

**Habitats Regulations Assessment document: NMSPA – tLSE 014**

<b>European Marine Site:</b>	<b>Northumberland Marine SPA</b>
<b>Generic sub-feature(s):</b>	<b>Benthic feeding birds, Water column.</b>
<b>Gear type(s):</b>	<b>Scallop dredges</b>
<b>NIFCA tLSE type:</b>	<b>Detailed</b>
<b>Gear/feature interaction reference(s):</b>	<b>NMSPA – 055 NMSPA – 056</b>

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<b><i>Date</i></b>	<b><i>Revision</i></b>	<b><i>Editor</i></b>
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<b>Circulation</b>		
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06/12/2023	Marine Management Organisation	22/02/2024
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## Test for Likely Significant Effect (LSE)

### NMSPA – 055: Benthic feeding seabirds (European shags and Great cormorants)

<p><b>1. Is the activity/activities directly connected with or necessary to the management of the site for nature conservation?</b></p>	<p>No</p>
<p><b>2. What pressures (such as abrasion, disturbance) are potentially exerted by the gear type(s)?</b></p> <p>There is no specific mention of 'benthic feeding birds' in the Advice on Operations. Therefore these sensitivities have been taken from the benthic feeding birds from the Lindisfarne SPA to 'dredges'.</p> <p>*Sensitivities have been categorised as medium-high risk</p>	<p>Changes in suspended solids (water clarity) (Insufficient evidence)*</p> <p>Visual disturbance (Sensitive)*</p> <p>Above water noise (Sensitive)</p> <p>Collision ABOVE water with static or moving objects not naturally found in the marine environment (e.g., boats, machinery, and structures) (Sensitive)</p> <p>Collision BELOW water with static or moving objects not naturally found in the marine environment (Sensitive)</p> <p>Hydrocarbon and PAH contamination (Not-assessed)</p> <p>Introduction of light (Sensitive)</p> <p>Introduction of microbial pathogens (Sensitive)</p> <p>Litter (Sensitive)</p> <p>Synthetic compound contamination (incl. pesticides, antifoulants, pharmaceuticals) (Not-assessed)</p> <p>Transition elements &amp; organo-metal (e.g. TBT) contamination (Not-assessed)</p>
<p><b>3. Is the feature potentially exposed to the pressure(s)?</b></p>	<p>No, NIFCA byelaw prohibits the use of a dredge for fishing within the District and there has been no significant activity in the two areas outside 6nm in 2021 and 2020.</p>

<p><b>4. What are the conservation objectives for the feature?</b></p> <p>There are no specific Conservation Objectives for 'benthic feeding birds' in the Conservation Advice. Therefore these Conservation Objectives have been taken from the listed seabird features of Northumberland Marine SPA.</p>	<p><b>Conservation objectives for benthic feeding birds:</b></p> <p><b>Maintain:</b></p> <ul style="list-style-type: none"> <li>- the size of the breeding population</li> <li>- safe passage of birds moving between nesting and feeding areas</li> <li>- concentrations and deposition of air pollutants to below the site-relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System (<a href="http://www.apis.ac.uk">www.apis.ac.uk</a>)</li> <li>- the structure, function and supporting processes associated with the feature and its supporting habitat through management or other measures (whether within and/or outside the site boundary as appropriate) and ensure these measures are not being undermined or compromised.</li> <li>- the extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of its breeding cycle (courtship, nesting, feeding): baseline is not known at present</li> <li>- the distribution, abundance and availability of key food and prey items (e.g. sandeel, herring, sprat, crustacea, annelids, coarse fish, <i>Clupeidae</i>) at preferred prey sizes</li> <li>- the dissolved oxygen (DO) concentration to levels equating to High Ecological Status</li> <li>- water quality at mean winter dissolved inorganic nitrogen levels where biological indicators of eutrophication (opportunistic macroalgal and phytoplankton blooms) do not affect the integrity of the site and features, avoiding deterioration from existing levels</li> <li>- natural levels of turbidity (e.g. concentrations of suspended sediment, plankton and other material) across the habitat.</li> <li>- <b>Restrict:</b> the frequency, duration and / or intensity of disturbance affecting roosting, nesting, foraging, feeding, moulting and/or loafing birds so that they are not significantly disturbed</li> <li>- <b>Reduce:</b> aqueous contaminants to levels equating to High Status</li> </ul>
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<p><b>5. What are the potential effects/impacts of the pressure(s) on the feature, taking into account the exposure level?</b></p> <p><i>(reference to conservation objectives)</i></p>	<p>Inside the NIFCA District (6nm from the shore) scalloping is prohibited by the 'Dredges' byelaw. This was introduced in 2022 and completely prohibits the use of dredges, requiring all dredging gear to be onboard, lashed and stowed when vessels are in the District. Therefore, the features of the SPA are not exposed to any of the above pressures from dredging whilst within the 6nm zone.</p> <p>There are two areas of the SPA that extend outside of the NIFCA District and the Marine Management Organisation (MMO) has provided activity data related to dredging in these areas. Estimated landings data from the UK under 12m fleet does not show any landings from these areas in 2021 and 0.01 tonnes in 2020. Average annual landing from these areas from UK under 12m vessels (2012-21) is 0.01 tonnes. No VMS pings from dredging vessels were recorded in these areas in 2020 and 2021 (MMO data, pers comms).</p> <p>Therefore, NIFCA can conclude with high confidence that currently the SPA features are not exposed to the potential pressures caused by dredging.</p>
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<p><b>6. Condition and Conservation Objective Inferences</b></p>	<p>Benthic feeding birds are not specifically designated in the SPA, they make up part of the ‘breeding seabird assemblage.’ The following species are listed as ‘main components’ in the Conservation Advice: Arctic tern, common tern, roseate tern, Sandwich tern, little tern, Atlantic puffin, common guillemot, great cormorant, European shag, black-headed gull and black-legged kittiwake. Of these species European shags and great cormorants are considered benthic feeding birds. These species are designated as breeding features in the SPA, which means birds will be present in high numbers during the breeding season (February to August) before dispersing more widely. Population numbers are from 2015 (Natural England, 2015).</p> <ul style="list-style-type: none"> <li>▪ European shag – 1,677</li> <li>▪ Great cormorant – 230</li> </ul> <p>The Farne Islands and the Isles of Scilly are the two largest shag breeding colonies in England (Natural England, 2012). The Conservation Advice package does not give feature condition for these species. However, seabird species have been badly hit by Avian Influenza during the last two breeding seasons (2022 and 2023). The Farne Islands are home to approximately 200,000 seabirds. In the most recent breeding season (2023) the National Trust have collected 3,647 dead birds, but estimate this may only be 10% of the birds that have died. In 2022 National Trust rangers on the island collected over 6,000 dead birds. Cliff nesting birds were hit particularly badly on the Farne Islands in 2022 and kittiwakes and large gulls in 2023 (National Trust, 2023).</p> <p>Bird flu will have had impacted both population number and breeding success of multiple species in the SPA, as there has been a high mortality of adult birds. Data is not yet available to show the full impact at the four main breeding sites that make up the SPA.</p>	
<p><b>7. Is the potential scale or magnitude of any effect likely to be significant?</b></p>	<p><b>Alone:</b></p> <p><b>No.</b> Due to the prohibition of scallop dredging in the NIFCA District and the lack of any significant activity in 2021 and 2020 in the areas outside 6nm, NIFCA concludes with high confidence that scallop dredging does not pose a risk to the features of the SPA.</p>	<p><b>OR In-combination</b></p> <p><b>No.</b> There is currently no regular scallop dredging in the site, therefore it cannot act in combination with other fishing activity/projects to increase the pressure on features of the SPA.</p>
<p><b>8. Have NE been consulted on this LSE test? If yes, what was NE’s advice?</b></p>	<p>Yes, NE were consulted throughout the process and have approved this LSE.</p>	

**NMSPA – 056: Water column**

<p><b>1. Is the activity/activities directly connected with or necessary to the management of the site for nature conservation?</b></p>	<p>No</p>
<p><b>2. What pressures (such as abrasion, disturbance) are potentially exerted by the gear type(s)?</b></p> <p>*Sensitivities have been categorised as medium-high risk for this feature.</p>	<p>Changes in suspended solids (water clarity) (Sensitive)*</p> <p>Removal of non-target species (Sensitive)*</p> <p>Visual disturbance (Sensitive)*</p> <p>Deoxygenation (Sensitive)</p> <p>Hydrocarbon and PAH contamination (Not assessed)</p> <p>Introduction of light (Sensitive)</p> <p>Introduction or spread of invasive non-indigenous species (INIS) (Sensitive)</p> <p>Litter (Sensitive)</p> <p>Nutrient enrichment (Sensitive)</p> <p>Organic enrichment (Sensitive)</p> <p>Synthetic compound contamination (incl. pesticides, antifoulants, pharmaceuticals) (Not-assessed)</p> <p>Transition elements &amp; organo-metal (e.g. TBT) contamination (Not-assessed)</p> <p>Underwater noise changes (Sensitive)</p>
<p><b>3. Is the feature potentially exposed to the pressure(s)?</b></p>	<p>No, NIFCA byelaw prohibits the use of a dredge for fishing within the District and there has been no significant activity in the two areas outside 6nm in 2021 and 2020.</p>
<p><b>4. What are the conservation objectives for the feature?</b></p>	<p>Conservation objectives for water column:</p> <p>Water column is not mentioned in supplementary advice and therefore does not have specific Conservation Objectives.</p>

<p><b>5. What are the potential effects/impacts of the pressure(s) on the feature, taking into account the exposure level?</b></p> <p><i>(reference to conservation objectives)</i></p>	<p>Inside the NIFCA District (6nm from the shore) scalloping is prohibited by the ‘Dredges’ byelaw. This was introduced in 2022 and completely prohibits the use of dredges, requiring all dredging gear to be onboard, lashed and stowed when vessels are in the District. Therefore, the features of the SPA are not exposed to any of the above pressures from dredging whilst within the 6nm zone.</p> <p>There are two areas of the SPA that stretch outside of the NIFCA District and the Marine Management Organisation (MMO) has provided activity data related to dredging in these areas. Estimated landings data from the UK under 12m fleet does not show any landings from these areas in 2021 and 0.01 tonnes in 2020. Average annual landing from these areas from UK under 12m vessels (2012-21) is 0.01 tonnes. No VMS pings from dredging vessels were recorded in these areas in 2020 and 2021 (MMO data, pers comms).</p> <p>Therefore, NIFCA can conclude with high confidence that currently the SPA features are not exposed to the potential pressures caused by dredging.</p>	
<p><b>6. Condition and Conservation Objective Inferences</b></p>	<p>No evidence is available for the current condition of the water column feature within the Northumberland Marine SPA.</p> <p>In lieu of adequate evidence or conservation objectives, a CO of ‘Maintain’ has been inferred with a ‘low’ level of confidence.</p>	
<p><b>7. Is the potential scale or magnitude of any effect likely to be significant?</b></p>	<p><b>Alone:</b></p> <p><b>No.</b> Due to the prohibition of scallop dredging in the NIFCA District and the lack of any significant activity in 2021 and 2020 in the areas outside 6nm, NIFCA concludes with high confidence that scallop dredging does not pose a risk to the features of the SPA.</p>	<p><b>OR In-combination</b></p> <p><b>No.</b> There is currently no regular scallop dredging in the site, therefore it cannot act in combination with other fishing activity/projects to increase the pressure on features of the SPA.</p>
<p><b>8. Have NE been consulted on this LSE test? If yes, what was NE’s advice?</b></p>	<p>Yes, NE were consulted throughout the process and have approved this LSE.</p>	

**Conclusion**

**Is the proposal likely to have a significant effect 'alone or in combination' on the Northumberland Marine SPA?**

No

<b>Has the Marine Management Organisation been formally consulted on this tLSE (and do they agree)?</b>	<b>Yes, MMO been formally consulted on this tLSE and agree with the conclusions.</b>  <b>Charlie Wiseman, Principal Marine Conservation Manager, MMO</b>
<b>Has Natural England been formally consulted on this tLSE (and do they agree)?</b>	Yes, NE were consulted throughout the process and have approved this LSE.

<b>Date of document completion/'sign-off':</b>	<b>04/11/2024</b>
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## References

National Trust. (2023, September 11th). *National Trust*. Retrieved from Bird flu on the Farne Islands: <https://www.nationaltrust.org.uk/visit/north-east/farne-islands/bird-flu-on-the-farne-islands>

Natural England. (2012). *European shag: species information for SPA consultations*. Natural England Technical Information Note TIN134.

Natural England. (2015). *Departmental Brief: Northumberland Marine potential Special Protection Area (pSPA): Natural England*.

Natural England. (2023). *Lindisfarne SPA Conservation Advice Package*.

Natural England. (2023). *Northumberland Marine SPA Conservation Advice Package*.

**Annex 1** Location of Northumberland Marine SPA and co-located SPAs

