

**Department of Agriculture,
Environment and Rural Affairs**

From: [DAERA Marine Information Requests](#)
To: [MD Marine Renewables](#)
Subject: Spiorad na Mara Limited - Spiorad na Mara Offshore Wind Farm - Scotwind N4 Site - HRA Screening Consultation - Response Required by 24 October 2024
Date: 24 October 2024 15:57:10
Attachments: [image001.png](#)
[image003.png](#)
[image004.png](#)

Hi
This is a nil return from NI Marine and Fisheries. Thanks
Eamonn

Eamonn Brady | Marine Plan Team | Department for Agriculture, Environment and Rural Affairs
Ground Floor | Clare House | 303 Airport Road West | Belfast | BT3 9ED
Contact: Eamonn.Brady@daera-ni.gov.uk | **Tel:** (028) 90 569262 | **DD:** 69262.



Fisheries Management Scotland

From: [Alan Wells](#)
To: [MD Marine Renewables](#)
Cc: [Ben Walker](#); [Marc MacFarlane](#); [marineenergy@nature.scot](#); [erica.knott@nature.scot](#); [malcolm.fraser@nature.scot](#); [anna.moscrop@whales.org](#); [carla.boreham@whales.org](#); [Catherine.Kelham@RSPB.ORG.UK](#); [planning.scotland@rspb.org.uk](#); [clerk@widsfb.org](#); [admin@ohft.org.uk](#); [Brian Davidson](#); [consultations@naturalengland.org.uk](#); [ruth.cantrell@naturalengland.org.uk](#); [enquiries@naturalresourceswales.gov.uk](#); [natureconservation@npws.gov.ie](#); [WildlifeLicence@npws.gov.ie](#); [Marine.inforequests@daera-ni.gov.uk](#); [Liz.Pothanikat@daera-ni.gov.uk](#)
Subject: RE: Spiorad na Mara Limited - Spiorad na Mara Offshore Wind Farm - Scotwind N4 Site - HRA Screening Consultation - Response Required by 24 October 2024
Date: 01 October 2024 08:24:04
Attachments: [image001.png](#)
[image003.png](#)

Dear Kate,

Thank you for getting in touch. We note, and agree with, the comments by NatureScot from May 2024, and in particular, comments regarding the status of Atlantic salmon, and the difference between rivers gradings and SAC status. We also note, and agree with, the points made by NatureScot with regard to the potential for Atlantic salmon from a large number of rivers to migrate to the West of the Outer Hebrides and potentially pass through the development site. We note the comments by the Western Isles DSFB and Outer Hebrides Fisheries Trust regarding the timing and duration of future works, should consent be granted. These comments are particularly relevant, given the potential for connectivity with salmon from a large number of rivers across the UK and Ireland.

The latest HRA Screening report argues that “While Lilly et al. (2023) successfully tagged a number of salmon smolts in southwest Scotland, north west England and Northern Ireland, the tracking data does not extend as far as the Project or the ZoI and therefore no connectivity can be established between salmon from these rivers and the Project.”

We note, and support, the recent position that the Marine Directorate have taken - “MSS do not consider it appropriate for an EIA/HRA to conclude there is no or negligible impact just because no evidence exists of the impact. MSS advise that impacts to diadromous fish must be adequately investigated, rather than relying on a lack of evidence to claim there is no impact”. We believe that this statement is highly relevant to the proposed development and that more work is required to determine whether there is wider connectivity to other rivers, including SACs.

Whilst we recognise that the HRA process is focussed on the potential to have a likely significant effect on European sites of nature conservation importance, it is important to recognise that the drivers behind declines in wild salmon and sea trout, and other species of migratory fish, affect **all** rivers to a greater or lesser extent. In recognition that the marine phases of both Atlantic salmon and sea trout are included on the list of Priority Marine Features - the habitats and species of *greatest conservation importance* in inshore waters – we consider that **all** relevant rivers should be fully considered in the consenting and assessment process.

It is now well-recognised that populations of Atlantic salmon have rapidly deteriorated across their native range. In the latest species reassessment by the [IUCN Red List](#) of Threatened Species, released in December 2023, Atlantic salmon have been reclassified from ‘Least Concern’ to ‘Endangered’ in Great Britain (as a result of a 30-50% decline in British populations since 2006 and 50-80% projected between 2010-2025), and from ‘Least Concern’ to ‘Near Threatened’ in terms of global populations (as a result of global populations declines of 23% since 2006). We

therefore have an obligation to ensure that Atlantic salmon are protected and restored across Scotland and the wider UK.

Kind regards,

Alan

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National Trust for Scotland

The National Trust for Scotland: Comments to the Marine Directorate on the Spiorad Na Mara Offshore Windfarm HRA Screening Report

23rd October 2024

The National Trust for Scotland (the Trust) is very pleased that the concerns we raised in December 2023 with respect to what SPAs should be included in the Scoping Report were addressed.

Including the Mingulay and Berneray SPA, St Kilda SPA, and Seas Off St Kilda SPA (all of which contain seabird colonies the Trust cares for) in the HRA Screening Report ensures it is more comprehensive, and that appropriate levels of scrutiny is given to the impacts on vulnerable seabird colonies. The Trust commends the developer for working with us to address our concerns, as we are eager to facilitate the expansion of offshore windfarms in a way that also offers the best protection for seabirds.

However, there are four instances where species advised for inclusion by the Trust have not been scoped into the HRA Screening Report. We believe there is adequate data and/or it would be in line with the Precautionary Principle to include these species. The species are:

- St Kilda SPA: Leach's Petrel
- Seas off St Kilda SPA: Fulmar
- Mingulay and Berneray SPA: Fulmar and Guillemot

We have re-iterated our concerns and evidence for inclusion of these four species below.

St Kilda SPA: Leach's Petrel

Leach's Petrel was screened out of the assessment based on low abundances. Given the rapidly declining status of Leach's Petrel and the importance of St Kilda to the species, the Trust strongly advises the species is included in the HRA. We disagree that the abundance is considered too low to warrant further consideration.

Moreover, although information to inform assessments on procellariiforms (including Manx shearwater and Fulmar) may be data deficient (partially due to lack of effort to collect data on these species and technological limitations), technology has advanced, and work is now being carried out to fill these data gaps. Storm-petrels especially are known to be difficult to detect using current survey methods (e.g. Digital Aerial Surveys), which has been identified as a knowledge gap by Offshore Wind Strategic Monitoring and Research Forum. JNCC, in partnership with the University of Oxford, RSPB and the University of Gloucestershire, are currently undertaking work in this area (which includes Trust sites) and it is expected to be completed by December 2026. Leach's petrels are also currently the subject of a tracking study on St Kilda managed by RSPB. It would be pertinent for the applicant to use any interim results that may be available to consider these species in further assessments.

This is particularly important when we consider the vulnerability of Leach's petrels – they have declined by 79% since 2000 (Seabird Census 2023) and are listed as vulnerable to global extinction on the IUCN Red List. Coupled with this vulnerability is the fact that St Kilda is home 93% of the total UK population, meaning impacts on the St Kilda colonies would in fact have a significant population-level impact.

Seas off St Kilda SPA: Fulmar

Fulmar have been screened out based on low vulnerability scores for collision and displacement impacts. We question how robust this evidence base is, as recent reviews suggest Fulmar may be sensitive to both collision and displacement (Deakin et al, 2022). Fulmar has also been identified as one of the most sensitive species with respect to the Trollvind, a windfarm off the Norwegian coast (Ollus et al, 2023). Further evidence of the need to include Fulmar is the Trust's tracking data from Summer 2011 (which was highlighted in our submission in 2023) which shows some activity of St Kilda fulmars near Lewis. The Trust's own count in 2023 found that fulmars on St Kilda have declined by a 69% since 1999, which emphasises the need to include Seas off St Kilda Fulmar in the HRA.

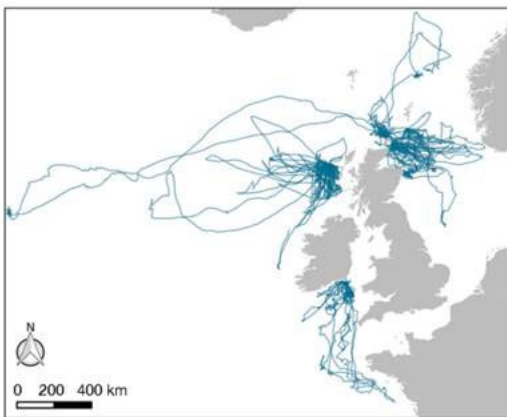


Figure 1: from Edwards, E. PhD Thesis 2015, University of St Andrews 'The breeding season foraging trip characteristics, foraging distribution and habitat preference of northern fulmars, Fulmarus glacialis'.

Mingulay and Berneray SPA: Fulmar and Guillemot

The Trust would encourage the applicant to include fulmars based on the evidence presented by us in 2023. Although no direct seabird tracking data currently exists data for Mingulay and Berneray SPA, data from the European at Sea Surveys shows high concentrations of Fulmar, Guillemot and Razorbill (as well as other species), around the array area in both winter (January) and during the breeding season (July):

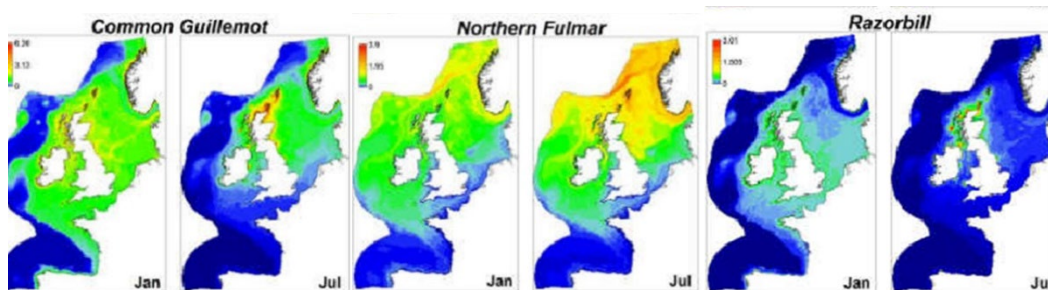


Figure 2: taken from: Waggitt JJ, Evans PGH, Andrade J, et al. 'Distribution maps of cetacean and seabird populations in the North-East Atlantic.' *J Appl Ecol.* 2020; 57: 253–269.

<https://doi.org/10.1111/1365-2664.13525>

Digital aerial survey (DAS) data has also confirmed these species to be present in the array area in sufficient numbers to warrant inclusion in assessments. Although these concentrations cannot be attributed to specific colonies, we do know the Mingulay and Berneray SPA is particularly important for these species, meaning it would be prudent to include them in the HRA for this SPA.

It is also important to include Guillemot in the HRA for the Mingulay and Berneray SPA because there is high variability and low confidence around the foraging radius of Guillemot, meaning it is impossible to be confident that the Mingulay and Berneray colony will not be impacted by the development.

The distance from the proposed site to Mingulay is 195km and the NatureScot recommended foraging range for Guillemot is of 95.2km. The Trust appreciates the applicant is following NatureScot guidance by not including Guillemot in the HRA, however foraging radii are widely accepted to be highly variable between colonies, years and individuals (Cleasby et al, 2023; Woodward et al, 2024). Guillemot foraging ranges are less well documented and classed as low confidence (Woodward et al, 2024), although available tracking data does show their foraging ranges can be just as large as that of Razorbill (Wakefield et al, 2017; Woodward et al, 2024).

The Trust is concerned that guillemots in the SPA have not been included in the HRA because of a poor understanding of their foraging ranges due to a lack of tracking data, rather than because there is a body of evidence showing that they are unlikely to be using the array area. Therefore, we strongly recommend guillemots are included in further assessments.

Finally, we observed that the application says guillemots should be considered further but then does not include them in table 5.11 or 5.8 for Mingulay. The Trust queries if leaving Guillemot out of tables 5.11 and 5.8 is an error because the application does not directly state that Guillemot is being discounted or provide explanation as to why.

Cetaceans

St Kilda is the UK's only dual UNESCO World Heritage Site, meaning it is designated both for its terrestrial and marine elements.

The Trust understands the Hebridean Whale and Dolphin Trust has raised concerns about how cetaceans will be impacted by the noise caused by pile driving, which can carry across large distances and have a significant impact on the behaviour of cetaceans. As logged on the HWDT's Whale Watch map (<https://whaletrack.hwdt.org/sightings-map/>), St Kilda is a hot spot for cetacean sightings, particularly for Minke Whale (bearing in mind the very low population density means many sightings are probably missed).

Stuart Murray also compiled the St Kilda Cetacean Records (2010) which showcases the importance of St Kilda to cetaceans. Between 2001-2010 Minke Whale, Fin Whale, Short-beaked Common Dolphin, White-beaked Dolphin, Atlantic White-sided Dolphin, Risso's Dolphin, Killer Whale, Long-finned Pilot Whale, and Harbour Porpoise were all spotted within 3km of St Kilda. Reports of Northern Bottlenose Whale, Humpback Whale and Sperm Whale were also noted.

Cetaceans are an important part of the marine biodiversity the WHS is designated for and, given the high instances of sightings and the potential harmful impacts of pile driving and other noise pollution, the Trust supports the HWDT's comments that cetacean impacts should be fulsomely included in the HRA so that effective mitigation can be developed in the final application.

Yours sincerely,

Diarmid Hearn

Head of Public Policy, Risk and Environment, National Trust for Scotland

Natural England

Date: 26 September 2024
Our ref: 488928
Your ref: ~~Click here to enter text.~~



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Dear Kate

HABITATS REGULATIONS APPRAISAL SCREENING REPORT under The Conservation (Natural Habitats, &c.) Regulations 1994

SPIORAD NA MARA LIMITED – SPIORAD NA MARA OFFSHORE WIND FARM – SCOTWIND N4 SITE

Location: NW coast of Lewis

Thank you for seeking our advice on the HRA Screening in your consultation which we received on 26 September 2024.

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.

The advice contained within this letter is provided by Natural England, which is the statutory nature conservation body within English territorial waters (0-12 nautical miles). As the application is located in Scottish waters, advice from NatureScot, the statutory nature conservation body in Scotland should be sought.

Having considered the location and scale of the Spiorad na Mara windfarm, we conclude that the project is unlikely to significantly impact any species from English designated sites. We do not expect a requirement to provide further comments or advice on this project unless the project changes substantially.

For any queries relating to the specific advice in this letter only please contact me using the details below. For any new consultations, or to provide further information on this consultation please send your correspondence to consultations@naturalengland.org.uk.

Yours sincerely

Ruth Cantrell
Marine Senior Officer
E-mail: ruth.cantrell@naturalengland.org.uk
Telephone: [Redacted]

NatureScot



NatureScot

Scotland's Nature Agency
Buidheann Nàdair na h-Alba

Marine Directorate
Scottish Government
[By email – MD.MarineRenewables@gov.scot]

16 October 2024
Our Ref: CNS/REN/OSWF/N4-Spiorad na Mara – Pre-application

Dear Kate

HABITAT REGULATIONS APPRAISAL SCREENING CONSULTATION - SPIORAD NA MARA LIMITED – SPIORAD NA MARA OFFSHORE WIND FARM – SCOTWIND N4 SITE

Thank you for consulting us on the Habitat Regulations Appraisal (HRA) screening report for the Spiorad na Mara offshore wind farm development, received 26 September 2024.

We have reviewed the HRA screening report and provide advice, as outlined below, on those European Sites and the associated qualifying features for which we consider it reasonable to expect a Likely Significant Effect (LSE) either alone or in combination with other plans or projects.

We note that at the current time the applicant has not been able to provide a definitive list of projects to inform an assessment of in-combination effects.

We understand that the applicant is no longer seeking deemed consent for the onshore elements of the application and so from this point onwards any liaison or consultation on the onshore elements should be directed to the local NatureScot Operations Team, based in Stornoway (west@nature.scot).

NatureScot Advice

We provide detailed advice on each of the receptor grounds in the following Annexes:

- Benthic, Subtidal and Intertidal Ecology – Annex A
- Marine Mammals – Annex B
- Offshore and Intertidal Ornithology – Annex C
- Migratory fish and freshwater pearl mussel – Annex D
- Terrestrial Ornithology and Ecology – Annex E

We hope this advice is useful to you. Please do not hesitate to contact me if you have any queries and copy any correspondence to our marine energy mailbox – marineenergy@nature.scot

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Yours sincerely

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NatureScot is the operating name of Scottish Natural Heritage

Annex A - Benthic, Subtidal and Intertidal Ecology

Overall, we are content with the conclusions reached for benthic features, with the exception of the issues discussed in more detail below.

The assessment for benthic features is based on the Zone of Influence of 15km, which is described as a precautionary approach being used until project specific reporting is available. Once available, the Zol will be reviewed and revised if necessary. We are content with the approach proposed.

Loch Roag, Traigh na Berie, St Kilda and North Rona SACs are identified for consideration, with only Loch Roag being screened in. However, our view is that Traigh Na Berie SAC should also be screened in as it lies within the 15km Zol.

In our scoping response, we did not mention Tràigh na Berie SAC but there was some confusion about distances at the time. Now that distances have been provided, our view is that this site should be considered.

We are in agreement with the conclusion to screen out St Kilda and North Rona SACs.

ANNEX B - Marine Mammals

Selection of Receptors

In the initial stage of selecting potential receptors (section 3.2.2), the assessment applied a 50km distance for harbour seal and a 20km distance for grey seal, and used telemetry studies to understand connectivity from any sites further than these distances. We are content with the approach for seal SACs.

According to Carter et al 2022, the developers have identified that there could be grey seal connectivity with the Monach Isles SAC. We note their approach in screening this SAC in, however we wish to emphasise that unless the telemetry data shows **regular use of the site** (i.e. not single sightings of animals) then we are content to screen out this SAC. However, without having sight of the data used for screening, we are content to screen the SAC in as a precaution.

Determination of Likely Significant Effect (LSE)

In table 5-2, we note that Moray Firth SAC is screened out while the Inner Hebrides and the Minches SAC and the Monach Islands SAC are screened in and NatureScot agree with this approach. However, all the impacts that could affect marine mammals (as per the EIA, indirect impacts on prey species, for example) should be included, not just disturbance from noise, physical structures and vessels.

Although not part of the HRA process, we advise that the Risso's dolphin feature of North-East Lewis MPA is assessed and considered in the EIA, especially until more is known about noise contours.

LSE Site List

Table 7-2 sets out the impacts on each of the SACs where LSE cannot be ruled out. While we agree with what is presented, we would advise more detail on the specific sources of impact. For example, we would expect noise from piling, other non-piling/continuous noise source construction activities, vessels, UXO and geophysical surveys to be separated to be considered individually at the next stage in the HRA process.

Other

Impacts to otter in the marine environment should be considered as they may be connected to the population of the Lewis Peatlands SAC. We note that otter as an interest of this site are mentioned in the section on terrestrial impacts, however, we advise that the developer will need to consider the impacts to otters in the marine environment within 10km of otter SACs.

ANNEX C – Offshore and Intertidal Ornithology

Impact Pathways (Pressures – Section 5.4.1)

Distributional responses (this is referred to as physical presence in the report), collision, and artificial lighting have been screened into the assessment. Vessel disturbance is considered, but only in the context of above water noise, they also screen out disturbance or displacement from vessel movements beyond 2km of the array area and offshore cable corridor. They screen out 'direct physical impact (to habitat)'.

We advise that disturbance from vessels is screened into assessment from the perspective of visual disturbance, and that vessel movements between the development area and the port from which they will operate are also considered, where impacts on SPA features are likely.

We also advise that temporary impacts to prey availability is also screened in during construction and decommissioning phases. This should be considered particularly if the area is of significant importance for foraging seabirds (Wakefield et al., 2017).

Impacts on prey availability

Offshore wind developments may have indirect impacts on marine birds by affecting prey availability. Impacts to key prey species and prey habitats within the wind farm area should be considered across all development phases alone and in combination with other activities in the development area, particularly in areas of importance for foraging seabirds (Wakefield et al. 2017).

We increasingly need to understand the impacts at the ecosystem scale and predator/prey interactions. Consideration across key trophic levels will enable better understanding of the consequences (positive or negative) of any potential changes in prey distribution and abundance on ornithological interests, and how this may influence population level impacts. Drivers of change could include habitat loss and potential changes to trophic interactions and community structure and function, including prey species compositional changes e.g. changing from those dependent on sandy substrates to those species favouring rocky substrates.

Impacts on prey availability does not appear to have been considered in the HRA Screening Report and is absent from Table 5-3 which lists pressures screened in/ out of further consideration. We advise that this impact pathway should be screened into further assessment.

Breeding seabirds in the breeding season - Assessment of connectivity

The connectivity of breeding birds in the breeding season has been based on the foraging range tool and further refined using the apportioning GIS tool. The use of the foraging range tool is appropriate to developing the longlist, however the apportioning tool uses a geometric centre to geometric centre measurement which is not appropriate at stage 3 of HRA. This results in multiple different 'distances to project' for various species – see for example North Rona and Sula Sgeir SPA or Flannan Isles SPA.

We do not support the apportionment advice being applied to the assessment of connectivity. The assessment of connectivity should be calculated from the edge of the development area to the edge of the SPA.

In addition, we have not been provided with the pdf output from the GIS tool (as requested in our Guidance Note 3) which ensures clear audit of the process taken, metrics used and outputs.

Furthermore, Foula SPA is considered in the long list but Seas off Foula SPA is not – this should be scoped into the long-list on the basis of connectivity with breeding seabirds such as great skua and fulmar. We also note that Kittiwake at Troup, Pennan and Lion’s Head SPA is scoped in despite being beyond the foraging range for this species.

Both table 5-4 and section 7.4 note species which qualify as a named component of the assemblage. It is not clear if the assessment intends to treat them differently as a result. We advise that in Scotland we treat these in the same way as qualifying species.

Table 5-4 requires review on the basis of the above advice.

Breeding seabirds in breeding season - Species within connectivity distances

The reports states that connectivity has been identified for 9 species (fulmar, gannet, great skua, guillemot, kittiwake, Manx shearwater, puffin, razorbill and storm petrel). However, this discounts Leach’s petrel which is within connectivity distance for Flannan Isles SPA, Foula SPA, North Rona and Sula Sgeir SPA, Ramna Stacks and Gruney SPA, St Kilda SPA and Sule Skerry and Sule Stack SPA.

HRA screening of species has been undertaken on the basis of only 12 months of DAS data. We have not seen the Final 2 Year DAS report, and we advise that screening should be based on the full 2 years of DAS data to determine LSE.

Petrels - The developer notes an intention to scope out petrels from LSE due to low numbers recorded in their DAS. We disagree with this approach and note that RSPB advised on this in May 2024. We agree with the representation from RSPB in May 2024 that petrels should not be scoped out on the basis of low numbers recorded on DAS - “The lack of observations of these species in the DAS data has been noted (see Section 6.7.3.5) and limited data available or more sparsely spread distribution when considering foraging ranges has been suggested as reasons why this may be. Mindful of the characteristics of procellariiforms (i.e. they are relatively small birds and tend to fly outside the day light hours) and the timings of the DAS (i.e. during the middle of the day), RSPB Scotland considers it likely this type of species will be under recorded in DAS. It is not appropriate to screen out these receptors on this basis. Impacts to these species should be scoped in.”

Given the challenges of undertaking a quantitative assessment for petrels based on the limitations of the survey technique for detecting and estimating populations for these species, we advise that a qualitative assessment can be undertaken. Tagging and tracking work from various petrel colonies could be used to inform this assessment (e.g. Mousa, St Kilda and Treshnish Isles).

Great skua - The developer also notes an intention to scope out great skua on the basis that they were seen in low numbers within one breeding season. We advise that great skua is not scoped out on the basis of this one season of data. This is particularly important given that the data was collected during the height of the outbreak of Highly Pathogenic Avian Influenza (HPAI) in great skua which resulted in a 77% decline in the UK breeding population (Tremlett et al., 2024).

Vulnerability

The developer presents an assessment of vulnerability of the species within connectivity distance. To do so they use the Wade et al., 2016 paper. They have translated the scoring from that paper into levels of vulnerability e.g. high, moderate, low etc. However, it is not always clear how this was done. For example, the impact pathway 'physical presence' (distributional effects) have been translated. We would have expected these scores to come from supplementary table 7 (vulnerability to displacement and disturbance). However, the scores differ, e.g. Kittiwake has a score of 8 not 2 and guillemot has a score of 24 not 4. Clear explanation of where each score has come from will be required in the assessment.

In addition, the assessment of above water noise appears to have come from the assessment of vessel and helicopter impacts on displacement and disturbance from Wade et al., 2016. This does not explicitly assess above water noise, and we would expect that a significant proportion of the displacement from vessels is likely to be from visual disturbance.

Seabirds in the non-breeding and migratory seasons

The screening of sites and species within connectivity during the non-breeding season and migratory seasons has been undertaken using the BDMPS. We agree with this approach and the exception used for guillemot during the non-breeding season.

Marine SPAs and Non-breeding Seabirds

The developers note that there are no SPAs which overlap with the ZOI. For marine SPAs this is 15km. We agree that there is no overlap between the ZOI and any marine SPAs, and therefore there is no LSE for the features of any marine SPA.

Migratory non-seabirds

The scoping of migratory non-seabirds is appropriate. In undertaking the assessment for migratory birds, the recently published Offshore wind strategic review (2023) should be used for assessment of migratory waterbirds and the WWT & MacArthur Green 2014 report should be used for seabirds.

ANNEX D – Migratory Fish and Freshwater Pearl Mussel

Distance from Project

As mentioned in our previous responses there still seems to be some ambiguity on distances. In the HRA three distances are provided for distances from each Atlantic salmon SAC and we are not entirely clear what the distances ‘at sea’ refers to.

Project Phase and Pressure

The list of pressures listed for each phase of the project is useful, but it is not obvious where increased risk of predation is located – particularly whilst others (INNS) is mentioned specifically despite being identified as being a lower priority within the ScotMER Evidence Map. We assume it may be included in ‘Physical Presence (of structure)’ but this isn’t clear. We have mentioned EMF, Operational Noise (UW noise) Disruption (light/shadow flicker) and increased risk of predation as key potential pressures, so whilst they may be rolled into one or more of the list provided in Table 5-14, it would be useful to see these things cited explicitly.

Justification for Screening in or out

We agree with the conclusion to screen in North Harris and Langavat SACs.

For freshwater pearl mussel (FWPM) in North Harris SAC, sea trout will also be a host – so like Atlantic salmon, anything which has the potential to impact Atlantic salmon/sea trout populations has the potential to impact FWPM. We suggest that, whilst it is unlikely that the development will impact the freshwater habitats that support either salmonid species or FWPM, it may have the potential to impact either of the salmonid species which are essential for FWPM to complete its life cycle.

In our response to MDLOT we stated that the River Derwent SAC and Atlantic salmon originating from rivers in other parts of GB and Ireland may be come into contact with the proposed development (e.g. Lilly, 2023; Rogers et al. 2024). However, we are aware evidence is currently a bit patchy. We therefore agree with the conclusion to screen out the River Derwent. However, this river as well as other natal rivers for Atlantic salmon should still be considered as part of the EIA. In addition, the developers may wish to be involved in more strategic salmonid tracking studies on the west coast.

Potential for LSE

We agree with the conclusion in table 5-14 for each feature within the Langavat and North Harris SACs.

For Table 7-5 for North Harris SAC we would prefer to see Atlantic salmon screening/LSE information presented separately rather than being amalgamated with other qualifying species and habitat features.

We question whether disturbance in coastal areas (which may mean that post-smolts avoid areas of high activity during all stages of development, operation and decommissioning) may equate to a potential loss of (coastal/marine) habitat. This also applies to sea trout, which may support FWPM.

The INNS assessment suggests no risk during construction and decommissioning. Construction means bringing material into the site from elsewhere, so that would present a risk, and decommissioning a structure and transporting material (which may also include INNS) to another location. In terms of import and export acting as vectors for introduction of INNS we are of the view that the construction phase does present a risk.

References for Migratory Fish

Lilly, J.M. (2023). *The behaviour of Atlantic salmon (Salmo salar) on first migration to sea*. Unpublished PhD Thesis, University of Glasgow 288pp.

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ANNEX E – Terrestrial Ornithology and Ecology

Migratory non-seabirds

Our view is that this list includes a number of species which are not relevant to this development. The screening should cover the species which functionally use the site/migrate through it (i.e. species whose populations breeding in Iceland/Greenland/Canada primarily pass through the area on spring and autumn migrations), therefore wintering waterbirds (grebes, divers, ducks, geese, swans, waders) should be the main focus and so many species and some SPAs can therefore be screened out.

Examples are any breeding corncrake, dotterel, divers, etc. Checking of breeding ranges and likelihood of presence during migration and status in the Outer Hebrides would identify these as having no or negligible connectivity (e.g. merlin breeding in Iceland are a different subspecies from UK and winter here, UK breeding merlins are short range migrants and would not be present passing through the site – which is what is stated in Woodward *et al* 2023).

There also seems to be inconsistent treatment of some species e.g. a conclusion of no LSE is reached for scaup for Lough Neag SPA, but LSE is concluded for Dornoch Firth and Loch Fleet SPA etc., similarly ruff at several English SPAs but ruff don't breed in Iceland/Greenland and any likely presence is passing through the site is minimal (this species is a scarce migrant and rare breeder in Outer Hebrides).

The paragraph 5.4.1.22 on the barrier effect is slightly simplistic and suggests LSE can be screened out. Whilst the references given do state that additional energetic costs are relatively low their modelling did not factor in impacts of weather during migration, nocturnal flights etc. and the authors note that the energetic cost of avoiding a wind farm is additional to any impacts caused by other factors. The screening statement also doesn't factor in that the avoidance energetic cost is an ongoing, potentially twice, yearly additional energy cost not a one-off as suggested.

Woodward *et al* 2023 highlights that several key species are known to stopover in the Outer Hebrides and can be affected by weather on migration, so birds passing through the wind farm area may not always be in good condition when they are travelling through.

Terrestrial birds

Paragraph 3.2.5.3 appears to be listing the Lewis Peatland SPA qualifying birds but incorrectly includes curlew, which is not a qualifying interest at this site.

Table 5-15 – For Ness & Barvas, Lewis SPA the text is slightly confused and talks about SPA curlew not corncrakes. Their justification isn't fully accurate. RSPB research has shown that the majority of female corncrakes nest within 250m of a calling male so simply using a disturbance distance for a male is not adequate, this distance will need to be greater to take into account any females.

Lewis Peatlands SPA – Lewis has one of the highest densities of golden eagles in Europe. All moorland habit in Lewis is used, and any golden eagle, regardless of breeding or not, that uses the SPA is an SPA bird, therefore golden eagle should be scoped in.

Several of the SPA qualifying species are Schedule 1 breeding birds under the Wildlife and Countryside Act 1981 (as amended) and a number of the actions which could impact are activities that will legally have to be avoided/mitigated regardless of whether in SPA or not. The potential disturbance of breeding birds should be considered through the production of a breeding bird mitigation plan.

Table 7.6 – We advise that LSE should not be ruled out during the operational phase for most qualifiers if e.g. cable maintenance/emergency work was required during the breeding season there is risk of disturbance to SPA birds, some of which are identified in the survey data as breeding within the cable survey corridor. This will require further consideration based on the refinement of the project envelope for the onshore cable connection route and deployment.

Cumulative

We advise that the in-combination assessment should consider terrestrial pressures/threats to SPA populations, this applies to both the terrestrial birds and the migratory non-seabirds covered in the offshore ornithology section. For example, we previously flagged up the AEWA single species plan for Greenland White-front (which is under review), which UK government is signed up to due to our international responsibility for this population, which is in an unfavourable status.

Terrestrial ecology

With regards to non-ornithology terrestrial interests, we have no further comments on the report.

**National Parks and Wildlife
Service**

From: [Housing_wildlifelicence](#)
To: [MD Marine Renewables](#)
Cc: [Ben Walker](#); [Marc MacFarlane](#); [Kate Taylor](#)
Subject: RE: Spiorad na Mara Limited - Spiorad na Mara Offshore Wind Farm - Scotwind N4 Site - HRA Screening Consultation - Response Required by 24 October 2024
Date: 15 November 2024 17:25:08
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)

Hi Marc

Apologies for the delay on replying to your emails on this subject, there was some difficulty in locating the correct section for this query.

At this time we don't have any comments or observations to make.

Regards
Claire

Claire Crowley
Assistant Principal
Wildlife Licencing Unit

An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreacht
Department of Housing, Local Government and Heritage

An tSeirbhís Páirceanna Náisiúnta agus Fiadhúlra
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RSPB Scotland



Kate Taylor
Casework Officer
Licensing Operations Team
Marine Directorate
Scottish Government
Marine Laboratory
Aberdeen
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By email: MD.MarineRenewables@gov.scot

7th November 2024

Dear Kate,

**SPIORAD NA MARA LIMITED – SPIORAD NA MARA OFFSHORE WIND FARM –
SCOTWIND N4 SITE**

**HABITATS REGULATIONS APPRAISAL SCREENING REPORT UNDER THE
CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994, THE
CONSERVATION OF OFFSHORE MARINE HABITATS AND SPECIES REGULATIONS
2017 AND THE CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2017**

Thank you for consulting RSPB Scotland on the above HRA Screening Report, and for allowing RSPB an extension of time to respond.

We understand that the HRA Screening Report covers both offshore and terrestrial elements of the proposed development and that the proposed development will comprise up to 66 fixed bottom turbines, with a nominal capacity of 840-1000MW, along with associated off and onshore infrastructure. including transmission cabling and substation/s, and a temporary working area of between 20,000 and 40,000m². We note that a 35 year consent is sought.

Faced with the threats of climate change to the natural world, RSPB considers that a low-carbon energy transition to reach net zero is essential to safeguard biodiversity. Inappropriately designed and/or sited developments can however cause serious and irreparable harm to biodiversity and must be avoided. We would anticipate that the onshore elements of the proposal would be subject to Biodiversity Enhancement, the extent of which would depend upon the policy context at the time of submission. We

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understand that consideration is being given to incorporating Marine Biodiversity Enhancement requirements into National Marine Plan 2 and, depending on application submission timeframes, this potential requirement should also be considered in relation to offshore elements.

We have reviewed the screening report in this context and provide the following comments.

General Comments

The UK is of outstanding international importance for its breeding seabirds and wintering marine birds. As with all Annex I and regularly migratory species, the UK has a particular responsibility under the Birds Directive to secure their conservation. Their survival and productivity rates can be impacted by offshore windfarms directly (i.e. collision) and indirectly (e.g. displacement from foraging areas, additional energy expenditure, potential impacts on forage fish and wider ecosystem impacts such as changes in stratification).

RSPB Scotland encourage the adoption of a precautionary approach to the identification of relevant protected sites for seabirds with clear methodology on the exclusion of sites and species. We generally agree with the collection and analysis methods advised by NatureScot, with some exceptions as set out below. We recommend use of the guidance notes available on their website to inform assessment. If an Applicant chooses to undertake supplementary modelling using alternative parameters to that recommended, we suggest this is clearly labelled.

As set out in Searle et al (2023)¹, assessing impacts of offshore windfarms and other renewables developments is inherently uncertain. This uncertainty is propagated throughout the impact assessments, as there are not only direct impacts, but ecosystem wide impacts that can change, for example, the abundance and availability of prey. Multiple data sources and modelling techniques are used to capture a simplified version of reality. They do not fully capture the complexity of seabird behavioural or demographic processes in a dynamic marine environment.

Not recognising these uncertainties risks poorly informed decisions being made. Furthermore, an underestimation of impacts will have repercussions when consenting later offshore wind development. If a precautionary approach is taken from the beginning, the likelihood of irreversible damage occurring is reduced even whilst our knowledge base is incomplete, and modelling improves.

¹ Searle, K. R., S. H. O'Brien, E. L. Jones, A. S. C. P. Cook, M. N. Trinder, R. M. McGregor, C. Donovan, A. McCluskie, F. Daunt, and A. Butler. "A framework for improving treatment of uncertainty in offshore wind assessments for protected marine birds." *ICES Journal of Marine Science* (2023): fsad025.

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The precautionary principle requires the Applicant to demonstrate with scientific certainty that something would not be harmful. The concept of something being overly precautionary dismisses the inherent uncertainty in modelling and overlooks the simplistic version of reality that the modelling captures.

Detailed Comments

If the apparent uncertainty about the number of turbines to be installed is not resolved by the time applications for the development are submitted, RSPB Scotland assumes that any assessments submitted in support of the applications will reference the 'worst case scenario' when it comes to identifying LSE.

We note that many details are yet to be confirmed, with numerous options remaining under investigation, including cable installation options, Grid Substation and SSEN Converter Substation locations, and associated lighting requirements, for example. It is therefore not straightforward for RSPB Scotland to identify with certainty what the likely significant effects of the development might be. Whilst it is not RSPB Scotland's role to advise on such matters, RSPB Scotland questions whether it might have been better to delay the submission of the HRA Screening Report until the proposals are more refined. It would have helped if the numerous options were mapped to assist with their visualisation.

We note the reference in paragraph 2.1.2.4 to 'interconnector cables being needed to link OSPs with larger offshore array areas', and question which larger array areas the applicant is referring to, and whether the applicant is aware of other proposals which are not at such an advanced stage of development, and which may need to be factored into 'in-combination' assessments.

It is noted that the Onshore Cable Corridor Area of Search traverses a significant area of peatland and that open-cut trenching is the worst-case scenario when it comes to the primary installation method for onshore cabling. Whilst it can be inferred that all cables will be undergrounded, this is not categorically confirmed and so may need to be further considered in any assessments which are undertaken in support of the application.

It is not clear why, when 24 months monthly surveys have been undertaken, the processed information to inform Screening has been undertaken based on only the first 12 months of DAS data (see paragraph 4.1.3.2 of the Screening Report).

Due to capacity constraints, we have not been able to interrogate every detail in the numerous tables included in the Screening Report.

RSPB Scotland would welcome inclusion of consideration of the potential wider ecosystem impacts that may arise through the construction and operation of the wind

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Patron: His Majesty The King **President:** Dr Amir Khan **Director, RSPB Scotland:** Anne McCall.

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farm². These could occur, for example, through changes in water column stratification arising from the presence of the wind farm ultimately altering the availability of prey to seabirds.

Offshore Ornithology

Referencing Tables 5.5 and 5.6 respectively, RSPB Scotland disagrees with the screening out of Great Skua, European Storm Petrel and Leach's Storm Petrel.

We note that the presence of very few Great Skua was recorded, however the years surveyed are all years during or just after the main impacts of HPAI on Great Skua, which has seen the UK population fall by 77%³, with Western Isle population declining 57%. Furthermore, in the years following HPAI there was very poor breeding success (especially for 2022 and 2023), with birds recorded abandoning territories during the breeding season. These changes in population will influence the surveys counts and any assessment based on those surveys will not properly account for potential future population level responses that will occur during the lifetime of the project. For these reasons we would prefer the screening in of Great Skua and associated protected sites.

The Applicant has also screened out both European and Leach's Storm Petrel due to low numbers being recorded during surveys. However, as highlighted in Deakin et al. 2022, Digital Aerial Surveys (DAS) are likely to have inherent biases in the counts of these species. The first of these biases is related to the small size and consequent detectability of these species, particularly when on the water surface. Furthermore, both species are active throughout the diel cycle, with different levels of activity depending on location and behaviour. As DAS flights are restricted to the middle of the day the results are potentially biased against birds active on the site during the nighttime or crepuscular hours. The Outer Hebrides has over 95% of the UK population of Leach's Storm Petrel and 6% of the UK population of European Storm Petrel⁴. As such it is unlikely that such small numbers are reflective of the actual numbers utilising the survey area.

In table 5.7, Manx Shearwater are listed as being vulnerable to impacts associated with artificial lights. This is correct and welcomed by RSPB Scotland. However European and Leach's Storm Petrel are also vulnerable to this impact and, as noted above, should be screened into this assessment. Further detail is also required as to how this impact will be quantified. All these species can be subject to attraction to light (such as those on

² Isaksson, N., Scott, B.E., Hunt, G.L., Benninghaus, E., Declerck, M., Gormley, K., Harris, C., Sjöstrand, S., Trifonova, N.I., Waggitt, J.J. and Wihsgott, J.U., 2023. A paradigm for understanding whole ecosystem effects of offshore wind farms in shelf seas. *ICES Journal of Marine Science*, p.fsad194.

³ Tremlett, C.J., Morley, N., and Wilson, L.J. (2024). UK seabird colony counts in 2023 following the 2021- 22 outbreak of Highly Pathogenic Avian Influenza. RSPB Research Report 76. RSPB Centre for Conservation Science, RSPB, The Lodge, Sandy, Bedfordshire, SG19 2DL

⁴ Burnell, Daisy, Allan J. Perkins, Stephen F. Newton, Mark Bolton, T. David Tierney, and Tomothy E. Dunn. *Seabirds Count: A Census of Breeding Seabirds in Britain and Ireland (2015-2021)*. Lynx Nature Books, 2023..

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turbine nacelles) and subsequent disorientation, (Deakin et al. 2022⁵) Such attraction, and subsequent disorientation, could have both direct and indirect impacts on these species. Direct impacts would be collision of birds that have altered their flight trajectory to enter the rotor swept zone, and it is most likely best considered by amended collision risk models. Indirect impacts could be through the energetic consequences of additional flight, which could result in subsequent mortality or reduced breeding performance. RSPB Scotland would welcome discussion with the Applicant as to a suitable methodology for this assessment.

Noting, and welcoming the screening in of Fulmar in Table 5.5, RSPB Scotland would welcome the inclusion of distributional responses as an impact for Fulmar, in particular in the consideration of in-combination impacts. We acknowledge that this is not something that has usually been considered for this species, mainly due to their large foraging range. However, the scale of proposed development in the ScotWind leasing round may mean that this becomes an emerging issue, and RSPB Scotland would welcome its consideration.

Onshore Ornithology

Any underground trenching corridor for electricity cables and connections would benefit from being sited as close as possible to existing areas of disturbance, notably from the A857 road, which will help to reduce impacts upon breeding birds and potentially reduce the need to remove peat. This is especially important in relation to the line that crosses the Lewis Peatlands SPA and in relation to the Ness and Barvas SPAs where Corncrake are present. Referencing the Ness and Barvas SPA citation in Table 5.15, and welcoming the screening in of Corncrake therein, it is noted that Curlew are referenced in the 7th column, which is presumably a typing/cut and paste error.

Nature Scot guidance on 'Dealing with Construction and Birds' should be referenced in the report and adhered to in any future works.

While Golden Eagles are referred to, in terms of habitat affected, this is viewed as being negligible and they are screened out. However, while the corridor width is 100 metres this does traverse the island, and we would question whether the habitat affected would be negligible. This would also depend on the quality of restoration along the underground line. We would also assume that the habitat affected would be different and involve different risks to the birds if the connection line were to be by means of overhead cables.

While noting that White Tailed Sea Eagle are not cited as part of the SPA designations careful consideration should be given to this species in the EIA as it is present and known to use the area of the windfarm and onshore infrastructure.

⁵ Deakin, Z., Cook, A., Daunt, F., McCluskie, A., Morley, N., Witcutt, E., Wright, L. and Bolton, M., 2022. A review to inform the assessment of the risk of collision and displacement in petrels and shearwaters from offshore wind developments in Scotland.

RSPB Scotland welcomes the numerous references in the Screening Report to NatureScot guidance, (for example the references in Table 3-3), and advises that the applicant continues to adhere to such guidance in assessing the likely significant effects of the proposed development.

Should you require any further information or clarification, please do not hesitate to get in contact.

Yours sincerely,
Andrew Tait
Senior Conservation Planner, RSPB Scotland

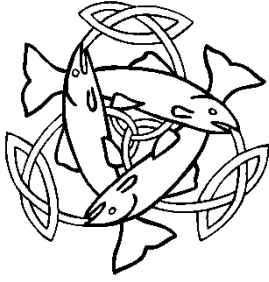
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**Western Isles District Salmon
Fisheries Board**



Western Isles District Salmon Fisheries Board

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Spiorad na Mara Offshore Wind Farm - Scotwind N4 Site

25/10/24

Dear Marine Directorate – Marine renewables,

WIDSFB welcome the inclusion of Atlantic Salmon being scoped into the EIA. WIDSFB understand that the inclusion of Atlantic Salmon is based on a 50km zone of influence however ZSL are conducting tracking studies which could potentially confirm connectivity between the Langavat SAC and the Spiorad na mara development. If the ZSL tracking study confirms connectivity to the Langavat SAC then the HRA screening should be revisited. WIDSFB would consider this a precautionary approach alongside the following:

- Impacts to migration from reflected light, shadow flicker and fixed electrical lighting should have clear mitigation measures identified in the EIA.
- Mitigation measures identified to address the risk of increased losses resulting from predation of smolts navigating the development site.

Where appropriate the mitigation requests above should consider outgoing (smolt) and returning (adult) life stages of Atlantic Salmon.

Yours Sincerely

Jason Laing
Clerk to the Western Isles District Salmon Fisheries Board

Whale and Dolphin Conservation

MD.MarineRenewables@gov.scot

Dear Sir or Madam,

Re : Spiorad na Mara Offshore Windfarm HRA - Screening Report.

Thank you for the opportunity to respond on the Habitats Regulations Appraisal (HRA) screening document for **Spiorad na Mara Offshore Windfarm**. WDC's comments relate only to cetaceans.

WDC supports efforts to develop marine renewable energy in Scotland in an environmentally sustainable manner that prioritises nature recovery. However, while we note the potential consequences of climate change for cetaceans and appreciate the Scottish Government's commitment to transition to renewable energy, we do have significant concerns about the potentially harmful impacts of these developments, both individually and cumulatively, on cetaceans (whales, dolphins and porpoises) in Scottish waters.

WDC is particularly concerned that not all cetacean species in the area have been screened into the HRA. All cetaceans are protected under UK law, specifically through the Conservation of Habitats and Species Regulations¹ and the Conservation of Offshore Marine Habitats and Species Regulations². In Scotland, these species also receive protection under the Conservation (Natural Habitats &c.) Regulations 1994 (as amended), classifying them as European protected species that require strict protection. This legislation makes it an offence to capture, kill, injure, or disturb any cetaceans throughout their natural range, and this should be a key consideration the HRA process³.

North-east Lewis NCMPA for Risso's dolphins.

The HRA screening report fails to screen-in and adequately address the existence of the North-east Lewis Nature Conservation MPA for Risso's dolphins and sandeels, which is a significant oversight given that this MPA lies within the screening area for the proposed development. It is crucial that the HRA screening report incorporates details and an assessment of this MPA, which was designated by the Scottish Government in 2020.

Risso's dolphins are regularly recorded both within and outside the MPA throughout the year, with a minimum population estimate of 117 animals. Many of these dolphins have been re-sighted between and within years and over extended periods (more than 10 years), indicating strong site fidelity and at least partial residency for some individuals⁴. Additionally, mothers with calves and groups consisting entirely of juveniles have also been observed within the NCMPA, highlighting that these waters are vital not only for feeding but also for breeding, nursing, and raising their young⁵.

Physical presence of vessels during operational phase

WDC does not agree that the 'Physical presence (of vessels)' during the operational and maintenance phases can be excluded (screened out) for cetacean MPAs. We recommend that this factor is screened in for all cetacean MPAs at all stages of the project phase in the HRA. There will be a significant increase in vessel activity during construction, operation, maintenance and decommissioning, each contributing to heightened vessel noise and collision risk.

¹ UK Government. The Conservation of Habitats and Species Regulations. <https://www.legislation.gov.uk/uksi/2017/1012/contents/made>

² UK Government. The Conservation of Offshore Marine Habitats and Species Regulations. <https://www.legislation.gov.uk/uksi/2017/1013/contents/made>

³ Marine Scotland guidance on The protection of marine European protected species from injury and disturbance: Guidance for Scottish inshore waters.

⁴ Weir et al 2019) [S0025315418000516jra.1.12](https://doi.org/10.1017/S0025315418000516jra.1.12)

⁵ Dolman and Hodgins 2013; Weir et al 2019; Hodgins in prep Report to NatureScot; Dolman S.J. and Hodgins N.K. (2013) Land and boat-based observations of Risso's dolphins off NE Isle of Lewis, Scotland. In Chen I., Hartman K., Simmonds M., Wittich A. and Wright A.J. (eds.) *Grampus griseus* 200th anniversary: Risso's dolphins in the contemporary world. Report from the European Cetacean Society Conference Workshop, 26th European Cetacean Society Conference, Galway, Ireland, 23-29 March 2012. European Cetacean Society Special Publication Series No 54, pp 44-53; Hodgins, Nicola. K., Dolman, Sarah. J. and Weir, Caroline. R. (2014). Potential hybridism between free-ranging Risso's dolphins (*Grampus griseus*) and bottlenose dolphins (*Tursiops truncatus*) off north-east Lewis (Hebrides, UK). *Marine Biodiversity Records*, 7, e97 doi:10.1017/S175526721400089X.

Increased vessel noise can disrupt critical cetacean behaviour and cause displacement. For example, studies have shown that foraging behaviour and echolocation of harbour porpoise can be negatively impacted by the presence of vessels, resulting in significantly fewer prey captures⁶. Given their high metabolism, harbour porpoises need to feed constantly and therefore particularly sensitive to disturbances. Interruptions in foraging can lead to reduced energy intake,⁷ with individuals potentially losing 4% of their body weight in just 24 hours due to starvation.⁸

2.1.2 Offshore Infrastructure

2.1.2.3 Offshore export cables

Cable routes have not yet been defined but evidence indicates that the development and operation of offshore windfarms can adversely impact cetacean prey species. This can result from construction noise, damage to the seabed, and electromagnetic fields (EMF) generated by the cable corridors during operation⁹. Species such as sandeels, mackerel, whiting and sprat are particularly impacted, all of which are key prey species for the harbour porpoise. Any development has the potential to disrupt prey populations and the specific impacts on marine mammals remain uncertain. Therefore, it is essential that these impacts be included within the HRA screening. Additionally, buried cable corridors should ideally be shared between developments to minimise the number of cables required.

2.1.2.5 Installation method for WTG foundations

WDC advises against using pile-driven foundations due to the intense impulsive noise pollution they generate, which can have harmful impacts on cetaceans. Although the immediate area of the development is not a designated MPA, a number of cetacean species that depend on the region are sensitive to disturbance from noise generated during pile driving and this is a major concern.

4.1.2 Marine mammal data sources

4.1.2.4 WDC acknowledges the use of the Lewis Wave array project data. However, since this survey data is now 14 years old, it should only be used in conjunction with more recent surveys that provide appropriate coverage and survey methodology. Hague et al (2020)¹⁰ provide a useful overview of regional baselines for marine mammals in Scottish waters, and additional data is available from various other organisations including Hebridean Whale and Dolphin Trust (2018)¹¹ and Whale and Dolphin Conservation (2024)¹².

As highlighted in WDC & HWDT's response to the scoping report, a diverse range of whale, dolphin, porpoise, and seal species are known to inhabit the scoping study area year-round. This includes nine species of cetacean: harbour porpoise, minke whale, common dolphin, Risso's dolphin, white-beaked dolphin, humpback whale, killer whale, bottlenose dolphin, and white-sided dolphin. There are also regular sightings of other cetaceans and megafauna

⁶ Wisniewska, D.M., Johnson, M., Teilmann, J., Siebert, U., Galatius, A., Dietz, R., Madsen, P.T., 2018. High rates of vessel noise disrupt foraging in wild harbour porpoises (*Phocoena phocoena*). Proc. R. Soc. B Biol. Sci. 285, 20172314. <https://doi.org/10.1098/rspb.2017.2314>

⁷ Wisniewska, D.M., Johnson, M., Teilmann, J., Rojano-Doñate, L., Shearer, J., Sveegaard, S., Miller, L.A., Siebert, U., Madsen, P.T., 2016. Ultra-High Foraging Rates of Harbor Porpoises Make Them Vulnerable to Anthropogenic Disturbance. Curr. Biol. 26, 1441–1446. <https://doi.org/10.1016/j.cub.2016.03.069>; Rojano-Donate et al 2024. Low hunting costs in an expensive marine mammal predator | Science Advances

⁸ Harbour porpoise (*Phocoena phocoena*) energetics and fish catch ability related to offshore pile driving. Ron Kastelein <http://inpas.nl/>

⁹ Effects of operational offshore wind farms on fishes and fisheries. Review rapport . 2022. <https://tethys.pnnl.gov/sites/default/files/publications/Svendsen-et-al-2022.pdf>. MaRVEN 2015. Environmental Impacts of Noise, Vibrations and Electromagnetic Emissions from Marine Renewable Energy.

<https://tethys.pnnl.gov/sites/default/files/publications/Marven-Report-2015.pdf> Effects of offshore wind farm noise on marine mammals and fish. 2006.

https://tethys.pnnl.gov/sites/default/files/publications/Effects_of_offshore_wind_farm_noise_on_marine_mammals_and_fish-1-.pdf

¹⁰ E L Hague, R R Sinclair and C E Sparling. 2020. Regional baselines for marine mammal knowledge across the North Sea and Atlantic areas of Scottish waters. Scottish Marine and Freshwater Science Vol 11 No 12, doi: 10.7489/12330-1

¹¹ Hebridean Marine Mammal Atlas. Part 1: Silurian, 15 years of marine mammal monitoring in the Hebrides. A Hebridean Whale and Dolphin Trust Report (HWDT), Scotland, UK. 60 pp

¹² Cetacean sightings and associated effort collected from Shorewatch sites around Scotland. WDC Shorewatch Dataset 2005-current. Made available under agreement on terms and conditions of use, and accessible via the WDC Shorewatch Programme www.whales.org/Shorewatch | Shorewatch.data@whales.org

throughout the year as documented in the WDC Shorewatch Dataset (www.whales.org/Shorewatch) and the NBN Atlas (www.nbnatlas.org), among others.

4.1.2.9 WDC notes that digital aerial surveys (DAS) were undertaken for two years; however, the methodology for these surveys is unclear, including the frequency of surveys and the specific protocols used. To provide a reliable baseline, these surveys should be conducted monthly, and ideally multiple times each month, covering both the project area and a buffer zone that represents the impact range of noise during construction. We are concerned that very few species known to use the area have been documented through the DAS, with harbour porpoises, just one bottlenose dolphin sighting and 75 unidentified dolphin/porpoise observations recorded over the two years. This leaves uncertainty in the data on which assessments are based. It is recommended that additional data is utilised to provide a more accurate baseline.

Mitigation Methods

WDC acknowledge that mitigation measures will be detailed in Stage 2 of the of the HRA Screening Assessment. We have previously raised concerns regarding mitigation methods, including soft starts, acoustic deterrents and marine mammal observers, for minimising the risk of injury to marine mammals from noise pollution, particularly piling noise. The effectiveness of these methods are increasingly being criticised and lack supporting evidence¹³.

WDC recommend that mitigation methods that are proven to reduce noise levels should be prioritised. Studies at full scale offshore wind farms have shown that the use of bubble curtains during pile driving activities can reduce the sound propagation and thus the area within which harbour porpoises are disturbed, by c.90%¹⁴. Additionally bubble curtains may reduce temporary habitat loss and risk of hearing loss in harbour porpoises¹⁵.

Reducing levels of noise propagating into the marine environment should be prioritised in order to minimise the displacement and disturbance of cetaceans over significant distances.

We appreciate the opportunity to comment and would be happy to provide further details if required.

Yours sincerely,

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¹³ Faulkner, R.C., Farcas, A., Merchant, N.D., 2018. Guiding principles for assessing the impact of underwater noise. *J. Appl. Ecol.* <https://doi.org/10.1111/1365-2664.13161>. Wright, A.J., Cosentino, A.M., 2015. JNCC guidelines for minimising the risk of injury and disturbance to marine mammals from seismic surveys: We can do better. *Mar. Pollut. Bull.* 100, 231–239. <https://doi.org/10.1016/j.marpolbul.2015.08.045>

¹⁴ Nehls, G., Rose, A., Diederichs, A., Bellmann, M., Pehlke, H., 2016. Noise Mitigation During Pile Driving Efficiently Reduces Disturbance of Marine Mammals, in: Popper, A.N., Hawkins, A. (Eds.), *The Effects of Noise on Aquatic Life II*. Springer New York, New York, NY, pp. 755–762. https://doi.org/10.1007/978-1-4939-2981-8_92

¹⁵ Dähne, M., Tougaard, J., Carstensen, J., Rose, A., Nabe-Nielsen, J., 2017. Bubble curtains attenuate noise from offshore wind farm construction and reduce temporary habitat loss for harbour porpoises. *Mar. Ecol. Prog. Ser.* 580, 221–237. <https://doi.org/10.3354/meps12257>.