



Marine
Management
Organisation

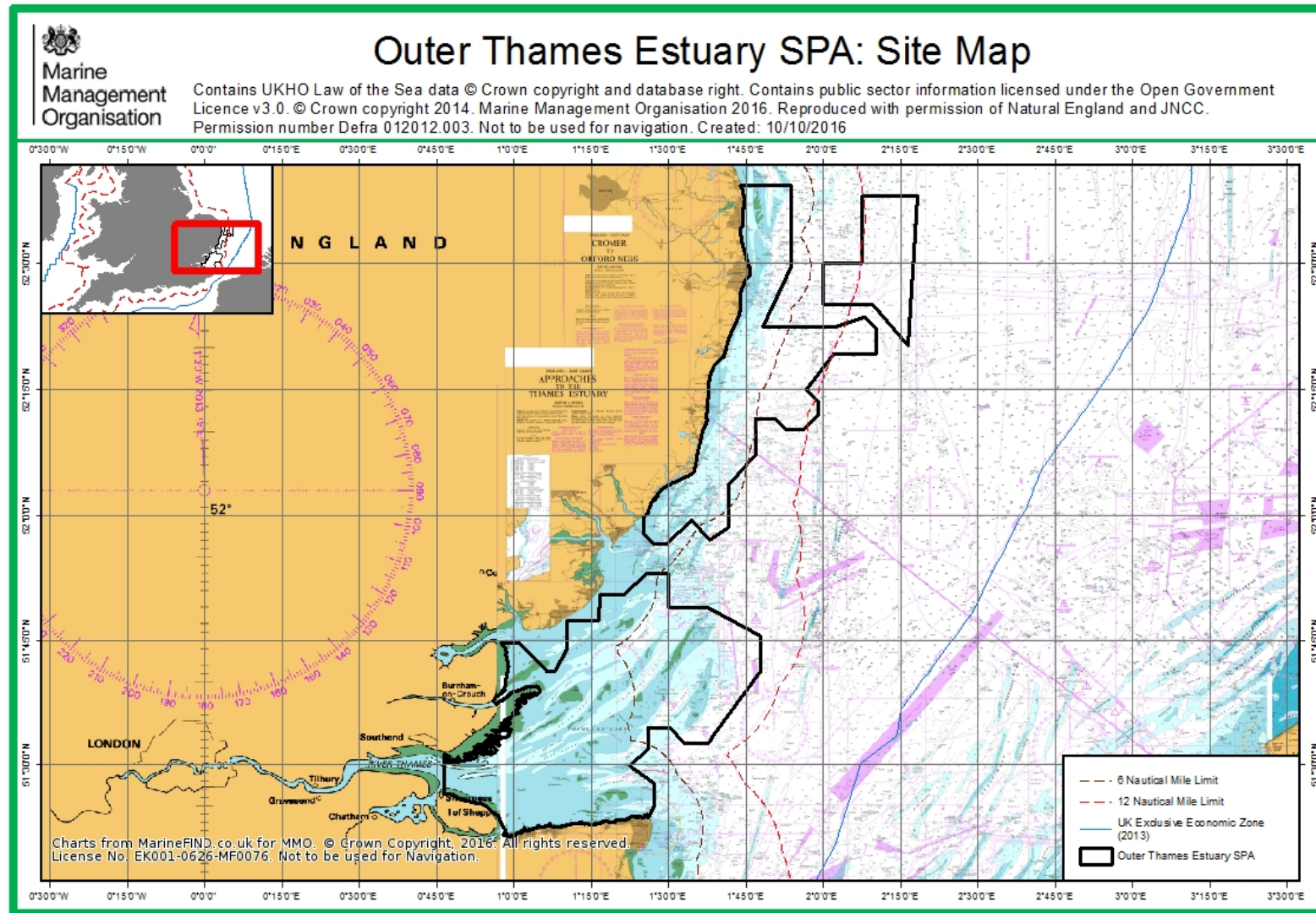
Outer Thames Estuary Special Protection Area (SPA): Executive summary

October 2016



Red throated diver: Outer Thames Estuary Special Protection Area (SPA)
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Figure 1: Site map – Outer Thames Estuary Special Protection Area (SPA)



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 full 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

Outer Thames Estuary SPA lies across both English territorial waters and UK offshore waters, straddling the 0 to 200nm limits.

The site lies within International Council for the Exploration of the Sea (ICES) rectangles¹ 34F1, 34F2, 33F1, 33F2, 32f0, 31F1, 32F1, 31F0 and 31F0.

This site has been classified for red throated diver (*Gavia stellata*). More information about the site, including the formal conservation advice package, is available from [Natural England](#).

The MPA assessment for this site covers the interaction of identified fishing gears with the red throated divers and associated supporting habitats between the 0 and 200nm limits.

Figure 1 shows the location of this site.

3. Summary of assessment findings

The main pressures to red throated diver and associated supporting habitats from commercial fishing activities are:

- physical damage of the supporting sandbank habitat from towed gears which could potentially reduce prey and foraging areas for red throated divers;
- physical disturbance to red throated divers by fishing activity, which could reduce available habitat for foraging or loafing birds, and displace birds from feeding or resting grounds subsequently altering behaviour and time/energy budgets; and

¹ ICES statistical rectangles are part of a widely used grid system for North Eastern Atlantic waters.

- biological disturbance from fishing gears which could result in mortality of birds through entanglement and the extraction of food availability.

Evidence indicates that current levels of fishing activity **are not** having an adverse effect on the integrity of the site. For further details on this conclusion please see the full MPA assessment.

The MMO conclude that the site management plan includes the provision to **monitor** current and potential activities within the site in line with the MMO’s Marine Protected Area Monitoring and Control Plan.

Receipt of significant new information about current and potential activities or features at this site will initiate a review of the assessment.

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 fishing activities. To understand what the potential fishing activities are likely to be, the MMO use historical fishing activity and expert opinion.

Overview of gears being assessed

Table 1: Fishing gears being assessed for the Outer Thames Estuary SPA

Phase	Fishing gears
1 – Initial test	All fishing gears from Part A and bait dragging required the initial test

Phase	Fishing gears
2 – Part A	Beam trawl (whitefish, shrimp, pulse/wing), otter trawl (heavy,light), multi-rig, pair trawl, demersal seines (anchor seine, Scottish/fly seine), Towed, mid-water trawl (single, pair, industrial), dredge (scallop, mussels, clams, oysters), pump-scoop dredge (cocles, clams), suction dredge (cockles), pots/creels, cuttle pots, fish traps, nets (gill nets, trammel nets, entangling nets, drift nets, (demersal/pelagic)), longlines (pelagic and demersal), tractor dredge, handlines (rod/gurdy), jigging/trolling, purse seine, beach seines/ring nets, shrimp push nets, fyke and stakenets, commercial diving, manual gathering
3 – Part B	Beam trawl (whitefish, shrimp, light/heavy otter trawl, multi-rig, pair, pulse) Seining Dredging for scallops and mussels Netting using gill, trammel, entangling, bottom contacting drift nets and longlines All pelagic (non-seabed contacting) fishing Hand working (including bait dragging, crab tiling, digging with forks)

5. Fisheries activity information

Fisheries access

The site extends across four regulatory jurisdictions; Eastern Inshore Fisheries and Conservation Authority (IFCA) and Kent and Essex IFCA 0 to 6nm, MMO 6 to 12nm and Department for Environment, Food and Rural Affairs (Defra) 12 to 200nm.

Belgium and French vessels have fisheries access rights between the 6 to 12nm limits. The small section of the site lying offshore (beyond 12nm) is fished by other Member States including the Netherlands, Denmark, and Germany.

Data sources - fishing activity

To understand the levels of fishing activity in this site, the following data sources have been 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 have been 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 provided information on fishing activity within MPAs. Information included number and size of vessels fishing, target species, type and amount of fishing gear used and seasonal trends in activity. Confidence levels were provided alongside expert opinion and estimates were provided where exact numbers were not known.

6. Ecological information

The MMO has used a number of sources of information to understand the vulnerability³ of birds and supporting habitats to each fishing gear type. This included looking at whether birds and supporting habitats are sensitive² to each fishing gear type.

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

Where appropriate, the MMO 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*, 2010² and Gibb *et al*, 2014³ and overall vulnerability of features to gear intensities on Hall *et al*, 2008⁴.

7. Summary of evidence

Fishing activity

VMS data from 2009 to 2013 shows activity throughout the site within the 0 to 200nm limits. Some areas are targeted more than others and effort levels are categorised as moderate across the site as a whole.

² 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.

³ 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.

⁴ Hall, K., Paramor, O.A.L., Robinson, L.A., Winrow-Giffin, A., Frid, C.L.J., Eno, N.C., Dornie, 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

Sensitivity of features and vulnerability to gears

Sensitivity of this feature ranges from low to high depending on the specific pressure that is being assessed. However those pressures where sensitivity is high the vulnerability of the feature to that gear type is low or moderate. Also considering that the level of fishing effort is moderate, the MMO is content that the risk of exposing this feature to an interaction with a gear type where a significant impact could occur is not likely

Sensitivity of supporting habitats and vulnerability to gears

Sensitivity of the supporting habitats ranges from low to high depending on the specific pressure that is being assessed. However those pressures where sensitivity is high the vulnerability of the supporting habitat to that gear type is low. Also considering that the level of fishing effort is moderate, the MMO is content that the risk of exposing the supporting habitat to an interaction with a gear type where a significant impact could occur is not likely

Other activities occurring within the site

Other activities occurring in the site in-combination with fishing activities were also considered in the assessment. These include other infrastructure projects such as windfarms, aggregate dredging, ports, harbours and recreational activities.

There are gaps in evidence on recreational activity impacts.

8. Management options

Following the completion of the MPA assessment, one of the following management options will be adopted. The MMO intend to adopt Option 2. However, if gaps in evidence come to light during this consultation period; 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 bird features

Option 4: Prohibit fishing activities within the site

Any additional evidence submitted will be reviewed and may inform the decisions as to which management option is adopted.

9. Next steps

Any additional evidence submitted will need to be validated. This will help determine the confidence score in the evidence and determine if it can be used as part of the assessment.

The MMO has started to implement management Option 2 to ensure this is in place by the end of 2016. However, if further validated information is received, the MMO will review the site assessment.

10. Consultation and evidence

To respond to the consultation, 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