



Marine
Management
Organisation

Managing Fisheries in Marine Protected Areas: Approach and Process Overview

January 2016

1. Introduction

The Marine Management Organisation (MMO) is carrying out site assessments for marine protected areas (MPA) in English inshore waters to ensure current and potential fishing activities do not have a negative impact on habitats and species in these MPAs.

We are asking for feedback on the draft site assessments, which evaluate the impact of fisheries activities, and recommend if and what management measures are needed.

We are also asking for any additional evidence to support these assessments and ensure that the evidence used in these assessments is robust.

Any management measures resulting from our MPA assessments will be subject to public consultation.

Evidence must be received before Monday 15 February 2016.

The sites which are being assessed are:

- Inner Dowsing, Race Bank and North Ridge - Site of Community Importance (SCI)
- Margate and Long Sands - SCI
- Outer Thames Estuary - Special Protection Area (SPA)
- Skerries Banks and Surrounds - Marine Conservation Zone (MCZ)
- Start Point to Plymouth Sound and Eddystone - SCI
- Land's End and Cape Bank - SCI
- Liverpool Bay - SPA
- Fylde - MCZ
- Shell Flat and Lune Deep - SCI

*SCI/SAC – within MMO MPA assessments these types of site are collectively referred to as European marine sites (EMS) to avoid confusion

2. Background

The MMO and the inshore fisheries and conservation authorities (IFCA) are completing site assessments MPAs in English inshore waters.

The MMO are responsible for assessment of fisheries impacts for MPAs located between 6 and 12nm, with the IFCAs responsible for most assessments within 0 to 6nm. The MMO is also undertaking assessments for some MPAs within 0 to 6nm.

The new site assessments are part of a revised approach to managing commercial fisheries in marine protected areas. The revised approach was introduced in 2012 for

European marine sites¹ (EMS) by the Department for Environment, Food and Rural Affairs (Defra) in order to ensure that all existing and potential commercial fishing activities are managed in accordance with the provisions of Article 6 of the Habitats Directive². This approach was extended in 2013 to include marine conservation zones (MCZs), following the first MCZ site designations.

Management measures for high priority activity/feature interactions came into force in 2014.

Other industries activities within MPAs are already managed through existing consenting regimes, for example marine licensing.

3. A revised approach

The revised approach is being implemented using a risk based and phased approach.

The risk-prioritisation is based on [a matrix](#) comparing the generic sensitivity of designated sub-features to different fishing activities. The matrix categorises the activity/feature as high priority (red), medium priority (amber) or priority risk (green) or no interaction (blue)³.

By using a phased approach activity/feature interactions identified as red were assessed first. Management measures for sites with red interactions were introduced in early 2014.

For amber interactions, more evidence is required to determine whether management of an activity is required to conserve site features. Site MPA assessments are being completed for these interactions. Green interactions also require a site MPA assessment if there are “in combination effects” with other plans or projects.

MPA assessments will determine if additional management measures are required to prevent deterioration of features or significant risk to the condition or conservation objectives of the protected features. This is in line with the requirements of the Habitats Directive and the Marine and Coastal Access Act 2009.

All additional management measures for amber and green interactions will be in place by the end of 2016.

¹ European marine sites is a term to define special areas of conservation (SAC) and special protection areas (SPA) designated to protect habitats and species under the Habitats and Birds Directives respectively, and having marine components.

² Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

³Managing fisheries in MPAs matrix: www.gov.uk/government/publications/fisheries-in-european-marine-sites-matrix

4. Assessment process

MPA assessments will determine whether fishing activities are compatible with the site’s conservation objectives. Where the activities are not compatible, management measures will be introduced to protect the site.

All assessments are being carried out within the principles of Article 6(3) of the Habitats Directive (for EMSs) or sections 125 and 126 of the Marine and Coastal Access Act 2009 (for MCZs).

The assessment process has three phases. Phases two and three are different for EMSs and MCZs, due to different legislative requirements.

	European marine site	Marine conservation zone
Phase 1	Simple screen: is the activity occurring/already managed? Is interaction feasible?	
Phase 2	Likely significant effect type test: is scale or magnitude of effect likely to be significant?	MCZ screen: Is the activity capable of affecting (other than insignificantly) the protected features of the MCZ ⁴ ?
Phase 3	Appropriate assessment type test: Can MMO ascertain that the activity will have no adverse effect on site integrity?	Significant risk assessment: Is there a significant risk of the activity hindering the achievement of the conservation objectives of the MCZ?

If a fishing activity/feature interaction cannot be excluded at any of the three phases, management will be required. MMO will consider voluntary measures before making a byelaw. If a permanent byelaw is required, this will be formally consulted upon. Please see the MMO [byelaw-making process](#) for further information.

5. Evidence sources

Protected feature information

The location, extent and condition of protected features have been provided by Natural England and Joint Nature Conservation Committee.

Fishing activities

To determine the levels of fishing activity, we are using a range of sources:

Vessel monitoring system (VMS) data

VMS data are taken from electronic reports from UK and other Member States commercial fishing vessels carrying EU mandated VMS. All EU commercial fishing vessels of 12 metres and over in length are required to report their position, course and speed at regular intervals (at least once every two hours) through VMS⁵.

⁴ Includes affecting any ecological or geomorphological process on which the conservation of any protected feature of the MCZ is (wholly or in part) dependent.

⁵ Data informing MMO MPA assessments is only available for vessels >15m vessels.

VMS reports recording speeds between zero and six knots are considered to be indicative of fishing activity.

In some cases, VMS data have also been used to give a value in kilowatt hours. This has been done by assigning each VMS report a time period and linking this to a vessels' known engine capacity.

Fisheries landings data: Landings data are recorded at an International Council for the Exploration of the Sea (ICES) rectangle⁶ level.

VMS data have been used to estimate what proportion of fishing effort from within the ICES rectangles takes place within the MPA. Landings data were then linked to vessels' VMS activity to estimate what proportion of the landings recorded for these ICES rectangles were taken from within the MPA.

Fishermap: [Fishermap](#) data were used to identify the potential activity from smaller vessels and to assess effort. The Fishermap data are from interviews with almost 600 skippers of under 15 metre fishing vessels. The data, published in 2012, are presented as a year's activity collected from a series of monthly totals of vessel numbers per grid cell.

Fisheries sightings data: Data collated as part of Defra's "Understanding the distribution and trends in inshore fishing activities and the link to coastal communities" project, were analysed. This project used 2010 to 2012 sightings of fishing vessels from IFCAs, Welsh Government and MMO to develop a fisheries sightings per unit effort data layer.

Expert opinion: Gaps in available data have been bridged by expert opinion from MMO marine officers, IFCA officers and fishing industry representatives.

Sensitivity/vulnerability information

We have used a number of sources to assess sensitivity⁷ of features to different fishing activities in order to assess vulnerability⁸.

Natural England have provided advice on feature sensitivity through MPA conservation advice packages. In some cases we have supplemented this information with peer reviewed journal articles and government reports.

Where appropriate, we have categorised sensitivity and fishing effort as 'high', 'medium' and 'low' based on secondary evidence if there is no peer reviewed evidence available. Sensitivity levels are based on Tillin *et al*, 2010⁹ and Gibb *et al*, 2014¹⁰ and overall vulnerability of features to gear intensities on Hall *et al*, 2008¹¹.

⁶ ICES statistical rectangles are part of a widely used grid system for North Eastern Atlantic waters. For more information see: www.ices.dk/marine-data/maps/Pages/ICES-statistical-rectangles.aspx

⁷ Sensitivity definition: "a measure of tolerance (or intolerance) to changes in environmental conditions".

⁸ Vulnerability definition: "a combination of the sensitivity of a feature to a particular pressure/activity, and its exposure to that pressure/activity".

⁹ 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,

Where appropriate, fishing activity levels for each gear have been categorised based on Hall *et al*, 2008. Additional information on sensitivity levels is documented in the MMO MPA assessment methodology.¹²

6. How to submit evidence

When submitting evidence, please state why you think the evidence is relevant, and how you think it will inform our assessments. If there are any limitations on how you would like us to use or display your evidence, please ensure these are clearly stated.

To submit evidence, please email it to: conservation@marinemanagement.org.uk, or by post as a CD or DVD to:

MPA Assessment Call for Evidence
Marine Conservation Team
Lancaster House
Newcastle upon Tyne
NE4 7YH

Geographic information system (GIS) data should be submitted in a format that is compatible with ESRI ArcGIS 10.2 wherever possible. This includes shapefiles, geodatabase or interchange formats such as MapInfo MIF. The data should include XML metadata completed to the [Marine Environmental Data and Information Network \(MEDIN\)](#) standard (see [submitting metadata](#)).

If you cannot provide data in GIS format, your data can still be considered for inclusion but it may take longer to incorporate into our assessments.

7. Next steps

Evidence submitted will be quality assured in line with the MMO process for [evidence quality assurance](#). Relevant evidence will be used to inform our finalised MPA assessments.

Finalised assessments and findings will be shared with Natural England who will provide conservation advice.

If the finalised assessments indicate that an MMO byelaw is required, a draft version of the byelaw will be subject to public consultation for at least five weeks.

If you would like to be made aware of any MMO byelaw consultations resulting from our MPA assessments, please contact us at: conservation@marinemanagement.org.uk.

Southampton and the Marine Life Information Network (MarLIN) Plymouth: Marine Biological Association of the UK. Defra Contract No. MB12 Task 3A, Report No. 22.

¹⁰ 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.

¹¹ 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