

Appendix 2 - OSPAR related items for 2017 Strategic Assessment

Obligations under the Oslo / Paris Convention for the Protection of the Marine Environment of the North-East Atlantic¹ (OSPAR) have been considered, including how proposed Eastern IFCA work-streams fit into these and identification of any gaps which could lead to potential work in the future. This consideration has been based on species and habitats listed within “List of Threatened and/or Declining Species & Habitats” within OSPAR Region 2, Greater North Sea².

Analysis of actions for Eastern IFCA to consider in connection with certain circumstances are identified in section 1 (“*Summary of Eastern IFCA commitments and planned actions under OSPAR*”), with further detailed information at section 2 (“*Threatened and/or Declining Species*”) and 3 (“*Threatened and/or Declining Habitats*”).

In summary, it is evident that the existing approaches and activities of Eastern IFCA in general satisfy obligations under OSPAR, and that additional requirements are limited to informing relevant authorities should we become aware of the presence of certain, generally very rare, species or habitats.

¹ <http://www.ospar.org/about/introduction>

² <http://www.ospar.org/work-areas/bdc/species-habitats/list-of-threatened-declining-species-habitats>

1. Summary of Eastern IFCA commitments and planned actions under OSPAR.

Species	If occur within district, EIFCA inform		Cetaceans Strandings Investigation Programm	Notes
	Natural England	Environment Agency		
Sturgeon, <i>Acipenser sturio</i>	Yes	Yes		
Allis shad, <i>Alosa alosa</i>	Yes	Yes		
European eel, <i>Anguilla Anguilla</i>	Yes	Yes		Take action only if anything of relevance to the conservation of the species come to our attention (e.g. high mortalities)
Portuguese dogfish, <i>Centroscymnus coelolepis</i>	Yes			
Leafscale gulper shark, <i>Centrophorus squamosus</i>	Yes			
Basking shark, <i>Cetorhinus maximus</i>	Yes			
Houting, <i>Coregonus lavaretus oxyrinchus</i>	Yes	Yes		Also check identity of the species very carefully, if possible
Long-snouted seahorse, <i>Hippocampus guttulatus</i>	Yes			
Short-snouted seahorse, <i>Hippocampus hippocampus</i>	Yes			
Porbeagle shark, <i>Lamna nasus</i>	Yes			

Strategic Assessment 2017 – Appendix 2

Sea lamprey, <i>Petromyzon marinus</i>	Yes	Yes		
Atlantic Salmon, <i>Salmo salar</i>	Yes	Yes		If we detect as anything other than as vagrants
Leatherback Turtle, <i>Dermochelys coriacea</i>	Yes			Inform Natural History Museum London, and the Marine Conservation Society
Blue whale, <i>Balenoptera musculus</i>	Yes		Yes	
Northern Right Whale, <i>Eubalena glacialis</i>	Yes		Yes	

Habitat	If occur within EIFCA district, inform Natural England	Managed as MPA commitment
Coral Gardens	Yes	
Intertidal <i>Mytilus edulis</i> Beds on Mixed & Sandy Sediments		Yes
Intertidal Mudflats		Yes
Littoral Chalk Communities		Yes
<i>Lophelia pertusa</i> Reefs	Yes	
<i>Modiolus modiolus</i> beds	Yes	
<i>Ostrea edulis</i> Beds		Yes
<i>Sabellaria spinulosa</i> Reefs		Yes
Sea-Pen & Burrowing Megafauna Communities	Yes	
<i>Zostera</i> Beds		Yes

2. Threatened and/or Declining Species within OSPAR Region 2, Greater North Sea

2.1 Invertebrates –

Ocean Quahog, *Arctica Islandica*

The range of *A. Islandica* includes the Southern North Sea. However, extensive sampling between 1972 and 2002 did not record any living examples within 50 miles of the English North Sea coastline (although there was a paucity of sampling effort in inshore sites). *A. Islandica* is considered sensitive to fish beam trawling pressure.

The species is a Protected Species within national MPAs, but is not a qualifying feature of any of the MPAs within Eastern IFCA district.

Dog whelk, *Nucella lapillus*

Dog whelk are found on rocky shores; they have suffered from the effects of TBT antifouling paints in the past (particularly in the 1970s). Populations in The Wash were badly affected, with a study in 1999 (Harding, M.J.C., Davies, I.M., Bailey, S.K. and Rodger, G.K. (1999) Survey of Imposex in Dogwhelks (*Nucella lapillus*) from North Sea Coasts. *Applied Organometallic Chemistry* 13; 521–538) classifying the population as Category D (the worst affected), “*N. lapillus populations showing severe effects of exposure to TBT, to the extent that production of egg capsules would be prevented*”.

The UK position on conservation of the species (as quoted in the OSPAR “Background document for *Nucella lapillus* (Dog whelk)”) is “*Conservation of N. lapillus is not a national objective. N. lapillus occurs everywhere along the coast on rocky substrates. The condition of the population continues to improve. Re-colonisation of locations is low and depends on the distribution of existing populations.*”

Dog whelk is not a Protected Species within national MPAs, nor a qualifying feature of any of the MPAs within Eastern IFCA district.

Flat Oyster, *Ostrea edulis*

The Eastern IFCA district is considered to lie within the range of *O. edulis*. The OSPAR definition of an oyster bed is – “*Beds of the oyster Ostrea edulis occurring at densities of 5 or more per m² on shallow mostly sheltered sediments*”. The species has experienced declines, attributed to disease, cold winters and effects from TBT antifouling paints. *O. edulis* are a Protected Species within National MPAs, and under certain circumstances form biogenic reefs which are Protected Habitats in SACs. It is a UK BAP priority marine species

They are a sub-feature of the Cromer Shoals MCZ, and the measures required to meet the conservation objectives will be implemented as the management of this MCZ (currently at an early stage) develops. Eastern IFCA surveys have consistently found *O. edulis* at low densities in the Stour estuary.

2.2 Birds –

Balearic shearwater, *Puffinus mauretanicus*

This species breeds only in a small area of the Mediterranean Balearic Islands. Between late May / early June, the birds spread into the Atlantic, with some travelling as far as the English Channel and southern North Sea. There is evidence of a shift towards a more Northerly distribution, possibly linked to higher sea surface temperatures. This could increase the proportion of the small (currently abt. 18 – 25 000) world population which use the North Sea as a summer feeding ground.

Balearic shearwater is classified as Critically Endangered (IUCN, 2010) and listed in Annex I of the Directive 2009/147/EC on the Conservation of Wild Birds (European Wild Birds Directive). They are not listed as a Protected Species within UK MPAs, and are not a feature of any of the MPAs within the Eastern IFCA district.

Black-legged kittiwake (= “Our” Kittiwake), *Rissa tridactyla*

Kittiwakes breed within the Eastern IFCA district; outside of the breeding season they are highly pelagic, wintering as far south as the Sargasso Sea and off West Africa. At the time of the OSPAR listing (2009), the species was considered as “significantly declined” in the UK.

Several (if not most) of the breeding sites within EIFCA district are man-made structures – e.g. the harbour wall at Lowestoft, and the old “pylon” structures at Sizewell.

“Black-legged kittiwake – reproducing” are considered a Protected Species for SPAs. The species is not listed as a feature for any MPA within EIFCA district.

Roseate tern, *Sterna dougallii*

The roseate tern population in the UK experienced the most dramatic decline of any seabird species between 1969-70 and 1985-88. It also has one of the most restricted ranges of any seabird around the British Isles, with most of the population breeding in just a few colonies. (<http://jncc.defra.gov.uk/page-2891>). JNCC data for the abundance and distribution of the species indicates one record at the lowest level of abundance (1 – 10 birds) on the Norfolk coast (http://jncc.defra.gov.uk/PDF/S2000_18_ros_tabs_and_figs_web.pdf).

“Roseate tern – reproducing” are considered a Protected Species for SPAs. The species is not listed as a feature for any MPA within EIFCA district.

2.3 Fish –

(*) Sturgeon, *Acipenser sturio*

Although the natural range of the sturgeon would include the coastal waters and rivers of the East of England, the species is now locally extinct. They are not considered a Protected Species for MPAs and are not listed as a feature for any MPA within EIFCA district. It is a UK BAP priority fish species. The species is a protected species listed in appendix III of the Bern Convention, and its trade is restricted under CITES appendix II. As it is an anadromous fish, living in the sea and ascending rivers to spawn, it falls within the remit of the Environment Agency for management.

It should be noted that, whilst only *Acipenser sturio* is native to the UK, there are several other species of sturgeon, some of which have been imported into the UK for ornamental and fisheries purposes. Examples of these species have turned up in a variety of locations, and caused confusion as to the correct identity of the fish.

It is unlikely that the capture or finding of such a distinctive and potentially very large fish would go un-remarked – should EIFCA become aware of such an occurrence, we should inform the Environment Agency, and Natural England.

(*) Allis shad, *Alosa alosa*

Allis Shad have been recorded at sea in the EIFCA district, and Shad have in the past supported appreciable fisheries in the southern North Sea. Sampling at Sizewell power station in 1981 & 1982 recorded several Allis shad. (Aprahamian, M. W., S. M. Lester, and C. D. Aprahamian. *Shad conservation in England and Wales*. Environment Agency, 1998.) There is significant doubt as to whether any of the East Coast rivers have supported breeding populations in the recent past, with the only known English spawning river being the River Severn. Recent evidence indicates very low population levels, if any, in the North Sea.

Allis Shad are listed within Habitat & Species Directive Annex II & V (under the name *Alosa* spp.), Bern Convention Appendix III and IUCN Red List DD (Data Deficient). They are a Protected Species within SACs. They are not listed as a feature of any of the MPAs within the EIFCA district. It is a UK BAP priority fish species.

As Shad are anadromous fish, living in the sea and ascending rivers to spawn, the species falls within the remit of the Environment Agency for management.

Should EIFCA become aware of the occurrence of Allis Shad within our district, we should inform the Environment Agency, and Natural England.

(*) European eel, *Anguilla Anguilla*

As Eels are catadromous fish, living in fresh waters and descending rivers to spawn in the sea, the species falls within the remit of the Environment Agency for management.

The species is not a Protected Species within MPAs, and is not listed as a feature of any of the MPAs within the EIFCA district. It is a UK BAP priority fish species.

Eels are a focus for conservation interest by several groups; within our district, the Norfolk Rivers Trust are currently running a specific Eel project on the River Glaven. EIFCA have participated in that project.

EIFCA should maintain a “watching brief” on Eels, and inform Natural England and the Environment Agency should anything of relevance to the species come to our attention.

(*) Portuguese dogfish, *Centroscymnus coelolepis*

Although the Portuguese Dogfish is listed as “*under threat and/or in decline*” in OSPAR Area 2 (North Sea) on the OSPAR website, the associated documentation does not support a distribution within the North Sea for this deep water species. It is a UK BAP priority marine species. They are not a Protected Species within MPAs, and are not listed as a feature of any of the MPAs within the EIFCA district.

Should EIFCA become aware of the occurrence of Portuguese dogfish within our district, we should inform Natural England.

(*) Leafscale gulper shark, *Centrophorus squamosus*

Although the Leafscale gulper shark is listed as “*under threat and/or in decline*” in OSPAR Area 2 (North Sea) on the OSPAR website, the associated documentation does not support a distribution within the North Sea for this deep water species. It is a UK BAP priority marine species. They are not a Protected Species within MPAs, and are not listed as a feature of any of the MPAs within the EIFCA district.

Should EIFCA become aware of the occurrence of Leafscale gulper shark within our district, we should inform Natural England.

(*) Basking shark, *Cetorhinus maximus*

Although global basking shark distribution is recognised to include the North Sea, sightings of this usually quite obvious species are far more prevalent along the western seaboard of the UK and in the Irish Sea.

The species is protected under EU law, transcribed into UK law as Schedule 5 of the Wildlife and Countryside Act 1998 under which it is forbidden to capture, kill or catch basking sharks; or to have in one's possession or to sell basking sharks or any products derived from basking sharks. In addition, the Countryside and Rights of Way Act 2000 specifies that it is forbidden to kill or capture basking sharks.

The greatest current threat to the species is thought to be accidental entanglement with fishing gear or other ropes etc. in the sea, with disturbance and possible collision due to the activities of those seeking close encounters with the species as an additional threat.

Basking Sharks are a UK BAP priority marine species. They are not a Protected Species within MPAs, and are not listed as a feature of any of the MPAs within the EIFCA district.

It is unlikely that the capture or finding of such a distinctive and potentially very large fish would go un-remarked – should EIFCA become aware of such an occurrence, we should inform Natural England.

Houting, *Coregonus lavaretus oxyrinchus*

The species (as *Coregonus lavaretus*) is also known by the common names Whitefish, Powan, Gwyniad or Schelly.

Although the Houting is listed as “*under threat and/or in decline*” in OSPAR Area 2 (North Sea) on the OSPAR website, JNCC documentation (http://jncc.defra.gov.uk/_speciespages/2193.pdf) does not support a distribution within the marine waters of the southern North Sea for this species –those very few UK sites where the species is found are fresh water lakes.

The species is not a Protected Species within MPAs, and is not listed as a feature of any of the MPAs within the EIFCA district. It is a UK BAP priority fish species.

Should the species ever occur in our district, it will be an anadromous fish, living in the sea and ascending rivers to spawn. Therefore, the species falls within the remit of the Environment Agency for management.

EIFCA should inform the Environment Agency in the very unlikely event of Houting occurring in our district (but note that the identification of any such suspected fish should be checked very carefully)

(*) Spotted Ray, *Raja montagui*

Seemingly, the designation of Spotted Ray is due to recent declines in Belgian waters. The species is not a Protected Species within MPAs, and is not listed as a feature of any of the MPAs within the EIFCA district.

OSPAR data indicates an overall downward trend in abundance and contraction of range. It is most likely that this is due to commercial fishing, which is likely to be the single most important pressure on the species. The current range indicates that EIFCA district is potentially important for this species.

In common with several other species of elasmobranchs, EIFCA recognise the need for greater understanding of this species within the waters of our district, and this is reflected in most recent versions of our Strategic Assessment.

(*) Cod, *Gadus morhua*

The species is not a Protected Species within MPAs, and is not listed as a feature of any of the MPAs within the EIFCA district. It is a UK BAP priority marine species.

The role of EIFCA in connection with the management and protection of Cod is mostly linked to our role in enforcing national legislation. It is doubtful whether any legislative or research actions we could take would contribute to the appreciable amount of such activities undertaken by national and international bodies, but we should continue to be aware of the conservation status of the species – if and when we generate potentially useful information, this should be disseminated to the appropriate body

(Natural England or CEFAS, depending on whether it is a “conservation” or “fisheries” related piece of information).

Long-snouted seahorse, *Hippocampus guttulatus*

Although Long-snouted seahorse distribution is recognised to include the North Sea, sightings are at best rare within the EIFCA district. Recent (30 Nov 2016) versions of the MARLIN website (<http://www.marlin.ac.uk/species/detail/1788>) do not present such records, indicating a distribution which reaches no further North & East than Eastbourne.

The species is protected under “The Wildlife and Countryside Act 1981 (Variation of Schedule 5) (England) Order 2008” and is a Protected Species within National MPAs, but are not listed as a feature of any of the MPAs within the EIFCA district. It is a UK BAP priority marine species

Seahorses tend to be associated very closely with eelgrass beds; it is likely that the protective measures in place to support such beds will have the effect of providing protection for a range of species using this ecosystem, including seahorses.

Should EIFCA become aware of the occurrence of Long-snouted seahorses within our district, we should inform Natural England.

Short-snouted seahorse, *Hippocampus hippocampus*

The recognised distribution of Short-snouted seahorse as presented on the OSPAR website includes data from MARLIN (Marine Life Information Network) indicating records of occurrence within the EIFCA district, off the shores of Norfolk & Suffolk. However, later (30 Nov 2016) versions of the MARLIN website (<http://www.marlin.ac.uk/species/detail/1788>) do not present such records, indicating a distribution which reaches no further North & East than the Thames estuary.

The species is protected under “The Wildlife and Countryside Act 1981 (Variation of Schedule 5) (England) Order 2008” and is a Protected Species within National MPAs, but are not listed as a feature of any of the MPAs within the EIFCA district. It is a UK BAP priority marine species.

Seahorses tend to be associated very closely with eelgrass beds; it is likely that the protective measures in place to support such beds will have the effect of providing protection for a range of species using this ecosystem, including seahorses.

Should EIFCA become aware of the occurrence of Short-snouted seahorses within our district, we should inform Natural England.

(*) Porbeagle shark, *Lamna nasus*

The natural distribution of Porbeagle sharks includes the Southern North Sea, and the fact that the species is often found in shallow and inshore waters suggests that it would be a natural component of the ecosystem of our district. However, due to the extreme decline of the species in the North Eastern Atlantic and nearby waters caused by

overfishing, it's presence is likely to be at best a rare occurrence nowadays. In common with most large sharks skates and rays, the late maturation and low fecundity of the species make it susceptible to overfishing, and unlikely to recover quickly from severe reductions in the population.

The Porbeagle is listed on Annex 1 (Highly Migratory Species) of the UN Convention on the Law of the Sea (UNCLOS), on Annex 1 of the Conservation of Migratory Species Migratory Shark Memorandum of Understanding and in Appendix II of CITES. The European Union prohibits EU vessels from fishing for, retaining, boarding, transshipping or landing porbeagle sharks in all waters since January 2012.

The species is not a Protected Species within MPAs, and is not listed as a feature of any of the MPAs within the EIFCA district. It is a UK BAP priority marine species.

Should EIFCA become aware of the occurrence of Porbeagle Shark within our district, we should inform Natural England.

In common with several other species of elasmobranchs, EIFCA recognise the need for greater understanding of this species within the waters of our district, and this is reflected in most recent versions of our Strategic Assessment.

Sea lamprey, *Petromyzon marinus*

This species has experienced appreciable decline in numbers and range, such that OSPAR data now indicates limited distribution within the UK, and very limited occurrence within EIFCA district. However, it is possible that the species could be encountered at sea or in fresh waters in our district. The most likely causes of decline are thought to be fishing pressure, and restrictions of movement between sea and the reaches of rivers where the species spawn.

Sea Lamprey is a Protected Species within MPAs; it is listed as a feature of the Humber Estuary SAC. It is a UK BAP priority fish species.

As Lampreys are anadromous fish, living in the sea and ascending rivers to spawn, the species falls within the remit of the Environment Agency for management.

Should EIFCA become aware of the occurrence of Sea Lamprey within our district, we should inform the Environment Agency, and Natural England.

(*) Thornback skate / ray, *Raja clavata*

Seemingly, the designation of Thornback Ray is due to recent declines in waters of the Eastern North Sea. The species is not a Protected Species within MPAs, and is not listed as a feature of any of the MPAs within the EIFCA district.

OSPAR data indicates an overall downward trend in abundance and contraction of range. It is most likely that this is due to commercial fishing, which is likely to be the single most important pressure on the species. The current range indicates that EIFCA district is potentially important for this species.

In common with several other species of elasmobranchs, EIFCA recognise the need for greater understanding of this species within the waters of our district, and this is reflected in most recent versions of our Strategic Assessment.

(*) White skate, *Rostroraja alba*

R. alba was formerly sufficiently abundant in some coastal areas to support localised longline target fisheries in parts of its range. It has declined severely during the past 50 to 100 years around the British Isles, in the Irish Sea, and the Bay of Biscay. It is now absent from research vessel surveys, very rarely recorded in commercial catches, and very infrequent, if not locally extinct in most of its former shelf range. It is likely that it is extirpated in the southern North Sea.

The species is not a Protected Species within MPAs, and is not listed as a feature of any of the MPAs within the EIFCA district. It is a UK BAP priority marine species.

In common with several other species of elasmobranchs, EIFCA recognise the need for greater understanding of this species within the waters of our district (should it ever occur). This importance is reflected in most recent versions of our Strategic Assessment.

(*) Atlantic Salmon, *Salmo salar*

The range and abundance of Atlantic Salmon have declined from that in pre-industrial times, with continuing declines in recent years. The major causes are thought to be fishing pressure (especially at sea) and to a very large extent, obstructions to upstream passage by physical barriers or pollution in the lower reaches of rivers.

The species is a Protected Species within MPAs; it is not listed as a feature of any of the MPAs within the EIFCA district. It is a UK BAP priority fish species.

As Salmon are anadromous fish, living in the sea and ascending rivers to spawn, the species falls within the remit of the Environment Agency for management.

Should EIFCA become aware of the occurrence of Atlantic Salmon within our district as anything other than as vagrants, we should inform the Environment Agency, and Natural England.

(*) Spurdog, *Squalus acanthias*

Spurdog numbers have very much declined in recent years, with estimates indicating of the order of a 95% reduction overall. The species have been targeted in large scale commercial fishing, and are still caught as a bycatch. On numerous occasions, commercial fishermen report large aggregations of spurdog, and propose this as an indication that the “official” stock assessments are wide of the mark. It is not known whether these aggregations do indeed represent a higher population than is sometimes thought or if they are as a result of the tendency of the species to form dense shoals. The species is now the subject of national restrictions, and EIFCA play a role in enforcing these.

Spurdog is not a Protected Species within MPAs, and is not listed as a feature of any of the MPAs within the EIFCA district. It is a UK BAP priority marine species.

In common with several other species of elasmobranchs, EIFCA recognise the need for greater understanding of this species within the waters of our district, and this is reflected in most recent versions of our Strategic Assessment.

(*) Angel shark, *Squatina squatina*

Angel Shark abundance and distribution have declined significantly over the past 50–100 years as a result of intensive demersal fishing pressure and its high vulnerability to bycatch. The species is now extirpated in the North Sea.

The species is not a Protected Species within MPAs, and is not listed as a feature of any of the MPAs within the EIFCA district. It is a UK BAP priority marine species.

In common with several other species of elasmobranchs, EIFCA recognise the need for greater understanding of this species within the waters of our district, and this is reflected in most recent versions of our Strategic Assessment.

* Fish species affected by fishing in this list are marked with an asterisk (*). These species are subject to management by an international or national fisheries authority or body. The OSPAR Commission has no competence to adopt programmes or measures on questions relating to the management of fisheries. Where the OSPAR Commission considers that action is desirable in relation to such a question, it is to draw that question to the attention of the authority or international body competent for that question. The inclusion of species affected by fishing in this list must be read in this context.

2.4 Reptiles –

Leatherback Turtle, *Dermochelys coriacea*

Much of the information in this section is abstracted from a JNCC document (<http://jncc.defra.gov.uk/pdf/Article17/FCS2007-S1223-audit-Final.pdf>).

Leatherback turtles (the world's largest turtle) are a rare but nevertheless regular visitor around the British Isles during the summer months. Recent studies have suggested that the waters of the UK represent the northerly limit of routine seasonal leatherback foraging migrations, probably seeking accumulations of jellyfish to feed on.

The majority of sightings have been off the South West coasts of England and Wales, with relatively few, but definitive, recorded sightings within the EIFCA district.

The species is not a Protected Species within MPAs, and is not listed as a feature of any of the MPAs within the EIFCA district. It is a UK BAP priority marine species.

Despite the animal's large size, it is quite possible for it to go unnoticed. However, stranded animals are likely to attract attention. Should examples of the species come to our attention, we should inform Natural England, the Natural History Museum London, and the Marine Conservation Society via their dedicated website (<https://www.mcsuk.org/sightings/turtles.php>)

2.5 Marine Mammals –

Blue whale, *Balenoptera musculus*

Blue Whales have been sighted in UK waters, but to date only well offshore in the Western Approaches. The species is not a Protected Species within MPAs, and is not listed as a feature of any of the MPAs within the EIFCA district. Blue Whale are a UK BAP priority marine species.

It is unlikely that the presence of such a very large animal would go un-remarked – should EIFCA become aware of such an occurrence, we should inform Natural England and UK Cetaceans Strandings Investigation Programme.

Northern Right Whale, *Eubalena glacialis*

Northern Right Whale is a UK BAP priority marine species. The species is not a Protected Species within MPAs, and is not listed as a feature of any of the MPAs within the EIFCA district.

It is unlikely that the presence of such a very large animal would go un-remarked – should EIFCA become aware of such an occurrence, we should inform Natural England and UK Cetaceans Strandings Investigation Programme.

Harbour Porpoise, *Phocoena phocoena*

The species is a Protected Species within MPAs. It is listed as the feature responsible for the designation of the Southern North Sea pSAC (<http://jncc.defra.gov.uk/pdf/SouthernNorthSeaConservationObjectivesAndAdviceOnActivities.pdf>). Harbour Porpoise are a UK BAP priority marine species.

The Southern North Sea pSAC includes areas of the Eastern IFCA district, and EIFCA will therefore assume responsibility for the management of fishing activity such that the feature is maintained in favourable condition.

3. Threatened and/or Declining Habitats within OSPAR Region 2, Greater North Sea

In general, where they occur within EIFCA district, the listed habitats are included as SAC features.

Coral Gardens

Although Coral Gardens is listed as “*under threat and/or in decline*” in OSPAR Area 2 (North Sea) on the OSPAR website, the associated documentation does not support a distribution within the southern North Sea for this deep water habitat.

Should EIFCA become aware of the occurrence of deep water coral gardens within our district, we should inform Natural England.

Intertidal *Mytilus edulis* Beds on Mixed & Sandy Sediments

Intertidal Blue mussel (*Mytilus edulis*) beds have supported appreciable commercial fisheries within the EIFCA district. Of late, there has been little such activity, due to low stock levels probably caused by high levels of mortality at a younger age than would be the norm for the species.

There are a suite of management measures in place, varying by location, in connection both with the management of the stocks of the species, and also to ensure that the food value and habitat engineering role of Mussels are maintained at a favourable level for the MPA concerned.

Intertidal Mudflats

“Intertidal Mudflats” are identified within the UK Priority Habitat Action Plan as “Mudflats”. They are listed as a feature of the Alde Ore & Butley SAC, the Humber Estuary SAC and the Wash & North Norfolk Coast SAC within the EIFCA district.

EIFCA manage interactions between fisheries and these protected habitats by means of measures identified with Habitats Regulation Assessment documents, which are approved by Natural England.

Littoral Chalk Communities

“Littoral Chalk Communities “ are identified within the UK Priority Habitat Action Plan as “Littoral and sub-littoral chalk”. The habitat is not listed as a feature of any of the MPAs within the EIFCA district – however the feature “Subtidal chalk” is listed as a Protected Feature within the Cromer Shoal Chalk Beds MCZ.

EIFCA manage interactions between fisheries and these protected habitats by means of measures identified with Habitats Regulation Assessment documents, which are approved by Natural England.

***Lophelia pertusa* Reefs**

Although the deep water coral *Lophelia pertusa* is listed as “*under threat and/or in decline*” in OSPAR Area 2 (North Sea) on the OSPAR website, the associated documentation does not support a distribution within the southern North Sea for this deep water species.

Should EIFCA become aware of the occurrence of these corals within our district, we should inform Natural England.

***Modiolus modiolus* beds**

Modiolus (Horse Mussel) beds are a UK Priority Habitat Action Plan habitat as defined by JNCC (http://jncc.defra.gov.uk/PDF/UKBAP_Tranche2-ActionPlans-Vol5-1999.pdf). They are not listed as a feature of any of the MPAs within the EIFCA district.

The Marine Life Information Network website (<http://www.marlin.ac.uk/species/detail/1532>) identifies records of occurrence of individuals off the coast of the EIFCA district, but notes that actual reefs of the species are “*absent south of the Irish Sea and Humber estuary*”.

Should EIFCA become aware of the occurrence of *Modiolus* beds within our district, we should inform Natural England.

***Ostrea edulis* Beds**

See comments above under *Ostrea edulis* as a species.

***Sabellaria spinulosa* Reefs**

Sabellaria spinulosa reefs are a UK Priority Habitat Action Plan habitat as defined by JNCC (http://jncc.defra.gov.uk/PDF/UKBAP_Tranche2-ActionPlans-Vol5-1999.pdf). They are listed as a feature of the Wash & North Norfolk Coast SAC.

Eastern IFCA manage this feature as a “Red Risk” within European Marine Site management, and have implemented the Protected Areas Byelaw to achieve this end. This byelaw has resulted in areas closed to all bottom towed fishing gear in the Wash & North Norfolk Coast SAC and the Haisborough, Hammond and Winterton SAC (currently in the process of being drafted).

Sea-Pen & Burrowing Megafauna Communities

“Sea-Pen & Burrowing Megafauna Communities” are a component of the UK Priority Habitat Action Plan habitat “Mud habitats in deep water”. This is not listed as a feature of any of the MPAs within the EIFCA district. OSPAR documentation does not support a distribution for these communities within the EIFCA district.

Should EIFCA become aware of the occurrence of these communities beds within our district, we should inform Natural England.

Zostera Beds

Zostera (Eelgrass) beds are a UK Priority Habitat Action Plan habitat as defined by JNCC (http://jncc.defra.gov.uk/PDF/UKBAP_Tranche2-ActionPlans-Vol5-1999.pdf). They are listed as a feature of the Wash & North Norfolk Coast SAC.

Eastern IFCA manage this feature as a “Red Risk” within European Marine Site management, and have implemented the Protected Areas Byelaw to achieve this end. This byelaw has resulted in areas closed to all bottom towed fishing gear in the Wash & North Norfolk Coast SAC and the Humber Estuary SAC.