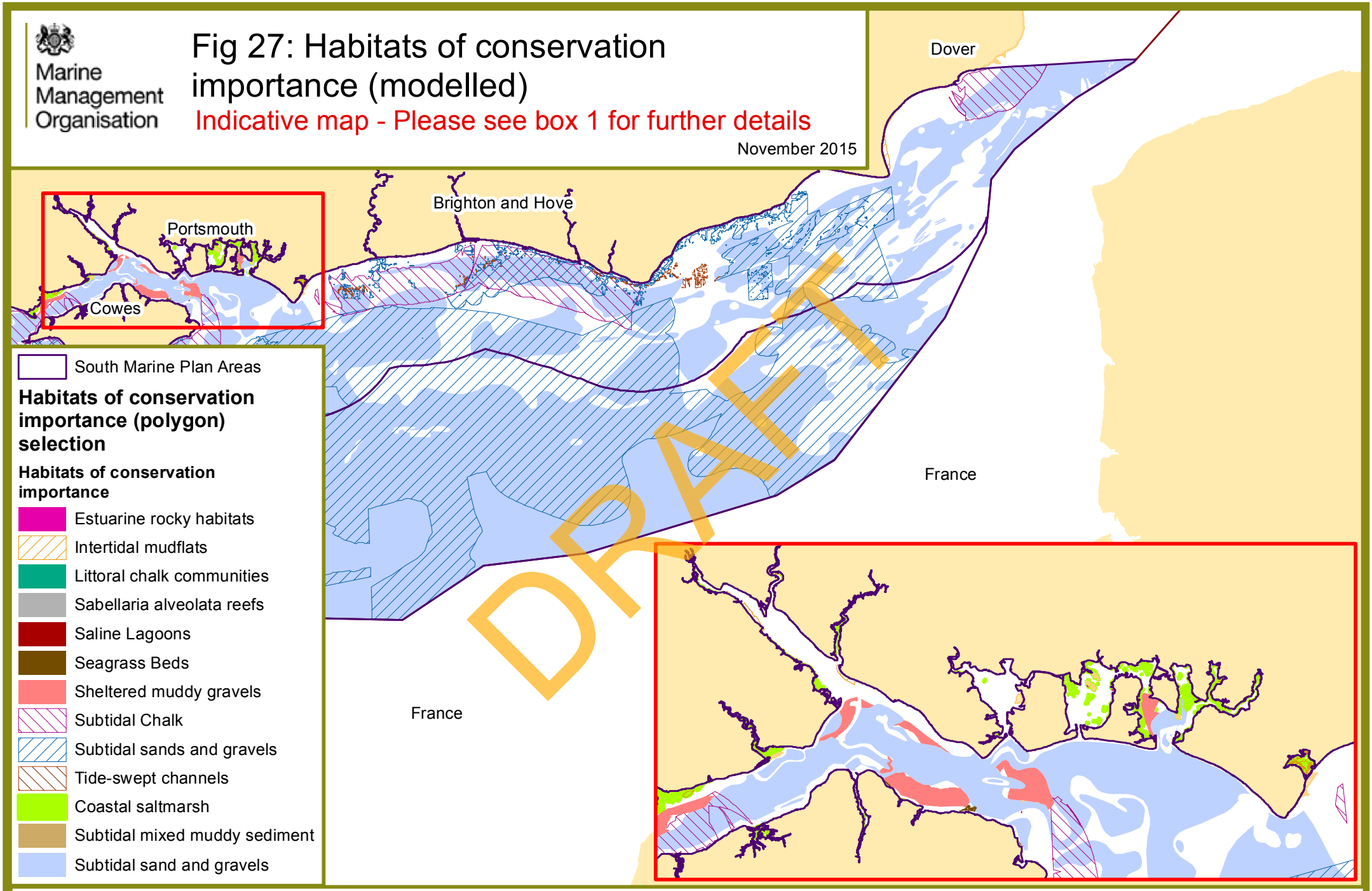


Marine Management Organisation

# Fig 27: Habitats of conservation importance (modelled)

Indicative map - Please see box 1 for further details

November 2015

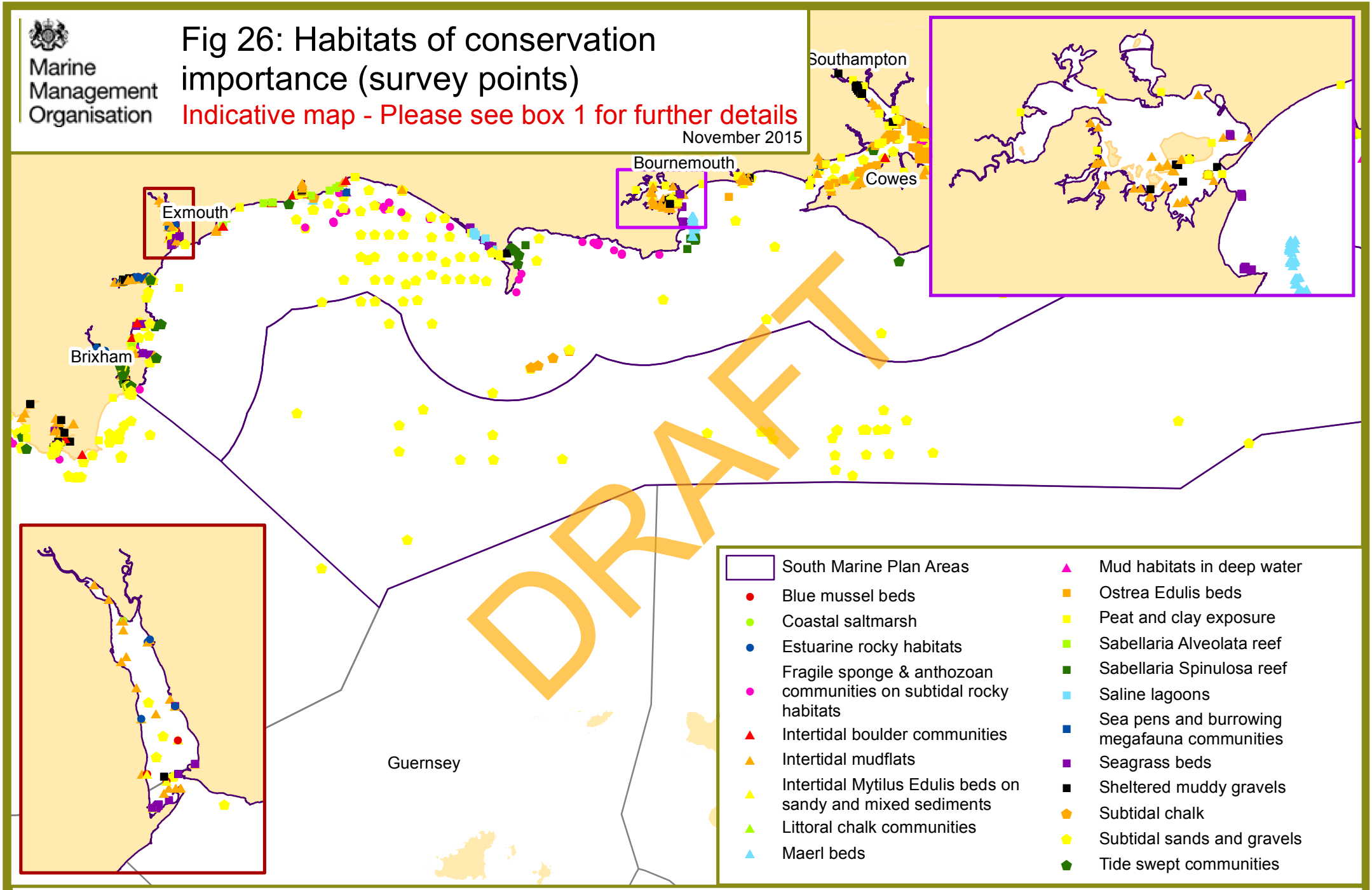


Marine Management Organisation

# Fig 26: Habitats of conservation importance (survey points)

Indicative map - Please see box 1 for further details

November 2015



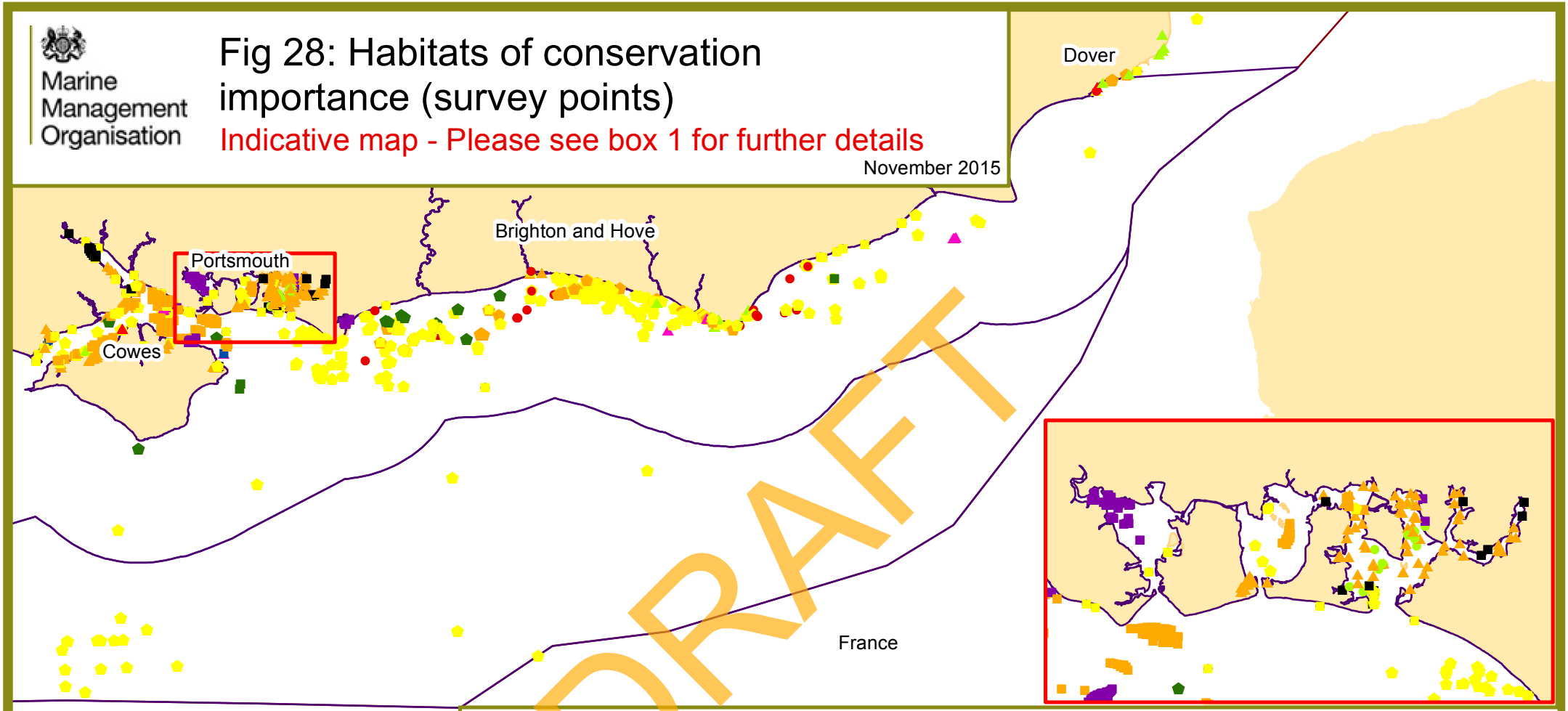

Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0.
VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23.
HOCI data reproduced with permission of Defra MB0102 project.

Marine Management Organisation

# Fig 28: Habitats of conservation importance (survey points)

Indicative map - Please see box 1 for further details

November 2015




- South Marine Plan Areas
- Sheltered muddy gravels
- Peat & clay exposures possible
- Blue Mussel Beds
- Coastal Saltmarsh
- Estuarine Rocky Habitats
- Fragile sponge & anthozoan communities on subtidal rocky habitats
- Intertidal Boulder Communities
- Intertidal Mudflats
- Intertidal Mytilus edulis beds on sandy and mixed sediments
- Littoral Chalk Communities
- Maerl Beds
- Mud Habitats in Deep Water
- Ostrea edulis beds
- Peat and Clay Exposure
- Sabellaria alveolata reefs
- Sabellaria spinulosa reef
- Saline lagoons
- Sea Pens and Burrowing Megafauna Communities
- Seagrass Beds
- Sheltered Muddy Gravels; Sheltered muddy gravels
- Subtidal chalk
- Subtidal sands and gravels
- Tide swept communities

**Policy S-BIO-3**
Proposals must take account of the space required for coastal habitats where important in their own right and/or for ecosystem functioning and provision of goods and services. Proposals must demonstrate that they will, in order of preference:

a) avoid
b) minimise
c) mitigate for net loss of coastal habitat.

**Policy S-BIO-3 applies to the inshore marine plan area**

**Policy S-BIO-4**
Proposals must demonstrate that they will avoid reducing the distribution and net extent of priority habitats.

**Policy S-BIO-4 applies to the inshore and offshore marine plan areas**

### What are coastal habitats and priority habitats?

617. Habitat is defined as the physical surroundings in which organisms live and interact.[124]

618. The south inshore marine area has a wide range of coastal habitats, varying in abundance, extent and condition.[125] The many estuaries, large and small, in the south inshore marine area significantly increase the length of the coastline and the opportunities for land-sea interactions. Coastal habitats include salt marshes, intertidal mudflats, sand and shingle beaches, dunes and cliffs (up to mean high water). Priority habitats are those recognised as being of 'principal importance' for the conservation of biological diversity in England under the Natural Environment and Rural Communities Act (2006) Section 41). Details of each habitat and species with current issues and threats can be accessed via the Natural England website.

### Why is this important?

619. The South Plans Analytical Report identified a lack of space for coastal habitats as a specific problem in the south inshore area. This is due to coastal squeeze, a process where habitats have decreasing space between rigid coastal structures and rising sea level or coastal erosion. Coastal squeeze occurs due to development, industrial expansion and provision of hard sea defences and is already affecting habitats such as saltmarsh.[126] Sea level rise as a result of climate change will add to this pressure particularly along the coast and within estuaries (see also objective 7 – climate change).

620. Maintaining the extent and distribution of priority and coastal habitats is important as it reduces habitat fragmentation, species isolation and ensures the maintenance of biodiversity. It also ensures that the size of important coastal breeding and feeding

[124] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[125] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[126] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)

grounds is sufficient and the continued provision of coastal ecosystem services.[127] However, not all coastal habitats occur within designated sites or are subject to statutory protection.[128]

621. The Marine Policy Statement states that marine plans will contribute to the achievement of the UK's high level marine objectives, which includes the following: 'Healthy marine and coastal habitats occur across their natural range and are able to support strong, biodiverse biological communities and the functioning of healthy, resilient and adaptable marine ecosystems'.[129]

622. Achieving these policies will also aid in achievement of Good Environmental Status for Descriptor 1 of the Marine Strategy Framework Directive[130] by ensuring that the extent of habitats that are important for the maintenance of biodiversity are not reduced (see also text under objective 12 – space for nature) and contribute to the UK's high level marine objectives for living within environmental limits.[131]

### How the policies will be implemented

623. These policies are intended to ensure that all current available evidence relating to priority habitats and the space required for functional coastal habitats is taken into account within proposals in the south marine plan areas. Policies S-BIO-3 and S-BIO-4 are made locally and spatially specific, by reference to figures 24 to 28 showing the location or distribution of broadscale habitats, and of some habitats and species that are protected or of conservation concern.

624. Figures are provided where the evidence is considered adequate, or where it is limited. It is useful to highlight available evidence in conjunction with a clear indication of uncertainties. The absence of evidence does not mean that there are no coastal habitats that are sensitive or of conservation concern; additional proposal specific evidence may be required. It is essential to identify the location of coastal and priority habitats within the south marine plan areas.

625. Where new evidence emerges that improves or changes the evidence provided here, this must be taken account of in applying the policy. Both public authorities and proposals should consider this along with any other evidence gathered.

626. Proposals must demonstrate they take account of evidence in relation to policies S-BIO-3 and S-BIO-4 enabling public authorities to make an informed assessment as to whether or not the proposal meets these policies.

627. Evidence could include the South Marine Plan (this document), the South Plans Analytical Report and the Marine Planning Portal.



[127] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[128] Marine Management Organisation, South marine plan areas Options Report, (2015)
[129] HM Government, Marine Policy Statement (2011), Box 1, page 12.
[130] Marine Strategy Framework Directive Descriptor 1: Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions.
[131] HM Government, Marine Policy Statement (2011), Box 1, page 12.

### S-BIO-3

628. Proposals that are likely to lead to a net loss in coastal habitat extent must demonstrate that they will, in order of preference, avoid, minimise or mitigate any net loss of coastal habitats. Examples of measures include:
    - avoid - careful spatial and temporal planning of infrastructure elements so as not to impact coastal habitat extent and making using of existing infrastructure
    - minimise - reductions in the duration and intensity of proposals and the co-location of activities (see also objective 1 – co-existence and S-CO-1)
    - mitigate - use of sediment curtains to prevent siltation or, where a proposal is not permanent, taking steps to rehabilitate coastal habitats post decommissioning. It may be necessary to consider compensatory habitat creation as a way to mitigate the loss of coastal habitat extent

629. Within Natura 2000 sites additional assessment measures are required. The definitions of avoidance, mitigation and compensation are defined under the Birds Directive and Habitats Directive.

630. If these criteria cannot be met by a proposal, where it requires an authorisation decision, it will only be authorised if there are relevant considerations in line with the Marine and Coastal Access Act (2009) (Section 58(1)).

### S-BIO-4

631. Proposals must demonstrate that they avoid reductions in the distribution and extent of priority habitats within the south marine areas. Examples of measures include those cited above for policy S-BIO-3.

632. Proposals are still required to be in compliance with relevant legislation and regulations including Habitats Regulations Assessment, Environmental Impact Assessment and National Policy Statements where they apply.

633. Public authorities should take all current available evidence relating to habitats into account when assessing proposals for the south marine plan areas.

634. Public authorities should implement these policies proportionally on proposals that may reduce coastal and priority habitat extent.

**Policy S-DIST-1**
Proposals, including in relation to tourism and recreational activities, within and adjacent to the south marine plan areas must demonstrate that they will, in order of preference
a) avoid
b) minimise
c) mitigate significant cumulative adverse physical disturbance or displacement impacts on highly mobile species.

**Policy S-DIST-1 applies to the inshore and offshore marine plan areas**

### What is disturbance and displacement of highly mobile species?

635. Highly mobile species are those that range over large distances and include fish, birds, cetaceans (whales and dolphins), other marine mammals and turtles.

Individuals are often part of more widespread international populations and may only be present in the south marine plan areas for part of their life cycle.[132]

636. Highly mobile species can be disturbed or displaced by human activities. Disturbance impacts include the restriction or alteration of natural behaviours, particularly breeding and feeding, as a result of the presence of humans.[133]

637. Displacement includes moving highly mobile species from, or restricting access to, foraging and breeding grounds. The Birds Directive and Habitats Directive prohibit the deliberate disturbance of birds and cetaceans, particularly during periods of breeding, rearing, hibernation and migration. However, disturbance induced from tourism and recreation activities is rarely deliberate in the UK and other mechanisms are required to manage these impacts.

### Why is this important?

638. Highly mobile species are resident or regular visitors to waters of the south marine plan areas (see figure 29).[134] They experience disturbance caused by a range of human activities in the south marine plan areas as identified by the South Plans Analytical Report. Many highly mobile species are charismatic and bring value for tourism and recreation through wildlife watching and employment at reserves, while appropriate recreation and tourism may bring opportunities for protection of species through increased public awareness and additional funding.

639. Tourism and recreation activities, are major drivers of the economics of the south marine plan areas but can themselves exert significant disturbance as noted in the Marine Policy Statement.[135] Disturbance from tourism and recreation can be particularly problematic for water birds and marine mammals. Bait digging for recreational fishing is also of concern as it coincides with bird intertidal foraging and results in physical disturbance of bird habitat (as well as resulting in direct loss of prey for birds). In localised areas there are also issues of collision with recreational users. The need to protect water bird populations is recognised in some local authority plans, for example, Chichester District Council (Chichester and Langstone Harbours) and Havant Borough Council, and in voluntary bait digging agreements such as those around Poole Harbour.

### How the policy will be implemented

640. Proposals must demonstrate that they will, in order of preference, avoid, minimise or mitigate adverse impacts of physical disturbance and include supporting information that is proportionate to the proposal.



[132] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[133] UK CEED 2000. A review of the effects of recreational interactions within UK European marine sites. Countryside Council for Wales (UK Marine SACs Project) p.264
[134] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[135] HM Government, Marine Policy Statement (2011), (3.11.14)

641. If these criteria cannot be met by a proposal, where it requires an authorisation decision, it will only be authorised if there are relevant considerations in line with the Marine and Coastal Access Act (2009) (Section 58(1)).

642. Public authorities may seek to establish codes of practice, memorandum of agreement or understanding or best practice documents. This will provide guidance in the development of proposals prior to submission.

643. Public authorities should manage activities that do not require authorisation, including coastal tourism and recreational activities like boating, dog walking and bait digging, through authorisation decisions relating to tourism and recreation, such as development of marinas or slipways. Byelaws can also be introduced to manage activity, for example preventing dogs at certain times of year on beaches or where public authorities have regard to the South Marine Plan under the Marine and Coastal Access Act (2009) (Section 58(3)).

644. Public authorities should manage activities that require authorisation, such as energy development or aggregates dredging, through existing assessments that are required to meet European Union and national legislation, including Habitats Regulations Assessments and Environmental Impact Assessments. These will identify conditions that need to be placed on a licence or permit.

645. If a decision is otherwise than in accordance with the plan policies, the public authority must state its reasons as required under the Marine and Coastal Access Act (2009) (Section 58(2)).

646. Public authorities should consider the cumulative impacts of disturbance and displacement for larger proposals. Public authorities should take a strategic oversight for addressing cumulative adverse impacts of disturbance from proposals that are not required to do so under existing legislation. This may be through aligning future local plan and policy development with this policy or in authorisation of proposals that directly or indirectly change levels of physical disturbance such as access arrangements and routing.

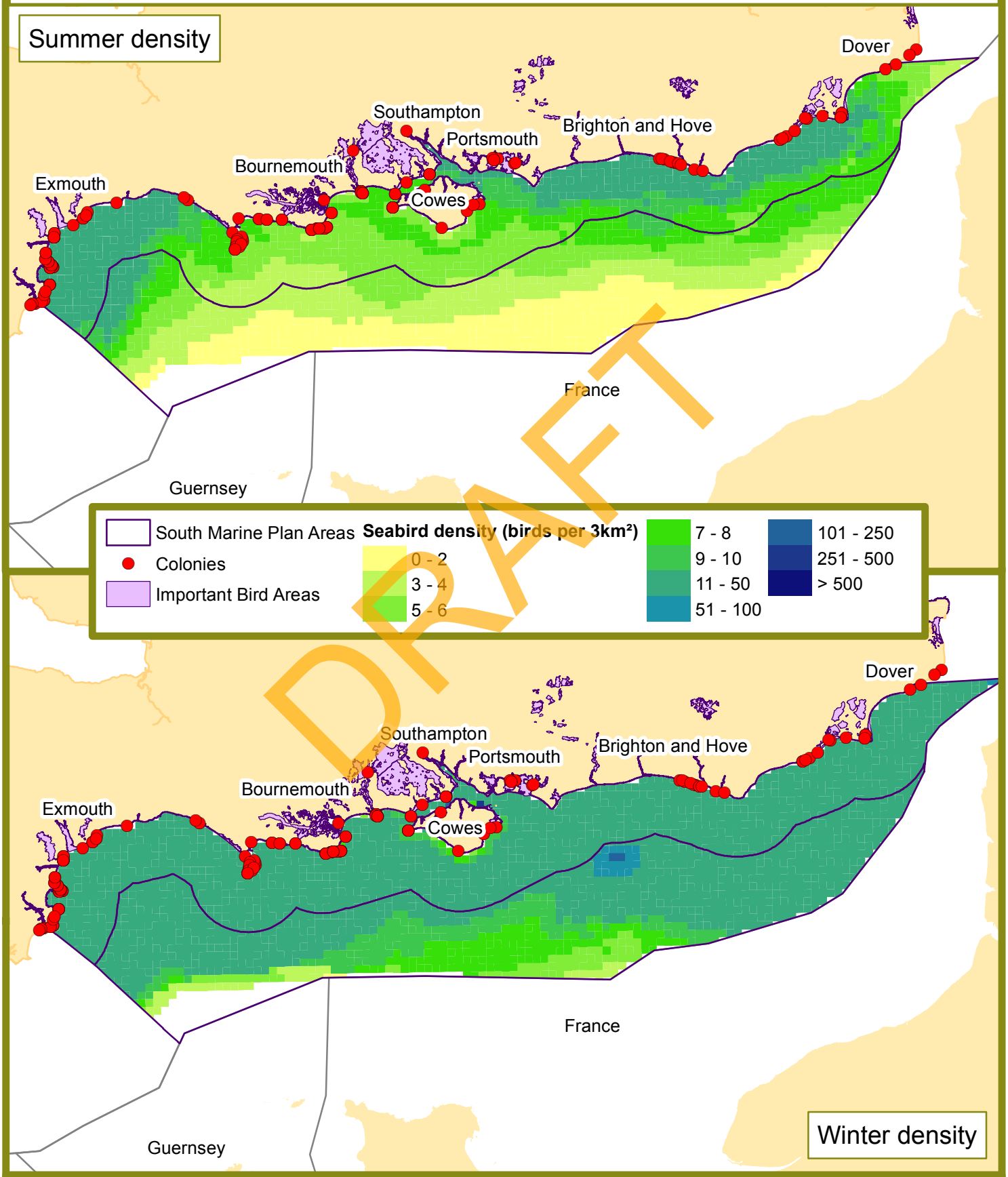
Marine Management Organisation

# Fig 29: Seasonal seabird density

Wildfowl and Wetlands Trust & European Seabirds at Sea 1979-2011 data modelled on a 3km² grid. Density data for gannets, kittiwakes, common scoters, red-throated divers and red-breasted mergansers only.

Information map - Please see box 1 for further details

August 2015




Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0. VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23. Bird density data reproduced with permission of NE, WWT Consulting, MMO, JNCC, RSPB and DECC

**Policy S-FISH-4**
Proposals must demonstrate that they will, in order of preference:
a) avoid
b) minimise
c) mitigate significant adverse impact on essential fish habitat, including, spawning, nursery, feeding grounds and migration routes.

**Policy S-FISH-4 applies to the inshore and offshore marine plan areas**

### What is essential fish habitat?

647. Essential fish habitats are areas of waters and sea or riverbed necessary to fish for spawning, breeding, feeding or growth to maturity. Essential fish habitat also encompasses migration routes, such as estuaries or channels that connect essential fish habitats throughout the life cycle.

### Why is this important?

648. A sustainable fish population and any associated sustainable fishing industry relies upon essential fish habitats.[136] Such habitats are necessary for spawning, breeding, feeding, and the survival of early live stage and subsequent growth of fish to maturity. Together these habitats enhance breeding success, survival and growth of fish and ultimately increase stock yields.

649. The south marine plan areas and adjacent areas are important fishing areas and generate the greatest catch by sea area of any English waters.[137] Proposals can adversely impact the availability or quality of essential fish habitats and fish stock sustainability through removal, change to hydrodynamic regimes, pollution or numerous other mechanisms. There is therefore a need to protect essential fish habitats and the services they provide from adverse impacts from proposals.

650. This policy contributes to the aims of the Marine Policy Statement (3.8.1) in supporting the long-term existence of the fisheries sector through support of stock recruitment. It recognises that 'sustainable fish stocks have the potential to maintain a prosperous and efficient fishing industry providing social, cultural and economic benefits to often fragile coastal communities' (Marine Policy Statement 3.8.6).

651. This policy contributes to the Marine Strategy Framework Directive descriptors 1, 3, 4 and 6 in line with ecosystem approaches to management recognising wider connections between ecosystem elements. Preservation of essential fish habitats and the species they support is an important part of preservation of biological diversity (descriptor 1), has important consequences for sea floor integrity (descriptor 6), wider elements of marine food webs (descriptor 4) and the commercial resources they sustain (descriptor 3).

[136] Marine Management Organisation (2012), Spatial models of essential fish habitat (South Inshore and Offshore marine plan areas)
[137] Marine Management Organisation (2014) UK Sea Fisheries Statistics (2013);

### How the policy will be implemented

652. Proposals should demonstrate that they will in order of preference avoid, minimise or mitigate the significant adverse impacts significant adverse impact upon essential fish habitat. Examples of avoidance, minimisation and mitigation include careful analysis of alternatives, design stipulations, and 'best management practices'.

653. If these criteria cannot be met by a proposal, where it requires an authorisation decision, it will only be authorised if there are relevant considerations in line with the Marine and Coastal Access Act (2009) (Section 58(1)).

654. As essential fish habitats often co-occur in coastal and priority habitats, public authorities should apply this policy in conjunction with the policies S-BIO-3 and S-BIO-4.

655. Proposals and public authorities should refer to figure 30 for indicative spawning and nursery grounds in the south marine plan areas. It is important to note that the map does not show all the species relevant to this policy due to limited evidence.

656. Public authorities should consider essential fish habitat for all finfish and shellfish species during project level assessments.

657. Public authorities should use data collected for Environmental Impact Assessments as a key evidence base, as information will be current and at a more appropriate resolution to accurately assess any proposal's impact on essential fish habitats.

658. Other additional indicative information can be used including the location of areas closed due to a high abundance of juvenile fish, either seasonal or 'real-time' closures, to be found on the Marine Management Organisation's website. Further essential fish habitat maps or updates may become available through the Marine Management Organisation's Marine Information System. The Centre for Environment, Fisheries and Aquaculture Science undertakes regular fisheries surveys and reports[138] at the resolution of sub-rectangles of ICES statistical rectangles. Modelled data is available for some species[139,140] for example MMO1044.



[138] Ellis, J.R., Milligan, S.P., Readdy, L., Taylor, N. and Brown, M.J. (2012) Spawning and nursery grounds of selected fish species in UK waters. Sci. Ser. Tech. Rep., Cefas Lowestoft, 147: 56 pp.

[139] Marine Management Organisation (2013) Spatial models of Essential Fish Habitat (South Coast Inshore and Offshore Marine Plan Areas). A report produced for the Marine Management Organisation by the Institute of Estuarine and Coastal Studies, 73pp. MMO Project No: 1044. ISBN: 978-1-909452-21-3. Available at http://webarchive.nationalarchives.gov.uk/20140108121958/http:/www.marinemanagement.org.uk/evidence/1044.htm

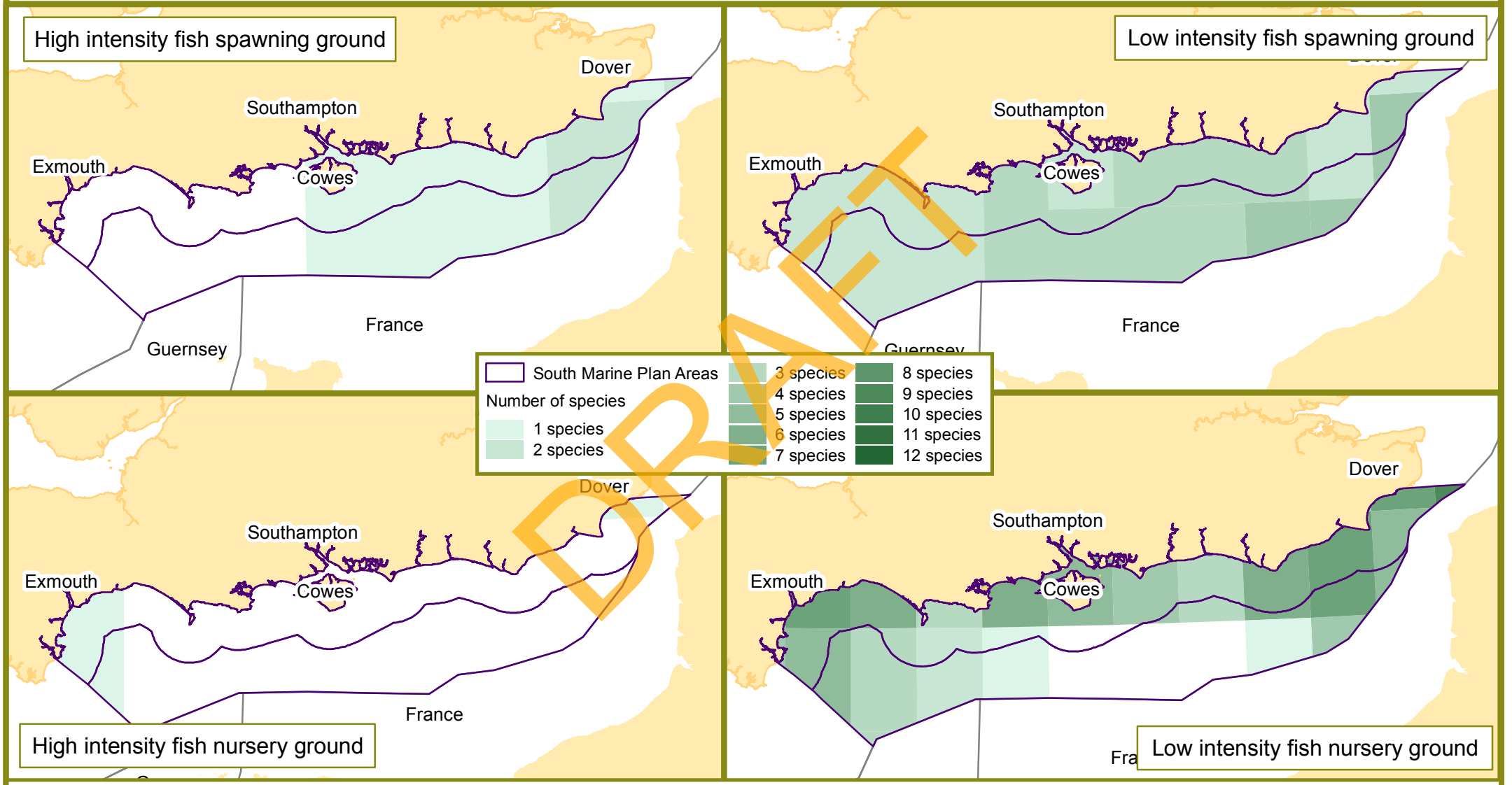
[140] Aires et al. (2014) Updating fisheries sensitivity maps in British Waters, Scottish Marine and Freshwater Science Report Vol 5 No 10 available at http://www.gov.scot/Resource/0046/00465795.pdf

Marine Management Organisation

# Fig 30: Fish spawning and nursery grounds

## Indicative map - Please see box 1 for further details

November 2015




The dataset presented in this map was developed for use by the Marine Conservation Zone projects, as such it is focussed on species considered to be of conservation importance. For further information please refer to Defra Project MB102, Report No. 15, Task 2B)

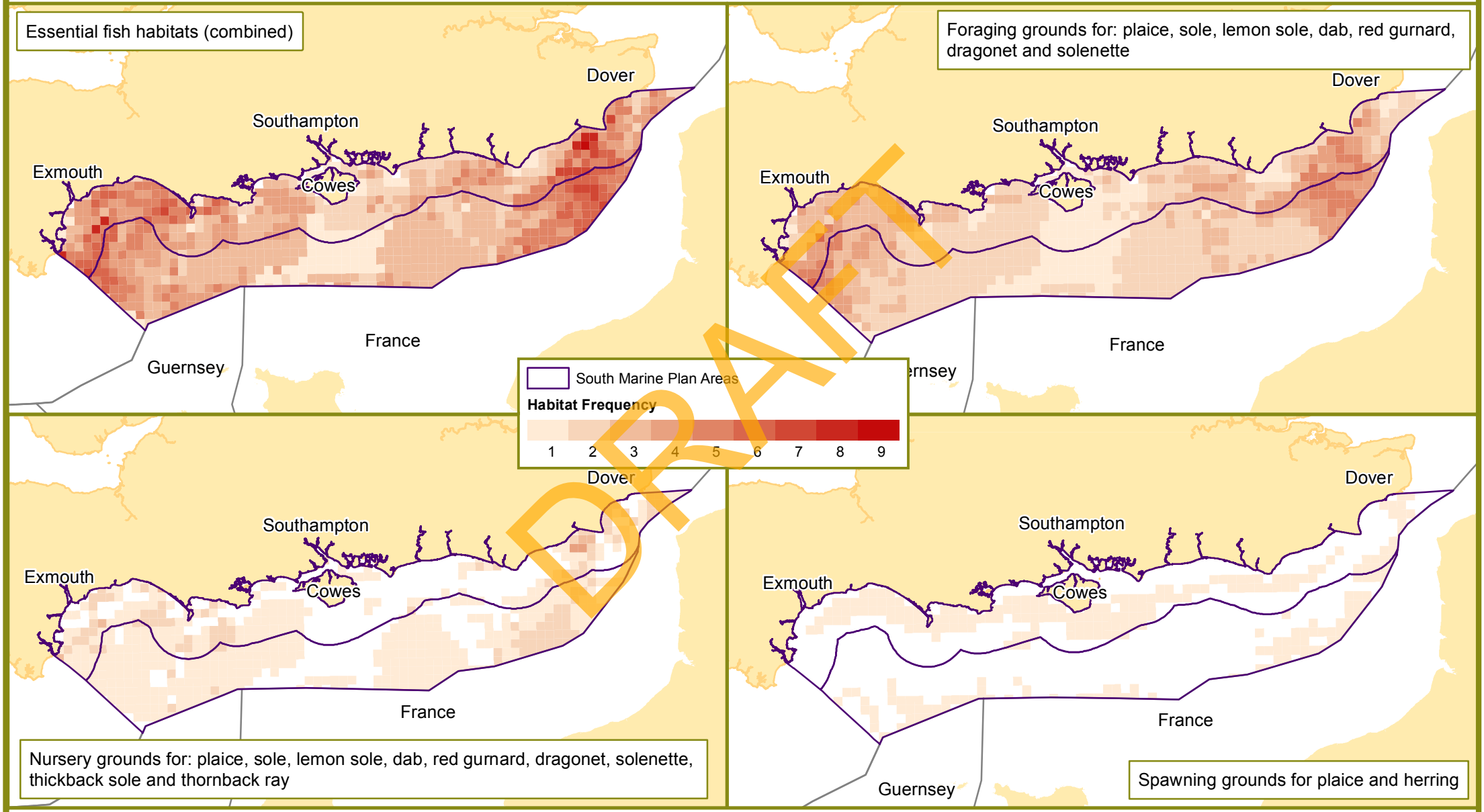

VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23

Marine Management Organisation

# Fig 31: Essential fish habitats

## Indicative map - Please see box 1 for further details

November 2015




Please note- 'habitat frequency' refers to the number of species (subject to survey in this study) for which a particular grid square represents an 'essential habitat' (as defined in accordance with the study). For further detail please see: http://webarchive.nationalarchives.gov.uk/20140108121958/http://www.marinemanagement.org.uk/evidence/1044.htm

Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0. VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23

**Policy S-FISH-4-HER**
Proposals will consider herring spawning mitigation in the area highlighted on figure 32 during the period 01 November to the last day of February annually.

**Policy S-FISH-4-HER applies to the inshore and offshore marine plan areas**

### What is herring spawning?

659. Herring are seabed spawners, depositing sticky eggs on coarse sand, gravel, small stones and rock that are then fertilised by males. The eggs can form extensive carpets over large areas several layers thick and remain attached to the seabed for approximately three weeks until hatching. This spawning activity occurs the south plan area highlighted in figure 32, therefore proposals could potentially impact this fish stock if mitigation is not applied.

660. This policy focuses on herring due to the availability of data, and does not prioritise this species over others. This policy is a sub policy of S-FISH-4. Reference should be made to policy S-FISH-4 when considering other species.

### Why is this important?

661. Herring is a keystone species ecologically important as a prey for birds, marine mammals and other fish.[141] It is important that herring stocks are maintained, as reduction may have implications on other marine populations and ecosystems as a whole. Herring stocks tend to mix together for most of the year but separate for spawning to different areas and at different times depending their stock. The Southern Bight or Downs area (located in the south marine plan areas) is an important herring spawning area for a large proportion of the North Sea herring stock.

662. The Marine Strategy Framework Directive, programme of measures, identifies that the main pressure on fish communities is the extraction of fish species by commercial fishing. The existing measure to address these pressures is the implementation of the Common Fisheries Policy (1380/2013; CFP). This policy supports this by limiting any further impacts from anthropogenic activities and pressures on fish communities.

### How the policy will be implemented

663. The herring spawning period for the Southern Bight or Downs herring stock located within the English channel runs from November to January annually.[142] The Marine Management Organisation has identified herring spawning areas located within figure 32 of the South Marine Plan and therefore this policy applies to proposals located within this figure.

664. The following two examples highlight how existing proposals may mitigate any potential impacts to herring spawning areas within ranked areas shown in figure 32.

[141] Dickey-Collas, M. *et al*, 2010 Lessons learned from stock collapse and recovery of North Sea herring: a review and Overholtz, W. J. *et al*, 2007; Consumption impacts by marine mammals, fish, and seabirds on the Gulf of Maine–Georges Bank Atlantic herring (*Clupea harengus*) complex during the years 1977–2002

[142] The Scottish Government, Fish and shellfish stocks, (2013),

665. Marine dredging proposals:
    - green – low herring spawning potential - No herring spawning mitigation required
    - yellow and orange – low to medium and medium to high potential – spatial, temporal and extraction intensity mitigation should be considered during peak herring spawning period (1 December to 31 January)
    - red – high herring spawning potential –
        - no extraction in the peak spawning period from the 1 December to 31 January annually
        - spatial, temporal and extraction intensity mitigation should be considered during 1 November to 30 November and 1 February – last day of February annually.

666. Piling proposals:
    - green - low herring spawning potential. No herring spawning mitigation required. If it is demonstrated that there will be no noise impacts from pilling activity in the yellow, orange and red areas.
    - yellow, orange and red areas. No piling activity during the period of 1 November to January 31 annually.

667. Public authorities should assess any mitigation measures added to a proposal after project level assessments are undertaken. The mitigation should be applied in alignment with International Council for the Exploration of the Sea advice. Public authorities should note that this advice has recently been revised for dredging activity. This allows public authorities to be flexible in applying mitigation and enables dredging to take place in areas that were previously closed. This is reflected in this policy and the mitigation advised above.

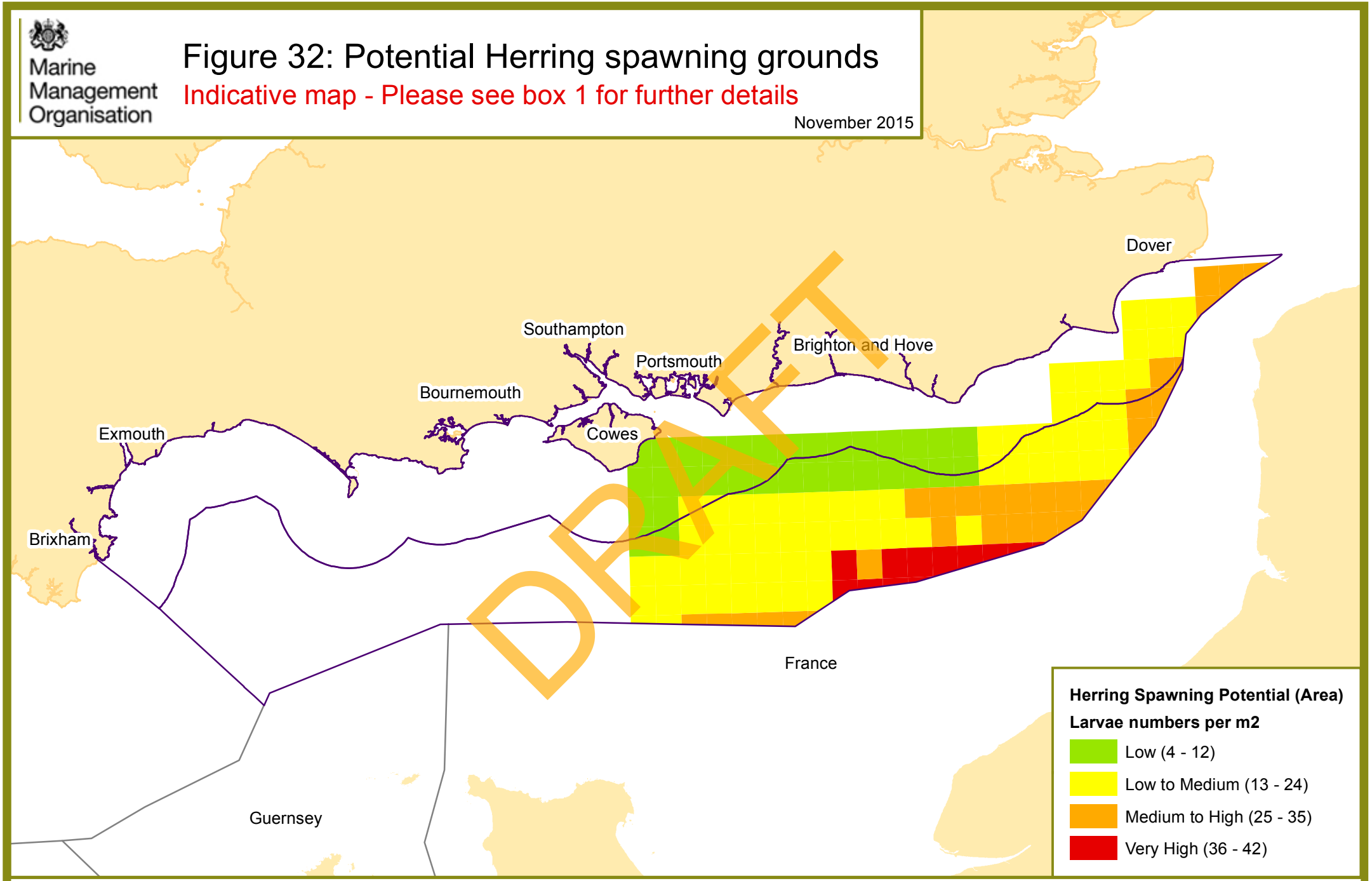
668. Public authorities should consider whether proposals located in figure 32 have included herring spawning mitigation (and the level of mitigation). If mitigation has not been considered justification of this is required.

Marine Management Organisation

# Figure 32: Potential Herring spawning grounds

Indicative map - Please see box 1 for further details

November 2015




Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0. VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23

Data is taken from The East Channel Association 'East English Channel Herring Spawning Assessment' (Ref: EOR0632).

**Policy S-DD-2**
Proposals must identify where use of dredge disposal sites can be minimised by pursuing re-use opportunities through matching of spoil to suitable sites.

**Policy S-DD-2 applies to the inshore and offshore marine plan areas**

### What is re-use of dredge material?

669. Re-use of dredge material is about reducing the need to dispose of excavated material at marine disposal sites.

670. Dredged material can only be disposed in identified areas and only for certain types of dredged material. Where practical and if the dredged material has been identified as suitable, it can be re-used or recycled before disposing at sea.

671. The South Plan Analytical Report highlighted water quality, sediment loading and coastal squeeze as an issue. Where practical, and particularly in estuarine areas where sediment loading is identified as an issue, dredged material can remain within its sedimentary cell.

672. Recent examples of re-use of marine dredge material include the saltmarsh replenishment works at Lymington and a capital dredging project in Southampton Water. Further information on these specific projects and dredging activity across the south marine plan areas can be found within the Marine management Organisation MMO1073 report: use of beneficial dredge materials in the south inshore and offshore marine plan areas.

### Why is this important?

673. Re-use is important because it supports the growth of industry and increases available space within areas under development. It can also reduce the pressure on existing marine habitats with some materials being able to support beneficial re-use and ecosystem services, for example, replenishing mudflats providing habitat and feeding grounds for wildlife and recharging of barrier beaches for coastal defence.[143] This is particularly relevant in the south marine plan areas due to the density of activities. For more information see the South Plan Analytical Report.

674. Marine licences may stipulate re-use as a condition. This is also signposted in accordance with the Oslo/Paris Convention for the Protection of the Marine Environment of the North East Atlantic guidance and the EU Waste Framework Directive.

675. The Marine Policy Statement (3.6.8) states that 'applications to dispose of wastes must demonstrate that appropriate consideration has been given to the internationally agreed hierarchy of waste management options for sea disposal'.

676. Whilst it is beneficial to use dredge materials, there are a number of challenges that industry and beneficiaries face. The Marine Management Organisation MMO1073 report: use of beneficial dredge materials in the south inshore and offshore marine

[143] 2008/98/EC of the European parliament and of the council of 19 November 2008 on waste and repealing

plan areas, has gone some way to address these challenges, setting out the potential for the re-use of marine dredgings within the south marine plan areas.

677. The re-use of such dredgings is not straightforward or always feasible. It requires future planning from all those involved from regulators and contractors tor those that manage receipt of the dredged material. Key constraints and scenarios regarding this action are also detailed within MMO1073 report.

678. This policy encourages the re-use of dredged material in an alternative way, whilst aiming to reduce the number of new disposal sites being created, along with existing sites currently being used.

### How the policy will be implemented

679. This policy links to and supports policy S-BIO-2 within the South Marine Plan. It should be noted that maps highlighting current re-use opportunities are not exhaustive, and only provide examples of current areas of potential.

680. Proposals must highlight other areas for alternative use of dredged material instead of using disposal sites. Such proposals should highlight where dredged material has been identified as suitable to be re-used in an alternative way, and which area can accommodate the matching dredged material in each instance.

681. Public authorities must establish whether the intent of this policy has been achieved through the application process.

682. Public authorities should note that harbour authorities' statutory powers to dredge and dispose of dredged materials in tidal waters are subject to consent. A licence to dispose of dredged material at sea must be obtained from the Marine Management Organisation. Information on exemption guidance and the licensing application process can also be found on their website.

683. Where The Crown Estate, or another party, own the bed of the harbour their permission for dredging operations is also likely to be needed. As of 2014[144] all maintenance and navigational dredging requires consent through a marine licence unless it is specifically exempted.[145]

684. The South Marine Plan Habitats Regulations Assessment considered this policy would cause a material change to existing activities and may have a 'likely significant effect' on relevant European and Ramsar sites. All new developments within the south marine plan area are legally required to undergo a habitat and regulations assessment.

685. A project level appropriate assessment will also be required where the possibility of a 'likely significant effect on a European/Ramsar site cannot be excluded on the basis of currently available information. A list of suggested mitigation measures specific to this policy that may be useful when considering any appropriate assessment are

[144] HM Government, Marine and Coastal Access Act Transitional processes order (2012)
[145] Including the Marine and Coastal Access Act (s. 75)

contained in table 21 within the South Marine Plan habitat and regulations assessment AAIR (link will be added when published).

**Policy S-WQ-1**
Proposals that may have significant adverse impacts upon habitats and species that can be of benefit to water quality must demonstrate that they will, in order or preference:

a) avoid
b) minimise
c) mitigate significant adverse impacts.

**Policy S-WQ-2**
Activities that can deliver an improvement to water quality should be supported wherever practical.

**Policies S-WQ-1 and S-WQ-2 apply to the inshore and offshore marine plan areas**

### What are habitats and species that benefit water quality?

686. Habitats and species that benefit water quality are ecosystem services. These ecosystem services can be defined as "the benefits provided by ecosystems that contribute to making human life both possible and worth living"[146]. Ecosystem services fall into one of four subcategories depending on their contributions: provisioning, regulatory, cultural or supporting services. Natural England Commissioned paper 088 identifies where habitats and species assemblages provide a water filtration, nutrient assimilation or hazardous chemical sequestration as those ecosystem services that can be of benefit to water quality. The paper explicitly identifies the types of habitats that offer these services

687. Habitats such as coastal saltmarshes, intertidal mudflats, seagrass beds, reed beds and natural blue mussel beds provide a range of regulatory services[147] which maintain and can improve water quality, including water filtration, nutrient assimilation and hazardous chemical sequestration[148] services (see also policy S-CC-4):

- water filtration is the physical process of removing contaminants from water flowing through a system
- nutrient assimilation is the result of actions to enhance and accelerate the ability of the ambient environment to accept nutrients (phosphorus and nitrogen) and still meet water quality standards
- hazardous chemical sequestration is the capture and long-term storage of chemicals that might degrade water quality standards in line with reporting for the Water Framework Directive objectives

[146] Ecosystem Assessment: http://ukn ea.unep-wcmc.org/EcosystemAssessmentConcepts/EcosystemServices/tabid/103/Default.aspx
[147] UN Millennium Ecosystem Assessment (2005) Ecosystems and Human Well-being: A Framework for Assessment
[148] Sequestration is the capture and long term storage of a chemical that effectively reduces or removes the effects of that chemical from the system

688. Coastal saltmarsh habitats, reed beds and intertidal mudflats aid in reducing turbidity and sedimentation and in the longer term can remove through isolation hazardous chemicals and nutrients. Seagrass beds play a role in the removal of nitrogen and can reduce turbidity. There is also evidence that seagrasses are effective in the removal of hazardous chemicals from the water column. Filter feeding shellfish, such as blue mussels, filter water and absorb nutrients (particularly nitrogen) from the water column thereby improving water quality. [149]

### Why is this important?

689. Water filtration, nutrient assimilation and hazardous chemical sequestration are essential to achieving and maintaining a long term improvement in water quality.

690. Water quality is particularly important to the prosperity of the south coast, as many of the most economically and culturally important activities (for example tourism, recreation and fishing) rely upon good water quality. [150]

691. For many areas of the south inshore marine plan area, water quality is not anticipated to meet an appropriate status[151] until 2027.[152] This is reflected in both the South East and South West River Basin Management Plans.[153] The expected increase in the number and diversity of marine users within the south marine plan areas poses additional risk in meeting Good Ecological status in accordance with the Water Framework Directive. Activities and developments can place additional stress on water resources through:
    - increasing demand for freshwater
    - increasing the volume of discharge
    - through physical modification of the water column and movement [154]

692. The South Marine Plan builds on existing measures and addresses water quality issues through ensuring proposals and public authorities consider impacts on habitat and species assemblages that provide water filtration, nutrient assimilation and hazardous chemical sequestration services, and look for opportunities to improve water quality. The plan policies are not restricted to the inshore marine plan area as there is the potential for offshore sources to impact inshore water quality.



[149] Marine Management Organisation (2015), Evidence Supporting the Use of Environmental Remediation to Improve Water Quality in the south marine plan areas, MMO1105, In press
[150] Marine Management Organisation, South Inshore and South Offshore Marine Plan Areas: South Plans Analytical Report, (2014)
[151] Good Ecological Status is the target of the Water Framework Directive for most water bodies except 'heavily modified water bodies' for which the target is to achieve 'Good Ecological Potential'
[152] The WFD deadline for achieving 'good' status can be extended from the intended target of 2015 onto 2021 or 2027 if needed for 'technical or economic' reasons.
[153] Annex G of South East and South West River Basin Management Plans identify estuaries as being at risk of not meeting Good Ecological Status (Potential) by 2015, indicating poor water quality relating to significant pressures including; point source organic pollution; Diffuse source pressures, and morphological alterations.
[154] HM Government, Marine Policy Statement (2011), (2.6.4.1)

### How the policies will be implemented

693. Proposals should consider the Environment Agency's 'Clearing the Waters[155] guidance and the Marine Management Organisation's Environmental Remediation to Improve Water Quality report[156] in their application of policies S-WQ-1 and S-WQ-2.
694. Proposals and public authorities can use figures 24 to 28 in scoping locations and habitats with the potential to provide relevant ecosystem services. Several examples of these habitats are found in protected areas within the south marine plan areas and may require additional consideration. Relevant issues and threats for each habitat and species assemblages can be accessed via the statutory nature conservation bodies.
695. Policies S-WQ-1 and S-WQ-2 align with the Marine Policy Statement (2.6.1.4). They complement actions of the Marine Strategy Framework Directive (S1, 5 and 8)and the Water Framework Directive, enacted through River Basin Management Plans and the catchment based approach, as well as that of current water company controls and regulations.

### S-WQ-1

696. Proposals should identify habitats and species capable of providing ecosystem service(s) relevant to policy S-WQ-1, and whether they have the potential to have significant adverse impacts. An extensive, though not a comprehensive list of habitats and species is available in Natural England's Commissioned Report 088.

697. Proposals must demonstrate that they will, in order of preference, avoid, minimise or mitigate significant adverse impact on these ecosystem services. If these criteria cannot be met by a proposal, where it requires an authorisation decision, it will only be authorised if there are relevant considerations in line with the Marine and Coastal Access Act (2009) Section 58(1).

698. Examples of how to avoid, minimise or mitigate significant adverse impacts include but are not limited to:
    - avoid – identify and avoid siting proposals at locations where adverse impacts might occur, ensuring outputs of proposal do not indirectly impact these locations
    - minimise - limiting the overall development footprint or the amount of time activities that disturb sediments occurs
    - mitigation - using bioremediation around infrastructure, such as mussel ropes or microalga mats, or creating compensatory habitat

699. Public authorities should apply appropriate weight to proposals in designated sites that may impact upon habitats and species assemblages providing water filtration, nutrient assimilation or hazardous chemical sequestration ecosystem service as per the Marine Policy Statement (2.6.1.5); "The marine plan authority should ensure that appropriate weight is attached to designated sites; to protected species, habitats and

[155] Updated *'Clearing the Waters'* guidance is expected to be published in early 2016
[156] MMO 1105 Evidence Supporting the Use of Environmental Remediation to Improve Water Quality in the South marine plan areas In press

other species of principal importance for the conservation of biodiversity; and to geological interests within the wider environment" .[157]

### S-WQ-2

700. WQ-2 aims to promote activities that will help deliver an improvement in water quality wherever it is practical to do so. Activities might include, but are not limited to:

- habitat restoration works
- provision of natural sediment settling areas
- voluntary measures
- building in beneficial features as part of good design, for example that enhance habitat and species assemblages that provide regulatory services
- development of bioremediation sites such as those suggested by the MMO 1105 Evidence Supporting the Use of Environmental Remediation to Improve Water Quality in the South marine plan areas[158].

701. Proposals should note that identifying positive impacts or enhancement of an ecosystem service is not a substitute for avoidance, minimisation or mitigation of significant adverse impacts.

702. Early discussion with public authorities is advised when implementing S-WQ-2 as it may help identify where best to direct resource to achieve the greatest benefit.

703. Public authorities should assess proposals compliance with other relevant policy and legislation including, where applicable Water Framework Assessments via the Environment Agency's 'Clearing the Waters' guidance.



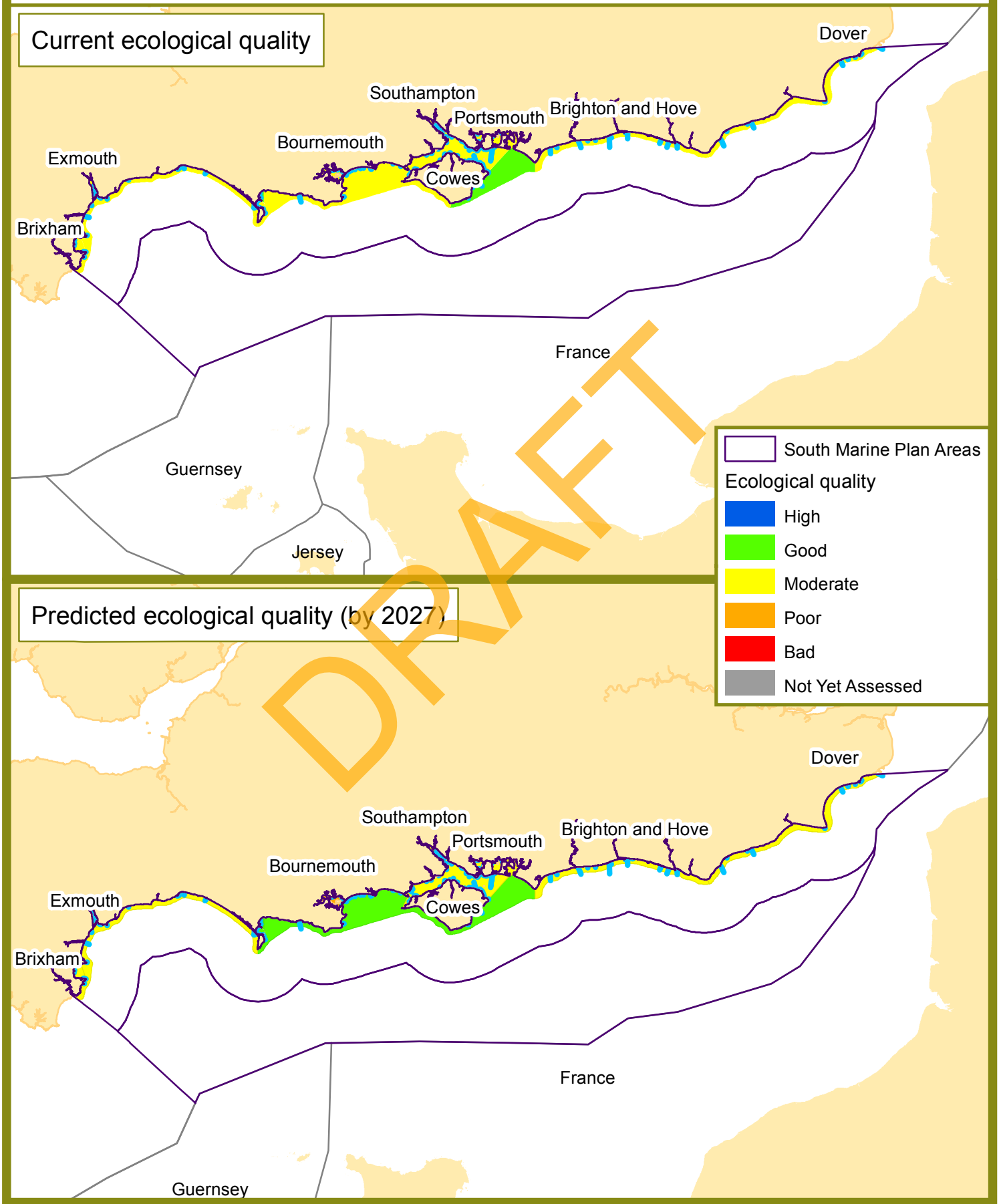
[157] HM Government, Marine Policy Statement (2011) (2.6.1.5)
[158] MMO 1105 Evidence Supporting the Use of Environmental Remediation to Improve Water Quality in the South marine plan areas In press

Marine Management Organisation

# Fig 33: Current and predicted ecological water quality

Information map - Please see box 1 for further details

November 2015






Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0. VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at www.marineregions.org/. Consulted on 2014-09-23 Reproduced with permission of the Environment Agency

### Signposting - objective 12 - space for nature

704. Existing measures which relate to, and may contribute to achievement of the objective include:

- Marine Policy Statement (3.6.8) (S-DD-2)
- Marine Strategy Framework Directive
- National Planning Policy Framework (S11)
- Water Framework Directive
- Birds Directive (S-DIST-1)
- Habitats Directive (S-DIST-1)
- EU Waste Framework Directive (S-DD-2)
- Oslo/Paris Convention for the Protection of the Marine Environment of the North East Atlantic
- Marine and Coastal Access Act (2009)
- Planning Act 2008
- Petroleum Act 1988
- Electricity Act 1989
- Natural Environment and Rural Communities Act 2006
- Conservation of Seals Act 1970 (S-DIST-1)
- Wildlife and Countryside Act 1981 (S-DIST-1)
- Common Fisheries Policy (1380/2013; CFP) (S-FISH-1)

705. Further information and guidance that may help in implementing the objective include:

- Environmental Impact Assessment/ Strategic Environmental Assessment/ Habitats Regulations Assessment (S-DIST-1)
- River Basin Management Plans
- South East River Basin Management Plan
- South West River Basing Management Plan
- Use of beneficial dredge materials in the South inshore and offshore marine plan areas (MMO 1073)
- Exemption Guidance
- Licensing Application Process
- Exemption Guidance (S-DD-2)
- Licensing Application Process (S-DD-2)

# Chapter 6 Monitoring, review and reporting

## 6.1 Three yearly reporting

706. At intervals not more than three years after each marine plan is adopted there is a duty to report on:
    - the effects of policies in the marine plan
    - the effectiveness of those policies in securing plan objectives and
    - the progress towards achieving any objectives set out for that region in a marine plan and the Marine Policy Statement

707. The progress report will cover a number of themes for the South Marine Plan this may include:
    - a review of the context in which it sits
    - evidence demonstrating effective implementation of the plan
    - evidence demonstrating plan effects
    - priority actions for implementation through the next reporting period, (for each policy, the report might seek to identify possible or actual reasons for under or over-performance against objectives, and how these may be addressed).

708. Potential actions identified through the report may include any of the following:
    - partial review of one or more of the South Marine Plan policies
    - review and revision of the indicators, or the content of the monitoring plan to reflect any changes to the marine plan policies
    - commissioning or undertaking further research
    - working with partner organisations to identify or overcome identified obstacles to delivery of the plan
    - changes in management or decision-making approaches in order to achieve the plan policies and/or objectives

## Glossary

**Activities** – A general term that includes development and uses. Examples of uses might include fishing or recreation.

**Analysis of Business Impact**- Assesses potential regulatory effects in line with government policy and the Better Regulation agenda. To evaluate likely costs and benefits and their long term impact on the public, private or third sector, the environment and wider society. Impacts are considered against a baseline which uses a 20 year prediction where no marine plans are developed - a 'business as usual' scenario.

**Anoxic** – To be without oxygen (for example anoxic sediments are sediments without oxygen).

**Area of search** – A broad area (of seabed and associated water column) within which some development or other activity may be acceptable, subject to detailed consideration, for example mineral extraction, or renewable energy generation. It can refer to areas of search used by Joint Nature Conservation Committee for offshore Special Areas of Conservation, and may be defined in map format by the relevant organisations involved depending on the sector concerned.

**Authorisation** – Normally relates to something which can be applied for. See also 'Decisions'.

**Avoid** – To avoid an impact the proposal should be altered so that it no longer exerts a pressure (eg creates no noise), or the pressure produced cannot be received by a receptor (eg move proposal location to where no marine mammals will be able to hear the noise).



**Capital dredging** – This can be deepening or widening an existing navigable area, or enabling an entirely new channel for access to a new facility. Capital dredging allows improvement of access, for example to allow bigger and deeper vessels, longer optimum tidal windows and the provision of passing places. This area will not have been dredged during the preceding 10 years.

**Co-existence** – Where multiple development, activities or uses can exist alongside or close to each other in the same area and/or at the same time.

**Co-location** – Where multiple development (often structures), activities or uses co-exist in the same place by sharing the same marine footprint or area. Footprint can include both the physical location of a development or activity, for example a built structure, and a wider area associated with the development or activity, for example a surrounding safety zone.

**Cumulative impact** – An impact occurs only when a pressure is present and acts on a receptor that is sensitive to that pressure. A cumulative impact refers to the combined impact of such pressures over time in the marine area.

**Cumulative effects** – Effects are taken to be distinct from impacts; an effect is a change caused by a pressure without any consideration of the impact. A cumulative effect is the result of a set of effects that are linked over time in the marine area. If cumulative effects occur but there is no or little impact, there may be no need for a management intervention.

**Decisions** – There are two types of 'decision' specified in the Marine and Coastal Access Act (Section 58) that are to be made by public authorities and which will involve consideration of the marine plans.

- Firstly, 'An authorisation or enforcement decision which is defined in the Marine and Coastal Access Act (Section 58(4)) as any approval, confirmation, consent, licence, permission or other authorisation (however described), whether special or general. Examples include a decision to grant or refuse a marine licence in accordance with part 4 of the Marine and Coastal Access Act, or a planning permission granted by a local planning authority if the permission is capable of affecting part of the marine area. Such decisions must be taken 'in accordance with' the marine plans (Marine and Coastal Access Act Section 58 (1)) unless relevant considerations indicate otherwise. An exception is a decision under the Planning Act on applications for development consent for Nationally Significant Infrastructure Projects which only have to have regard to marine plans.
- Secondly any other decisions which 'relate to the exercise of any function capable of affecting the UK marine area, but which are not an authorisation or enforcement decision'. Examples include designation of Marine Protected Areas or byelaws that do not extend/replace/vary/revoke or withdraw an authorisation. A public authority must 'have regard to' the marine plans when taking any such decision (Marine and Coastal Access Act Section 58 (3)).

**Delivery activities** – Activities undertaken to deliver marine planning which also contribute to achievement of the objectives and represent the wider benefits of planning. For example: sub-national policy analysis should lead to better integration of decision making; delivery of workshops, meetings and training should improve awareness of existing requirements and those within the plan and Marine Policy Statement; evidence collation and commissioning should improve the marine evidence base to inform decisions. It is important that such activities are recognised and included when measuring the success of the plans through the use of appropriate process indicators.

**Development** – Built infrastructure and 'activities' as defined in Marine and Coastal Access Act (Section 66) and other legislation, for example oil and gas activities (under Petroleum Act 1998) and carbon dioxide storage (under Energy Act 2008). This includes nationally significant infrastructure projects under the Planning Act (Section 29). The definition is analogous to that in the Town and Country Planning Act (1990) (Section 55) of 'carrying out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land'. It encompasses, but is not restricted to, what is sometimes commonly called 'development'. Examples include built or fixed structures, such as a gas platform or a wind farm comprising pilings, turbines, and associated structures (convertor stations etc), and activities such as aggregate extraction and maintenance dredging.

**Displacement** – The action of causing the moving of a development, or activity from its current place or position, for example shipping traffic can no longer occur in an area due to the placement of built infrastructure.

**Ecosystem approach**[159] – an ecosystem-based approach to the management of human activities means an approach which ensures that the collective pressure of human activities is kept within the levels compatible with the achievement of Good Environmental Status; that does not compromise the capacity of marine ecosystems to respond to human induced changes and that enables the sustainable use of marine goods and services.

**Evidence** – For the purpose of marine planning, evidence includes policy, data, information, surveys, maps, and any other relevant material.

**Gross Value Added** – Gross Value Added is the value generated by any unit engaged in a production activity. It is measured at basic prices, excluding taxes (less subsidies) on products. Regional Gross Value Added is measured using the income approach. The main components of income based Gross Value Added are:

- compensation of employees (wages)
- gross operating surplus (the sum of self-employment income, gross trading profits) and
- surpluses, non-market capital consumption, rental income (less holding gains)
- taxes (less subsidies) incurred as a result of engaging in production, independently of the quantity or value of goods and services produced such as business rates

**Habitats Regulation Assessment** - The Habitats and Species Regulations (2010)[160] require a Habitats Regulations Assessment (HRA) to be carried out on any proposed plan or project that has potential to cause impacts on a Natura 2000 site. The decision about whether a plan or project can proceed following an HRA will be made by the relevant competent authority.

**Heritage assets** – Elements of the historic environment such as buildings, monuments, sites or landscapes that have been identified as holding a degree of significance.[161]

**Historic environment** – The historic environment includes all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged.[162]



[159] HM Government, Marine Policy Statement (2011), page 3 and Regulation 5 of the Marine Strategy Regulations (2010)
[160] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. The Habitats Directive is primarily transposed in England under the Conservation of Habitats and Species Regulations 2010 and in the offshore marine area by the Offshore Marine Conservation (Natural Habitats, &c) Regulations 2007
[161] HM Government, Marine Policy Statement (2011) (paragraph 2.6.61)
[162] HM Government, Marine Policy Statement (2011) (paragraph 2.6.6.1)

**Independent investigation** – Once the consultation draft of the marine plans has been published, and the Marine Management Organisation has assessed comments received, resolved any issues where possible and identified any issues that remain unresolved, the Marine Management Organisation will consider whether or not to recommend the need for an Independent Investigation (II). The Secretary of State will then determine, in accordance with the Marine and Coastal Access Act (Schedule 6, paragraph 13), whether or not to initiate. If an Independent Investigation is initiated by the Secretary of State the Marine Management Organisation will appoint an independent person to assist the Planning Inspectorate to investigate the draft marine plans' proposals, make any recommendations and the reasons for those recommendations will be published.

**Infrastructure** – the fundamental facilities serving a development for example such as wharfs for offloading of fish or aggregates, as well as connections to land for example such as pipelines or cables.

**Leasing round** – A public tendering process where The Crown Estate Commissioners invite applications for the grant of exclusive rights to exploit the seabed for a specified purpose.

**Licensing round** – Period during which Government offers and then allocates a number of specified areas (Blocks or part Blocks) within its national boundaries for exploration to oil and gas companies, typically in return for fees and/or a commitment to carry out a work programme.

**Local planning authority (or Local Authority)** – An organisation that has powers under the Town and Country Planning Act to determine applications for planning permission and prepare development plans for its area. In England local planning authorities are: (1) district councils; (2) London borough councils; (3) metropolitan district councils; (4) county councils in relation to any area in England for which there is no district council; (5) the Broads Authority. A National Park authority is the local planning authority for the whole of its area.

**Marine Conservation Zone** – Specific areas designated under the Marine and Coastal Access Act for the purposes of conserving marine flora or fauna, marine habitats or features of geological or geomorphologic interest.

**Minimise** – Reduce to the smallest possible amount or degree. Minimisation is a reduction in the level of pressure generated. Minimising pressure to effectively zero is the same as avoidance.

**Mitigate** – Make less severe. Mitigation is a reduction of how a given pressure level is experienced by the receptor.

**Monitoring plan** – A document which includes the approach and indicators that will be used to measure the effectiveness of the policies, and review process.

**Nationally significant infrastructure project** – Major infrastructure developments in England and Wales as defined in the Planning Act (Section 14). In England and Wales, consents for Nationally Significant Infrastructure Projects, including the larger offshore renewable energy (> 100MW) and port developments, need to be determined in accordance with the Planning Act. However, where a relevant National Policy Statement has been published, nationally significant infrastructure project applications must be determined in accordance with the National Policy Statement, subject to certain exceptions, and having regard to the Marine Policy Statement and relevant marine plans. The determining authority is the relevant Secretary of State (for example, the Department for Energy and Climate Change in the case of offshore wind energy) on a recommendation supplied by the National Infrastructure Directorate within the Planning Inspectorate (to whom the Marine Management Organisation is a statutory consultee).

**Non-marine planning matters** – Non-marine planning matters are best addressed by a response other than marine plans. Such responses may include other plans, decisions and management measures affecting the marine plan area already in existence under development or required without need for an operative marine plan. These measures, established under other drivers, together with the plan objectives, contribute to achievement of the High Level Marine Objectives as set out in the Marine Policy Statement. In some cases, information, institutional or market failure may mean that the achievement of the goal may be constrained. In such cases, it may be that a plan objective is not required; rather signposting is used within the marine plans to raise awareness or to encourage improved implementation of existing drivers. This avoids replication of both objectives and policies, ensuring marine plans focus on issues where they add value or where matters are not otherwise addressed.

**Objectives** – A more detailed statement of desired outcomes or observable behavioural changes that the plans are seeking to achieve. Objectives represent achievement of a goal or vision, identifying specifically where marine plans are able to bring benefit in terms of initiating or complementing responses to core issues. They are, as far as possible, specific, measurable, achievable, relevant and time bound (SMART). Objectives can include targets, such as interim steps to achieving the outcome and goal. They provide a framework within which policies are to be set out. The South Marine Plan's objectives are derived from the South Plans Analytical Report core issues, once non-marine planning matters have been considered. Due to the nature of the issues to be addressed, and available evidence, the plans contain a mixture of objectives from those that are SMARTer, to those which indicate a direction of travel, to broad objectives. If the objective remains broad it may still require a degree of signposting to other measures which contribute to achieving the outcome. As the objective becomes more specific this need will be reduced.

**Options** – In planning terms, this is the part of the planning process for considering different ways of achieving the objectives of a plan and addressing any significant issues.

**Plan policies** – Support the delivery of the marine plan objectives and addresses the issues outlined for the sustainable development of the plan area. By following the above approach there is a greater focus on the added value of marine plans, with

more refined objectives, paving the way for further specificity in plan policies. When developing SMART plan policies, consideration can be given to a number of different factors such as becoming more local, spatial or prescriptive.

**Precautionary principle** – Where evidence is inconclusive, decision-makers should make reasonable efforts to fill evidence gaps but will also need to apply precaution within an overall risk-based approach, in accordance with the sustainable development policies of the UK Administrations. This means that if the risks from an activity are uncertain, preventative measures may be required if there is concern that human activities may harm human health, living resources and marine ecosystems or interfere with other legitimate uses of the sea, or have other social and economic impacts. This would need to be considered based on risk.

**Pressure** – The effects from any given activity over time in the marine area. Pressures can be physical, chemical or biological. The same pressure can be caused by a number of different activities, for example fishing using towed bottom gears and aggregate dredging both cause abrasion.

**Proposals** – General term, usually for something new but could also be for a change that encompasses development and uses, subject to management by public authorities, for example fishing or certain recreation activity, together with management measures. Proposals may relate to either type of decision specified in the Marine and Coastal Access Act (see 'Decisions').

**Public authority** – This means a Minister of the Crown, a public office holder or a public body (Marine and Coastal Access Act Section 322 (1)). A 'public body' includes government departments, The Crown Estate, local authorities, local planning authorities, Inshore Fisheries Conservation Authorities and statutory undertakers. A 'public office holder' means a person holding an office under the Crown, an office created by an act or devolved legislation, or an office paid for by parliament. Public authorities are responsible for ensuring that relevant decisions (see 'Decisions') take appropriate account of the marine plans and plan policies.

**Renewable Energy Zone** – The Renewable Energy Zone was declared under the Energy Act (2004) (Section 84). It extends up to a maximum of 200nm from the baseline (usually the low water mark but with exceptions such as straight baselines across the mouths of some bays). The UK has claimed exclusive rights in this area with respect to production of energy from water or wind.

**Seascape** – In the context of this document, reference to seascape should be taken as meaning landscapes with views of the coast or seas, and the adjacent marine environment with cultural, historical and archaeological links with each other.

**Seascape character** – In the marine environment seascape character relates to the perception of an area, and the combination of characteristics at the surface, within the water column and on the seabed.

**Sequestration** – The process of removing or capturing a chemical or gas from the environment and storing it for example carbon dioxide.

**Signposting** – Highlights or points to existing plans, policies, measures or information, relevant to a specific plan policy or sector/topic, particularly if they are critical to addressing an issue identified in the planning process. It is important to recognise that there are a number of other influences within the marine plan areas, some with overlapping objectives, which together with other factors influence change, such as the licensing system or market forces. Marine plans are therefore not the sole instrument of change. Signposting is important to highlight the contribution of other measures to support and complement existing plans where appropriate. Examples of other plans of relevance include Local Plans and their equivalents such as Local Development Frameworks/Core Strategies, River Basin Management Plans, Shoreline Management Plans, Estuary Management Plans, European Marine Site management schemes, Area of Outstanding Natural Beauty management plans, and the Broads Authority plan. To enable integrated coastal planning, specific attention has been given to assessing the policies in local development frameworks and other plans thereby informing the production of these marine plans.[163]

**Sustainability appraisal** – Sustainability appraisal incorporates the requirements of the Environmental Assessment of Plans and Programmes Regulations 2004 (commonly referred to as the 'Strategic Environmental Assessment Regulations'), which implement the requirements of the European Directive 2001/42/EC (the 'Strategic Environmental Assessment Directive') on the assessment of the effects of certain plans and programmes on the environment. Sustainability appraisal ensures that potential environmental effects are given full consideration alongside social and economic issues.

**Sustainable development** – Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.

**Use** – Generally a purpose for which the marine area is used, for example fishing or recreation. Distinguished from 'development' (see above), which has a specific meaning in legislation and in marine management.

**Vision** – Includes a short statement of the overall aim for the plan area (based on a 20 year time horizon). It also includes a description of what will characterise the plan area in 20 years' time. It should be noted that this is a vision for the plan area and there will be numerous other drivers which contribute to its successful delivery.

**Visual resource** – Can be interpreted primarily as views of the coast and sea from land. Views from the sea to land, and sea to sea, are also relevant.



[163] Marine and Coastal Access Act 2009 Schedule 6 9(1)

# Appendix 1: Marine planning requirements, background and context

## A 1.1 Marine planning requirements and background

709. Through the Marine and Coastal Access Act (2009),[164] the UK government introduced a number of measures to deliver its vision of 'clean, healthy, safe, productive and biologically diverse oceans and seas'. These included provision for a marine planning system, establishing the Secretary of State as the marine planning authority for the English Inshore and English Offshore marine planning regions, with the power to delegate certain marine planning functions. The Secretary of State delegated a number of functions to the Marine Management Organisation in April 2010, retaining the decision to publish the plans and to lay and what to lay in relation to the Marine and Coastal Access Act (2009)(Section 61) reporting requirements.

710. Marine plans, together with the Marine Policy Statement, underpin this planning system for England's marine area. Plans will formulate and present outcomes for a marine plan area consistent with the Marine Policy Statement informed by evidence relevant to the plan area. In 2011 the Department for Environment, Food and Rural Affairs recommended a series of marine plan areas for the English inshore and offshore marine areas to the Marine Management Organisation. The boundaries for these areas were identified following stakeholder and expert input and a specific consultation in 2010 resulting in 11 plan areas covering the seas around England.[165] Plans will be produced for each of these areas; the first plans adopted in April 2014 were for the East inshore and offshore plan areas. The South Marine Plan covers the south inshore and offshore plan areas.

711. The process of marine planning will contribute to the achievement and integration of sectoral activity through specific policies within a framework of economic, social and environmental considerations, in order to deliver the high level marine objectives set out in the Marine Policy Statement.[166] This approach will help ensure the sustainable development of the marine area consistent with the UK Sustainable Development Strategy (see box 6) in the context of the government's current priorities including a focus on enabling sustainable economic growth. In doing so, the South Marine Plan provides a clear approach to managing relevant aspects of the south inshore and south offshore marine plan areas, their resources, and the activities and interactions taking place within them.

### Box 6: Sustainable development

The Marine Policy Statement defines sustainable development in line with the UK Sustainable Development Strategy 'Securing the Future' (reiterated in the government's refreshed vision), which sets out five guiding principles of sustainable development:

- living within the planet's environmental limits

[164] HM Government Marine and Coastal Access Act (2009) http://www.legislation.gov.uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf

[165] There is map on the Marine Management Organisation's webpages https://www.gov.uk/government/publications/marine-plan-areas-in-england

[166] HM Government, Marine Policy Statement (2011), 2.1

- ensuring a strong, healthy and just society
- achieving a sustainable economy
- promoting good governance
- using sound science responsibly

The National Planning Policy Framework, which presumes in favour of sustainable development reiterates these principles. It also reinforces the government's view of sustainable development and that the English planning system has an economic, social and environmental role.

### A 1.2 Marine planning – national context

712. The Marine Policy Statement was adopted by all UK administrations and published in March 2011. It built upon the shared UK wide high level marine objectives published in 2009,[167] and provides the policy framework for the preparation of marine plans, establishing how decisions affecting the marine area should be made in order to enable sustainable development. It sets out a high level approach to developing marine plans. The process should be participative, based on an ecosystem approach,[168] and apply precaution within an overall risk based approach; a particular issue highlighted is cumulative effects or impacts (see box 7). The Marine Policy Statement also lists high level principles for decision-making, stating that it should be consistent with existing legislation, streamlined where possible, and seek to avoid or mitigate negative impacts where possible in a proportionate manner and using sound science responsibly.

### Box 7: Cumulative effects

The south marine plan areas are busy with a large and diverse range of human activities occurring, which exert pressure to varying degrees. Cumulative effects can arise from a range of pressures, such as (but not limited to) disturbance or damage to the seabed, increases in underwater noise, pollution and increases in marine litter. Cumulative effects can occur both spatially and temporally. The effect of such pressures and whether or not they have an impact will depend on the sensitivity of the components of the ecosystem that are affected and the level of exposure to those pressures.

Cumulative effects are considered through existing processes such as Environmental Impact Assessment and Strategic Environmental Assessment. In addition a Habitats Regulations Assessment is required where a plan or project is likely to have a significant effect on a feature (habitats and species) of a Natura 2000 site, either individually or in combination with other plans or projects (inter project cumulative effects).These processes also consider the need to avoid, minimise or mitigate impacts caused by cumulative effects, and this also is reflected in the

[167] Objectives in Our seas – a shared resource: High Level Marine Objectives

[168] A recent review concluded that the majority of the principles of the ecosystem approach are already incorporated in the existing marine planning process with recommendations for further application relating mainly to data availability (including in relation to cumulative impacts) and some elements of stakeholder engagement. https://www.gov.uk/government/publications/integration-of-ecosystem-approach-into-marine-planning-mmo-1048

principles of the National Planning Policy Framework and the Marine Policy Statement (2.6.1.3) on conserving and enhancing the natural environment.

As set out in the Marine Policy Statement (2.3.1.6 and 2.3.2.1), marine plans should contribute to considering cumulative impacts, for example 'Marine plans should ... identify how the potential impacts of activities will be managed, including cumulative effects' and 'when considering the potential benefits and adverse effects, decision makers should also take into account any multiple and cumulative impacts of proposals, in the light of other projects and activities'.

When taken as a whole, the South Marine Plan objectives will contribute to consideration of cumulative effects, through for example, managing space effectively and reducing adverse impacts. In addition, objective 12 – space for nature, addresses cumulative effect that impact the specific issue of water quality as identified in the estuaries of the south inshore marine plan area.

A variety of work is being undertaken by different organisations to develop our knowledge of environmental sensitivity to pressure, as well as on how this information can be best analysed to develop our knowledge of areas at greater risk of cumulative effects. For example, the Marine Management Organisation has developed a framework for scoping cumulative effects strategically.[169] The Marine Management Organisation will continue to collaborate with third parties to ensure that any developments in knowledge can be considered in future marine planning. This may result in a more prescriptive approach to management of cumulative effects at such time as the evidence base is deemed robust enough to support it. Public authorities should look to ensure that current and future guidance as it becomes available is clearly highlighted, applied, and reviewed (where required), working with, for example, the Joint Nature Conservation Committee and Natural England, The Crown Estate and industry.[170]

713. All marine plans must conform with the Marine Policy Statement unless relevant considerations indicate otherwise.[171] The Marine Policy Statement also provides an overview and summary of national policy relevant to marine planning and decision-making in the marine plan areas, set within the context of European and international policy and commitments. The plans take account of this and other UK national policy particularly that under the Planning Act (2008), including the National Planning Policy Framework,[172] National Policy Statements such as those for ports, energy for example Nuclear power generation, and the process for nationally significant infrastructure project consents.[173] Relevant provisions in the National Planning Policy Framework and National Policy Statements were identified and incorporated into the marine plans where appropriate.

[169] Marine Management Organisation (2014) A Strategic Framework for Scoping Cumulative Effects, pp 224. MMO Project No: 1055
[170] See, for example, the South coast and East English Channel marine aggregate regional environmental assessments, which have produced cumulative impact assessments for the marine aggregates extraction industry and the potential effects on other marine industries.
[171] Marine and Coastal Access Act Section 51(6)
[172] National Planning Policy Framework
[173] Planning Act 2008, S 14

714. The Marine Policy Statement (1.3.5), marine plans and the planning process will contribute to an integrated and holistic approach to the management of marine and coastal areas in line with the principles of Integrated Coastal Zone Management. The Marine Management Organisation has taken all reasonable steps, as required by the Maritime Spatial Planning Directive and Marine and Coastal Access Act, to ensure that the South Inshore Marine Plan is compatible with any related relevant development plans[174] (or their equivalent). The Marine Management Organisation is also working with public and local authorities responsible for other plans affecting the south inshore marine plan area,[175] for example through review of River Basin Management Plans. Table 5 in appendix 2 provides a summary of findings from this analysis. The Coastal Concordat, [176] an agreement between the Department for Environment, Food and Rural Affairs, the Department for Communities and Local Government, the Department for Transport, the Marine Management Organisation, the Environment Agency, Natural England and the Local Government Association's Coastal Special Interest Group, sets out how regulatory and advisory bodies propose to work with local planning authorities to enable sustainable growth in the coastal zone in support of streamlined consenting and decision-making.

715. The Planning and Compulsory Purchase Act 2004 (as amended by the Localism Act 2011) places a duty to co-operate on the Marine Management Organisation and other public authorities in the preparation of marine plans, local development plans, and other plans (so far as they relate to a strategic matter).[177] It requires local authorities and other public bodies[178] to engage constructively, actively and on an ongoing basis.[179] That duty applies to the marine plans, their implementation and any subsequent revisions. These requirements, together with the options for communities to formulate their own Neighbourhood Plans, bring new opportunities for an integrated planning system for land and sea.

716. In fulfilment of the above requirements and policy aims, the Marine Management Organisation worked with planning and other authorities to identify policies in their plans with marine relevance for consideration in the development of the South Marine Plan (see table 5 for a summary of findings). Spatial information on those other plans can also be found on the marine planning portal.

### A 1.3 Marine planning – international context

717. Marine planning sits within an international regulatory framework which governs a number of aspects of marine management. The national policy documents referred to above describe most of these as part of their context. They range from the UN Convention on the Law of the Sea (UNCLOS) to a number of European Union Directives and policies. Some of these are detailed at appropriate points in the south

[174] HM Government Marine and Coastal Access Act (2009) Sc 6 3(2)
[175] HM Government Marine and Coastal Access Act (2009) Schedule 6 9(2)(h)
[176] A Coastal Concordat for England (2013)
[177] Planning and Compulsory Purchase Act 2004, S 33A
[178] ie a body or person prescribed under S 33A(1)(c) Planning and Compulsory Purchase Act 2004. Prescribed bodies are currently set out in Regulation 4 of the Town & Country Planning (Local Planning) (England) Regulations 2012 (SI 2012/767).
[179] A Plain English Guide to the Localism Act

plans, whereas the Maritime Spatial Planning Directive is considered here. Mention is also made of the Marine Strategy Framework Directive as it requires a strategic approach to the region that encompasses the whole of the south plans areas and cuts across many of the issues addressed in the plans.

718. This plan has been prepared in accordance with, and give consideration to, the EU Maritime Spatial Planning Directive (2014/89/EU) which came into force in July 2014 in support of the Integrated Maritime Policy for the European Union. The Directive introduces a framework for maritime spatial planning and aims to promote the sustainable development of marine areas and the sustainable use of marine resources. It also sets out a number of minimum requirements all of which have been addressed in these plans.

719. In particular, the planning process for the south plans has applied an ecosystem based approach as required by Article 5(1) of the Directive, whilst enabling sustainable use of goods and services, as well as contributing to the objectives of Article 5(2) and other objectives relevant to the plan areas. In doing so, and in accordance with Article 5(3) of the Directive, we have considered a wide range of sectoral uses and activities environmental, economic and social aspects, as well as safety aspects and have determined how these different objectives are reflected and weighted in the Marine Plans. Land-sea interactions have also been taken into account as part of the marine planning process. Involvement of stakeholders has been central to the development of these plans and full details of the procedures and processes used, including those to ensure stakeholder engagement and cross-boundary working are set out in the Statement of Public Participation.

720. Member States must produce plans for their waters by 2021. Member States will determine the content of the plans tailored to their specific economic, social, environmental and governance characteristics, including taking account of national policies, as long as they are in conformity with the requirements of the Directive.

721. The South Marine Plan gives consideration to the EU Marine Strategy Framework Directive (2008/56/EC), which forms the environmental pillar of the EU Integrated Maritime Policy. The Directive requires all EU Member States to take measures to achieve Good Environmental Status in their seas by 2020 and puts in place a framework to allow co-ordinated action across Europe to improve the marine environment. The Directive requires Member States to apply an ecosystem based approach to the management of human activities and is transposed through the Marine Strategy Regulations. The UK Marine Strategy Part One and Marine Strategy Part Two implement the first elements of the Directive and set out the UK's overall approach to managing the marine environment. The third and final part of the UK Marine Strategy will set out the measures needed to achieve or maintain Good Environmental Status and will be published at the end of 2015. Appendix 3, table 6 and objective 11 set out how the South Marine Plan will contribute to the delivery of the Marine Strategy Framework Directive.

## Appendix 2: Evidence base

722. The Marine Policy Statement (2.3.1.2) states that 'marine plans will be based on a sound evidence base, as far as possible', and as such the Marine Management Organisation has been working closely with many partners and stakeholders since the start of the planning process to gather and apply the best available evidence (as required under the Maritime Spatial Planning Directive) to better understand the activities, resources and ecosystem in the south marine plan areas. Evidence was summarised in the South Plans Analytical Report, setting out the range of evidence used for marine plan preparation including spatial data (presented on the marine planning portal), third party research reports/guidance documents, specifically commissioned research[180] and national/sub-national policy.

723. Although the South Plans Analytical Report summarised the evidence base and highlighted the issues to be considered through the planning process, evidence gathering continued throughout the process with the opportunity for stakeholders to comment through the marine planning portal and at key stages in the process via workshops and consultations. All evidence used has gone through a quality assurance process and this has informed how the evidence has been used to support decision making.

724. To support integration between land and sea, there is a duty to ensure all marine plans are compatible with plans developed by local planning authorities. There is also a duty to have regard to all other plans prepared by public bodies for the management and /or use of the sea or coast.[181] The plans assessed to fulfil this requirement included local transport plans, waste and mineral plans, river basin management plans, beach management plans, Heritage coast plans and shoreline management plans. Spatial information related to sub-national plans can also be found on the marine planning portal. For certain activities such as marine aggregates, this compatibility and influence may extend to plans and authorities outside of the marine plan area.

725. Table 5 provides a summary of findings from this analysis of public plans. Please note some of the plans do not appear in the table as they were not considered at a scale relevant to the South marine plan area or are taken account of in other plans. It indicates those plans that include provisions that relate to the Marine Policy Statement (chapters 2 and 3) 'detailed considerations' and 'key activities'. This can be considered as an overview of the extent to which matters relevant to the marine area are addressed in terrestrial planning. This table also signposts local planning

[180] All published reports can be viewed at the following two websites:
http://webarchive.nationalarchives.gov.uk/20140507202222/http:/www.marinemanagement.org.uk/evidence/register-reports.htm
https://www.gov.uk/government/collections/evidence-register-and-reports#evidence-reports

[181] HM Government, Marine Policy Statement (2011) directs the evidence base to take in a wide range of sources including existing plans. The 'Description of the Marine Planning System for England' states that as much as possible the marine planning system should facilitate the process of land-sea integration, build on and reinforce existing terrestrial policies. Please see chapter 6 for a list of statutory and non-statutory plans in the description document.

authorities to provisions within the Marine Policy Statement of relevance to their planning priorities.

726. By involving planning authorities and other stakeholders, the Marine Management Organisation developed a process for assessing sub-national policies and plans, to identify policies with marine relevance for consideration in the development of the South Marine Plan.

## Table 5: Public authority plans cross referenced with the Marine Policy Statement detailed considerations and activities.

| | Ecology and Biodiversity | Air quality | Noise | Water Quality | Seascape | Historic Environment | Climate Change | Coastal Change and Flooding | Marine Protected Areas | Defence and National Security | Energy Production | Ports and Shipping | Aggregates | Dredging and Disposal | Cables | Fisheries | Aquaculture | Surface water management | Tourism and Recreation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Local Development Plans and AONB Plans | | | | | | | | | | | | | | | | | | | |
| Adur | X | X | | | X | X | | X | | | | X | | | | | | X | X |
| Arun | X | | | | X | X | X | X | X | | X | X | | | X | | | | X |
| Bournemouth | X | | | | X | X | X | X | X | | | | | | | | | X | X |
| Brighton and Hove | X | | | | X | X | X | X | X | | | X | X | | | | | | X |
| Chichester | X | | | X | X | | | X | X | X | | X | | | | | | X | X |
| Chichester Harbour AONB | X | | | X | X | X | X | X | | | X | X | | X | | X | | X | X |
| Christchurch | X | | | | X | | | | | | | | | | | | | | X |
| Dorset AONB | X | | | | X | X | X | | X | | X | X | | | | X | | X | X |
| East Devon | X | | | X | X | | | X | X | | X | | | | | | | X | X |
| East Devon AONB | X | | | X | X | X | | | | | X | | | | | | | X | X |
| Eastbourne | X | | | | X | X | | X | | | X | | | | | | | | X |
| Eastleigh | X | X | | | X | X | | X | | | X | X | | | X | | | X | X |
| Exeter | X | X | | | | X | X | | | | X | | | | | | | X | X |
| Fareham | X | X | | | X | X | X | | | | | | X | | | | | | X |
| Gosport | X | | | X | X | X | | X | X | | | X | | | | | | X | X |
| Hastings | X | | | | X | X | | | | | | | | | | | | | |
| Havant | X | X | X | | X | X | X | X | | | X | X | | | | | | X | X |
| High Weald AONB | X | | | | | X | X | X | | | | | | | | | | X | |
| Horsham | X | | | | X | X | | | | | | | | | | | | | X |
| Isle of Wight | X | X | X | | X | X | | X | X | | | X | X | | | | | | X |
| Isle of Wight AONB | X | | | | X | X | X | | | | X | X | | | | | | | X |
| Lewes | X | | | | X | X | X | X | | | X | | | | | | | X | X |

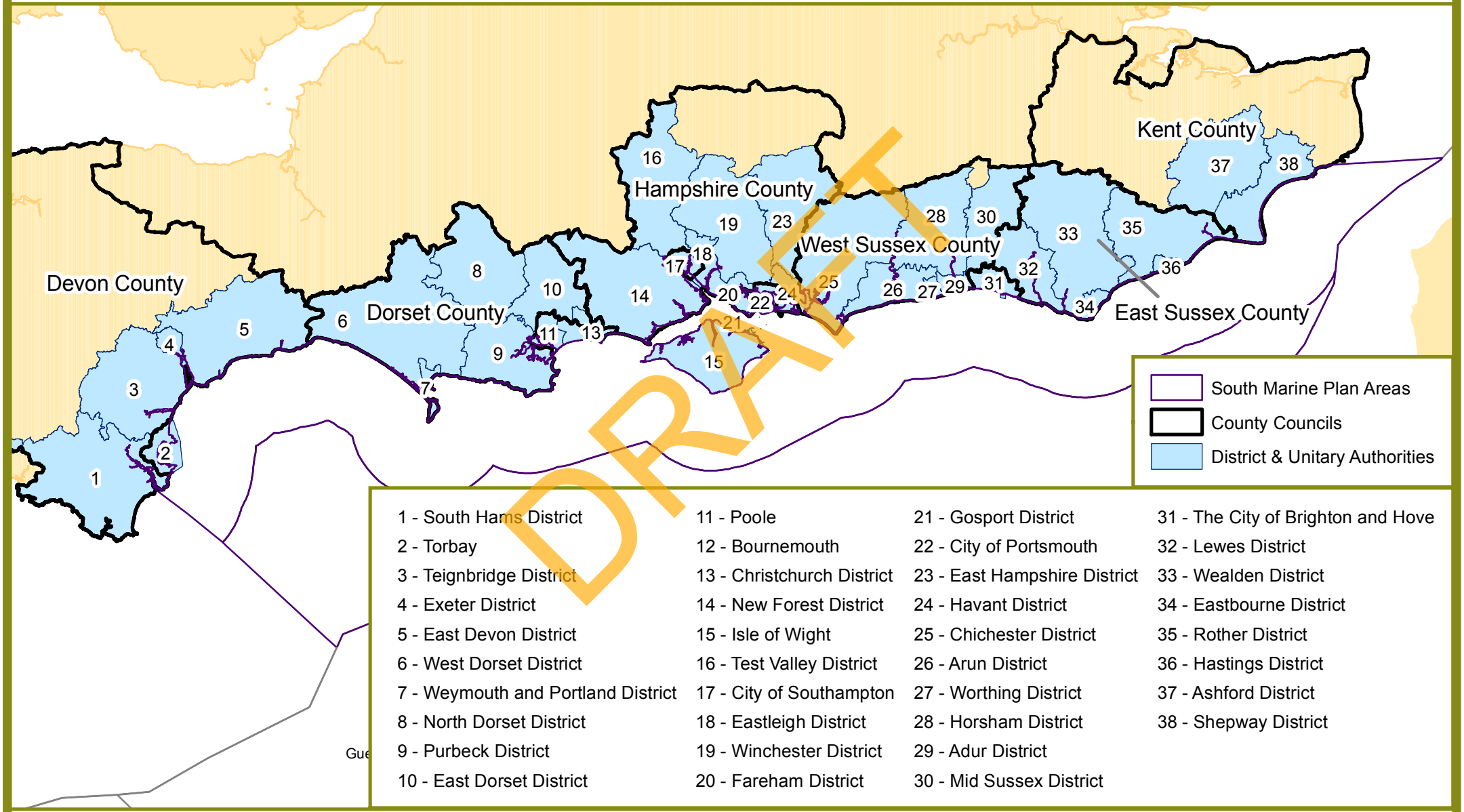
| | Ecology and Biodiversity | Air quality | Noise | Water Quality | Seascape | Historic Environment | Climate Change | Coastal Change and Flooding | Marine Protected Areas | Defence and National Security | Energy Production | Ports and Shipping | Aggregates | Dredging and Disposal | Cables | Fisheries | Aquaculture | Surface water management | Tourism and Recreation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New Forest | X | | | | | X | X | X | X | | X | X | | | | | | X | X |
| New Forest National Park | X | | | X | X | | X | X | | | | | | | | | | | |
| Poole | X | | X | | X | X | X | X | X | | | X | | | | | | | X |
| Portsmouth | X | | | | X | X | | X | X | | | X | | | | | | X | X |
| Purbeck | X | | | X | X | X | X | | | | X | | X | | X | | | | X |
| Rother | X | | | | X | X | | X | X | | | X | | | | | | | X |
| Shepway | X | | | | | | | X | | | | | | | | | | X | X |
| South Devon AONB | X | | | | X | X | X | X | | | | | | | | X | | X | X |
| South Downs National Park | X | | | X | X | X | | X | | | | | | | | | | X | |
| South Hams | X | | | | | X | X | | X | | | | | | | | | X | X |
| Southampton | X | | | | X | X | X | X | X | | | X | | | | | | X | X |
| Teignbridge | X | | | | X | | | X | X | | | X | | | | X | | X | X |
| Test Valley | X | X | X | X | X | X | | X | | | X | | | | | | | | |
| Torbay | X | | | X | X | X | X | X | X | | | | | | | | | X | X |
| Wealden | X | | | | X | X | X | X | | | | | | | | | | | X |
| West Dorset | X | | | | X | X | X | X | X | | X | | | | X | | | | X |
| Weymouth and Portland | X | | | | X | X | X | X | X | | X | X | | | | X | | X | X |
| Winchester | X | X | | X | | X | | | X | | | | | | | | | | |
| Worthing | X | X | | X | X | X | X | | | | | | | | | | | X | X |
| Local Transport Plans | | | | | | | | | | | | | | | | | | | |
| South Hampshire | | X | | | | | | | | | | | | | | | | | X |
| Kent County Council | | | | | | | | | | | | | | | | | | | |
| East Sussex | | X | | | | | X | | X | | | X | | | | | | | |
| Brighton and Hove | X | X | | | | | X | | | | | | | | | | | | X |
| West Sussex | X | X | | | | | X | | | | | | | | | | | | |

| | Ecology and Biodiversity | Air quality | Noise | Water Quality | Seascape | Historic Environment | Climate Change | Coastal Change and Flooding | Marine Protected Areas | Defence and National Security | Energy Production | Ports and Shipping | Aggregates | Dredging and Disposal | Cables | Fisheries | Aquaculture | Surface water management | Tourism and Recreation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Central Hampshire and New Forest | | | | | | | | | | | | X | | | | | | | X |
| Bournemouth, Poole and Dorset | X | X | X | | | X | X | | | | | X | | | | | | | X |
| Devon and Torbay | | | | | | | X | X | | | | | | | | | | X | X |
| Waste and Mineral Plans | | | | | | | | | | | | | | | | | | | |
| Kent County | | | | | | | | | | | | | | | | | | | |
| Kent Minerals Local Plan | | | | | | | | | | | | | X | | | | | | |
| East Sussex, South Downs and Brighton and Hove | | | | | | | | | X | | X | X | X | X | X | | | | |
| Joint Hampshire | | | | | | | X | | X | | | | X | X | | | | | |
| West Sussex Minerals Local Plan | | | | | | | | | | | X | X | | | | | | | |
| West Sussex | | | | | | X | | | X | | X | X | | | | | | | |
| Dorset | | | X | | | | | | X | | | X | X | X | | | | | |
| Bournemouth, Dorset and Poole | | | X | | | | | | X | | | | | | | | | X | |
| Devon County (Minerals) | | | | | | | | X | X | | | X | X | X | X | | | | |
| Devon County (waste) | | | | | | | | | X | | | X | | | | | | X | |
| River Basin Management Plans | | | | | | | | | | | | | | | | | | | |
| South East | | | X | X | | | | | X | | X | | | | | | | | |
| South West | X | | | | | | | | X | | | | | | | | | | |
| World Heritage Sites | | | | | | | | | | | | | | | | | | | |
| Jurassic Coast | X | | X | | | X | | | | | | | | | | | | | X |

Marine Management Organisation

# Fig 34: District, unitary and county authority areas

November 2015




1 - South Hams District
2 - Torbay
3 - Teignbridge District
4 - Exeter District
5 - East Devon District
6 - West Dorset District
7 - Weymouth and Portland District
8 - North Dorset District
9 - Purbeck District
10 - East Dorset District
11 - Poole
12 - Bournemouth
13 - Christchurch District
14 - New Forest District
15 - Isle of Wight
16 - Test Valley District
17 - City of Southampton
18 - Eastleigh District
19 - Winchester District
20 - Fareham District
21 - Gosport District
22 - City of Portsmouth
23 - East Hampshire District
24 - Havant District
25 - Chichester District
26 - Arun District
27 - Worthing District
28 - Horsham District
29 - Adur District
30 - Mid Sussex District
31 - The City of Brighton and Hove
32 - Lewes District
33 - Wealden District
34 - Eastbourne District
35 - Rother District
36 - Hastings District
37 - Ashford District
38 - Shepway District

Map produced in ETRS89 UTM 30N. Not for Navigation. Contains public sector information licensed under the Open Government Licence v3.0
VLIZ (2014). Maritime Boundaries Geodatabase, version 8. Available online at http://www.marineregions.org/. Consulted on 2014-09-23

## Appendix 3: Direct and indirect contributions of plan policies to Marine Strategy Framework Directive descriptors

### Table 6: Contribution of policies to Marine Strategy Framework Directive descriptors

**D= Direct, I = Indirect**

| Objective | Obj 7 | | Obj 10 | | | | Obj 11 | | | | | Obj 12 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MSFD Descriptor (full text above in table 3)/Policy | S-CC-2 | S-CC-4 | S-MPA-1 | S-MPA-2 | S-MPA-3 | S-MPA-4 | S-NIS-1 | S-ML-1 | S-ML-2 | S-UWN-1 | S-UWN-2 | S-BIO-1 | S-BIO-2 | S-BIO-3 | S-BIO-4 | S-FISH-4 | S-FISH-4-HER | S-DIST-1 | S-WQ-1 | S-WQ-2 |
| Descriptor 1: Biological diversity | | I | I | I | I | I | | | | I | I | D | D | D | D | D | D | D | D | D |
| Descriptor 2: Non-indigenous species | | | | | | | D | | | | | | | | | | | | | |
| Descriptor 3: Fish/Shellfish | I | | | I | | I | I | | | | | I | I | I | I | D | D | I | | |
| Descriptor 4: Marine food webs | | | | | | | I | | | | | I | I | I | | D | I | I | | |
| Descriptor 5: Human-induced eutrophication | | | | | | | | | | | | | | I | | | | | I | I |
| Descriptor 6: Seafloor integrity | | | I | I | I | I | | | | | | I | I | I | I | D | I | | | |
| Descriptor 7:Hydrological conditions | I | | | | | | | | | | | I | I | | | | | | | |
| Descriptor 8: Pollution | | | | | | | | | | | | I | | | | | | | I | I |
| Descriptor 9: Seafood for human consumption | | | | | | | I | | | | | | | | | | | | I | I |
| Descriptor 10: marine litter | | | | | | | | D | D | | | | I | | | | | | | |
| Descriptor 11: Underwater noise | | | | | | | | | | D | D | | I | | | | | I | | |

## Appendix 4: Contributions of South Marine Plan policies to objectives

### Table 7: Policy by plan objective

**D= Direct contribution, I = Indirect contribution S = South. The policy lettering is shorthand for the full title, for example CC = climate change, EMP = employment.**

| Policy | Obj1 | Obj2 | Obj3 | Obj4 | Obj5 | Obj6 | Obj7 | Obj8 | Obj9 | Obj10 | Obj11 | Obj12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-CO-1 | D | | | | | I | | | | | | I |
| S-DEF-1 | D | | | | | | | | | | | |
| S-OG-1 | D | I | | I | | | | | | | | |
| S-TIDE-1 | D | I | | | | | I | | | | | |
| S-PS-1 | D | D | | | | | | I | I | | | |
| S-AGG-1 | D | I | I | I | | | | | | | | |
| S-AGG-2 | D | I | I | I | | | | | | | | |
| S-AGG-3 | D | I | I | I | | | | | | | | |
| S-DD-1 | D | I | I | | | I | | | I | | | |
| S-AQ-1 | D | | | | | | | | | | | I |
| S-INF-1 | I | D | | | | | | | | | | |
| S-PS-2 | I | D | | | I | I | | | | | | |
| S-PS-3 | D | D | | I | I | I | | | | | | |
| S-CAB-1 | I | D | | | | | | | | | | |
| S-CAB-2 | I | D | | | | | | | | | | |
| S-AQ-2 | I | D | | | I | | | | | | | |
| S-REN-1 | | I | D | I | | | I | | | | | |
| S-AGG-4 | I | I | D | I | | | | | | | | |
| S-FISH-1 | | I | D | I | | | | | | | | |
| S-TR-1 | | | D | | | | | I | I | | | |
| S-EMP-1 | | | I | D | | | | | | | | |
| S-EMP-2 | | | I | D | | | | | | | | |
| S-SOC-1 | I | | | | D | I | I | | | | I | I |

| Policy | Obj1 | Obj2 | Obj3 | Obj4 | Obj5 | Obj6 | Obj7 | Obj8 | Obj9 | Obj10 | Obj11 | Obj12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-TR-2 | | I | I | | D | | | I | I | | | |
| S-FISH-2 | | | I | | D | | | | | | | |
| S-FISH-3 | | | I | | D | | | | | | | |
| S-ACC-1 | I | I | | | | D | | | | | | |
| S-ACC-2 | I | I | | | | D | | | | | | |
| S-CC-1 | | | | | | | D | | | | | |
| S-CC-2 | | | | | | | D | | | I | I | I |
| S-CC-3 | | | I | | | | D | | | | | |
| S-CC-4 | | | | | | | D | | | I | I | I |
| S-HER-1 | | | | | | | | D | I | | | |
| S-SCP-1 | | | | | | | | I | D | | | |
| S-MPA-1 | | | | | | | | | | D | | I |
| S-MPA-2 | | | | | | | I | | | D | | I |
| S-MPA-3 | | | | | | | I | | | D | | I |
| S-MPA-4 | | | | | | | | | | D | | I |
| S-NIS-1 | | | | | | | | | | | D | |
| S-ML-1 | | | | | | | | | | | D | |
| S-ML-2 | | | | | | | | | | | D | |
| S-UWN-1 | | | | | | | | | | | D | |
| S-UWN-2 | | | | | | | | | | | D | |
| S-BIO-1 | | | | | | | | | | I | I | D |
| S-BIO-2 | | | | | | | | | | I | I | D |
| S-BIO-3 | | | | | | | | | | I | I | D |
| S-BIO-4 | | | | | | | | | | I | I | D |
| S-DIST-1 | | | | | | | | | | | | D |
| S-FISH-4 | | | I | | | | | | | | | D |
| S-FISH-4-HER | I | I | I | | | | | | | | I | D |
| S-DD-2 | | | | | | | | | | | | D |
| S-WQ-1 | | | | I | I | | | | | | | D |
| S-WQ-2 | | | | I | I | | | | | | | D |

## Appendix 5: Methodology used to define the high density navigation routes shown in figure 7, ports and shipping policy map

727. Detailed context behind the development of the high density navigation routes shown in policy map figure 7 is set out in the following text and this is supported by spatial information within the map. Information provided in relation to navigation approaches should be accounted for in reference to S-PS-3.

728. Where proposals are progressing at the time of plan adoption, a multi-sectoral approach to resolving navigation issues where they have been identified on a case-by-case basis, such as with regards to Round 3 Offshore Wind Farms, is most appropriate. A number of standing bodies, including the Department for Transport chaired Nautical and Offshore Renewable Energy Liaison group, provide a forum for developing a response to the needs of navigation in light of the need for Offshore Wind Farms to deliver renewable energy targets. Such bodies are informed by ongoing research commissioned by relevant parties such as The Crown Estate. The map in figure 7 indicates traffic patterns in the South Inshore and South Offshore Marine Plan Areas and reflects areas accommodating over 1000 vessel transits per year. This measure of intensity is a number derived by the Marine Management Organisation classifying Automatic Identification Systems data that can be viewed on the marine planning portal. It applies to vessels of 300gt and over using their Automatic Identification System with others such as fishing vessels, yachts and those less than 300gt excluded. This policy, S-PS-3, applies where 90% of traffic occurs, beginning on the landward side at the boundaries of harbour administrative areas and/or traffic management areas, and excludes routes that pass through proposed Offshore Wind Farms.

729. Figure 7 has limitations, while it can reflect well established areas of importance to shipping, there are other areas not indicated on the map that are important as short sea routes. This is because the routes in question pass through Round 3 wind farm zones that have yet to be fully planned in terms of the location of projects within the zones. Subsequently, alterations in the patterns of shipping may arise. As a result of recognising only those routes that will not be interrupted by Round 3 wind farm zones, a greater area of coastal shipping is afforded considerable protection in comparison to short sea shipping. Consequently a number of the routes are not currently recognised in Figure 7. As development plans for Round 3 wind farm zones become clearer, mapping supporting S-PS-3 will be updated on the marine planning portal and marine information system.

730. The Marine Management Organisation's shipping density data is based upon Anatec's Ship Routes database represented over a 0.5km by 0.5km grid. Attributable data includes the estimated number of ships passing through the cell per year and vessel type (cargo, tanker, ferry and offshore service). The data is modelled in part from logging Automatic Identification System data which is based on Very High Frequency radio signals showing location and vessel type. Very High Frequency radio signals are limited to being collected within 30nm of any receiver. Outside these limits the Automatic Identification System data will be under represented. Third party organisations such as Anatec collect data in these areas.

731. When calculating ship density, the movements of 'non-routine traffic' such as fishing vessels, military vessels, tugs, dredgers and recreational craft are excluded. It should be noted that irrespective of the map provided, each proposal will be treated on its own merits, with measures such as navigational risk assessments undertaken as required, taking into account commercial and recreational traffic. The figure of 1000 vessels per year disguises the risks that arise from issues such as complex crossing and overtaking situations, and restriction to sea room to manoeuvre as required by the International Regulations for the Prevention of Collision at Sea. Figures used to derive this map are from the UK Maritime and Coastguard Agency Automatic Identification System data and only includes vessels over 300gtwhere Automatic Identification System is operating. Important navigation routes will be re-examined as part of the review of marine plans, with the intention being to update figure 7.