

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

NWIFCA-RA-SPA-010

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Site: **Ribble and Alt Estuaries**

European Designated Sites: UK9005103 Ribble and Alt Estuaries Special Protection Area (SPA)
UK11057 Ribble and Alt Estuaries Ramsar
Sefton Coast SAC
UK9020294 Liverpool Bay/Bae Lerpwl SPA adjoins this site

European Marine Site **Ribble and Alt Estuaries**

Qualifying Feature(s):

SPA and Ramsar

A037 *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)
A038 *Cygnus cygnus*; Whooper swan (Non-breeding)
A040 *Anser brachyrhynchus*; Pink-footed goose (Non-breeding)
A048 *Tadorna tadorna*; Common shelduck (Non-breeding)
A050 *Anas penelope*; Eurasian wigeon (Non-breeding)
A052 *Anas crecca*; Eurasian teal (Non-breeding)
A054 *Anas acuta*; Northern pintail (Non-breeding)
A130 *Haematopus ostralegus*; Eurasian oystercatcher (Non-breeding)
A137 *Charadrius hiaticula*; Ringed plover (Non-breeding)
A140 *Pluvialis apricaria*; European golden plover (Non-breeding)
A141 *Pluvialis squatarola*; Grey plover (Non-breeding)
A143 *Calidris canutus*; Red knot (Non-breeding)
A144 *Calidris alba*; Sanderling (Non-breeding)
A149 *Calidris alpina alpina*; Dunlin (Non-breeding)
A151 *Philomachus pugnax*; Ruff (Breeding)
A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
A157 *Limosa lapponica*; Bar-tailed godwit (Non-breeding)
A162 *Tringa totanus*; Common redshank (Non-breeding)
A183 *Larus fuscus*; Lesser black-backed gull (Breeding)
A193 *Sterna hirundo*; Common tern (Breeding)

Waterbird assemblage

Seabird assemblage

Breeding Waterbird Assemblage

Natterjack toad (NON MARINE)

SAC

H2110. Embryonic shifting dunes
H2120. Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram
H2130. Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland*
H2150. Atlantic decalcified fixed dunes (*Calluno-Ulicetea*); Coastal dune heathland*
H2170. Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*); Dunes with creeping willow
H2190. Humid dune slacks
S1166. *Triturus cristatus*; Great crested newt
S1395. *Petalophyllum ralfsii*; Petalwort

Site sub-feature(s):**SPA and Ramsar****Supporting Habitat:**

- intertidal rock
- intertidal sand and muddy sand
- intertidal mud
- intertidal mixed sediment
- coastal saltmarshes and saline reedbeds – (Saltmarsh)
- freshwater and coastal grazing marsh (Saltmarsh)
- coastal sand dunes (Sand dunes)
- water column

Great crested newt and Natterjack toad Supporting Habitat: Coastal sand dunes

Generic sub-feature(s):

Estuarine birds, Surface feeding birds, Benthic feeding seabirds, Intertidal mud and sand, Saltmarsh spp.

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.

Sefton Coast SAC

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), 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 Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- ☐ The extent and distribution of qualifying natural habitats and habitats of qualifying species
- ☐ The structure and function (including typical species) of qualifying natural habitats
- ☐ The structure and function of the habitats of qualifying species
- ☐ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- ☐ The populations of qualifying species, and,
- ☐ The distribution of qualifying species within the site.

Liverpool Bay SPA**Qualifying Feature(s):**

A001 *Gavia stellate* Red-throated diver (non-breeding)

A065 *Melanitta nigra* Common scoter (non-breeding)

Waterbird assemblage

Site sub-feature(s):

Sublittoral sand and mud, Water column

Generic sub-feature(s):

Pursuit and plunge diving birds, Benthic feeding seabirds, Sub-tidal muddy sand.

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 (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, 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 activities assessed:**Gear type(s):**

Seine nets & other: Shrimp push 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 2016.

The purpose of this site specific assessment document is to assess whether or not in the view of NWIFCA the fishing activity of ‘Shrimp push-nets’ has a likely significant effect on the qualifying features of the Ribble and Alt Estuaries European Site and on the basis of this assessment whether or not it can be concluded that ‘Shrimp push-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 species¹
- Reference list² (Annex 1)
- Natural England's consultation advice (Annex 2)
- Site map(s) – sub-feature/feature location and extent (Annex 3)
- Fishing activity data (map) (Annex 4)

2. Information about the EMS

(See cover pages). Throughout this document this group of designated sites will be referred to as a whole as "Ribble & Alt Estuaries European Site".

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 activities within the site

Shrimp push netting involves pushing a net at low water by foot on a flat sandy or muddy beach (<http://www.countrylife.co.uk/life-in-the-country/how-to-go-shrimping>).

Officers report a maximum of around twelve regular shrimp push netters in the area, with numbers fishing depending on the weather conditions and numbers of shrimp present, generally between March to July, and late August to December. Fishing activity is mainly recreational with two commercial fishers. Areas fished are from Southport to Formby and off Blackpool and Lytham. Fishing is carried out at low water for 1.5 hours at a time due to the tide, therefore the impact time of fishing is small. Fishermen wade in areas of still or sheltered water up to waist-deep, pushing the net as the tide stops running so that the shrimps settle and can be caught. Push nets vary between 5 and 6 ft wide with a wooden bar across the bottom that bounces along the sand substrate without digging in to it. Fishing may occur up to 15 times a month if the wind, tide and sediment conditions are favourable, however in reality it occurs less than this.

Access to fishing areas is by foot, 4x4 or vehicle by established access routes. These include routes along the shore, slipways, paths, a route at Hall Road at Marshside Nature Reserve and through sand dunes near Formby and Altcar.

Officers report that shrimp push netting is a low level activity, and officer stats confirm this (see Table 1). This is an activity that has historically always occurred in the area.

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)

| Push netting IFCO sightings for Ribble & Alt Estuaries European Site (0 in other months not included in table) | Sep-14 | Oct-14 | Nov-14 | Dec-14 |
|--|---------------|--------------------------|---|---------------|
| Push netters seen (recreational and commercial) | 2 | 3 | 2 | 3 |
| Location | Harrowside | Blackpool and Harrowside | Penfold Channel (landing at Marshside) and St Annes | Ainsdale |

Table 1: IFCO stats from patrols May 2014- August 2015

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 EMS³.

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-shore based activities)

1. Above water noise
2. Visual disturbance
3. Collision BELOW water with static or moving objects not naturally found in the marine environment (e.g., boats, machinery, and structures)- *only applicable to Lesser Black Backed Gull and Common Tern*
4. Litter
5. Removal of non-target species
6. Removal of target species
7. Genetic modification & translocation of indigenous species
8. Abrasion/disturbance of the substrate on the surface of the seabed (*supporting habitat*)
9. Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion (*supporting habitat*)
10. Physical change (to another seabed type) (*supporting habitat*)

SCREENED OUT-

Due to the nature of the shrimp push netting activity and the low levels of activity occurring in the European Site and existing background levels, the following potential pressures can be screened out as unlikely to be a pressure:

11. Deoxygenation
12. Hydrocarbon & PAH contamination. Includes those priority substances listed in Annex II of Directive 2008/105/EC.
13. Introduction of light
14. Collision BELOW water with static or moving objects not naturally found in the marine environment (e.g., boats, machinery, and structures)- *can be screened out for all species except Lesser Black Backed Gull and Common Tern*

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

| Qualifying Feature | Sub-feature | Gear type and potential pressures | Potential for Likely Significant Effect? | Justification and evidence |
|---|--|--|--|--|
| A037 <i>Cygnus columbianus bewickii</i> ; Bewick's swan (Non-breeding) | Intertidal rock, intertidal sand and muddy sand, intertidal mud, intertidal mixed sediment, coastal saltmarshes and saline reedbeds – (Saltmarsh), freshwater and coastal grazing marsh (Saltmarsh), coastal sand dunes (Sand dunes), Water column | <i>Shrimp push-netting</i> 1. Above water noise 2. Visual disturbance 3. <i>Collision BELOW water with static or moving objects not naturally found in the marine environment (e.g., boats, machinery, and structures)</i> 4. Litter 5. Removal of non-target species 6. Removal of target species | NO | (Estuarine birds) 1 & 2. Disturbance risk to birds through noise/ visual disturbance from fishing activity. Limited activity means that exposure of features to potential pressures and noise/ visual disturbance is minimal. Any noise exerted by the gear operation would be unlikely to exceed ambient noise levels in area. Activity is limited spatially and temporally and access to beach is via vehicle and foot on established access routes. 3. <i>Screened out as only applies to diving birds.</i> This will not occur due to the nature of the activity. 4. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels. 5 & 6. Biological disturbance- extraction of non- target species including bycatch of fish (bird prey). Nature of activity means accidental bird bycatch will not occur. Limited activity means impact on bird feature food resource is minimal. Also selective extraction of target species (shrimps). Redshank, Sanderling, Grey Plover, Ringed Plover and Shelduck feed on shrimps but limited activity means impact on bird feature food resource is minimal. Shrimp are not targeted |
| A038 <i>Cygnus cygnus</i> ; Whooper swan (Non-breeding) | | | | |
| A040 <i>Anser brachyrhynchus</i> ; Pink-footed goose (Non-breeding) | | | | |
| A048 <i>Tadorna tadorna</i> ; Common shelduck (Non-breeding) | | | | |
| A050 <i>Anas penelope</i> ; Eurasian wigeon (Non-breeding) | | | | |
| A052 <i>Anas crecca</i> ; Eurasian teal (Non-breeding) | | | | |
| A054 <i>Anas acuta</i> ; Northern pintail (Non-breeding) | | | | |
| A130 <i>Haematopus ostralegus</i> ; Eurasian oystercatcher (Non-breeding) | | | | |
| A137 <i>Charadrius hiaticula</i> ; Ringed plover (Non-breeding) | | | | |
| A140 <i>Pluvialis apricaria</i> ; European golden plover (Non-breeding) | | | | |
| A141 <i>Pluvialis squatarola</i> ; Grey plover (Non-breeding) | | | | |
| A143 <i>Calidris canutus</i> ; Red knot (Non-breeding) | | | | |
| A144 <i>Calidris alba</i> ; Sanderling (Non-breeding) | | | | |

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| A149 <i>Calidris alpina alpina</i> ; Dunlin (Non-breeding) | | | | as a food resource for other bird species. |
| A151 <i>Philomachus pugnax</i> ; Ruff (Breeding) | | | | 7. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels. Fishermen don't move push nets further than local area therefore unlikely to move non-indigenous species. |
| A156 <i>Limosa limosa islandica</i> ; Black-tailed godwit (Non-breeding) | | | | 8,9 & 10. Abrasion risk to substrate and sub-surface substrate-potential impact to substrate and associated communities through abrasion and movement of substrate via contact of push-nets. Fishing activity footprint is small-limited activity means that exposure of features and sub-features to potential pressures is minimal. Area is naturally highly dynamic with strong currents, a large tidal range. No increase in disturbance on existing background levels. |
| A157 <i>Limosa lapponica</i> ; Bar-tailed godwit (Non-breeding) | | | | |
| A162 <i>Tringa totanus</i> ; Common redshank (Non-breeding) | | | | |
| | | 7. Genetic modification & translocation of indigenous species 8. Abrasion/disturbance of the substrate on the surface of the seabed (<i>supporting habitat</i>) 9. Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion (<i>supporting habitat</i>) 10. Physical change (to another seabed type) (<i>supporting habitat</i>) | | Estuarine bird feature interaction categorised as "Blue" in generic matrix. |
| A183 <i>Larus fuscus</i> ; Lesser black-backed gull (Breeding) | Intertidal rock, intertidal sand and muddy sand, intertidal mud, intertidal mixed sediment, coastal saltmarshes and saline reedbeds – (Saltmarsh), freshwater and coastal grazing marsh (Saltmarsh), coastal sand dunes (Sand dunes), Water column | <i>Shrimp push-netting</i> 1. Above water noise 2. Visual disturbance | NO | (Surface feeding seabirds) 1 & 2. Disturbance risk to birds through noise/ visual disturbance from fishing activity. Limited activity means that exposure of features to potential pressures and noise/ visual disturbance is minimal. Any noise exerted by the gear operation would be unlikely to exceed ambient noise levels in area. Activity is limited spatially and temporally and access to beach is via vehicle and foot on established access routes. |
| A193 <i>Sterna hirundo</i> ; Common tern (Breeding) | | | | 3. This will not occur due to the nature of the activity. |
| | | 3. Collision BELOW water with static or moving | | |

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| | | <p>objects not naturally found in the marine environment (e.g., boats, machinery, and structures)</p> <p>4. Litter</p> <p>5. Removal of non-target species</p> <p>6. Removal of target species</p> <p>7. Genetic modification & translocation of indigenous species</p> <p>8. Abrasion/disturbance of the substrate on the surface of the seabed (<i>supporting habitat</i>)</p> <p>9. Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion (<i>supporting habitat</i>)</p> <p>10. Physical change (to another seabed type) (<i>supporting habitat</i>)</p> | | <p>4. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels.</p> <p>5 & 6. Biological disturbance- extraction of non- target species including bycatch of fish (bird prey). Nature of activity means accidental bird bycatch will not occur. Limited activity means impact on bird feature food resource is minimal. Also selective extraction of target species (shrimps). Limited activity means impact on bird feature food resource is minimal.</p> <p>7. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels. Fishermen don't move push nets further than local area therefore unlikely to move non-indigenous species.</p> <p>8,9 & 10. Abrasion risk to substrate and sub-surface substrate-potential impact to substrate and associated communities through abrasion and movement of substrate via contact of push-nets. Fishing activity footprint is small-limited activity means that exposure of features and sub-features to potential pressures is minimal. Area is naturally highly dynamic with strong currents, a large tidal range. No increase in disturbance on existing background levels.</p> <p>Surface feeding seabird feature interaction</p> |
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|----------------------|--|---|----|---|
| | | | | categorised as "Blue" in generic matrix. |
| Waterbird assemblage | Intertidal rock, intertidal sand and muddy sand, intertidal mud, intertidal mixed sediment, coastal saltmarshes and saline reedbeds – (Saltmarsh), freshwater and coastal grazing marsh (Saltmarsh), coastal sand dunes (Sand dunes), Water column | <p><i>Shrimp push-netting</i></p> <ol style="list-style-type: none"> 1. Above water noise 2. Visual disturbance 3. <i>Collision BELOW water with static or moving objects not naturally found in the marine environment (e.g., boats, machinery, and structures)</i> 4. Litter 5. Removal of non-target species 6. Removal of target species 7. Genetic modification & | NO | <p>1 & 2. Disturbance risk to birds through noise/ visual disturbance from fishing activity. Limited activity means that exposure of features to potential pressures and noise/ visual disturbance is minimal. Any noise exerted by the gear operation would be unlikely to exceed ambient noise levels in area. Activity is limited spatially and temporally and access to beach is via vehicle and foot on established access routes.</p> <p>3. This will not occur due to the nature of the activity.</p> <p>4. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels.</p> <p>5 & 6. Biological disturbance- extraction of non- target species including bycatch of fish (bird prey). Nature of activity means accidental bird bycatch will not occur. Limited activity means impact on bird feature food resource is minimal. Also selective extraction of target species (shrimps). Redshank, Sanderling, Grey Plover, Ringed Plover and Shelduck feed on shrimps but limited activity means impact on bird feature food resource is minimal. Shrimp are not targeted as a food resource for other bird species.</p> <p>7. Limited activity means</p> |

| | | | | |
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| | | <p>translocation of indigenous species</p> <p>8. Abrasion/disturbance of the substrate on the surface of the seabed (<i>supporting habitat</i>)</p> <p>9. Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion (<i>supporting habitat</i>)</p> <p>10. Physical change (to another seabed type) (<i>supporting habitat</i>)</p> | | <p>that exposure of features to potential pressure is minimal and no greater than existing background levels. Fishermen don't move push nets further than local area therefore unlikely to move non-indigenous species.</p> <p>8,9 & 10. Abrasion risk to substrate and sub-surface substrate-potential impact to substrate and associated communities through abrasion and movement of substrate via contact of push-nets. Fishing activity footprint is small-limited activity means that exposure of features and sub-features to potential pressures is minimal. Area is naturally highly dynamic with strong currents, a large tidal range. No increase in disturbance on existing background levels.</p> |
| Seabird assemblage | Intertidal rock, intertidal sand and muddy sand, intertidal mud, intertidal mixed sediment, coastal saltmarshes and saline reedbeds – (Saltmarsh), freshwater and coastal grazing marsh (Saltmarsh), coastal sand dunes (Sand dunes), Water column | <p><i>Shrimp push-netting</i></p> <p>1. Above water noise</p> <p>2. Visual disturbance</p> <p>3. <i>Collision BELOW water with static or moving objects not naturally found in the marine environment (e.g., boats, machinery, and structures)</i></p> <p>4. Litter</p> | NO | <p>1 & 2. Disturbance risk to birds through noise/visual disturbance from fishing activity. Limited activity means that exposure of features to potential pressures and noise/visual disturbance is minimal. Any noise exerted by the gear operation would be unlikely to exceed ambient noise levels in area. Activity is limited spatially and temporally and access to beach is via vehicle and foot on established access routes.</p> <p>3. This will not occur due to the nature of the activity.</p> <p>4. Limited activity means that exposure of features to potential pressure is minimal and no greater</p> |

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| | | <p>5. Removal of non-target species</p> <p>6. Removal of target species</p> <p>7. Genetic modification & translocation of indigenous species</p> <p>8. Abrasion/disturbance of the substrate on the surface of the seabed (<i>supporting habitat</i>)</p> <p>9. Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion (<i>supporting habitat</i>)</p> <p>10. Physical change (to another seabed type) (<i>supporting habitat</i>)</p> | | <p>than existing background levels.</p> <p>5 & 6. Biological disturbance- extraction of non- target species including bycatch of fish (bird prey). Nature of activity means accidental bird bycatch will not occur. Limited activity means impact on bird feature food resource is minimal. Also selective extraction of target species (shrimps). Redshank, Sanderling, Grey Plover, Ringed Plover and Shelduck feed on shrimps but limited activity means impact on bird feature food resource is minimal. Shrimp are not targeted as a food resource for other bird species.</p> <p>7. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels. Fishermen don't move push nets further than local area therefore unlikely to move non-indigenous species.</p> <p>8,9 & 10. Abrasion risk to substrate and sub-surface substrate-potential impact to substrate and associated communities through abrasion and movement of substrate via contact of push-nets. Fishing activity footprint is small-limited activity means that exposure of features and sub-features to potential pressures is minimal. Area is naturally highly dynamic with strong currents, a large tidal range. No increase in disturbance on existing background levels.</p> |
| Breeding waterbird assemblage | Intertidal rock, intertidal sand and | <p><i>Shrimp push-netting</i></p> <p>1. Above water noise</p> | NO | 1 & 2. Disturbance risk to birds through noise/ visual disturbance from |

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| | <p>muddy sand, intertidal mud, intertidal mixed sediment, coastal saltmarshes and saline reedbeds – (Saltmarsh), freshwater and coastal grazing marsh (Saltmarsh), coastal sand dunes (Sand dunes), Water column</p> | <p>2. Visual disturbance</p> <p>3. <i>Collision BELOW water with static or moving objects not naturally found in the marine environment (e.g., boats, machinery, and structures)</i></p> <p>4. Litter</p> <p>5. Removal of non-target species</p> <p>6. Removal of target species</p> <p>7. Genetic modification & translocation of indigenous species</p> | <p>fishing activity. Limited activity means that exposure of features to potential pressures and noise/ visual disturbance is minimal. Any noise exerted by the gear operation would be unlikely to exceed ambient noise levels in area. Activity is limited spatially and temporally and access to beach is via vehicle and foot on established access routes.</p> <p>3. This will not occur due to the nature of the activity.</p> <p>4. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels.</p> <p>5 & 6. Biological disturbance- extraction of non- target species including bycatch of fish (bird prey). Nature of activity means accidental bird bycatch will not occur. Limited activity means impact on bird feature food resource is minimal. Also selective extraction of target species (shrimps). Redshank, Sanderling, Grey Plover, Ringed Plover and Shelduck feed on shrimps but limited activity means impact on bird feature food resource is minimal. Shrimp are not targeted as a food resource for other bird species.</p> <p>7. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels. Fishermen don't</p> |
|--|--|--|--|

| | | | | |
|------------------------------|--|--|----|--|
| | | 8. Abrasion/disturbance of the substrate on the surface of the seabed (<i>supporting habitat</i>) 9. Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion (<i>supporting habitat</i>) 10. Physical change (to another seabed type) (<i>supporting habitat</i>) | | move push nets further than local area therefore unlikely to move non-indigenous species. 8,9 & 10. Abrasion risk to substrate and sub-surface substrate-potential impact to substrate and associated communities through abrasion and movement of substrate via contact of push-nets. Fishing activity footprint is small-limited activity means that exposure of features and sub-features to potential pressures is minimal. Area is naturally highly dynamic with strong currents, a large tidal range. No increase in disturbance on existing background levels. |
| Natterjack toad (NON MARINE) | Intertidal rock, intertidal sand and muddy sand, intertidal mud, intertidal mixed sediment, coastal saltmarshes and saline reedbeds – (Saltmarsh), freshwater and coastal grazing marsh (Saltmarsh), coastal sand dunes (Sand dunes), Water column | <i>Shrimp push-netting</i> 1. Above water noise 2. Visual disturbance 3. <i>Collision BELOW water with static or moving objects not naturally found in the marine environment (e.g., boats, machinery, and structures)</i> 4. Litter 5. Removal of non-target species 6. Removal of target species | NO | 1 & 2. Feature present on land in area near Hightown Dunes. Low levels of activity and access to beach is via vehicle and foot on established access routes, therefore no increase on existing background disturbance levels. 3. No interaction between feature and pressure. 4. Low levels of activity and access to beach is via vehicle and foot on established access routes, therefore no increase on existing background disturbance levels. 5 & 6. No interaction between feature and pressure. |

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| | | <p>7. Genetic modification & translocation of indigenous species</p> <p>8. Abrasion/disturbance of the substrate on the surface of the seabed (<i>supporting habitat</i>)</p> <p>9. Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion (<i>supporting habitat</i>)</p> <p>10. Physical change (to another seabed type) (<i>supporting habitat</i>)</p> | | <p>7. No interaction between feature and pressure.</p> <p>8,9 & 10. No interaction between feature and pressure.</p> |
| H2110. Embryonic shifting dunes | | <i>Shrimp push-netting</i> | NO | Access to beach is via vehicle and foot on established access routes. |
| H2120. Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes"); Shifting dunes with marram | | <i>Shrimp push-netting</i> | NO | Access to beach is via vehicle and foot on established access routes. |
| H2130. Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland* | | <i>Shrimp push-netting</i> | NO | Access to beach is via vehicle and foot on established access routes. |
| H2150. Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>); Coastal dune heathland* | | <i>Shrimp push-netting</i> | NO | Access to beach is via vehicle and foot on established access routes. |
| H2170. Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>); Dunes with creeping willow | | <i>Shrimp push-netting</i> | NO | Access to beach is via vehicle and foot on established access routes. |
| H2190. Humid dune slacks | | <i>Shrimp push-netting</i> | NO | Access to beach is via vehicle and foot on established access routes. |

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| | | <p>7. Genetic modification & translocation of indigenous species</p> <p>8. Abrasion/disturbance of the substrate on the surface of the seabed (<i>supporting habitat</i>)</p> <p>9. Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion (<i>supporting habitat</i>)</p> <p>10. Physical change (to another seabed type) (<i>supporting habitat</i>)</p> | | <p>7. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels. Fishermen don't move push nets further than local area therefore unlikely to move non-indigenous species.</p> <p>8,9 & 10. Abrasion risk to substrate and sub-surface substrate-potential impact to substrate and associated communities through abrasion and movement of substrate via contact of push-nets. Fishing activity footprint is small-limited activity means that exposure of features and sub-features to potential pressures is minimal. Area is naturally highly dynamic with strong currents, a large tidal range. No increase in disturbance on existing background levels.</p> <p>Interaction between Red throated diver feature and gear is very unlikely-interaction categorised as "Blue" in generic matrix, bird numbers present in these intertidal areas would be minimal and there are no intertidal areas within the Liverpool Bay SPA site.</p> |
| A065 <i>Melanitta nigra</i> Common scoter (non-breeding) | Sub-tidal muddy sand, water column | <p><i>Shrimp push-netting</i></p> <p>1. Above water noise</p> <p>2. Visual disturbance</p> | NO | <p>1 & 2. Disturbance risk to birds through noise/ visual disturbance from fishing activity. Limited activity means that exposure of features to potential pressures and noise/ visual disturbance is minimal. Any noise exerted by the gear operation would be unlikely to exceed ambient noise levels in area. Activity is limited spatially and temporally and access to beach is via vehicle and foot on established access</p> |

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| | | <p>3. Collision BELOW water with static or moving objects not naturally found in the marine environment (e.g., boats, machinery, and structures)</p> <p>4. Litter</p> <p>5. Removal of non-target species</p> <p>6. Removal of target species</p> <p>7. Genetic modification & translocation of indigenous species</p> <p>8. Abrasion/disturbance of the substrate on the surface of the seabed (<i>supporting habitat</i>)</p> <p>9. Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion (<i>supporting habitat</i>)</p> <p>10. Physical change (to another seabed type) (<i>supporting habitat</i>)</p> | <p>routes.</p> <p>3. This will not occur due to the nature of the activity.</p> <p>4. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels.</p> <p>5 & 6. Biological disturbance- extraction of non- target species including bycatch of fish (bird prey). Nature of activity means accidental bird bycatch will not occur. Limited activity means impact on bird feature food resource is minimal. Also selective extraction of target species (shrimps). Limited activity means impact on bird feature food resource is minimal.</p> <p>7. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels. Fishermen don't move push nets further than local area therefore unlikely to move non-indigenous species.</p> <p>8,9 & 10. Abrasion risk to substrate and sub-surface substrate-potential impact to substrate and associated communities through abrasion and movement of substrate via contact of push-nets. Fishing activity footprint is small-limited activity means that exposure of features and sub-features to potential pressures is minimal. Area is naturally highly dynamic with strong currents, a large</p> |
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| | | | | <p>tidal range. No increase in disturbance on existing background levels.</p> <p>Interaction between Common scoter feature and gear is very unlikely- interaction categorised as "Blue" in generic matrix, bird numbers present in these intertidal areas would be minimal and there are no intertidal areas within the Liverpool Bay SPA site.</p> |
| Waterbird assemblage | Sub-tidal muddy sand, water column | <p><i>Shrimp push-netting</i></p> <ol style="list-style-type: none"> 1. Above water noise 2. Visual disturbance 3. Collision BELOW water with static or moving objects not naturally found in the marine environment (e.g., boats, machinery, and structures) 4. Litter 5. Removal of non-target species 6. Removal of target species | NO | <p>1 & 2. Disturbance risk to birds through noise/ visual disturbance from fishing activity. Limited activity means that exposure of features to potential pressures and noise/ visual disturbance is minimal. Any noise exerted by the gear operation would be unlikely to exceed ambient noise levels in area. Activity is limited spatially and temporally and access to beach is via vehicle and foot on established access routes.</p> <p>3. This will not occur due to the nature of the activity.</p> <p>4. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels.</p> <p>5 & 6. Biological disturbance- extraction of non- target species including bycatch of fish (bird prey). Nature of activity means accidental bird bycatch will not occur. Limited activity means impact on bird feature food resource is minimal. Also selective</p> |

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| | | <p>7. Genetic modification & translocation of indigenous species</p> <p>8. Abrasion/disturbance of the substrate on the surface of the seabed <i>(supporting habitat)</i></p> <p>9. Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion <i>(supporting habitat)</i></p> <p>10. Physical change (to another seabed type) <i>(supporting habitat)</i></p> | <p>extraction of target species (shrimps). Limited activity means impact on bird feature food resource is minimal.</p> <p>7. Limited activity means that exposure of features to potential pressure is minimal and no greater than existing background levels. Fishermen don't move push nets further than local area therefore unlikely to move non-indigenous species.</p> <p>8,9 & 10. Abrasion risk to substrate and sub-surface substrate-potential impact to substrate and associated communities through abrasion and movement of substrate via contact of push-nets. Fishing activity footprint is small-limited activity means that exposure of features and sub-features to potential pressures is minimal. Area is naturally highly dynamic with strong currents, a large tidal range. No increase in disturbance on existing background levels.</p> |
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| <p>Is the potential scale or magnitude of any effect likely to be significant?⁴</p> | <p>Alone</p> <p>No</p> <p>Comments :</p> <p>Small scale activity with very limited impacts on a small number of features.</p> | <p>OR In-combination⁵</p> <p>Uncertain</p> <p>Comments :</p> <p>These activities also occur at the site:</p> <ul style="list-style-type: none"> • Beam trawl (whitefish, shrimp) • Light otter trawls • Handworking (access from land and vessel) • Static- fixed nets • Drift nets (demersal and pelagic) • Longlines (demersal) • Pots/creels • Digging for bait <p>In combination effects will be assessed when all initial TLSEs for a site are completed.</p> |
| <p>Have NE been consulted on this LSE test? If yes, what was NE's advice?</p> | <p>Yes</p> | |

7. Conclusion⁶

Taking into account the information detailed in the Test of Likely Significant Effect, it can be concluded that fishing using shrimp push-nets has no likely significant effect on the Ribble and Alt Estuaries European Site interest features.

8. In-combination assessment¹³

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

9. Summary of consultation with Natural England

See attached advice from Natural England (Annex 2).

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

10. Integrity test

As this assessment has concluded no likely significant effect on the interest features of the Ribble and Alt Estuaries European Site in the NWIFCA district, there is no need to conduct an integrity test for this activity.

Annex 1: Reference list

Brown, S. 2014. *Personal communication from IFCA local fisheries officer- 18th June and 26th August 2015*

Grieve, C., Brady, D.C., Polet, I.H. 2011. Best practices for managing, measuring and mitigating the benthic impacts of fishing. Final report to the marine stewardship council.

Sewell, J., Harris, R., Hinz, H., Votier, S., Hiscock, K. 2007. An assessment of the impact of selected fishing activities on European Marine Sites and a review of mitigation measures.

Natural England Marine Conservation Advice for Special Protection Area: Ribble and Alt Estuaries, published March 2015, including Advice on Operations. Available at: <https://www.gov.uk/government/publications/marine-conservation-advice-for-special-protection-area-ribble-and-alt-estuaries-uk9005103>

<http://www.countrylife.co.uk/life-in-the-country/how-to-go-shrimping>

<http://www.cheshireandwirralbirdatlas.org/species/shelduck-breeding.htm> (Shelduck diet)

<http://www.birdwatchireland.ie/IrelandsBirds/Waders/Sanderling/tabid/321/Default.aspx> (Sanderling diet)

https://books.google.co.uk/books?id=_0r4AwAAQBAJ&pg=PT416&lpg=PT416&dq=ringed+plover+shrimp&source=bl&ots=ZNUup7fMTr&sig=CBX8_HPq9cYR7JFExNNDFX384Ik&hl=en&sa=X&ved=0CCUQ6AEwATgKahUKEwifjrK3teDIAhVE8RQKHdF4Ceo#v=onepage&q=ringed%20plover%20shrimp&f=false (Ringed Plover)

<http://www.birdlife.org/datazone/species/factsheet/22680003> (Shelduck diet)

Annex 2: Natural England's consultation advice

Date: 11 December 2015
Our ref: 174084
Your ref: NWIFCA-RA-SPA-005, NWIFCA-RA-SPA_008 & NWIFCA-RA-SPA-010



North Western Inshore Fisheries and Conservation Authority (NWIFCA)
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Lancashire
LA5 9BY

Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

BY EMAIL ONLY

T 0300 060 3900

Dear Sarah

Formal Advice to NWIFCA. Fisheries in EMS Habitats Regulations Assessment for Amber risk Categories in Ribble & Alt Estuaries SPA, including gear types: Pots/creels (NWIFCA-RA-SPA-005), longlines (demersal) (NWIFCA-RA-SPA-008) and shrimp push nets (NWIFCA-RA-SPA-010).

Thank you for your consultation on the above which was received by Natural England on 08 December 2015.

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 EMSs¹. 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 three Habitat Regulations Assessments (HRAs) 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 assessments consider the effects of the following fishing activities on the Ribble & Alt Estuaries Special Protection Area (SPA):

- NWIFCA-RA-SPA-005: Pots/creels;
- NWIFCA-RA-SPA-008: Lines: longlines (demersal);
- NWIFCA-RA-SPA-010: Seine nets & other: shrimp push 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 HRAs 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 three HRAs, 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.

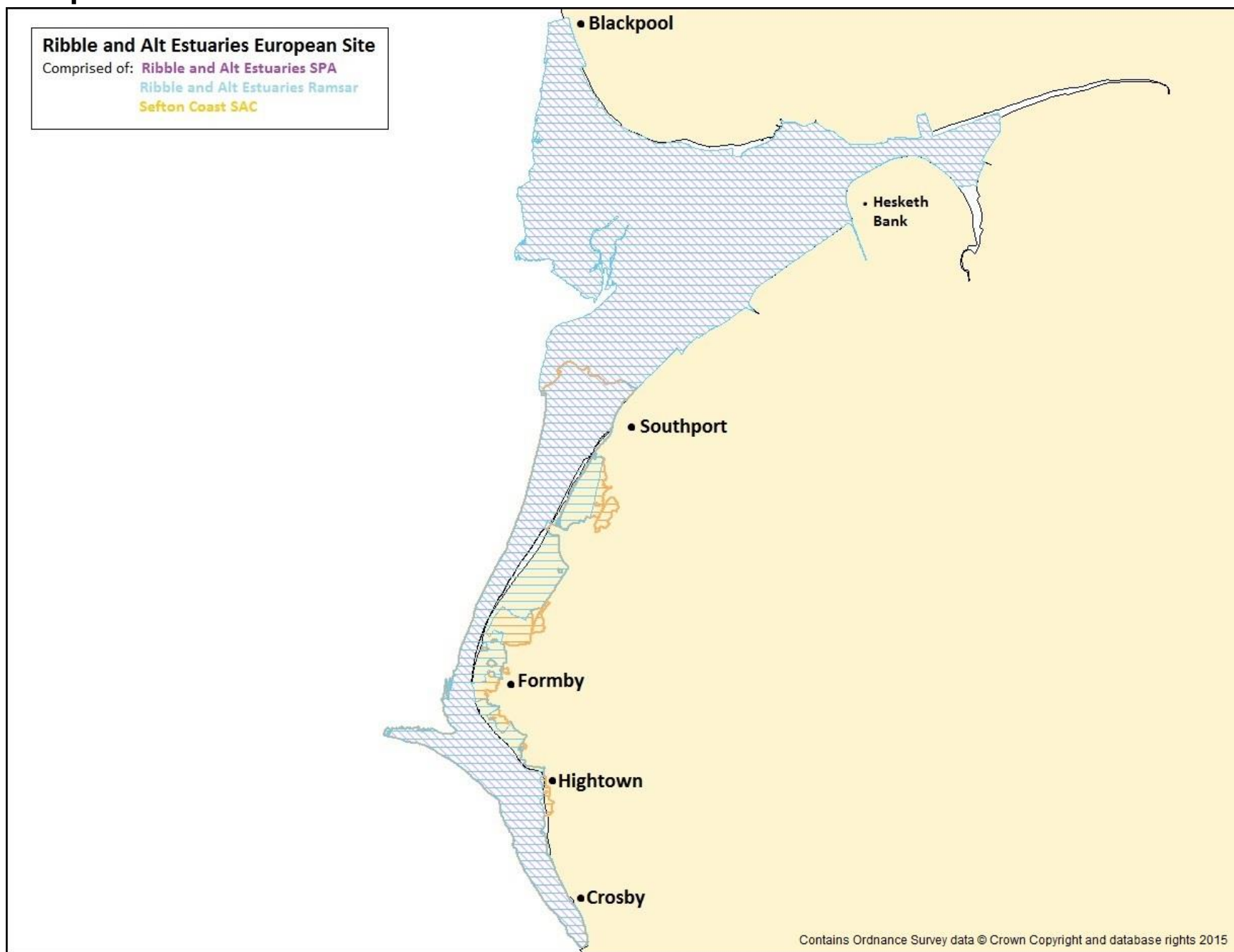
Yours sincerely



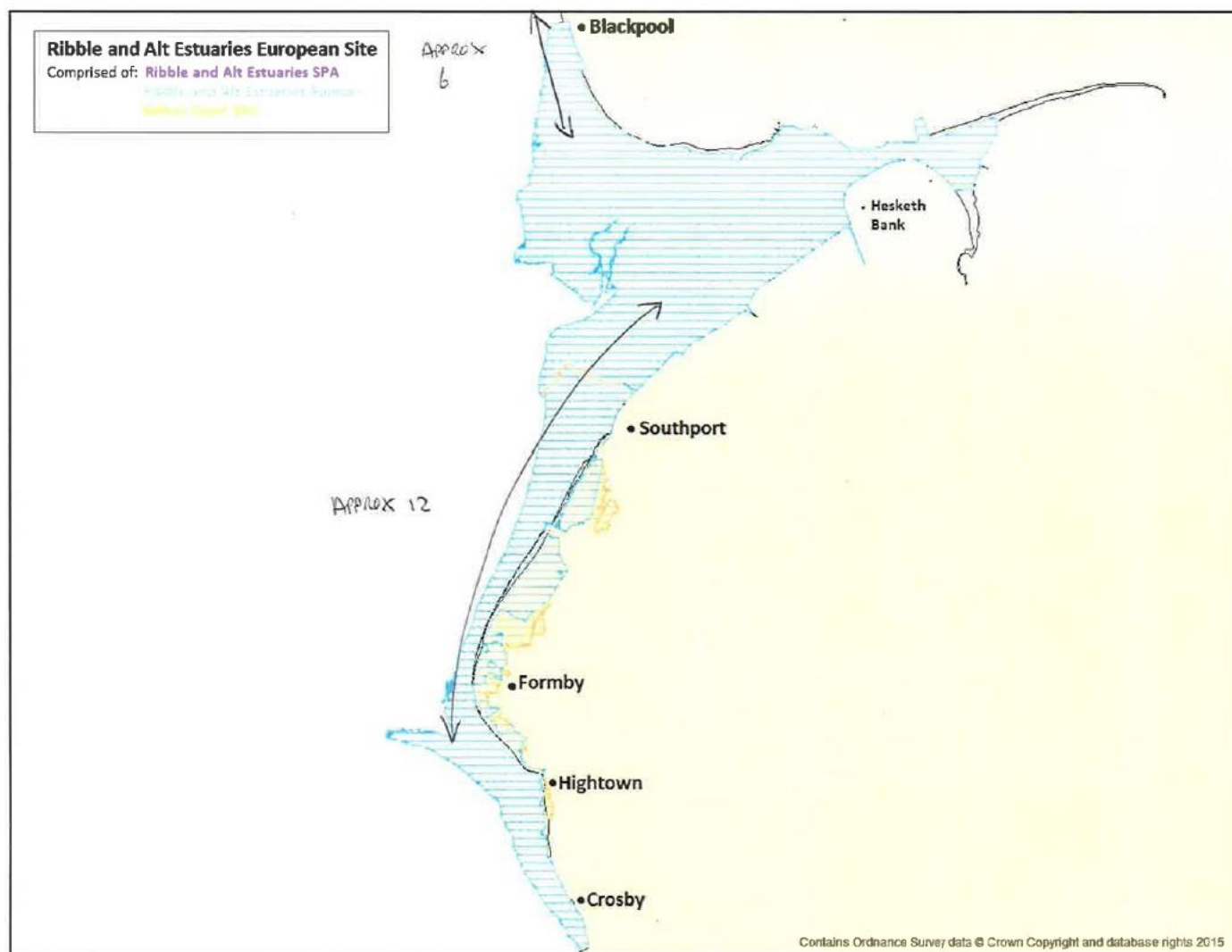
Emily Hardman
Cheshire, Greater Manchester, Merseyside and Lancashire Area Team
Email: Emily.Hardman@naturalengland.org.uk
Tel: 0300 060 4011



Annex 3: Site Map

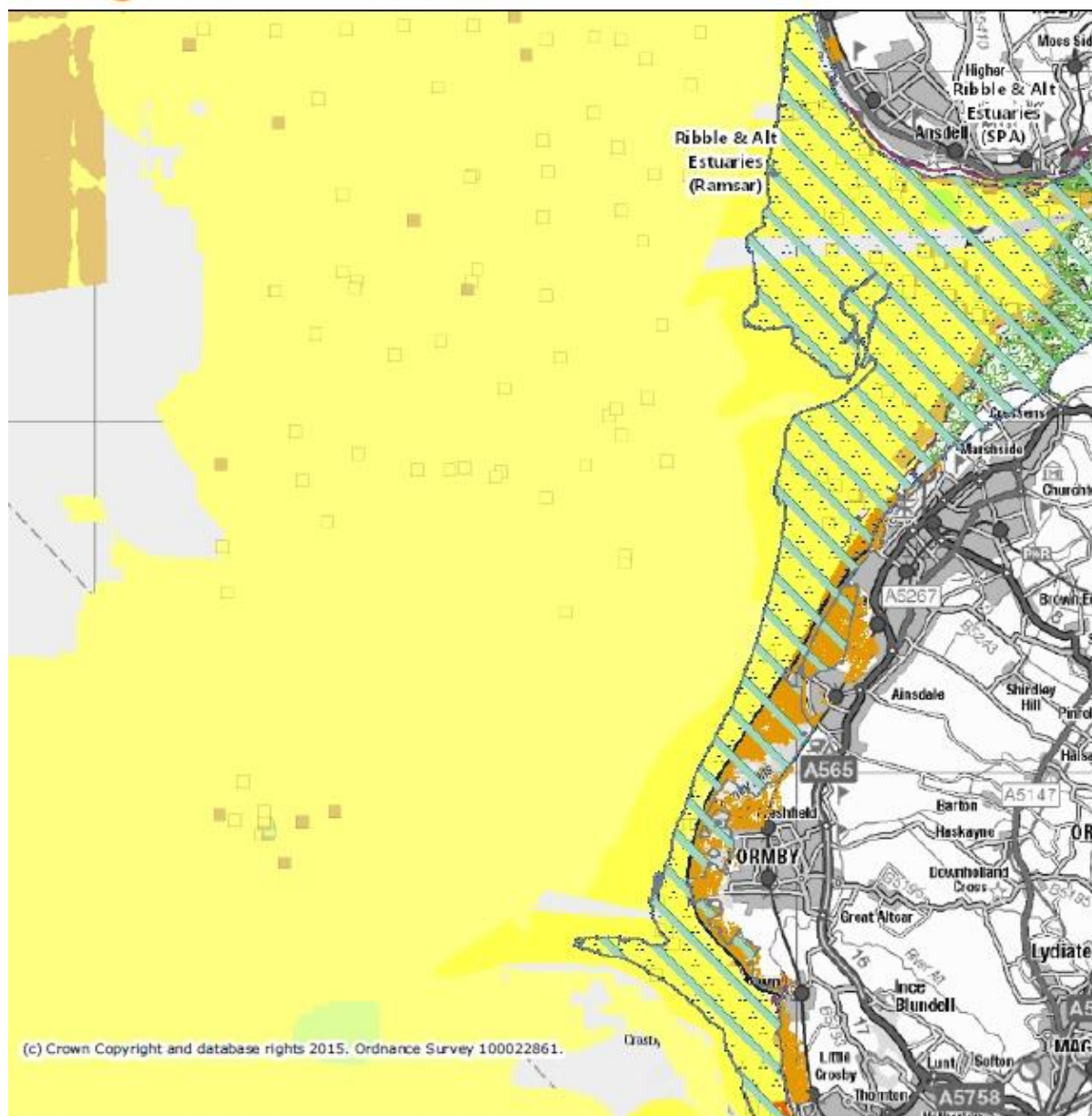


Annex 4: Fishing activity map (annotated by local IFCO)



Annex 5: Feature map (Magic Map mapping)

Ribble & Alt Estuaries SPA and Ramsar Magic Map



Legend

-  Ramsar Sites (England)
-  Special Protection Areas (England)
-  Priority Habitat Inventory - Coastal Sand Dunes (England)
-  Intertidal coarse sediment (A2.1)
-  Intertidal sand and muddy sand (A2.2)
-  Intertidal mud (A2.3)
-  Intertidal mixed sediments (A2.4)
-  Intertidal seagrass beds (A2.61)
-  Intertidal coarse sediment (A2.1)
-  Intertidal sand and muddy sand (A2.2)

Projection = OSGB36

xmin = 278400

ymin = 394000

xmax = 367500

ymax = 437800

Map produced by MAGIC on 23 November, 2015.
Copyright resides with the data suppliers and the map must not be reproduced without their permission.
Some information in MAGIC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.

Annex 6: Fishing gear



Example of a shrimp push net



Example of shrimp push netting operation