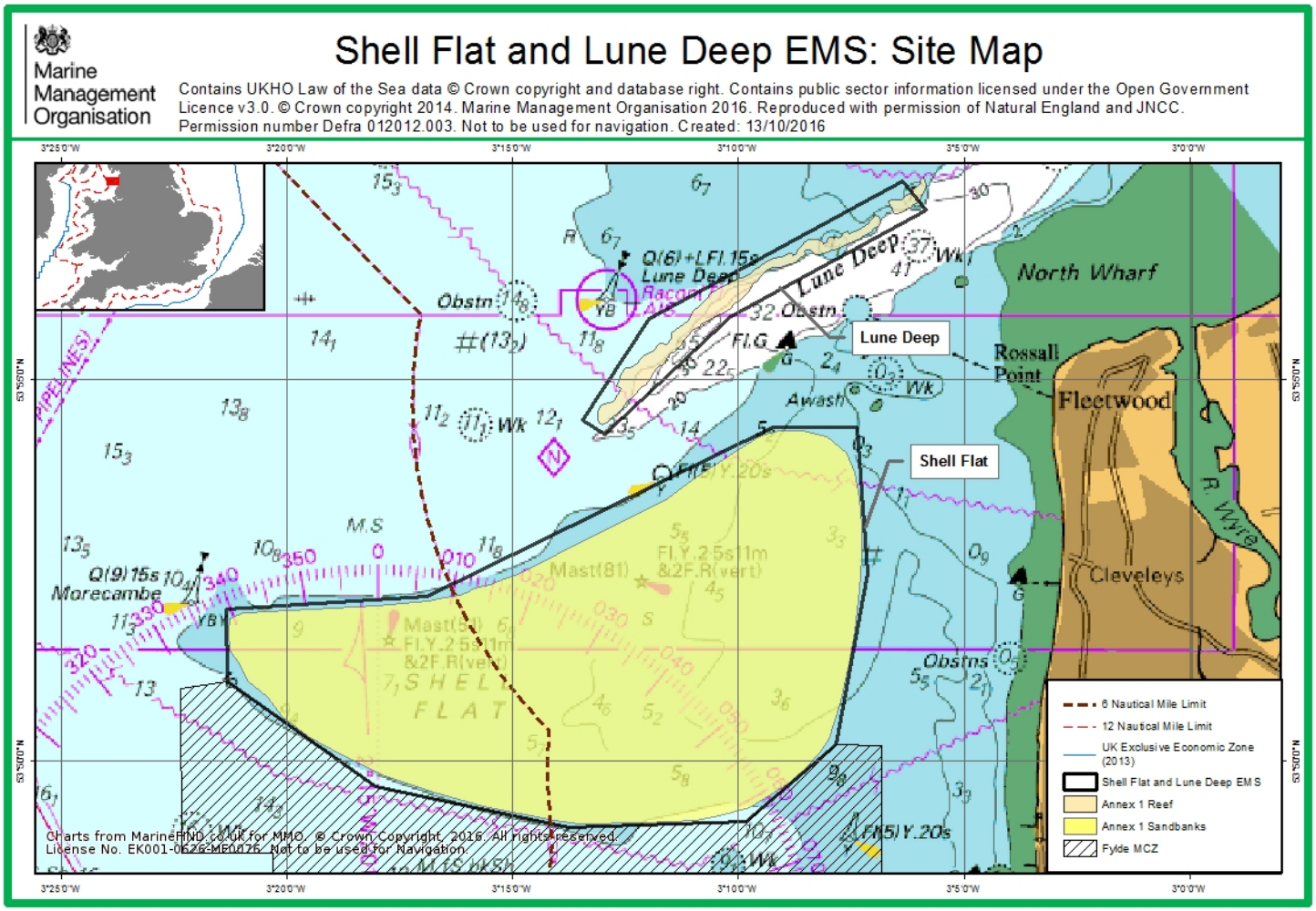
Marine Management Organisation

Shell Flat and Lune Deep European Marine Site (EMS): Executive Summary

October 2016

Sandy sediments in Shell Flat and Lune Deep European marine site (EMS)

Figure 1: Shell Flat and Lune Deep European Marine Site (EMS)[1]



[1] Shell Flat and Lune Deep is a Site of Community Importance (SCI). This site is described as an EMS to avoid confusion with stakeholders.

1. Introduction

The Marine Management Organisation (MMO) is conducting marine protected area (MPA) assessments to ensure current and potential commercial fishing activities in MPAs in English inshore waters (0 to 12 nautical miles (nm)) are appropriately managed.

To ensure our findings and conclusions are robust and are based on the best available evidence, we are inviting you to review the executive summary along with the part assessment, if required, and submit any additional relevant evidence that could contribute to this assessments. Evidence will be used to inform management decisions.

All submitted evidence must follow our evidence guidance and be received before Monday 12 December (see Approach and Process Overview for more details).

2. Site location and features

Shell Flat and Lune Deep EMS is located at the mouth of Morecambe Bay surrounded by shallower areas to the north and south. The site is located within the 0 to12nm limit.

The site lies within International Council for the Exploration of the Sea (ICES) rectangle[2] 26E6.

The site has been designated for reef and sandbanks (subtidal sandbanks and subtidal mud). More information about the site, including the formal conservation advice package, is available from Natural England.

The MMO is carrying out an MPA assessment for the sandbank feature only; within 0 to 12nm. The North Western Inshore Fisheries and Conservation Authority (NWIFCA) will assess the reef feature in the 0 to 6nm limit.

Figure 1 shows the location and extent of the features within the site.

3. Summary of draft assessment findings

The MMO is currently conducting the assessment. Thus far the MMO has identified those fishing activities that do not occur within the site. The remaining gear/feature interactions have been screened for those that a likely significant effect cannot be ruled out.

The MMO is now assessing the remaining gear/feature interactions to understand whether there could be an adverse effect of site integrity from commercial fishing.

For further details on the assessment please contact:
conservation@marinemanagement.org.uk

[2] ICES statistical rectangles are part of a widely used grid system for North Eastern Atlantic waters.

4. Assessment process

Overview of assessment process

Site assessments include three phases:

1. Initial test – Is the fishing activity occurring? Is the activity already sufficiently regulated? Is there existing or potential interaction between the activity and designated feature?

2. Part A – Is the activity directly connected with or necessary for the management of the site? Is the activity likely to have a significant effect on the site?

3. Part B – Is the activity likely to cause an adverse effect on the integrity of the site?

MPA assessments include current and potential commercial fishing activities. To understand what the potential fishing activities are likely to be, we use historical fishing activity and expert opinion. Further information on potential activities is available on request.

Overview of gears being assessed

Table 1: Fishing gears being assessed for the Shell Flat and Lune Deep EMS

Phase	Activities
1 - Initial test	All fishing gears from Part A, and: Cuttle pots Fish traps Drift nets (demersal) Beach seine/ring nets Shrimp push nets Fyke and stakenets Bait dragging Beam trawl (shrimp) Anchor seine Scottish/fly seine Scallops Seed Mussels Pump scoop (cockles, clams) Suction (cockles)

Phase	Activities
2 – Part A	Pots/creels (crustacea/gastropods) Gill nets Trammels Entangling Beam trawl (whitefish) Beam trawl (pulse/wing) Heavy otter trawl Light otter trawl Multi-rig trawls Pair trawls Towed (demersal/pelagic)
3 – Part B	Pots/creels (crustacea/gastropods) Gill nets Trammels Entangling Beam trawl (whitefish) Beam trawl (pulse/wing) Heavy otter trawl Light otter trawl Multi-rig trawls Pair trawls Towed (demersal/pelagic)

5. Fisheries activity information

Fisheries access

The boundaries of the site fully falls within the 12nm limit. French and Irish vessels have access rights between the 6 to 12nm limits.

Data sources - fishing activity

To determine the levels of fishing activity in this site, the following data sources will be used:

1. Vessel monitoring system (VMS) and fisheries landings data

This data incorporates two sources:

- location reports from vessels carrying the European Union mandated VMS (data available for vessels of 15m length and over); and
- landings data reported at ICES rectangle level from landings declarations and logbooks.

2. Sightings data

A number of sightings data sources and expert opinion will be included for non-VMS vessels:

- Understanding the distribution and trends in inshore fishing activities and the link to coastal communities: Defra commissioned a project to better understand trends in inshore fisheries, including collating and analysing fisheries sightings data from 2010 to 2012.
- FisherMap data 2012 Marine Conservation Zone Project Stakmap looking at commercial fishing for under 15m vessels with data collated by interviewing industry.
- MMO and IFCA expert opinion on fishing activity: MMO marine officers and inshore fisheries and conservation officers will provide information on fishing activity within MPAs. Information will include number and size of vessels fishing, target species, type and amount of fishing gear used and seasonal trends in activity. Confidence levels will be provided alongside expert opinion and estimates will also be provided where exact numbers are not known.

6. Ecological information

The MMO will use a number of sources of information to understand the vulnerability[4] of the feature to each fishing gear type. This will include looking at whether the feature is sensitive[3] to each fishing gear type.

The main sources will be from Natural England conservation advice packages, peer reviewed papers and government reports.

Where appropriate, the MMO will categorise sensitivity and fishing effort as 'high', 'medium' and 'low' based on secondary evidence if there is no peer reviewed evidence available. Sensitivity levels will be based on Tillin *et al,* 2010[3] and Gibb *et al*, 2014[4] and overall vulnerability of features to gear intensities on Hall *et al,* 2008[5].

[3] Tillin, H.M., Hull, S.C., Tyler-Walters, H. 2010 Development of a sensitivity Matrix (pressures-MCZ/MPA features). Report to the Department of Environment, Food and Rural Affairs from ABPMer, Southampton and the Marine Life Information Network (MarLIN) Plymouth: Marine Biological Association of the UK. Defra Contract No. MB12 Task 3A, Report No. 22.
[4] Gibb, N., Tillin, H., Pearce, B.,Tyler-Walters, H. 2014. Assessing the sensitivity of Sabellaria spinulosa to pressures associated with marine activities. JNCC report No. 504.
[5] Hall, K., Paramor, O.A.L., Robinson, L.A., Winrow-Giffin, A., Frid, C.L.J., Eno, N.C., Dernie, K.M., Sharp, R.A.M., Wyn, G.C, Ramsay, G.C. (2008). Mapping the sensitivity of benthic habitats to fishing in Welsh waters – development of a protocol; CCW (Policy Research) Report No: 8/12. 85pp

7. Summary of evidence

Fishing activity

VMS data from 2009 to 2013 and sightings show some activity on the contours of the sandbank and in conjunction with expert opinion fishing effort is classed as low.

Sensitivity of the feature and vulnerability to gears

This will be assessed during Part B of the assessment.

Other activities occurring within the site

This will be assessed during Part B of the assessment.

8. Management options

Following the completion of the MPA assessment, one of the following management options will be adopted. However, if gaps in evidence come to light during the assessment process; precautionary decisions may need to be made.

Option 1: No management is required

Option 2: Introduce a monitoring and control plan within the site to monitor current and potential activities

Option 3: Reduce or limit pressures on the site features

Option 4: Prohibit fishing activities within the site

9. Next steps

The MMO will now conduct Part B of the fishery assessment to ascertain whether commercial fishing causes an adverse effect on the integrity of this site.

The MMO will then finalise the assessments and share findings with Natural England who will offer conservation advice.

If management measures are required, these will be subject to formal public consultation.

10. Consultation and evidence

If you have evidence that you think MMO should be considering when writing the site assessment, please visit our website.

Please read the 'Approach and Process Overview' for how to submit evidence.

For further information please email conservation@marinemanagement.org.uk