Fisheries in EMS Habitats Regulations Assessment for Amber and Green risk categories

NWIFCA-MN-SPA-003
Date completed: 17/10/2016
Completed by: Belinda Vause

Site:	**Mersey Narrows and North Wirral Foreshore**
European Designated Sites:	UK9020287 Mersey Narrows and North Wirral Foreshore Special Protection Area (SPA) UK11042 Mersey Narrows and North Wirral Foreshore Ramsar
European Marine Site:	**Mersey Narrows and North Wirral Foreshore**

Qualifying Feature(s):
SPA and Ramsar
A157. *Limosa lapponica*; Bar-tailed godwit (non-breeding)
A177. *Hydrocoloeus minutus*; Little gull (non-breeding)
A143. *Calidris canutus islandica*; Knot (non-breeding)
A193. *Sterna hirundo*; Common tern (non-breeding)
A193. *Sterna hirundo*; Common tern (breeding)
Waterbird assemblage

Site Sub-feature(s):
SPA and Ramsar
Supporting habitats: Intertidal rock, intertidal biogenic reef – mussel beds, intertidal sand and muddy sand, intertidal mud, intertidal mixed sediment, coastal lagoons, saltmarsh (Atlantic salt meadows and Salicornia and other annuals), freshwater and coastal grazing marsh, water column.

Generic sub-feature(s): Estuarine birds, Benthic feeding seabirds, Intertidal mud and sand, Coastal lagoons.

High Level Conservation Objectives:

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified and the Ramsar Site and the wetland habitats and/or species for which the site has been listed (the 'Qualifying Features' listed above), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive and ensure that the site contributes to achieving the wise use of wetlands across the UK, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Fishing activity assessed:

Gear type(s):

Static fixed nets

- Staked gill nets

1. Introduction

1.1 Need for an HRA assessment

In 2012, the Department for Environment, Food and Rural Affairs (Defra) announced a revised approach to the management of commercial fisheries in European Marine Sites (EMS). The objective of this revised approach is to ensure that all existing and potential commercial fishing activities are managed in accordance with Article 6 of the Habitats Directive.

This approach is being implemented using an evidence based, risk-prioritised, and phased basis. Risk prioritisation is informed by using a matrix of the generic sensitivity of the sub-features of EMS to a suite of fishing activities as a decision making tool. These sub-feature-activity combinations have been categorised according to specific definitions, as red, amber, green or blue.

Activity/feature interactions identified within the matrix as red risk have the highest priority for implementation of management measures by the end of 2013 in order to avoid the deterioration of Annex I features in line with obligations under Article 6(2) of the Habitats Directive.

Activity/feature interactions identified within the matrix as amber risk require a site-level assessment to determine whether management of an activity is required to conserve site features. Activity/feature interactions identified within the matrix as green also require a site level assessment if there are “in combination effects” with other plans or projects.

Some European Sites within the NWIFCA District consist of features that are not fully marine (eg. sand dunes) and therefore fall outwith of the EMS Review process. They have not been included in the original risk matrix. Due to the nature of some of the fisheries in the District, particularly intertidal fisheries, the NWIFCA has adopted the approach of carrying out full HRA on all the features (including non-marine) within European Sites to ensure that any potential risk from fishing activity has been identified and assessed.

Site level assessments are being carried out in a manner that is consistent with the provisions of Article 6(3) of the Habitats Directive, that is to determine that fishing activities are not having an adverse effect on the integrity of the site, to inform a judgement on whether or not appropriate steps are required to avoid the deterioration of natural habitats and the habitats of species as well as disturbances of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this directive.

If measures are required, the revised approach requires these to be implemented by the end of 2016.

The purpose of this site specific assessment document is to assess whether or not in the view of NWIFCA the fishing activity of ‘Gill nets, Trammels and Entangling nets’ have a likely significant effect on the qualifying features of the Mersey Narrows and North Wirral Foreshore SPA and on the basis of this assessment whether or not it can be concluded that ‘Gill nets, Trammels and Entangling nets’ will not have an adverse effect on the integrity of this European Site.

1.2 Documents reviewed to inform this assessment

- Natural England's risk assessment Matrix of fishing activities and European habitat features and protected species[1]
- Reference list[2] (Annex 1)
- Natural England's consultation advice (Annex 2)
- Site map (Annex 3)
- Site map- sub-feature/feature location and extent (Annex 4)
- Fishing activity map (Annex 5)

2. Information about the EMS

(See cover pages).

The North Wirral coast which forms part of the Mersey Narrows and North Wirral Foreshore SPA is also part of the Dee estuary SAC. The impact of the activities described below on the Dee estuary SAC features is assessed in a separate document for Dee estuary SAC and SPA (NWIFCA-DE-EMS-005).

3. Interest feature(s) of the EMS categorised as 'Red' risk and overview of management measure(s) (if applicable)

No interest features of the EMS categorised as 'Red' risk.

4. Information about the fishing activity within the site

In the Mersey narrows and North Wirral foreshore SPA the only type of netting activity that occurs is intertidal staked gill netting from the shore, there is no netting from vessels. This activity only occurs along the North Wirral coast (see Annex 5).

There are 6 fishers who engage in this activity, however, the amount of commercial verses recreational activity by these fishers is unknown. Two of the fishers use ATVs (quad bikes) and access the foreshore via one of two concrete slipways along North Parade, Birkenhead. Tractors are not used. This fishery only occurs from April to October due to the seasonality of the target species and only on the sand and muddy sand habitat of the intertidal zone (Annex 5). Nets are attached to metal stakes (which protrude approx. 6 inches above the sand) and buoyed. During the fishing season (April to October) the nets will be fished most days unless there is rough weather or poor catches. In rough weather when there is a chance of the nets become damaged, or when catches are poor the nets will be rolled up, tied and left in situ to prevent fishing, or removed. Outside of the fishing season the nets and stakes are removed. Fishers set an average of 2 and a maximum of 4 multi-purpose nets each, and visit their nets after every tide when fishing is desirable to remove the catch.

[1] See Fisheries in EMS matrix: http://www.marinemanagement.org.uk/protecting/conservation/documents/ems_fisheries/populated_matrix3.xls

[2] Reference list will include literature cited in the assessment (peer, grey and site specific evidence e.g. research, data on natural disturbance/energy levels etc)

The nets are monofilament or multi-strand monofilament (composed of 3 to 12 strands of monofilament twine loosely twisted together), with a diamond mesh (mesh size >100mm), 6 to 8 feet in height and 80 - 150m in length. The footrope of the net is made from lead line and the head line has small floats attached making it neutrally buoyant, thus during fishing the net occupies the water column from the seabed up to 2.5m above the seabed. The height of water above the net varies from 0 to 15 feet with tidal movement and tidal height. The target species are bass, plaice, Dover sole, flounder, dab, turbot, and brill. In 29 years one cormorant is known to have been caught in this activity, it was released and appeared unharmed (Brownrigg and Capper *pers. comms*., 2016).

All local fishing activity information has been collated from two local Inshore Fisheries and Conservation Officers (IFCO's) whom have 6 years' and 29 years' experience as Fisheries and Conservation Officers in the Mersey area (Brownrigg and Capper *pers. comms*., 2016).

Netting Regulations
Netting within the European Site is regulated by:
Council Regulations (EC) No. 850/98 – Technical Measures
Council Regulations (EU) 2016/72 – Bass Fishing Restrictions
NWSFC Byelaw 7 – Mesh Sizes – nets other than trawl nets
NWSFC Byelaw 8 – Small mesh nets – other than trawls nets – restrictions
NWSFC Byelaw 10 – Set and drift nets
NWSFC Byelaw 11 – Marking of fishing gear and keeping pots
NWSFC Byelaw 19 – Specified fish sizes
Above byelaws available at www.nw-ifca.gov.uk

5. Test for Likely Significant Effect (LSE)

The Habitats Regulations Assessment (HRA) is a step-wise process and is first subject to a coarse test of whether a plan or project will cause a likely significant effect on an EMS[3].

Is the activity/activities directly connected with or necessary to the management of the site for nature conservation? No

5.1 Table 2: Assessment of LSE

What pressures (such as abrasion, disturbance) are potentially exerted by the gear type(s) to features? - *taken from NE Advice on Operations-anchored nets/lines*

Features: All of the qualifying features (bird species and assemblages) will be assessed in this document. Of the supporting habitats, these fisheries only occur within two habitats: 'intertidal sand and muddy sand' and the 'water column' (Annex 4 and Annex 5). There is no interaction with the remaining supporting habitats; intertidal rock, intertidal biogenic reef – mussel beds, intertidal mud, coastal lagoons, freshwater and coastal grazing marsh and saltmarsh (Atlantic salt meadows and Salicornia and other annuals) (Annex 4), thus these have been screened out. There is no interaction with the saltmarsh habitat because access is via established access routes, therefore impacts on this habitat feature are considered to be insignificant. Any interactions with the water column are considered insignificant because of the small scale and low intensity of this fishing activity.

[3] Managing Natura 2000 sites: http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm

As the fishing activity occurs in intertidal area all bird features will be assessed in this document.

Pressures: Many of the pressures from the Advice on Operations table provided in the Mersey narrows and North Wirral foreshore SPA Conservation Advice package have been screened out due to the low level of fishing activity in this fishery; a total of 6 fishers (which includes recreational activity), seasonal (April – October only) and the small number of nets (average of 2, maximum 4 per fisher). The following pressures will be assessed:

- Collision above water with static or moving objects not naturally found in the marine environment
- Collision below water with static or moving objects not naturally found in the marine environment
- Visual disturbance
- Removal of non-target species
- Abrasion/disturbance of the substrate on the surface of the seabed *(supporting habitat)*
- Penetration and/or disturbance on the substrate below the surface of the seabed including abrasion *(supporting habitat)*

Qualifying Feature	**Sub-feature**	**Gear type and potential pressures**	**Sensitivity**	**Potential for Likely Significant Effect?**	**Justification and evidence**
A143 *Calidris canutus*; Knot (Non-breeding) A157 *Limosa lapponica*; Bar-tailed godwit (Non-breeding) Waterbird assemblage *Including grey plover, sanderling, dunlin, redshank and oystercatcher- not assessed in their own right.*	*Supporting habitats assessed separately*	***Static fixed nets:*** *- Staked gill nets* Collision above water with static or moving objects not naturally found in the marine environment	Sensitive	No	**<u>Wading birds</u>** At low water the nets are; exposed/highly visible and accompanied by the operators in the act of fishing which will deter birds from the vicinity of the nets. In addition the scale and intensity of netting activity is very low. Thus collision with gear above/out of water is highly unlikely and is therefore unlikely to have a significant effect on the population or distribution of the qualifying features.
		Collision below water with static or moving objects not naturally found in the marine environment	Sensitive	No	Wading birds forage on the shore and wade in shallow water, they do not go below the water surface. This behaviour means collision with gear

					below water is highly unlikely and thus unlikely to have a significant effect on the population or distribution of the qualifying features.
		Visual disturbance	Sensitive	No	The scale and intensity of the netting activity and associated access is very low resulting in very limited visual disturbance and little increase on existing background levels. Thus fishing activity is unlikely to have an effect on the population or distribution of the qualifying features.
		Removal of non-target species such as… -Accidental bycatch of fish (bird prey)	No interaction	No	No interaction. These wading birds feed upon shellfish, worms, shrimps, small snails and insects.
		-Accidental bycatch of birds	Sensitive	No	At low water the nets are; exposed/highly visible and accompanied by the operators in the act of fishing which will deter birds from the vicinity of the nets. Wading birds do not go below the water surface thus at high water when the nets are fully submerged accidental removal of birds is highly unlikely. The nets will be very close to the water surface (and floating birds) during tidal flood and ebb periods. However, the small scale and low intensity of netting activity means collision with gear below water is highly unlikely. In addition, no wading birds are known to have ever been caught in this activity (Brownrigg and

					Capper *pers. comms*., 2016; IFCOs with 6 years' and 29 years' local experience). This activity is therefore unlikely to have a significant effect on the population or distribution of the qualifying features.
A193 *Sterna hirundo*; Common tern (Breeding) A177. *Hydrocoloeus minutus*; Little gull (non-breeding)	*Supporting habitats assessed separately*	***Static fixed nets:*** *- Staked gill nets* Collision above water with static or moving objects not naturally found in the marine environment	Sensitive	No	**<u>Surface feeding seabirds</u>** At low water the nets are; exposed/highly visible and accompanied by the operators in the act of fishing which will deter birds from the vicinity of the nets. In addition the scale and intensity of netting activity is very low. Thus collision with gear above/out of water is highly unlikely and is therefore unlikely to have a significant effect on the population or distribution of the qualifying features.
		Collision below water with static or moving objects not naturally found in the marine environment	Sensitive	No	Surface feeding seabirds do not go more than a few centimetres deep below the water surface when feeding therefore it is unlikely they would interact with the nets when they are set and submerged around the time of high water. Fishing gear may be very close to the water surface during tidal flood and ebb periods. However, the small scale and low intensity of netting activity means collision with gear below water is highly unlikely. This is therefore unlikely to have a significant

					effect on the population or distribution of the qualifying features.
		Visual disturbance	Sensitive	No	The scale and intensity of the netting activity and associated access is very low resulting in very limited visual disturbance and little increase on existing background levels. Thus fishing activity is unlikely to have an effect on the population or distribution of the qualifying features.
		Removal of non-target species such as… -Accidental bycatch of fish (bird prey)	Sensitive	No	The scale and intensity of the netting activity is very low. The impact on food resource for the birds is therefore minimal and unlikely to have an effect on the population or distribution of the qualifying features.
		-Accidental bycatch of birds	Sensitive	No	At low water the nets are; exposed/highly visible and accompanied by the operators in the act of fishing which will deter birds from the vicinity of the nets. These surface feeding seabirds do not go more than a few centimetres deep below the water surface when feeding therefore it is unlikely they would interact with the nets when they are set and submerged around the time of high water. Fishing gear may be very close to the water surface during tidal flood and ebb periods. However, the small scale and low intensity of netting activity means collision with

					gear below water is highly unlikely. In addition, no surface feeding birds are known to have ever been caught in this activity (Brownrigg and Capper *pers. comms*., 2016; IFCOs with 6 years' and 29 years' local experience). This activity is therefore unlikely to have a significant effect on the population or distribution of the qualifying features.
Waterbird assemblage *Including cormorant - not assessed in their own right.*	*Supporting habitats assessed separately*	***Static fixed nets:*** *- Staked gill nets* Collision above water with static or moving objects not naturally found in the marine environment	Sensitive	No	**<u>Diving Birds</u>** At low water the nets are; exposed/highly visible and accompanied by the operators in the act of fishing which will deter birds from the vicinity of the nets. In addition the scale and intensity of netting activity is very low. Thus collision with gear above/out of water is highly unlikely and is therefore unlikely to have a significant effect on the population or distribution of the qualifying features.
		Collision below water with static or moving objects not naturally found in the marine environment	Sensitive	No	Cormorants dive into the water column to feed. However, the small scale and low intensity of netting activity means collision with gear below water is highly unlikely. This is therefore unlikely to have a significant effect on the population or distribution of the qualifying features.
		Visual disturbance	Sensitive	No	The scale and intensity of the

					netting activity and associated access is very low resulting in very limited visual disturbance and little increase on existing background levels. Thus fishing activity is unlikely to have an effect on the population or distribution of the qualifying features.
		Removal of non-target species such as… -Accidental bycatch of fish (bird prey)	Sensitive	No	The scale and intensity of the netting activity is very low. The impact on food resource for the birds is therefore minimal and unlikely to have an effect on the population or distribution of the qualifying features.
		-Accidental bycatch of birds	Sensitive	No	At low water the nets are; exposed/highly visible and accompanied by the operators in the act of fishing which will deter birds from the vicinity of the nets. Cormorants dive into the water column to feed. However, the small scale and low intensity of netting activity means collision with gear below water is highly unlikely. In 29 years one cormorant is known to have been caught in this activity, it was released and appeared unharmed (Brownrigg and Capper pers. comms., 2016; IFCOs with 6 years' and 29 years' local experience). This activity is therefore unlikely to have a significant effect on the population or distribution of the qualifying features.

SPA Supporting Habitat	Intertidal sand and muddy sand	Abrasion/disturbance of the substrate on the surface of the seabed Penetration and/or disturbance on the substrate below the surface of the seabed including abrasion *(e.g. through abrasion and movement of substrate via contact of nets as well as penetration from anchoring/ stakes)*	Sensitive Sensitive	No No	Abrasion, penetration and disturbance will be caused by the stakes, nets and weighted lines during fishing activity. However, nets are set on sandy, muddy sand substrate and the area is naturally highly dynamic with strong currents, and a large tidal range. Therefore any impacts caused by abrasion, penetration or disturbance would be quickly dissipated and will be insignificant in relation to natural background levels of movement of this dynamic mobile substrate. Access to the fishery is via established access routes. No increase in disturbance on existing background levels. The small scale and low intensity of this netting activity is unlikely to have a significant effect on the extent, distribution, structure or function of the habitats of the qualifying features.

Is the potential scale or magnitude of any effect likely to be significant?[4]	**Alone** No **Comments :** Small scale activity with very limited impacts on a small number of features.	**OR In-combination[5]** Uncertain **Comments :** These activities may also occur at the site: • Hand working for cockles and mussels (access from land and vessel) In combination effects will be assessed when all initial TLSEs for a site are completed.
Have NE been consulted on this LSE test? If yes, what was NE's advice?	Yes	

[4] Yes or uncertain: completion of AA required. If no: LSE required only.
[5] If conclusion of LSE alone an in-combination assessment is not required.

6. Conclusion[6]

Taking into account the information detailed in the Test of Likely Significant Effect, it can be concluded that fishing using staked gill nets has no likely significant effect on the Mersey narrows and North Wirral foreshore SPA interest features.

7. In-combination assessment[13]

In combination effects will be assessed in a separate document when all initial TLSEs for a site are completed.

8. Summary of consultation with Natural England

See attached advice from Natural England (Annex 2).

9. Integrity test

As this assessment has concluded no likely significant effect on the interest features of the Mersey narrows and North Wirral foreshore SPA, there is no need to conduct an integrity test for this activity.

[6] If conclusion of adverse affect alone an in-combination assessment is not required.

Annex 1: Reference list

Brownrigg, A & Capper, P. 2016. *Personal communication from IFCA local fisheries officers*

Natural England Marine Conservation Advice for Special Protection Area: Mersey Narrows and North Wirral Foreshore published March 2015. Available at: https://www.gov.uk/government/publications/marine-conservation-advice-for-special-protection-area-mersey-narrows-and-north-wirral-foreshore-uk9020287

Annex 2: Natural England's consultation advice

Date: 28 November 2016
Our ref: 198929
Your ref: NWIFCA-MN-SPA-003

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North Western Inshore Fisheries and Conservation Authority (NWIFCA)
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BY EMAIL ONLY

Dear

Formal Advice to NWIFCA. Fisheries in EMS Habitats Regulations Assessment for Amber and Green risk Categories in Mersey Narrows and North Wirral Foreshore Special Protection Area (SPA), including gear types: Staked Gill Nets, Gill / Entangling nets and Trammel nets.

Thank you for your consultation on the above which was received by Natural England on 17 October 2016.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

In 2012, the Department for Environment, Food and Rural Affairs (Defra) announced a revised approach to the management of commercial fisheries in EMSs[1]. The objective of this revised approach is to ensure that all existing and potential commercial fishing activities are managed in accordance with Article 6 of the Habitats Directive. This document states that for 'green' risk activities a site level assessment will be required if there are 'in combination effects' with other plans or projects. The Department's strong preference is that site level assessments be carried out in a manner that is consistent with the provisions of Article 6(3) of the Habitats Directive. Appropriate management measures should be put in place to ensure that the fishing activity or activities either 1) have no likely significant effect on a site in view of its conservation objectives or 2) following assessment, can be concluded to have no adverse effect on the integrity of the site.

Natural England has considered the Habitat Regulations Assessment (HRA) prepared by North Western Inshore Fisheries and Conservation Authority (IFCA) for the purposes of making an assessment consistent with the provisions of Article 6(3). Please accept this letter as Natural England's formal advice on the assessment and the conclusions it makes. The assessment considers the effects of the following fishing activities on the Mersey Narrows and North Wirral Foreshore Special Protection Area (SPA):

- Static fixed nets: Staked gill nets, gill / entangling nets, trammel nets

[1] Defra revised approach:
https://www.gov.uk/government/publications/revised-approach-to-the-management-of-commercial-fisheries-in-european-marine-sites-overarching-policy-and-delivery

We are content that the best available and most up to date evidence has been used to carry out the HRA by North Western IFCA officers to determine whether management of an activity is required to conserve site features, and thus to ensure the protection of the features, from direct and indirect impacts, from the collection of marine fisheries resources.

We note that in combination effects will be assessed in a separate document when all initial Tests of Likely Significant Effects (tLSEs) for a site are completed.

Subject to the outcomes of the in combination assessments, it is Natural England's view that through their HRA, North Western IFCA officers appear to have appropriately identified those activities that are likely to have a significant effect in view of the site's conservation objectives, and whether management measures are required in order to ensure that the assessed fishing activity or activities will have no adverse effect on the integrity of the EMS.

It is Natural England's view that any foreseeable risk, or harm to the site has been appropriately assessed; and a robust mechanism for re-assessing that risk is in place. This view is based on our current knowledge of the impacts of these fishing activities on the designated features.

If you require any further comments or have any queries regarding the above please contact me to discuss them further.

Yours sincerely

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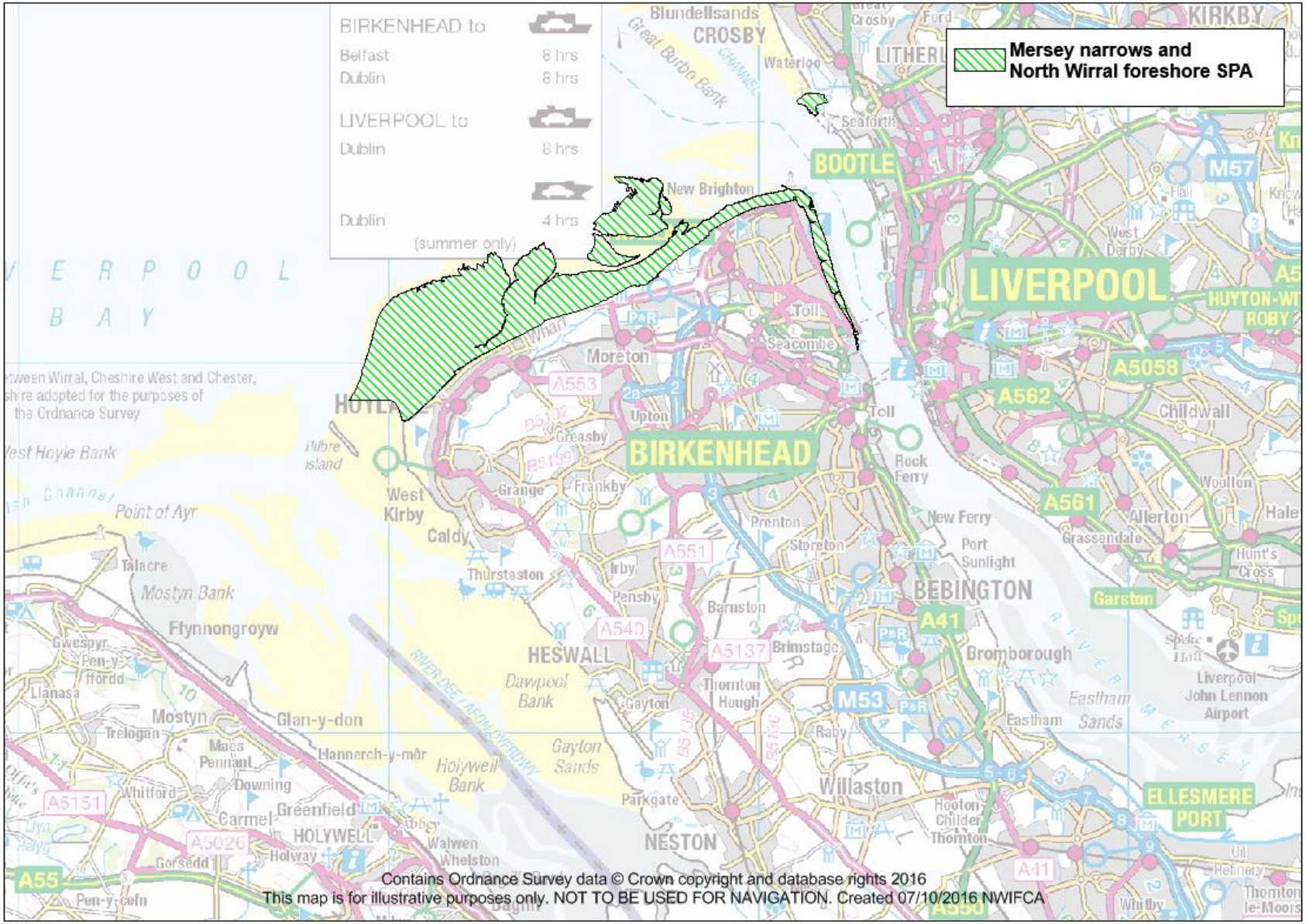
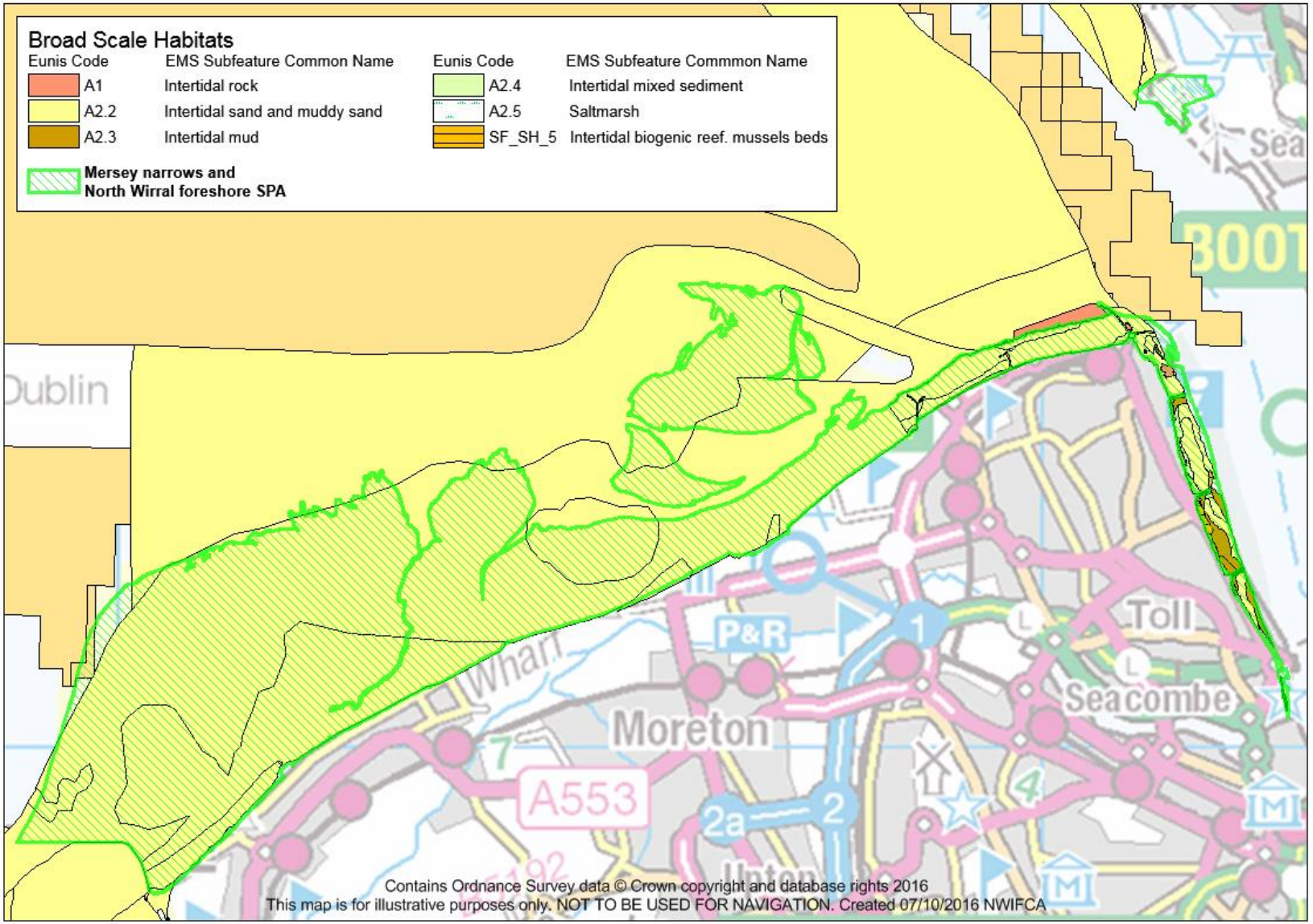
Annex 3: Mersey Narrows and North Wirral foreshore SPA Site Map



Annex 4: Broad scale habitat map: sub-feature/feature location and extent



Annex 5: Fishing Activity Map