



Record of a Habitats Regulations Assessment of a project

March 2016

OGN 200 Form 1

Document owner: Protected Sites Team, KSP

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1.0	March 2016	Document created

Review Date: February 2017

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1. Project Details

1(a): Project details where an external party has applied to NRW for any form of authorisation	
Application reference number (if applicable)	ORML2429T
Date application received	21/05/2024
Applicant details	Mona Offshore Wind Limited
Activity proposed	Mona Offshore Wind Limited (the Applicant), a joint venture of bp Alternative Energy investments (hereafter referred to as bp) and Energie Baden-Württemberg AG (hereafter referred to as EnBW) is developing the Mona Offshore Wind Project. The Mona Offshore Wind Project is a proposed offshore wind farm located in the east Irish Sea. The Mona Array Area (i.e. the area within which the offshore wind turbines (up to 96) will be located) is 300 km² in area and is located 28.8 km (15.6 nm) from the north coast of Wales, 46.9 km (25.3 nm) from the northwest coast of England and 46.6 km (25.2 nm) from the Isle of Man (when measured from Mean High Water (MHW)). The Mona Offshore Cable Corridor is the corridor between the Mona Array Area and the landfall on the North Wales coastline up to MHWS, in which most of the length of the offshore export cables will be located (the export cables are linked to the Offshore Substation Platforms (OSPs) located in the Mona Array Area). As set out within the Marine Licence Principles Document (J9), two Marine Licences are sought for the Mona Offshore Wind Project: • A Licence in respect of the Generation Assets, to be deemed as part of the Development Consent Order (DCO) • A separate Licence in respect of the Transmission Assets to be determined by NRW MLT.

In addition as detailed within the Marine Licence Application Form the current application is not seeking to include licensable decommissioning activities, but rather a separate marine licence will be sought for decommissioning activities nearer the time.

This HRA considers the licensable activities associated with the Transmission Assets as detailed below. In line with Regulation 67(2) of the Habitat and Species Regulations does not consider the works falling outside the Transmission Asset application, namely the Generation Assets and onshore works. As the Generation Assets and onshore works will be assessed as part of the HRA assessment conducted by another Competent Authority as part of the Development Consent Order determination. Neither is detailed consideration of decommissioning activities considered as part of this HRA as an assessment will be conducted at the time consent for this activity is sought. Accordingly, the Transmission Assets elements of the proposal are the focus of consideration under this HRA.

The licensable activities for the Mona Offshore Wind Transmission Asset are listed below.

- Activity 1 – Construction, and Maintenance of export cables, interconnector cables and substation platforms
- Activity 2 – Ground Investigation Works
- Activity 3 – Removal of accidentally dropped objects
- Activity 4 – UXO clearance
- Activity 5 – Disposal to designated site

The Mona Offshore Cable Corridor is provided in the NRW Marine Licence Application Plan (Document Reference A4), but the exact route of the offshore export cables within the licensed area will be determined during the post-consent detailed design phase.

There will be up to four offshore export cables, with a voltage of up to 275 kV. Each offshore export cable will also house fibre optic cable for communication. Where possible, the cables will be buried below the seabed. Where cable burial is not possible, cables will be protected.

The offshore export cable installation methodology, as well as the burial depth and any requirement for protection measures, will be informed by a detailed Cable Burial Risk Assessment. The offshore export cables will be buried to a target depth of 1 m with a maximum burial depth of 3 m and a minimum burial depth of 0.5 m.

The Maximum Design Scenario is that up to 20% of the total offshore export cables will require protection where the cable crosses obstacles such as exposed bedrock, pre-existing cables or pipelines that mean the cable cannot be buried. Cable protection methods being considered include rock protection, concrete mattresses, fronded mattresses and rock bags.

Where the offshore export cable crosses existing assets, these will be confirmed in agreement with the asset owners and may, for example, require rock berms or mattresses for cables to be placed on for separation and protection.

The offshore export cables will make landfall in Llanddulas, North Wales. The offshore export cables will be brought through the intertidal area to a location where they can be connected to the onshore export cables, landward of MHWS. The export cable will be installed through the intertidal area via trenchless techniques.

Up to four separate OSPs will be required, and they will all be located within the Mona Array Area. The exact locations will be determined during the post-consent detailed design phase. The OSPs could be fixed to the seabed by gravity base foundations, three or six-legged jacket foundations secured by suction buckets or three or six-legged jacket foundation secured by pin-piles. The Applicant requires flexibility in foundation choice to ensure that anticipated changes in available technology can be accommodated.

These OSPs will be connected to each other by interconnector cables in order to provide redundancy in the case of cable failure. There will be up to three interconnector cables, with a voltage of up to 275 kV. The maximum total length of the interconnector cables will be 50 km.

Onshore and offshore construction is currently planned to commence in 2026.

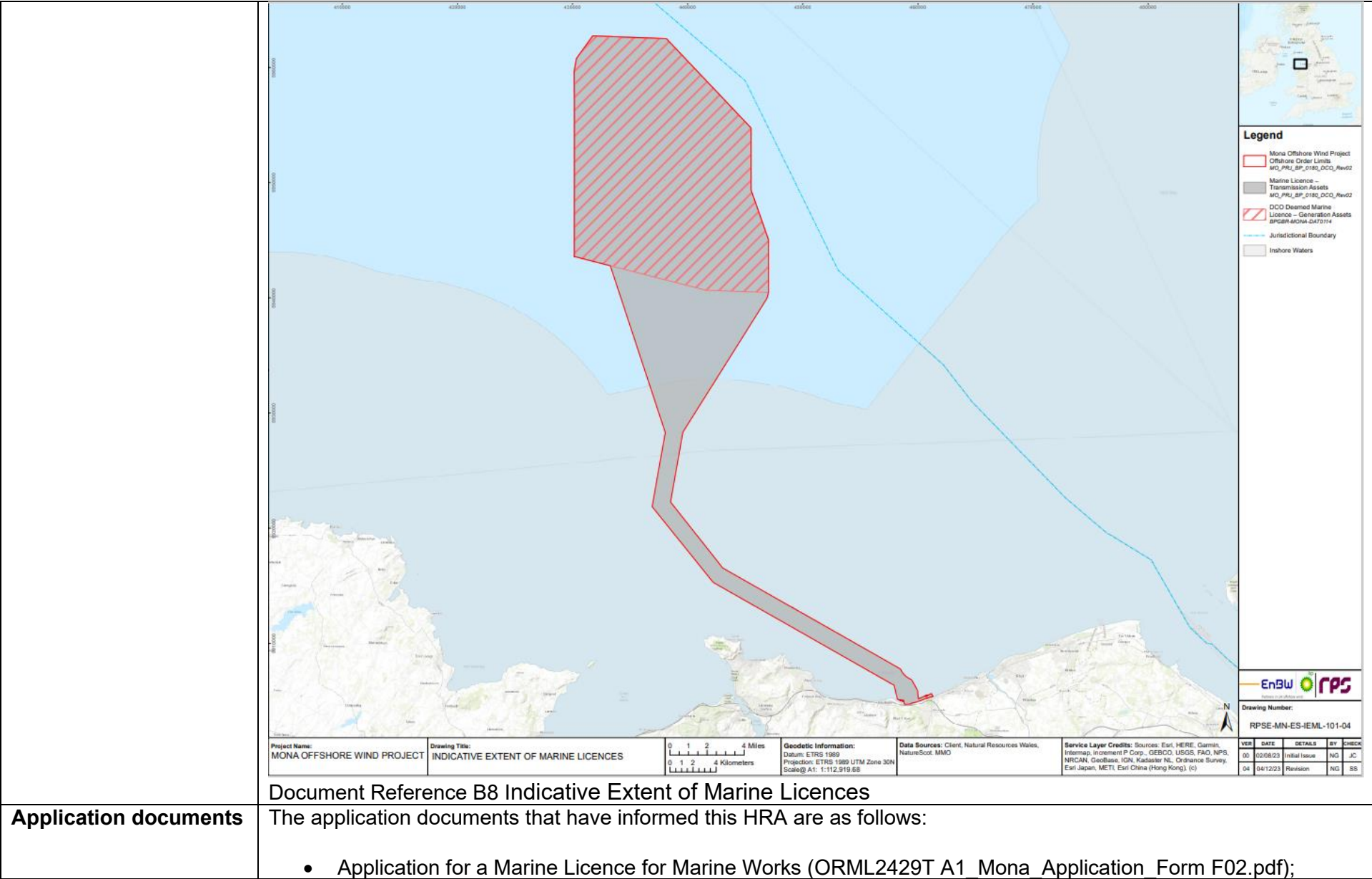
The overall operations and maintenance strategy will be finalised once the technical specifications of the Mona Offshore Wind Project are known. Routine inspections of offshore export cables will be undertaken to ensure that the cables are buried to an adequate depth and not exposed. The onshore export cables will be continuously monitored remotely.

Decommissioning will be undertaken under a Marine Licence applied for at the appropriate time, during the project's operational phase. Schedule 14 article 6 of the draft deemed Marine Licence proposes that the deemed marine licence remains in force until the scheme has been decommissioned. The current application is not seeking to include licensable decommissioning activities, but rather a separate marine licence will be sought for decommissioning activities nearer the time.

An additional sheet with a table outlining the key Transmission Assets design parameters are appended to the Marine Licence Application Form (ORML2429T A1_Mona_Application_Form F02.pdf).

Further details are provided in Volume 1, Chapter 3: Project description of the Environmental Statement (Document Reference F1.3; EN010137-000496-F1.3_Mona_ES_Project Description.pdf).

Relevant legislation	A marine licence is required before carrying out any licensable marine activity under the Marine and Coastal Access Act 2009. The Marine Works (EIA) Regulations – In line with Regulation 10 (1)(b) of the Marine Works Regulations, NRW intend to defer the EIA consent decision, on the basis that an assessment of any effects on the environment of the project in question is being / is to be carried out by the Secretary of State as part of the determination process for a Development Consent Order under the Planning Act and that this is, or will be, sufficient to meet the requirements of the EIA Directive. An application has also been made to the Planning Inspectorate for a Development Consent Order under the Planning Act 2008. In accordance with The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 the Secretary of State must not make an Order granting development consent for EIA development unless an EIA has been carried out in respect of that application.
Location	Coordinates have been provided with the Marine Licence application as Latitude and Longitude in decimal degrees to six decimal places. Please see the NRW Marine Licence Application Plan (Document Reference A4) and separate sheet attached. The coordinates are provided in the WGS 84 system. A shapefile for the Marine Licence Area has also been provided with the Marine Licence application. A map of the Project is shown below and provided in Volume 1, Chapter 3: Project description of the Environmental Statement (Document Reference F1.3; EN010137-000496-F1.3_Mona_ES_Project Description.pdf).



- MONA OFFSHORE WIND PROJECT Guide to the NRW Marine Licence Application Document Reference Number: MOCNS-J3303-RPS-10005 Document Reference: A2 May 2024 F02 (ORML2429T A2_Mona_Guide to the NRW Marine Licence Application F02.pdf);
- MONA OFFSHORE WIND PROJECT Environmental Statement Volume 1, Chapter 3: Project Description Document Number: MOCNS-J3303-RPS-10037 Document Reference: F1.3 APFP Regulations: 5(2)(a) February 2024 F01 (EN010137-000496-F1.3_Mona_ES_Project Description.pdf);
- MONA OFFSHORE WIND PROJECT Marine Licence Principles Document number: MOCNS-J3303-RPS-10147 Document Reference: J9 APFP Regulations: 5(2)(o) February 2024 F01 (EN010137-000335-J9_Mona_Marine Licence Principles Document.pdf);
- MONA OFFSHORE WIND PROJECT HRA Stage 1 Screening Report Document Number: MOCNS-J3303-RPS-10025 Document Reference: E1.4 APFP Regulations: 5(2)(g) February 2024 F01 (EN010137-000107-E1.4_Mona_HRA Stage 1 Screening.pdf);
- MONA OFFSHORE WIND PROJECT HRA Stage 2 Information to Support an Appropriate Assessment Part 1: Introduction and Background Document Number: MOCNS-J3303-RPS-10021 Document Reference: E1.1 APFP Regulations: 5(2)(g) February 2024 F01 (EN010137-000110-E1.1_Mona_HRA Stage 2 ISSA Part 1 – Introduction and background.pdf);
- MONA OFFSHORE WIND PROJECT HRA Stage 2 Information to Support an Appropriate Assessment Part Two: Special Areas of Conservation (SACs) Assessments Document Number: MOCNS-J3303-RPS-10023 Document Reference: E1.2 APFP Regulations: 5(2)(g) February 2024 F01 (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf); and
- MONA OFFSHORE WIND PROJECT HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document Number: MOCNS-J3303-RPS-10024 Document Reference: E1.3 APFP Regulations: 5(2)(g) February 2024 F01 (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf).

The following documents provided as part of a further information submission by the applicant in response to consultation comments have also informed this HRA:

- S_NRWML_3 Responses to NRW (A) Submission F01;
- S_NRWML_4 Response to Other Consultees Submission F01;
- S_NRWML_5 Errata Sheet F01;
- S_NRWML_9 Further Information Cover Letter;
- A2 Guide to the NRW Marine Licence Application F05;
- E1.3 HRA Stage 2 ISAA Part 3 – SPA and Ramsar SA (Clean) F03;
- E1.3 HRA Stage 2 ISAA Part 3 – SPA and Ramsar SA (Tracked) F02_F03;
- E1.3.1 Offshore ornithology ISAA Supporting Information F01;

	• E1.3.2 Assessment of proposed Ramsar Sites within the Isle of Man F02 (clean) F02; • E1.4 HRA Stage 1 Screening Report F03; • E1.5 HRA Integrity Matrices (Clean) F02; • E1.5 HRA Integrity Matrices (Tracked) F01_F02; • F2.5 Volume 2, Chapter 5: Offshore Ornithology (Clean) F04; • F2.5 Volume 2, Chapter 5: Offshore Ornithology (Tracked) F03_F04; • J9 Marine Licence Principles Document (Clean) F06; • J9 Marine Licence Principles Document (Tracked) F05_F06; • J10 Mitigation and Monitoring Schedule (Clean) F07; • J10 Mitigation and Monitoring Schedule (Tracked) F05_F07; • J14 Outline Vessel Traffic Management Plan (Clean) F02; • J14 Outline Vessel Traffic Management Plan (Tracked) F01_F02; • J15 Offshore In-Principle Monitoring Plan (Clean) F03; • J15 Offshore In-Principle Monitoring Plan (Tracked) F02_F03; • J16 Outline Underwater Sound Management Strategy (Clean) F02; • J16 Outline Underwater Sound Management Strategy (Tracked) F01_F02; • J17 Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels (Clean) F03; • J17 Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels (Tracked) F02_F03; • J21 Outline Marine Mammal Mitigation Protocol (Clean) F02; • J21 Outline Marine Mammal Mitigation Protocol (Clean) F01_F02; • S_D5_23 Offshore ornithology additional supporting in-combination assessment information in line with SNCB advice F01; • S_D5_24 Offshore Ornithology Additional Supporting Cumulative Assessment Information in line with SNCB Advice F01; and • S_D7_6 Offshore Ornithology Final Position Paper F01. Information submitted on the 22 April 2025 • S_NRWML_11 Responses to Further Consultation • J16 Outline Underwater Sound Management Strategy F03 • J21 Outline Marine Mammal Mitigation Protocol F03
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Environmental Statement	An ES has been prepared for the Mona Offshore Wind Project and is structured as follows: • Non-Technical Summary (NTS); • Volume 1 – Introductory Chapters; • Volume 2 – Offshore Chapters; • Volume 3 – Onshore Chapters; • Volume 4 – Offshore and Onshore Combined Chapters; • Volume 5 – Introductory Annexes; • Volume 6 – Offshore Annexes; • Volume 7 – Onshore Annexes; and • Volume 8 – Offshore and Onshore Combined Annexes.
Pre-application correspondence	Extensive consultation has been undertaken with NRW as set out in the Consultation Report (Document Reference E3).
NRW team responsible for drafting this HRA report, and name of lead officer	Marine Licensing Team: Peter Morrison (supported by Elena San Martin – ABPmer).

2. Determining the need for a Habitats Regulations Assessment

2.1 Is the whole of the project directly connected with or necessary to the management of one or more Natura 2000 sites, for the purposes of conserving the habitats or species for which the Natura 2000 site(s) is/are designated?	NO
2.2 Is there a possibility that the project could affect a different Natura 2000 site to the one(s) the project is intended to conserve?	NA
2.3 Is it necessary to carry out an HRA?	YES

3. Considering the likelihood of a significant effect (LSE)

3.1 Renewal of a permission on the same or more restrictive terms as the extant permission

Is this project a renewal of a current permission which complies with NRW approved criteria for ruling out significant effects of renewals (see section 6.2A of OGN 200) without conducting a project-specific LSE test?	NO
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3.2 Likelihood of significant effects (LSE) test

3.2.1 Which Natura 2000 sites¹ might be affected by the proposal?	Based on the project specification or information provided in the application, it is considered that the following protected sites that make up the UK national site network, Natura 2000 sites and Ramsar sites have features which could be affected by the project: • Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC • Dee Estuary/Aber Dyfrdwy SAC • River Dee and Bala Lake/Afon Dyfrydwy a Llyn Tegid SAC • River Ehen SAC • River Eden SAC • Afon Gwyrfai a Llyn Cwellyn SAC • River Kent SAC • River Derwent and Bassenthwaite SAC • Solway Firth SAC • River Bladnoch SAC • North Anglesey Marine/Gogledd Môn Forol SAC • North Channel SAC • Pen Llŷn a'r Sarnau/Lleyn Peninsula and the Sarnau SAC
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¹ SACs and SPAs in the UK no longer form part of the EU's Natura 2000 ecological network. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 have created a "UK national site network" which includes SACs and SPAs. Any references to Natura 2000 within this HRA template should include reference to the UK national site network. Ramsar sites do not form part of the national site network but remain protected in the same way as SACs and SPAs. Further details are provided in [Changes to the Habitats Regulations 2017 - GOV.UK](#).

	• West Wales Marine/Gorllewin Cymru Forol SAC • Strangford Lough SAC • Murlough SAC • Cardigan Bay/Bae Ceredigion SAC • The Maidens SAC • Pembrokeshire Marine/Sir Benfro Forol SAC • Bristol Channel Approaches/Dynesfeydd Môr Hafren SAC • Lundy SAC • Isles of Scilly Complex SAC • Rockabill to Dalkey Island SAC • Saltee Islands SAC • Roaringwater Bay and Islands SAC • Blasket Islands SAC • Mers Celtiques – Talus du golfe de Gascogne SCI • Abers - Côte des legends SCI • Ouessant-Molène SCI • Côte de Granit rose-Sept-Iles SCI • Anse de Goulven, dunes de Keremma SCI • Tregor Goëlo SCI • Côtes de Crozon SCI • Chaussée de Sein SCI • Cap Sizun SCI • Récifs du talus du golfe de Gascogne SCI • Anse de Vauville SCI • Cap d'Erquy-Cap Fréhel SCI • Baie de Saint-Brieuc –Est SC • Banc et récifs de Surtainville SCI • Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard SCI • Estuaire de la Rance SCI • Baie du Mont Saint-Michel SCI • Liverpool Bay/Bae Lerpwl SPA • Irish Sea Front SPA • Skomer, Skokholm and the Seas off Pembrokeshire SPA • Glannau Aberdaron ac Ynys Enlli/Aberdaron Coast and Bardsey Island SPA • Lambay Island SPA • Howth Head Coast SPA • Ireland's Eye SPA
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	• Copeland Islands SPA • East Coast Marine pSPA • Grassholm SPA • Ailsa Craig SPA • Wicklow Head SPA • Rathlin Island SPA • Saltee Islands SPA • North Colonsay and Western Cliffs SPA • Rum SPA • Shiant Isles SPA • Handa SPA • St Kilda SPA • Cape Wrath SPA • Flannan Isles SPA • Flamborough and Filey Coast SPA • Fowlsheugh SPA • Canna and Sanday SPA • Mingulay and Berneray SPA • Buchan Ness to Collieston SPA • Troup, Pennan and Lions Heads SPA • Skelligs SPA • East Caithness Cliffs SPA • North Caithness Cliffs SPA • Sule Skerry and Sule Stack SPA • North Rona and Sula Sgeir SPA • West Westray SPA • Central Valley Curragh proposed Ramsar (pRamsar) site • Dalby Peatlands pRamsar site • Gob ny Rona, Maughold Head and Port Cornaa proposed Ramsar (pRamsar) site • Southern Coasts and Calf of Man pRamsar site • The Ayres pRamsar site The potential for the project to affect the following Natura 2000 sites was also initially considered, but can be ruled out without further consideration: N/A
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Key for table below:	There is no impact pathway from the proposal to the designated feature (green)	
	There is an impact pathway in principle, but significant effects from the proposal when considered alone can be ruled out (blue)	
	There is an impact pathway and significant effects cannot be ruled out (red)	
3.2.2 Screening assessment		
	Assessment of likelihood of significant effect	
	I Relevant conservation objectives	II Potential impact pathway
Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC		
Reefs	https://naturalresourceswales.gov.uk/media/687997/eng-menai-strait-reg-37-report-2018.pdf	• Increase in SSC and sediment deposition (Mona Offshore Cable Corridor and Access Areas only) • Increased risk of introduction and spread of INNS (Mona Offshore Cable Corridor and Access Areas only) • Changes in physical processes (Mona Offshore Cable Corridor only) • Accidental pollution (Mona Offshore Cable Corridor and Access Areas only)
Sandbanks which are slightly covered by seawater all the time		• Increase in SSC and sediment deposition (Mona Offshore Cable Corridor and Access Areas only) • Increased risk of introduction and spread of INNS (Mona Offshore Cable Corridor and Access Areas only) • Changes in physical processes (Mona Offshore Cable Corridor only) • Accidental pollution (Mona Offshore Cable Corridor and Access Areas only)
All habitat features		The site-specific survey data correlates with the NRW (2016) mapped distribution of Annex I habitat features which also indicate no presence of Annex I features within the Mona Offshore Cable Corridor and Access Areas, therefore the following direct impacts were screened out of further assessment: • Long term habitat loss • Temporary habitat disturbance • Resuspension of contaminated sediments
Dee Estuary/Aber Dyfrdwy SAC		
Sea lamprey	https://naturalresources.wales/media/673576/Dee%20Estuary-Reg33-Volume%201-English-091209_1.pdf	• Underwater sound impacting fish and shellfish receptors • Electromagnetic Fields (EMF) from subsea electric cables

River lamprey		- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
All habitat features		On the basis of the physical processes modelling for the Mona Offshore Wind Project (see HRA Stage 1 Screening Report (Document Reference E1.1) section 1.3.2), Volume 6, Annex 6.1: Physical processes technical report of the Environmental Statement (Document reference F6.1.1) and Volume 2, Chapter 6: Physical processes of the Environmental Statement (Document reference F2.1) there is no potential impact pathway for the Dee Estuary SAC and it has been screened out and therefore not assessed in this HRA Stage 2 ISAA Part 2 - SAC assessments (Document Reference E1.2) in line with the Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the Environmental Statement (Document Reference F2.2) (see section 1.3.2).
River Dee and Bala Lake/Afon Dyfrydwy a Llyn Tegid SAC		
Sea lamprey	<u>CONSERVATION OBJECTIVES FOR N2K SITES</u> (naturalresources.wales)	- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
River lamprey		- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
Atlantic salmon		- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
River Ehen SAC		
Atlantic salmon	<u>European Site Conservation Objectives for River Ehen SAC - UK0030057</u> (naturalengland.org.uk)	- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
Freshwater pearl mussel		- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
River Eden SAC		
Atlantic salmon	<u>European Site Conservation Objectives for River Eden SAC - UK0012643</u> (naturalengland.org.uk)	- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
Sea lamprey		- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
River lamprey		- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
Afon Gwyrfaï a Llyn Cwellyn SAC		
Atlantic salmon	<u>CORE MANAGEMENT PLAN INCLUDING CONSERVATION OBJECTIVES FOR Afon Gwyrfaï a Llyn Cwellyn Special Area of Conservation</u> (naturalresources.wales)	- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
River Kent SAC		

Freshwater pearl mussel	European Site Conservation Objectives for River Kent SAC - UK0030256 (naturalengland.org.uk)	- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
River Derwent and Bassenthwaite SAC		
Atlantic salmon	European Site Conservation Objectives for River Derwent & Bassenthwaite Lake SAC - UK0030032 (naturalengland.org.uk)	- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
Sea lamprey		- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
River lamprey		- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
Solway Firth SAC		
Sea lamprey	European Site Conservation Objectives for Solway Firth SAC - UK0013025 (naturalengland.org.uk)	- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
River lamprey		- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
River Bladnoch SAC		
Atlantic salmon	conservation-advice-package.pdf	- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
North Anglesey Marine/Gogledd Môn Forol SAC		
Harbour porpoise	North Anglesey Marine pSAC: Draft Conservation Objectives And Advice On Activities (naturalresources.wales)	- Underwater sound from piling - Underwater sound from clearance of UXO - Underwater sound from vessels and other vessel activities - Changes in fish and shellfish communities affecting prey availability (construction only)
	North Anglesey Marine MPA JNCC - Adviser to Government on Nature Conservation	The potential for any adverse effects on marine mammal prey were screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
North Channel SAC		
Harbour porpoise	North Channel MPA JNCC - Adviser to Government on Nature Conservation	- Underwater sound from piling - Underwater sound from clearance of UXO - Underwater sound from vessels and other vessel activities
		The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects

		are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Pen Llŷn a'r Sarnau/Lleyn Peninsula and the Sarnau SAC		
Bottlenose dolphin	Contents (naturalresources.wales)	- Underwater sound from piling - Underwater sound from clearance of UXO - Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Grey seal		- Underwater sound from piling - Underwater sound from clearance of UXO - Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
West Wales Marine/Gorllewin Cymru Forol SAC		
Harbour porpoise	West Wales Marine pSAC: Draft Conservation Objectives And Advice On Activities (naturalresources.wales) West Wales Marine MPA JNCC - Adviser to Government on Nature Conservation	- Underwater sound from piling - Underwater sound from clearance of UXO - Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also

		screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Strangford Lough SAC		
Harbour seal	Strangford Lough SAC Conservation Objectives 2015 (daera-ni.gov.uk)	• Underwater sound from piling • Underwater sound from clearance of UXO • Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Murlough SAC		
Harbour seal	Murlough SAC Conservation Objectives 2015 (daera-ni.gov.uk)	• Underwater sound from piling • Underwater sound from clearance of UXO • Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Cardigan Bay/Bae Ceredigion SAC		
Bottlenose dolphin	Contents (naturalresources.wales)	• Underwater sound from piling • Underwater sound from clearance of UXO • Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging

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Grey seal		- Underwater sound from piling - Underwater sound from clearance of UXO - Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
The Maidens SAC		
Grey seal	<u>Maidens SAC Conservation Objectives 2017</u>	- Underwater sound from piling - Underwater sound from clearance of UXO - Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Pembrokeshire Marine/Sir Benfro Forol SAC		
Grey seal	<u>Contents (naturalresources.wales)</u>	- Underwater sound from piling - Underwater sound from clearance of UXO - Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be

		spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Bristol Channel Approaches/Dynesfeydd Môr Hafren SAC		
Harbour porpoise	<u>Bristol Channel Approaches pSAC: Draft Conservation Objectives and Advice on Activities (naturalresources.wales)</u>	• Underwater sound from piling • Underwater sound from clearance of UXO • Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Lundy SAC		
Grey seal	<u>European Site Conservation Objectives for Lundy SAC - UK0013114 (naturalengland.org.uk)</u>	• Underwater sound from piling • Underwater sound from clearance of UXO • Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Isles of Scilly Complex SAC		
Grey seals	<u>European Site Conservation Objectives for Isles of Scilly Complex SAC - UK0013694 (naturalengland.org.uk)</u>	• Underwater sound from piling • Underwater sound from clearance of UXO • Underwater sound from vessels and other vessel activities

		The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Rockabill to Dalkey Island SAC		
Harbour porpoise	<u>ConservationObjectives.rdl (npws.ie)</u>	• Underwater sound from piling • Underwater sound from clearance of UXO • Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Saltee Islands SAC		
Grey seal	<u>Site specific cons obj (npws.ie)</u>	• Underwater sound from piling • Underwater sound from clearance of UXO • Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Roaringwater Bay and Islands SAC		
Harbour porpoise	<u>Site specific cons obj (npws.ie)</u>	• Underwater sound from piling

		- Underwater sound from clearance of UXO - Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Blasket Islands SAC		
Harbour porpoise	ConservationObjectives.rdl (npws.ie)	- Underwater sound from piling - Underwater sound from clearance of UXO - Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
French SCIs		
Harbour porpoise	Various conservation objectives for specific sites, however at a high level the sites will look to ensure that the harbour porpoise is a viable component of the site – therefore impacts at a population level are considered.	- Underwater sound from piling - Underwater sound from clearance of UXO - Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this SAC and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).

Liverpool Bay/Bae Lerpwl SPA		
Red-throated diver	liverpool-bay-bae-lerpwl-spa-conservation-advice.pdf (naturalresources.wales) European Site Conservation Objectives for Liverpool Bay / Bae Lerpwl SPA - UK9020294 (naturalengland.org.uk)	• Temporary habitat loss/disturbance and increased suspended sediment concentration (SSC) • Disturbance and displacement from airborne sound and presence of vessels and infrastructure • Changes in prey availability (construction only) • Accidental pollution
Little gull		• Temporary habitat loss/disturbance and increased suspended sediment concentration (SSC) • Disturbance and displacement from airborne sound and presence of vessels and infrastructure • Changes in prey availability (construction only) • Accidental pollution
Common scoter		• Temporary habitat loss/disturbance and increased suspended sediment concentration (SSC) • Disturbance and displacement from airborne sound and presence of vessels and infrastructure • Changes in prey availability (construction only) • Accidental pollution
Little tern		• Temporary habitat loss/disturbance and increased suspended sediment concentration (SSC) • Disturbance and displacement from airborne sound and presence of vessels and infrastructure • Changes in prey availability (construction only) • Accidental pollution
Common tern		• Temporary habitat loss/disturbance and increased suspended sediment concentration (SSC) • Disturbance and displacement from airborne sound and presence of vessels and infrastructure • Changes in prey availability (construction only) • Accidental pollution
Waterbird assemblage		• Temporary habitat loss/disturbance and increased suspended sediment concentration (SSC) • Disturbance and displacement from airborne sound and presence of vessels and infrastructure • Changes in prey availability (construction only) • Accidental pollution
Irish Sea Front SPA		
Manx shearwater	Irish Sea Front SPA – Conservation Advice JNCC Resource Hub	• Disturbance and displacement from airborne sound and presence of vessels and infrastructure

Skomer, Skokholm and the Seas off Pembrokeshire SPA		
Common guillemot (non-breeding season only) ²	Microsoft Word - Skomer.Skokholm management plan 07.doc (naturalresources.wales) New/extended marine SPAs: Suggested approach to Reg 35 advice (naturalresources.wales)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Razorbill (non-breeding season only) ³		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Manx shearwater		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Atlantic puffin		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
European storm petrel		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Black-legged kittiwake ⁴		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Glannau Aberdaron ac Ynys Enlli/Aberdaron Coast and Bardsey Island SPA		
Manx shearwater	Glannau Aberdaron Plan (naturalresources.wales)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Lambay Island SPA		
Black-legged kittiwake	CO004069.pdf (npws.ie)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Howth Head Coast SPA		
Black-legged kittiwake	CO004113.pdf (npws.ie)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Ireland's Eye SPA		
Black-legged kittiwake	CO004117.pdf (npws.ie)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Copeland Islands SPA		
Manx shearwater	Copeland Islands SPA Conservation Objectives 2015 (daera-ni.gov.uk)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
East Coast Marine pSPA		
Manx shearwater	East Coast Marine pSPA Conservation objectives	Disturbance and displacement from airborne sound and presence of vessels and infrastructure

² Common guillemot is a component species of the seabird assemblage rather than an interest feature in its own right.

³ Razorbill is a component species of the seabird assemblage rather than an interest feature in its own right.

⁴ Black-legged kittiwake is a component species of the seabird assemblage rather than an interest feature in its own right.

Grassholm SPA		
Northern gannet	Core Management Plan Including Conservation Objectives For Grassholm Spa (naturalresources.wales)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Ailsa Craig SPA		
Northern gannet	SiteLink - Ailsa Craig SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Common guillemot (non-breeding season only)		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Wicklow Head SPA		
Black-legged kittiwake	Wicklow Head SPA National Parks & Wildlife Service	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Rathlin Island SPA		
Black-legged kittiwake	Rathlin SPA conservation objectives 2015 (daera-ni.gov.uk)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Common guillemot (non-breeding season only)		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Razorbill (non-breeding season only)		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Saltee Islands SPA		
Northern gannet	Site_specific_cons_obj (npws.ie)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
North Colonsay and Western Cliffs SPA		
Common guillemot (non-breeding season only)	SiteLink - North Colonsay and Western Cliffs SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Black-legged kittiwake		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Rum SPA		
Manx shearwater	Link	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Shiant Isles SPA		
Razorbill (non-breeding season only)	SiteLink - Shiant Isles SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure

Common guillemot (non-breeding only)		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Handa SPA		
Common guillemot (non-breeding season only)	https://www.nature.scot/sites/default/files/special-protection-area/8511/conservation-objectives.pdf	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Razorbill (non-breeding season only)		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
St Kilda SPA		
Northern gannet	Seas off St Kilda – Relevant Documentation & Conservation Advice JNCC Resource Hub	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Common guillemot (non-breeding only)		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Cape Wrath SPA		
Common guillemot (non-breeding only)	SiteLink - Cape Wrath SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Black-legged kittiwake (non-breeding only)		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Razorbill (non-breeding only)		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Flannan Isles SPA		
Common guillemot (non-breeding season only)	https://www.nature.scot/sites/default/files/special-protection-area/8502/conservation-objectives.pdf	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Flamborough and Filey Coast SPA		
Black-legged kittiwake (non-breeding season only)	European Site Conservation Objectives for Flamborough and Filey Coast SPA - UK9006101 (naturalengland.org.uk)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Fowlsheugh SPA		

Black-legged kittiwake (non-breeding season only)	SiteLink - Fowlsheugh SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Canna and Sanday SPA		
Common guillemot (non-breeding season only)	SiteLink - Canna and Sanday SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Mingulay and Berneray SPA		
Common guillemot (non-breeding season only)	SiteLink - Mingulay and Berneray SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Razorbill (non-breeding season only)		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Buchan Ness to Collieston SPA		
Black-legged kittiwake (non-breeding season only)	SiteLink - Buchan Ness to Collieston Coast SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Troup, Pennan and Lions Heads SPA		
Black-legged kittiwake (non-breeding season only)	SiteLink - Troup, Pennan and Lion's Heads SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Skelligs SPA		
Northern gannet	Skelligs SPA National Parks & Wildlife Service	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
East Caithness Cliffs SPA		
Black-legged kittiwake (non-breeding season only)	SiteLink - East Caithness Cliffs SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
North Caithness Cliffs SPA		
Black-legged kittiwake (non-	SiteLink - North Caithness Cliffs SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure

<i>breeding season only)</i>		
Sule Skerry and Sule Stack SPA		
Common guillemot (non-breeding season only)	SiteLink - Sule Skerry and Sule Stack SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
North Rona and Sula Sgeir SPA		
Common guillemot (non-breeding season only)	SiteLink - North Rona and Sula Sgeir SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
West Westray SPA		
Black-legged kittiwake (non-breeding season only)	SiteLink - West Westray SPA (nature.scot)	Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Central Valley Curragh pRamsar site		
Shrub-dominated riverside curraghs (carrs)	There are no conservation objectives for this pRamsar site. Further details about this site are available at: Ramsar - UK Overseas Territories Conservation Forum	The potential for any adverse effects on this pRamsar site were screened out given the distance between this site and the Mona Offshore Wind Project (approximately 50km) and the fact there is no potential connectivity with freshwater habitat features. In other words, there is no potential impact pathway from the proposal to the features.
Dalby Peatlands pRamsar site		
Dalby Peatland	There are no conservation objectives for this pRamsar site. Further details about this site are available at: Ramsar - UK Overseas Territories Conservation Forum	The potential for any adverse effects on this pRamsar site were screened out given the distance between this site and the Mona Offshore Wind Project (approximately 54km) and the fact there is no potential connectivity with terrestrial habitat features. In other words, there is no potential impact pathway from the proposal to the features.
Heathland and bog		The potential for any adverse effects on this pRamsar site were screened out given the distance between this site and the Mona Offshore Wind Project (approximately 54km) and the fact there is no potential connectivity with terrestrial habitat features. In other words, there is no potential impact pathway from the proposal to the features.
Gob ny Rona, Maughold Head and Port Cornaa pRamsar site		
Atlantic puffin	There are no conservation objectives for this pRamsar site. Further details about this site are available at: Ramsar - UK Overseas Territories Conservation Forum	No record of breeding since 1999 and therefore LSE can be ruled out.
Black-legged kittiwake		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Common guillemot		Disturbance and displacement from airborne sound and presence of vessels and infrastructure

<i>Great black-backed gull</i>		The predicted apportioning impact for this species is 0.0 annual mortalities (rounded value). This feature has therefore not been screened in on the basis that the magnitude of the impact is too low for there to be any risk of LSE either alone or in-combination.
<i>Herring gull</i>		The predicted apportioning impact for this species is 0.0 annual mortalities (rounded value). This feature has therefore not been screened in on the basis that the magnitude of the impact is too low for there to be any risk of LSE either alone or in-combination.
<i>Lesser black-backed gull</i>		The predicted apportioning impact for this species is 0.0 annual mortalities (rounded up). This feature has therefore not been screened in on the basis that the magnitude of the impact is too low for there to be any risk of LSE either alone or in-combination.
<i>Northern fulmar</i>		LSE can be ruled out on the basis that this species was not included in the apportioning report as the annual impact was two birds un-apportioned (E1.3.2 Assessment of proposed Ramsar Sites within the Isle of Man F02 (clean) F02).
<i>Razorbill</i>		The predicted apportioning impact for this species is 0.0 annual mortalities (rounded value). This feature has therefore not been screened in on the basis that the magnitude of the impact is too low for there to be any risk of LSE either alone or in-combination.
<i>Rocky marine shore ecosystem including cliffs, maerl, kelp and knotted wrack beds and seagrass beds</i>		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km zone of influence (Zol) so are screened out for further consideration for all impact pathways.
<i>Horse mussel beds</i>		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
<i>Saltmarsh</i>		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
<i>Salmon</i>		• Underwater sound impacting fish and shellfish receptors • EMF from subsea electric cables
<i>Trout</i>		• Underwater sound impacting fish and shellfish receptors • EMF from subsea electric cables

Grey seal		- Underwater sound from piling - Underwater sound from clearance of UXO - Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this pRamsar site and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
Southern Coasts and Calf of Man pRamsar site		
Atlantic puffin	There are no conservation objectives for this pRamsar site. Further details about this site are available at: Ramsar - UK Overseas Territories Conservation Forum	No record of breeding since 1999 and therefore LSE can be ruled out.
Black-legged kittiwake		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Common guillemot		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Great black-backed gull		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Herring gull		The predicted apportioning impact for this species is 0.0 annual mortalities (rounded value). This feature has therefore not been screened in on the basis that the magnitude of the impact is too low for there to be any risk of LSE either alone or in-combination.
Lesser black-backed gull		The predicted apportioning impact for this species is 0.0 annual mortalities (rounded value). This feature has therefore not been screened in on the basis that the magnitude of the impact is too low for there to be any risk of LSE either alone or in-combination.
Manx shearwater		Disturbance and displacement from airborne sound and presence of vessels and infrastructure
Northern fulmar		LSE can be ruled out on the basis that this species was not included in the apportioning report as the annual impact was two birds un-apportioned (E1.3.2 Assessment of proposed Ramsar Sites within the Isle of Man F02 (clean) F02).
Razorbill		The predicted apportioning impact for this species is 0.0 annual mortalities (rounded value). This feature has therefore not been screened in on the basis that the magnitude of the impact is too low for there to be any risk of LSE either alone or in-combination.

Seagrass		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
Kelp and knotted wrack		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
Maerl		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
Rocky shores		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
Cliffs		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
Sea caves		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
Coastal heath		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
Sandbank		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
Basking shark		• Underwater sound impacting fish and shellfish receptors • EMF from subsea electric cables
Plaice		• Underwater sound impacting fish and shellfish receptors • EMF from subsea electric cables
Cray fish <i>Palinurus elephas</i>		Cray fish show high site fidelity and so features of this pRamsar are unlikely to be present within the Mona Array Area and potential zone of impact from underwater sound (E1.3.2 Assessment of proposed

		Ramsar Sites within the Isle of Man F02 (clean) F02). This feature is therefore screened out.
Grey seal		• Underwater sound from piling • Underwater sound from clearance of UXO • Underwater sound from vessels and other vessel activities The potential for any adverse effects on marine mammal prey were screened out for the construction phase given the distance between this pRamsar site and the project, and that an impacts on prey species will be spatially limited, particularly in the context of the foraging opportunities within the extensive ranges for marine mammal species and the highly mobile nature of these species. They are also screened out for the operations and maintenance phase as effects are considered to be significantly reduced compared to the construction phase as underwater sound will be substantially lower (i.e. no piling will be required).
The Ayres pRamsar site		
Great black-backed gull	There are no conservation objectives for this pRamsar site. Further details about this site are available at: Ramsar - UK Overseas Territories Conservation Forum	The predicted apportioning impact for this species is 0.0 annual mortalities (rounded value). This feature has therefore not been screened in on the basis that the magnitude of the impact is too low for there to be any risk of LSE either alone or in-combination.
Herring gull		The predicted apportioning impact for this species is 0.0 annual mortalities (rounded value). This feature has therefore not been screened in on the basis that the magnitude of the impact is too low for there to be any risk of LSE either alone or in-combination.
Lesser black-backed gull		The predicted apportioning impact for this species is 0.0 annual mortalities (rounded value). This feature has therefore not been screened in on the basis that the magnitude of the impact is too low for there to be any risk of LSE either alone or in-combination.
Northern gannet		The Information Sheets states northern gannet forage offshore. They are therefore from other sites not The Ayres pRamsar site. The HRA Stage 1 Screening Report (REP2-012) identifies which designated sites with gannet are features are included in the assessment and therefore the species is fully assessed already.
Shingle, vegetated shingle, dune and cobble coastal ecosystem		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
Mytilus edulis beds (mixed with kelp)		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features

		are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
Maerl bed		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
Horse mussel bed		There is no connectivity between these habitat features and the Mona Offshore Wind Project. This site and all associated habitat features are located beyond the 12 km Zol so are screened out for further consideration for all impact pathways.
Herring		Underwater sound impacting fish and shellfish receptors As a pelagic species, herring generally swim well above the seafloor and can be expected to rarely be exposed to the EMF at the lowest levels from AC undersea power cables buried in the seafloor. EMF from subsea electric cables is therefore screened out.
Salmon		- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables
Sea trout		- Underwater sound impacting fish and shellfish receptors - EMF from subsea electric cables

3.2.3 Screening decision of the project 'alone'	
(c) If ANY rows in Column II of Table 3.2.2 are RED	The project is likely to have a significant effect on one or more Natura 2000 sites and therefore an appropriate assessment is required.

4. Appropriate assessment of the project when considered alone

4.1 Assessment of project as currently defined

Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC

Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC (26.8 km from Mona Array Area and overlap with Mona Offshore Cable Corridor and Access Areas)				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
Reefs Sandbanks which are slightly covered by seawater all the time	Increase in SSC and sediment deposition (Mona Offshore Cable Corridor and Access Areas only)	Temporary increases in SSC and associated sediment deposition are predicted to occur during the construction phase as a result of seabed preparation (sandwave, boulder and debris clearance), and installation of offshore export cables. Temporary increases in SSC and associated sediment deposition are predicted to occur during the operations and maintenance phase as a result of activities within the Mona Array Area and	A detailed assessment of effects on Annex I habitats is included in Section 1.5.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Construction phase <i>The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded that all increases in SSC and associated sediment deposition associated with offshore export cable installation within the SAC and associated activities (e.g. sandwave clearance and site preparation activities) out with the SAC during construction activities will be limited in spatial extent (plume envelope for the offshore export cable installation has a width of approximately 20 km which corresponds with the tidal excursion) and intermittent in nature. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective.	NO

		Mona Offshore Cable Corridor and Access Areas (i.e. jack-ups associated with maintenance and cable repair/reburial events). These activities may result in temporary changes to water clarity, smothering and siltation rate changes.	<i>The physical, biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded</i> Increases in SSC and associated sediment deposition associated with offshore export cable installation within the SAC and associated activities (e.g. sandwave clearance and site preparation activities) occurring outwith the SAC will be temporary in nature, reversible and the corresponding biological communities associated with the Annex I habitats are predicted to recover. Offshore export cable installation and associated activities will, therefore, not result in the degradation of the physical, biological and chemical structure and functions necessary for the long-term maintenance and quality of the Annex I reef or Annex I sandbanks which are slightly covered by seawater all the time habitat features. <i>The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded</i> Increases in SSC and associated sediment deposition associated with offshore export cable installation within the SAC and associated activities (e.g. sandwave clearance, pre-lay preparation) occurring out with the SAC will be temporary and the levels likely to reach the designated features will be low. Furthermore, the corresponding communities are predicted to recover from the low levels of SSC and sedimentation. The presence, abundance, condition and diversity of the typical benthic species associated with the Annex I features will, therefore, not be affected in such a way that the habitat quality will be degraded. Operations and maintenance phase <i>The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing</i> All increases in SSC and associated sediment deposition associated with offshore export cable maintenance activities will be limited in spatial extent (with a disturbance width of 20 m associated with export cable maintenance activities), and intermittent over the 35 year operational lifetime. The Mona Offshore Cable Corridor and Access Areas does not overlap with any Annex I designated features of the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC. Increases in SSC and associated	
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			deposition, will be substantially lower than during the construction phase. If increases in SSC do extend to reach the designated features beyond the Mona Offshore Cable Corridor and Access Areas the levels of SSC and sediment deposition would be very low and likely indiscernible from natural variability. Therefore, these activities will not prevent the distribution or extent of the Annex I reef or Annex I sandbanks which are slightly covered by seawater all the time habitat features, or each of their main component parts, from increasing or remaining stable. <i>The physical, biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded</i> Increases in SSC and associated sediment deposition associated with offshore export cable maintenance activities will be intermittent over the 35 year operation lifetime, temporary in nature, reversible and the corresponding biological communities associated with the Annex I habitats are predicted to recover, if they are affected at all (noting that the Mona Offshore Cable Corridor and Access Areas does not overlap with any Annex I designated features of the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC). Therefore, maintenance activities will not result in the degradation of the physical, biological and chemical structure and functions necessary for the long-term maintenance and quality of the Annex I reef or Annex I sandbanks which are slightly covered by seawater all the time habitat features. <i>The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded</i> Increases in SSC and associated sediment deposition associated with offshore export cable maintenance activities will be intermittent over the 35 year operation lifetime, temporary and substantially lower than during the construction phase. Furthermore, the corresponding communities are predicted to recover from the very low levels of SSC and sedimentation predicted as a result of maintenance activities. Therefore, the presence, abundance, condition and diversity of the typical benthic species associated with the Annex I habitats will not be affected in such a way that the habitat quality will be degraded.	
	Increased risk of introduction and spread of INNS	The installation/presence of artificial structures	A detailed assessment of effects on Annex I habitats is included in Section 1.5.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-	NO

	(Mona Offshore Cable Corridor and Access Areas only)	and the movements of vessels may lead to an increased risk of introduction and spread of INNS across all phases of the Mona Offshore Wind Project.	000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Construction phase <i>The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing</i> <i>The physical, biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded</i> <i>The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded</i> The Mona Offshore Cable Corridor and Access Areas does not overlap with any Annex I features within the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC. The nearest Annex I reef feature is located 2.4 km from the Mona Offshore Cable Corridor and Access Areas, therefore considering this distance the likelihood of a stepping stone effect is limited. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives. Operations and maintenance phase <i>The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing</i> <i>The physical, biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded</i> <i>The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded</i> The Mona Offshore Cable Corridor and Access Areas does not overlap with any Annex I features within the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC. The nearest Annex I reef feature is also located 2.4 km and the nearest Annex I sandbank feature is located 3.5 km from the	
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			Mona Offshore Cable Corridor and Access Areas, therefore considering this distance the likelihood of a stepping stone effect is limited. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives.	
	Changes in physical processes (Mona Offshore Cable Corridor only)	Changes in physical processes may arise from the installation of infrastructure into the water column, including scour effects and changes in the sediment transport and wave regimes resulting in potential effects on benthic receptors. Volume 6, Annex 1.1: Physical processes technical report of the Environmental Statement (Document Reference: F6.1.1) provides a full description of the modelling used to inform this assessment.	A detailed assessment of effects on Annex I habitats is included in Section 1.5.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Operations and maintenance phase <i>The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded that changes in physical processes along the Mona Offshore Cable Corridor are predicted to be highly limited in spatial extent (i.e. in the immediate vicinity of cable protection), and due to meteorological conditions, the scale of potential impacts are predicted to be well within the natural variation. Therefore, these activities will not prevent the distribution or extent of identified Annex I habitat features, or each of their main component parts, from increasing or remaining stable. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>The physical, biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded</i> Changes in physical processes along the Mona Offshore Cable Corridor are predicted to be highly limited in spatial extent (i.e. in the immediate vicinity of cable protection), due to meteorological conditions and the scale of potential impacts are predicted to be well within the natural variation. Therefore, changes in physical processes will not result in the degradation of the physical, biological and chemical structure and functions necessary for the long-term maintenance and quality of the Annex I reef or Annex I	NO

			sandbanks which are slightly covered by seawater all the time habitat features. <i>The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded</i> Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the Environmental Statement (Document Reference: F2.2) assessed the qualifying features of the SAC and associated characterising species as not sensitive to the relevant pressures. It is not considered that the presence, abundance, condition and diversity of the typical benthic species associated with the Annex I reef or Annex I sandbanks which are slightly covered by seawater all the time habitat features will be affected in such a way that the habitat quality will be degraded.	
	Accidental pollution (Mona Offshore Cable Corridor and Access Areas only)	There is a risk of pollution being accidentally released during the construction phase of the Mona Offshore Wind Project from sources including vessels/vehicles and equipment/machinery. There is also a risk of pollution being accidentally released during the operations and maintenance phase of the Mona Offshore Wind Project from sources including vessels/vehicles and equipment/machinery.	A detailed assessment of effects on Annex I habitats is included in Section 1.5.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Construction phase <i>The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing</i> <i>The physical, biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded</i> <i>The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded</i> The risk of accidental pollution is very low. Should a pollution event occur, effects will be temporary, reversible and limited in spatial extent. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives. Operations and maintenance phase <i>The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing</i>	NO

			<i>The physical, biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded</i> <i>The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded</i> The risk of accidental pollution is very low. Should a pollution event occur, effects will be temporary, reversible and limited in spatial extent. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives.	
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Dee Estuary/Aber Dyfrdwy SAC

Dee Estuary/Aber Dyfrdwy SAC (39.3 km from Mona Array Area and 13.2 km from Mona Offshore Cable Corridor and Access Areas)				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
Sea lamprey River lamprey	Underwater sound impacting fish and shellfish receptors	Some activities associated with the construction of the Mona Offshore Wind Project will generate underwater sound which has the potential to result in mortality, injury and/or disturbance to diadromous fish. Elevated underwater sound also has the potential to disrupt the migration of fish to their preferred spawning habitats (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference F2.3). The greatest potential impacts from underwater sound emissions are predicted to result from piling activities (for the installation of Offshore Substation Platform (OSP) foundations) and UXO clearance including detonation within the Mona	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Construction phase <i>The migratory passage of both adult and juvenile river lamprey/sea lamprey through the Dee Estuary between Liverpool Bay and the River Dee is unobstructed by physical barriers and/or poor water quality.</i> Diadromous fish species may experience behavioural effects in response to piling in the vicinity of the Mona	NO

		Array Area. Underwater sound modelling for all relevant activities has been undertaken for the Mona Offshore Wind Project and full details are presented in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1). All other sound sources including cable installation, foundation drilling are non-percussive and will result in much lower sound levels and therefore much smaller injury ranges (in most cases no injury is predicted) than those predicted for piling operations (see Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1)).	Array Area however, modelling indicates these effects would not result in barriers to migration to and from this SAC, and sound potential impacts will be short-term and intermittent during the construction phase. There is no route to impact for underwater sound to affect water quality or to physically obstruct the migratory passage of lamprey species. As such there is negligible risk of disruption to migration of lamprey. Therefore, the migratory passage of both adult and juvenile river lamprey through the Dee Estuary between Liverpool Bay and the River Dee will be unobstructed by physical barriers and/or poor water quality. <i>The five year mean count of river lampreys recorded by the Chester Weir fish trap is no less than 55 under the monitoring regime in use prior to notification (i.e. 100% of the mean annual count during the five years for which data are available prior to notification: 1993, 1997-2000).</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded that; • Sea lamprey and river lamprey within close proximity to piling operations may experience injury or mortality. However, given they are highly mobile, they tend to only utilise the environment within the Mona fish and shellfish ecology study area (which is illustrated on Figure 3.1 of the Fish and Shellfish Ecology ES Chapter 3 - ORML2429T - F2.3_Mona_ES_Fish and Shellfish Ecology.pdf) to pass through during migration. • Diadromous fish species may experience behavioural effects in response to piling in the vicinity of the Mona Array Area however, modelling indicates these effects would not result in barriers to migration to and from this	
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			SAC (which is located 39.3 km from the Mona Array Area), and potential impacts from underwater sound will be short-term and intermittent during the construction phase. As such there is negligible risk of disruption to migration of lamprey. Therefore, underwater sound associated with the Mona Offshore Wind Project will not result in the reduction of sea lamprey or river lamprey populations. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>The abundance of prey species forming the river lamprey/sea lamprey's food resource within the estuary, is maintained.</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant referred to Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3) which concluded that for prey species of the sea lamprey and river lamprey potential impacts from underwater sound would be of minor adverse significance, which is not significant in EIA terms with the exception of herring which was concluded to be moderate adverse during the herring spawning season only. Although, there is evidence that lamprey features may prey on herring, herring is predicted to form only a very small proportion of sea and river lamprey's diet with lamprey predicted to be able to switch prey to other species such as sprat, flounder and small gadoids. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the	
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			absence of any mitigation measures, however, there is a potential to compromise this conservation objective.	
	EMF from subsea electric cables	The presence and operation of inter-array, interconnector and offshore export cables within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas will lead to localised potential EMF impacts, which may affect Annex II diadromous fish features.	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Operations and maintenance phase <i>The migratory passage of both adult and juvenile river lamprey/sea lamprey through the Dee Estuary between Liverpool Bay and the River Dee is unobstructed by physical barriers and/or poor water quality.</i> Lamprey species are considered to have low sensitivity to EMF effects and Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3) concluded EMF impacts would not result in a barrier to migration of the qualifying diadromous fish species. There is no impact pathway from EMF to affect water quality or to physically obstruct a migratory pathway. As such, the migratory passage of both adult and juvenile river lamprey/sea lamprey through the Dee Estuary between Liverpool Bay and the River Dee will remain unobstructed by physical barriers and/or poor water quality <i>The five year mean count of river lampreys recorded by the Chester Weir fish trap is no less than 55 under the monitoring regime in use prior to notification (i.e. 100% of the mean annual count during the five years for which data are available prior to notification: 1993, 1997-2000).</i> Given that lamprey species are considered to have low sensitivity to EMF effects and that the assessment	YES

			concluded EMF impacts would not result in a barrier to migration of the qualifying diadromous fish species, the population or distributions of the qualifying species will not be prevented from being maintained or restored. <i>The abundance of prey species forming the river lamprey/sea lamprey's food resource within the estuary, is maintained.</i> Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3) concluded that for prey species of the sea lamprey and river lamprey (herring and sprat) impacts from EMF would be of minor adverse significance, which is not significant in EIA terms. The abundance of prey species forming the river lamprey/sea lamprey's food resource within the estuary, is maintained.	
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River Dee and Bala Lake/Afon Dyfrydwy a Llyn Tegid SAC

River Dee and Bala Lake/Afon Dyfrydwy a Llyn Tegid SAC (64.4 km from Mona Array Area and 40.7 km from Mona Offshore Cable Corridor and Access Areas)				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
<i>Sea lamprey</i> <i>River lamprey</i> <i>Atlantic salmon</i>	Underwater sound impacting fish and shellfish receptors	Some activities associated with the construction of the Mona Offshore Wind Project will generate underwater sound which has the potential to result in mortality, injury and/or disturbance to diadromous fish. Elevated underwater sound also has the potential to disrupt the migration of fish to their preferred spawning habitats (see Volume 2, Chapter 3: Fish and shellfish ecology	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Construction phase <i>The parameters defined in the vision for the watercourse as defined in (NRW, 2022) must be met.</i>	NO

		of the Environmental Statement (Document Reference F2.3). The greatest potential impacts from underwater sound emissions are predicted to result from piling activities (for the installation of Offshore Substation Platform (OSP) foundations) and UXO clearance including detonation within the Mona Array Area. Underwater sound modelling for all relevant activities has been undertaken for the Mona Offshore Wind Project and full details are presented in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1). All other sound sources including cable installation and foundation drilling are non-percussive and will result in much lower sound levels and therefore much smaller injury ranges (in most cases no injury is predicted) than those predicted for piling operations (see Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1).	<i>There will be no reduction in the area or quality of habitat for the feature populations in the SAC on a long-term basis.</i> Due to the nature of the impact, and the distance of the Mona Array Area (located 64.4 km from the Mona Array Area) from the River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC there is no route to impact and underwater sound will not prevent the defined vision for the watercourse from being met. There will be no reduction in the area or quality of habitat for the feature populations in the SAC on a long-term basis. <i>The SAC feature populations will be stable or increasing over the long term.</i> <i>The natural range of the features in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future.</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded; • Sea lamprey and river lamprey within close proximity to piling operations may experience injury or mortality. However, given they are highly mobile, they tend to only utilise the environment within the Mona fish and shellfish ecology study area to pass through during migration. • Diadromous fish species may experience behavioural effects in response to piling in the vicinity of the Mona Array Area however, modelling indicates these effects would not result in barriers to migration to and from this SAC (which is located 64.4 km from the Mona Array Area), and potential sound impacts will be short-term and intermittent during the construction phase. As such there is negligible risk of disruption to migration of lamprey. Therefore, underwater sound associated with the Mona Offshore Wind Project will not prevent the populations of the qualifying diadromous fish species from remaining stable or increasing in the long term. On	
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			the basis of the above, the natural range of features in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future as a result of underwater sound associated with the Mona Offshore Wind Project. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>All factors affecting the achievement of these conditions are under control.</i> The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. Given the conclusions made for the conservation objectives above, it is considered that in the absence of any mitigation measures, however, there is a potential to compromise this conservation objective.	
	EMF from subsea electric cables	The presence and operation of inter-array, interconnector and offshore export cables within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas will lead to localised potential EMF impacts, which may affect Annex II diadromous fish features.	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Operations and maintenance phase <i>The parameters defined in the vision for the watercourse as defined above must be met.</i> Due to the nature of the impact, and the distance of the Mona Array Area from the River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC (64.4 km) this impact will not prevent the defined vision for the watercourse from being met. <i>The SAC feature populations will be stable or increasing over the long term.</i>	YES

			<i>The natural range of the features in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future.</i> Given that lamprey and Atlantic salmon are considered to have low sensitivity to EMF from subsea electric cables and that the assessment concluded EMF from subsea electric cables impacts would not result in a barrier to migration of the qualifying diadromous fish species, the population of the qualifying species will not be prevented from remaining stable or increasing in the long term and the features natural range will neither be reduced or likely be reduced in the foreseeable future. <i>There will be no reduction in the area or quality of habitat for the feature populations in the SAC on a long-term basis.</i> There is no pathway for effect between EMF from subsea electric cables and the habitats of the qualifying species. Therefore, there will be no reduction in the area or quality of habitat for the feature populations in the SAC on a long-term basis. <i>All factors affecting the achievement of these conditions are under control.</i> Given the conclusions made above, it is considered that all factors affecting the achievement of these conditions will remain under control.	
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River Ehen SAC

<i>River Ehen SAC (83.01 km from Mona Array Area and 106.4 km from Mona Offshore Cable Corridor and Access Areas)</i>				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?

Atlantic salmon Freshwater pearl mussel	Underwater sound impacting fish and shellfish receptors	Some activities associated with the construction of the Mona Offshore Wind Project will generate underwater sound which has the potential to result in mortality, injury and/or disturbance to diadromous fish. Elevated underwater sound also has the potential to disrupt the migration of fish to their preferred spawning habitats (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference F2.3). The greatest potential impacts from underwater sound emissions are predicted to result from piling activities (for the installation of Offshore Substation Platform (OSP) foundations) and UXO clearance including detonation within the Mona Array Area. Underwater sound modelling for all relevant activities has been undertaken for the Mona Offshore Wind Project and full details are presented in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1). All other sound sources including cable installation and foundation drilling are non-percussive and will result in much lower sound levels and therefore much smaller injury ranges (in most cases no injury is predicted) than those predicted for piling operations (see Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1).	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Construction phases <i>The extent and distribution of qualifying natural habitats and habitats of qualifying species [are maintained or restored].</i> <i>The structure and function of the habitats of qualifying species [are restored].</i> <i>The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely [are restored].</i> There is no pathway for underwater sound to result in adverse effects on the habitats of the qualifying species. Therefore, underwater sound associated with the Mona Offshore Wind Project will not prevent the extent and distribution, structure and function or the supporting processes on which the habitats of the qualifying diadromous fish species rely, from being restored. <i>The populations of qualifying species [are maintained or restored].</i> <i>The distribution of qualifying species within the site [are restored].</i> As detailed in the Report to Inform Appropriate Assessment (document reference E.1.2), there is potential for indirect adverse effects on the larval stage of freshwater pearl mussel if there are	NO
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			adverse effects on the individual salmon (their host species for the first year of their life) to which they are attached. Atlantic salmon within close proximity to piling operations may experience injury or mortality. However, given they are highly mobile, will only travel through the potential ZoI during migration and the use of soft start piling procedures will potentially allow individuals in close proximity of piling to move away from the ensonified area, significant mortality or injury is not predicted. Atlantic salmon may experience behavioural effects in response to piling in the vicinity of the Mona Array Area however, modelling indicates these effects would not result in barriers to migration to and from this SAC (which is located 86.5 km from the Mona Array Area), and potential sound impacts will be short-term and intermittent during the construction phase. As such there is negligible risk of disruption to migration of Atlantic salmon. Therefore, underwater sound associated with the Mona Offshore Wind Project will not prevent the populations or the distributions of Atlantic salmon or freshwater pearl mussel species from being restored. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives.	
	EMF from subsea electric cables	The presence and operation of inter-array, interconnector and offshore export cables within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas will lead to localised	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-	YES

		potential EMF impacts, which may affect Annex II diadromous fish features.	E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Operations and maintenance phase <i>The extent and distribution of qualifying natural habitats and habitats of qualifying species [are maintained or restored].</i> <i>The structure and function of the habitats of qualifying species [are restored].</i> <i>The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely [are restored].</i> There is no pathway for effect between EMF from subsea electric cables impacts and the habitats of the qualifying species. Therefore, EMF from subsea electric cables impacts will not prevent the extent and distribution, structure and function or supporting processes on which the habitats of qualifying species rely from being maintained or restored. The populations of qualifying species. The distribution of qualifying species within the site. Given that Atlantic salmon are considered to have low sensitivity to EMF from subsea electric cables effects and that the assessment concluded EMF from subsea electric cables impacts would not result in a barrier to migration of the qualifying diadromous fish species, the populations or distributions of the Atlantic salmon and freshwater pearl mussel within the site will not be prevented from being maintained or restored.	
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River Eden SAC

River Eden SAC (86.5 km from Mona Array Area and 104.8 km from Mona Offshore Cable Corridor and Access Areas)				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
Sea lamprey River lamprey Atlantic salmon	Underwater sound impacting fish and shellfish receptors	Some activities associated with the construction of the Mona Offshore Wind Project will generate underwater sound which has the potential to result in mortality, injury and/or disturbance to diadromous fish. Elevated underwater sound also has the potential to disrupt the migration of fish to their preferred spawning habitats (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference F2.3). The greatest potential impacts from underwater sound emissions are predicted to result from piling activities (for the installation of Offshore Substation Platform (OSP) foundations) and UXO clearance including detonation within the Mona Array Area. Underwater sound modelling for all relevant activities has been undertaken for the Mona Offshore Wind Project and full details are presented in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1). All other sound sources including cable installation and foundation drilling are non-percussive and will result in much lower sound levels and therefore much smaller injury ranges (in most cases no	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Construction phase <i>The extent and distribution of qualifying natural habitats and habitats of qualifying species [are maintained or restored].</i> <i>The structure and function of the habitats of qualifying species [are maintained or restored].</i> <i>The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely [are maintained or restored].</i> There is no pathway for underwater sound to result in adverse effects on the habitats of the qualifying species. Therefore, underwater sound associated with the Mona Offshore Wind Project will not prevent the extent and distribution, the structure and function or the supporting processes on which the habitats of the qualifying diadromous fish species rely, from being maintained or restored.	NO

		injury is predicted) than those predicted for piling operations (see Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1).	<i>The populations of qualifying species [are maintained or restored].</i> <i>The distribution of qualifying species within the site [are maintained or restored].</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded; • Sea lamprey, river lamprey and Atlantic salmon within close proximity to piling operations may experience injury or mortality. However, given they are highly mobile, they tend to only utilise the environment within the Mona fish and shellfish ecology study area to pass through during migration. • Diadromous fish species may experience behavioural effects in response to piling in the vicinity of the Mona Array Area however, modelling indicates these effects would not result in barriers to migration to and from this SAC (which is located 86.5 km from the Mona Array Area), and potential sound impacts will be short-term and intermittent during the construction phase. As such there is negligible risk of disruption to migration of sea lamprey, river lamprey or Atlantic salmon. Therefore, underwater sound associated with the Mona Offshore Wind Project will not prevent the populations or the distributions of the qualifying diadromous fish species from being maintained or restored. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives.	
	EMF from subsea	The presence and operation of inter-array, interconnector and offshore export cables within the Mona Array Area and	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part	YES

	electric cables	Mona Offshore Cable Corridor and Access Areas will lead to localised potential EMF impacts, which may affect Annex II diadromous fish features.	Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Operations and maintenance phase <i>The extent and distribution of qualifying natural habitats and habitats of qualifying species [are maintained or restored].</i> <i>The structure and function of the habitats of qualifying species [are maintained or restored].</i> <i>The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely [are maintained or restored].</i> There is no pathway for effect between EMF from subsea electric cables and the habitats of the qualifying species. Therefore, EMF from subsea electric cables will not prevent the extent and distribution, structure and function or supporting processes on which the habitats of qualifying species rely from being maintained or restored. <i>The populations of qualifying species [are maintained or restored].</i> <i>The distribution of qualifying species within the site [are maintained or restored].</i> Given that sea lamprey, river lamprey and Atlantic salmon are considered to have low sensitivity to EMF from subsea electric cables and that the assessment concluded EMF from subsea electric cables would not result in a barrier to migration of the qualifying diadromous fish species, the populations and distributions of the qualifying features within the site will not be prevented from being maintained or restored.	
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Afon Gwyrfaï a Llyn Cwellyn SAC (92.3 km from Mona Array Area and 91.2 km from Mona Offshore Cable Corridor and Access Areas)

Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
Atlantic salmon	Underwater sound impacting fish and shellfish receptors	Some activities associated with the construction of the Mona Offshore Wind Project will generate underwater sound which has the potential to result in mortality, injury and/or disturbance to diadromous fish. Elevated underwater sound also has the potential to disrupt the migration of fish to their preferred spawning habitats (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference F2.3). The greatest potential impacts from underwater sound emissions are predicted to result from piling activities (for the installation of Offshore Substation Platform (OSP) foundations) and UXO clearance including detonation within the Mona Array Area. Underwater sound modelling for all relevant activities has been undertaken for the Mona Offshore Wind Project and full details are presented in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1). All other sound sources including cable installation and foundation drilling are non-percussive and will result in much lower sound levels and therefore much smaller injury ranges (in most cases no injury is predicted) than those predicted for piling operations (see Volume 5, Annex 3.1: Underwater sound	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Construction phase <i>The conservation objective for the water course as defined in Countryside Council for Wales (2008) must be met.</i> Due to the nature of the impact, and the distance of the Mona Array Area from the Afon Gwyrfaï a Llyn Cwellyn SAC this impact will not prevent the defined vision for the watercourse from being met. <i>The population of the feature in the SAC is stable or increasing over the long term.</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded; - Atlantic salmon within close proximity to piling operations may experience injury or mortality. However, given they are highly mobile, they tend to only utilise the environment within the Mona fish and shellfish ecology study area to pass through during migration. - Atlantic salmon may experience behavioural effects in response to piling in the vicinity of the	NO

		technical report of the Environmental Statement (Document reference: F5.3.1).	Mona Array Area however, modelling indicates these effects would not result in barriers to migration to and from this SAC (which is located 92.3 km from the Mona Array Area), and potential sound impacts will be short-term and intermittent during the construction phase. As such there is negligible risk of disruption to migration of Atlantic salmon. Therefore, underwater sound associated with the Mona Offshore Wind Project will not prevent the populations of the qualifying diadromous fish species from remaining stable or increasing in the long term. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future.</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded that Atlantic salmon within close proximity to piling operations may experience injury or mortality, with behavioural effects occurring over a wider area. However, given they are highly mobile, they tend to only utilise the environment within the Mona fish and shellfish ecology study area to pass through during migration. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective.	
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			<i>The Gwyrfai will continue to be a sufficiently large habitat to maintain the feature's population in the SAC on a long-term basis.</i> Due to the nature of the impact, and the distance of the Mona Array Area from the Afon Gwyrfai a Llyn Cwellyn SAC there will be no reduction in the area or quality of habitat for the feature populations. The Gwyrfai will continue to be a sufficiently large habitat to maintain the feature's population in the Afon Gwyrfai a Llyn Cwellyn SAC on a long-term basis.	
	EMF from subsea electric cables	The presence and operation of inter-array, interconnector and offshore export cables within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas will lead to localised potential EMF impacts, which may affect Annex II diadromous fish features.	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Operations and maintenance phase <i>The conservation objective for the water course as defined in Countryside Council for Wales (2008) must be met.</i> There is no pathway for effect between EMF from subsea electric cables and the watercourse. Therefore, EMF from subsea electric cables will not prevent the conservation objectives for the water course as defined in Countryside Council for Wales (2008) from being met. <i>The population of the feature in the SAC is stable or increasing over the long term.</i> <i>The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future.</i> Given that Atlantic salmon are considered to have low sensitivity to EMF from subsea electric cables effects and that the assessment concluded EMF from subsea electric	YES

			cables impacts would not result in a barrier to migration of the qualifying diadromous fish species, the populations of the qualifying features within the site will not be prevented from remaining stable or increasing over time. The natural range of the feature in the SAC will neither be reduced nor is likely to be reduced for the foreseeable future. <i>The Gwyrfai will continue to be a sufficiently large habitat to maintain the feature's population in the SAC on a long-term basis.</i> There is no pathway for effect between EMF from subsea electric cables and the habitats of the qualifying species. Therefore, EMF from subsea electric cables will not prevent the Gwyrfai from continuing to be a sufficiently large habitat to maintain the feature's population in the SAC on a long term basis.	
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River Kent SAC

<i>River Kent SAC (96.7 km from Mona Array Area and 105.1 km from Mona Offshore Cable Corridor and Access Areas)</i>				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
<i>Freshwater pearl mussel</i>	Underwater sound impacting fish and shellfish receptors	Some activities associated with the construction of the Mona Offshore Wind Project will generate underwater sound which has the potential to result in mortality, injury and/or disturbance to diadromous fish. Elevated underwater sound also has the potential to disrupt the migration of fish to their preferred spawning habitats (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference F2.3). The	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Construction phase	NO

		greatest potential impacts from underwater sound emissions are predicted to result from piling activities (for the installation of Offshore Substation Platform (OSP) foundations) and UXO clearance including detonation within the Mona Array Area. Underwater sound modelling for all relevant activities has been undertaken for the Mona Offshore Wind Project and full details are presented in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1). All other sound sources including cable installation and foundation drilling are non-percussive and will result in much lower sound levels and therefore much smaller injury ranges (in most cases no injury is predicted) than those predicted for piling operations (see Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1)).	<i>The extent and distribution of qualifying natural habitats and habitats of qualifying species [are maintained or restored].</i> <i>The structure and function of the habitats of qualifying species [are restored].</i> <i>The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely [are restored].</i> There is no pathway for underwater sound to result in adverse effects on the habitats of the freshwater pearl mussel feature. Therefore underwater sound associated with the Mona Offshore Wind Project will not prevent the extent and distribution, structure and function or the supporting processes on which the habitats of the qualifying diadromous fish species rely, from being restored. <i>The populations of qualifying species [are maintained or restored].</i> <i>The distribution of qualifying species within the site [are restored].</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded that; • Atlantic salmon within the River Kent SAC (the species considered to be the host species for freshwater pearl mussel within the River Kent SAC) within close proximity to piling operations may experience injury or mortality. However, given they are highly mobile, they tend to only utilise the environment within the Mona fish and shellfish ecology study area to pass through during migration.	
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			Atlantic salmon within the River Kent SAC may experience behavioural effects in response to piling in the vicinity of the Mona Array Area however, modelling indicates these effects would not result in barriers to migration to and from this SAC (which is located 96.7 km from the Mona Array Area), and potential sound impacts will be short-term and intermittent during the construction phase. As such there is negligible risk of disruption to migration of Atlantic salmon to and from the River Kent and freshwater pearl mussel will not be indirectly impacted as a result of impacts to Atlantic salmon. Therefore, underwater sound associated with the Mona Offshore Wind Project will not prevent the populations or the distributions of the freshwater pearl mussel from being restored. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives.	
	EMF from subsea electric cables	The presence and operation of inter-array, interconnector and offshore export cables within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas will lead to localised potential EMF impacts, which may affect Annex II diadromous fish features.	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Operations and maintenance phase <i>The extent and distribution of qualifying natural habitats and habitats of qualifying species [are maintained or restored].</i>	YES

			<i>The structure and function of the habitats of qualifying species [are restored].</i> <i>The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely [are restored].</i> There is no pathway for effect between EMF from subsea electric cables and the habitats of the qualifying species. Therefore, EMF from subsea electric cables will not prevent the extent and distribution, structure and function or supporting processes on which the habitats of qualifying species rely from being maintained or restored. <i>The populations of qualifying species [are maintained or restored].</i> <i>The distribution of qualifying species within the site [are restored].</i> Atlantic salmon and brown trout are considered to be the host species for freshwater pearl mussel within the SAC. EMF impacts on brown trout will not occur to brown trout as the species is purely freshwater resident and do not migrate to the marine environment. Given that Atlantic salmon are considered to have low sensitivity to EMF from subsea electric cables and that the assessment concluded EMF from subsea electric cables would not result in a barrier to migration of the qualifying diadromous fish species, the populations and distributions of the qualifying features within the site will not be prevented from being maintained or restored.	
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River Derwent and Bassenthwaite Lake SAC

River Derwent and Bassenthwaite Lake SAC (99.7 km from Mona Array Area and 119.7 km from Mona Offshore Cable Corridor and Access Areas)

Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in <i>italics</i>)	Can adverse effect on site integrity be ruled out?
Sea lamprey River lamprey Atlantic salmon	Underwater sound impacting fish and shellfish receptors	Some activities associated with the construction of the Mona Offshore Wind Project will generate underwater sound which has the potential to result in mortality, injury and/or disturbance to diadromous fish. Elevated underwater sound also has the potential to disrupt the migration of fish to their preferred spawning habitats (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference F2.3). The greatest potential impacts from underwater sound emissions are predicted to result from piling activities (for the installation of Offshore Substation Platform (OSP) foundations) and UXO clearance including detonation within the Mona Array Area. Underwater sound modelling for all relevant activities has been undertaken for the Mona Offshore Wind Project and full details are presented in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1). All other sound sources including cable installation and foundation drilling are non-percussive and will result in much lower sound levels and therefore much smaller injury ranges (in most cases no injury is predicted) than those predicted for piling operations (see Volume 5, Annex 3.1: Underwater sound technical	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Construction phase <i>The extent and distribution of qualifying natural habitats and habitats of qualifying species [are maintained or restored].</i> <i>The structure and function of the habitats of qualifying species [are maintained or restored].</i> <i>The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely [are maintained or restored].</i> There is no pathway for underwater sound to result in adverse effects on the habitats of the qualifying species. Therefore underwater sound associated with the Mona Offshore Wind Project will not prevent the extent and distribution, structure and function or the supporting processes on which the habitats of the qualifying diadromous fish species rely, from being maintained or restored.	NO

		report of the Environmental Statement (Document reference: F5.3.1).	<i>The populations of qualifying species [are maintained or restored].</i> <i>The distribution of qualifying species within the site [are maintained or restored].</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded that; • Sea lamprey and river lamprey and Atlantic salmon within close proximity to piling operations may experience injury or mortality. However, given they are highly mobile, they tend to only utilise the environment within the Mona fish and shellfish ecology study area to pass through during migration. • Diadromous fish species may experience behavioural effects in response to piling in the vicinity of the Mona Array Area however, modelling indicates these effects would not result in barriers to migration to and from this SAC (which is located 99.7 km from the Mona Array Area), and potential sound impacts will be short-term and intermittent during the construction phase. As such there is negligible risk of disruption to migration of lamprey and Atlantic salmon. Therefore, underwater sound associated with the Mona Offshore Wind Project will not prevent the populations or distributions of the qualifying diadromous fish species from being maintained or restored. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any	
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			mitigation measures, however, there is a potential to compromise these conservation objectives.	
	EMF from subsea electric cables	The presence and operation of inter-array, interconnector and offshore export cables within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas will lead to localised potential EMF impacts, which may affect Annex II diadromous fish features.	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Operations and maintenance phase <i>The extent and distribution of qualifying natural habitats and habitats of qualifying species [are maintained or restored].</i> <i>The structure and function of the habitats of qualifying species [are maintained or restored].</i> <i>The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely [are maintained or restored].</i> There is no pathway for effect between EMF from subsea electric cables impacts and the habitats of the qualifying species. Therefore, EMF from subsea electric cables impacts will not prevent the extent and distribution, structure and function or supporting processes on which the habitats of qualifying species rely from being maintained or restored. <i>The populations of qualifying species [are maintained or restored].</i> <i>The distribution of qualifying species within the site [are maintained or restored].</i>	YES

			Given that sea lamprey, river lamprey and Atlantic salmon are considered to have low sensitivity to EMF from subsea electric cables and that the assessment concluded EMF from subsea electric cables would not result in a barrier to migration of the qualifying diadromous fish species, the populations and distributions of the qualifying features within the site will not be prevented from being maintained or restored.	
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Solway Firth SAC

Solway Firth SAC (114.5 km from Mona Array Area and 134.8 km from Mona Offshore Cable Corridor and Access Areas)				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
Sea lamprey River lamprey	Underwater sound impacting fish and shellfish receptors	Some activities associated with the construction of the Mona Offshore Wind Project will generate underwater sound which has the potential to result in mortality, injury and/or disturbance to diadromous fish. Elevated underwater sound also has the potential to disrupt the migration of fish to their preferred spawning habitats (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference F2.3). The greatest potential impacts from underwater sound emissions are predicted to result from piling activities (for the installation of Offshore Substation Platform (OSP) foundations) and UXO clearance including detonation within the Mona Array Area. Underwater sound modelling for all relevant activities has been undertaken for the Mona	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Construction phase <i>The extent and distribution of qualifying natural habitats and habitats of qualifying species [are maintained or restored].</i> <i>The structure and function of the habitats of qualifying species [are maintained or restored].</i> <i>The supporting processes on which qualifying natural habitats and the habitats of</i>	NO

		Offshore Wind Project and full details are presented in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1). All other sound sources including cable installation and foundation drilling are non-percussive and will result in much lower sound levels and therefore much smaller injury ranges (in most cases no injury is predicted) than those predicted for piling operations (see Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1).	<i>qualifying species rely [are maintained or restored].</i> There is no pathway for underwater sound to result in adverse effects on the habitats of the qualifying species. Therefore underwater sound associated with the Mona Offshore Wind Project will not prevent the extent and distribution, structure and function or the supporting processes on which the habitats of the qualifying diadromous fish species rely, from being maintained or restored. <i>The populations of qualifying species [are maintained or restored].</i> <i>The distribution of qualifying species within the site [are maintained or restored].</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded that; • Sea lamprey and river lamprey within close proximity to piling operations may experience injury or mortality. However, given they are highly mobile, they tend to only utilise the environment within the Mona fish and shellfish ecology study area to pass through during migration. In addition the use of soft start piling procedures will potentially allow individuals in close proximity of piling to move away from the ensounded area, significant mortality or injury is not predicted. • Diadromous fish species may experience behavioural effects in response to piling in the vicinity of the Mona Array Area however, modelling indicates these	
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			effects would not result in barriers to migration to and from this SAC (which is located 114.5 km from the Mona Array Area), and potential sound impacts will be short-term and intermittent during the construction phase. As such there is negligible risk of disruption to migration of sea and river lamprey. Therefore, underwater sound associated with the Mona Offshore Wind Project will not prevent the populations or the distributions of sea lamprey and river lamprey from being maintained or restored. The applicant's assessment of effects against these conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives.	
	EMF from subsea electric cables	The presence and operation of inter-array, interconnector and offshore export cables within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas will lead to localised potential EMF impacts, which may affect Annex II diadromous fish features.	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Operations and maintenance phase <i>The extent and distribution of qualifying natural habitats and habitats of qualifying species [are maintained or restored].</i> <i>The structure and function of the habitats of qualifying species [are maintained or restored].</i> <i>The supporting processes on which qualifying natural habitats and the habitats of</i>	YES

			<i>qualifying species rely [are maintained or restored].</i> There is no pathway for effect between EMF from subsea electric cables impacts and the habitats of the qualifying species. Therefore, EMF from subsea electric cables impacts will not prevent the extent and distribution, structure and function or supporting processes on which the habitats of qualifying species rely from being maintained or restored. <i>The populations of qualifying species [are maintained or restored].</i> <i>The distribution of qualifying species within the site [are maintained or restored].</i> Given that sea lamprey and river lamprey are considered to have low sensitivity to EMF from subsea electric cables and that the assessment concluded EMF from subsea electric cables would not result in a barrier to migration of the qualifying diadromous fish species, the populations and distributions of the qualifying features within the site will not be prevented from being maintained or restored.	
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River Bladnoch SAC

<i>River Bladnoch SAC (121.5 km from Mona Array Area and 141.4 km from Mona Offshore Cable Corridor and Access Areas)</i>				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
<i>Atlantic salmon</i>	Underwater sound impacting fish and shellfish receptors	Some activities associated with the construction of the Mona Offshore Wind Project will generate underwater sound	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support	NO

		which has the potential to result in mortality, injury and/or disturbance to diadromous fish. Elevated underwater sound also has the potential to disrupt the migration of fish to their preferred spawning habitats (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference F2.3). The greatest potential impacts from underwater sound emissions are predicted to result from piling activities (for the installation of Offshore Substation Platform (OSP) foundations) and UXO clearance including detonation within the Mona Array Area. Underwater sound modelling for all relevant activities has been undertaken for the Mona Offshore Wind Project and full details are presented in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1). All other sound sources including cable installation and foundation drilling are non-percussive and will result in much lower sound levels and therefore much smaller injury ranges (in most cases no injury is predicted) than those predicted for piling operations (see Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1).	an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Construction phase <i>Restore the population of the species, including range of genetic types, as a viable component of the site.</i> <i>Restore the distribution of the species throughout the site.</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded that; • Atlantic salmon within close proximity to piling operations may experience injury or mortality. However, given they are highly mobile, they tend to only utilise the environment within the Mona fish and shellfish ecology study area to pass through during migration. • Diadromous fish species may experience behavioural effects in response to piling in the vicinity of the Mona Array Area however, modelling indicates these effects would not result in barriers to migration to and from this SAC (which is located 121.5 km from the Mona Array Area), and potential sound impacts will be short-term and intermittent during the construction phase. As such there is negligible risk of disruption to migration of Atlantic salmon. Therefore, underwater sound associated with the Mona Offshore Wind Project will not prevent the populations or distributions of the	
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			qualifying diadromous fish species from being restored. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives. <i>Restore the habitats supporting the species within the site and availability of food.</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded that there is no pathway for underwater sound to result in adverse effects on the habitats of the qualifying species. Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3) concluded that for prey species of Atlantic salmon potential impacts from underwater sound would be of minor adverse significance, which is not significant in EIA terms with the exception of herring which was concluded to be moderate adverse during the herring spawning season only. Although, there is evidence that adult Atlantic salmon may prey on herring, herring is predicted to form only a very small proportion of Atlantic salmon's diet and Atlantic salmon are predicted to be able to switch prey to other small fish species if required. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective.	
	EMF from subsea electric cables	The presence and operation of inter-array, interconnector and offshore export cables within the Mona Array	A detailed assessment of effects on Annex II diadromous fish species is included in Section 1.6.3 of the HRA Stage 2 Information to Support	YES

		Area and Mona Offshore Cable Corridor and Access Areas will lead to localised potential EMF impacts, which may affect Annex II diadromous fish features.	an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Operations and maintenance phase <i>Restore the population of the species, including range of genetic types, as a viable component of the site.</i> <i>Restore the distribution of the species throughout the site.</i> Given that Atlantic salmon are considered to have low sensitivity to EMF from subsea electric cables and that the assessment concluded EMF from subsea electric cables would not result in a barrier to migration of the qualifying diadromous fish species, the populations of the qualifying features (including range of genetic types) within the site will not be prevented from being restored as a viable component within the site. The distribution of the species throughout the site will not be prevented from being restored. <i>Restore the habitats supporting the species within the site and availability of food.</i> There is no pathway for effect between EMF from subsea electric cables and the habitats of the qualifying species. Therefore, EMF from subsea electric cables will not prevent the habitats supporting the species within the site and availability of food from being restored.	
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Harbour Porpoise SACs

North Anglesey Marine/Gogledd Môn Forol SAC (22.5 km from Mona Array Area and 17.5 km from Mona Offshore Cable Corridor and Access Areas)

North Channel SAC (81.5 km from Mona Array Area and 94.5 km from Mona Offshore Cable Corridor and Access Areas)
West Wales Marine/Gorllewin Cymru Forol SAC (95.4 km from Mona Array Area and 94.4 km from Mona Offshore Cable Corridor and Access Areas)
Bristol Channel Approaches/Dynesfeydd Môr Hafren SAC (274.8 km from Mona Array Area and 273.8 km from Mona Offshore Cable Corridor and Access Areas)
Rockabill to Dalkey Island SAC (126.1 km from Mona Array Area and 129.3 km from Mona Offshore Cable Corridor and Access Areas)
Roaringwater Bay and Islands SAC (448.8 km from Mona Array Area and 447.8 km from Mona Offshore Cable Corridor and Access Areas)
Blasket Islands SAC (565.5 km from Mona Array Area and 564.5 km from Mona Offshore Cable Corridor and Access Areas)
Mers Celtiques – Talus du golfe de Gascogne SCI (533.2 km from Mona Array Area and 532.1 km from Mona Offshore Cable Corridor and Access Areas)
Abers – Côte des legends SCI (600.1 km from Mona Array Area and 599 km from Mona Offshore Cable Corridor and Access Areas)
Ouessant-Molène SCI (601.3 km from Mona Array Area and 600.3 km from Mona Offshore Cable Corridor and Access Areas)
Côte de Granit rose-Sept-Iles SCI (607.7 km from Mona Array Area and 606.6 km from Mona Offshore Cable Corridor and Access Areas)
Anse de Goulven, dunes de Keremma SCI (610.2 km from Mona Array Area and 609.1 km from Mona Offshore Cable Corridor and Access Areas)
Tregor Goëlo SCI (630.6 km from Mona Array Area and 629.6 km from Mona Offshore Cable Corridor and Access Areas)
Côtes de Crozon SCI (638.8 km from Mona Array Area and 637.8 km from Mona Offshore Cable Corridor and Access Areas)
Chaussée de Sein SCI (650 km from Mona Array Area and 649 km from Mona Offshore Cable Corridor and Access Areas)
Cap Sizun SCI (658.9 km from Mona Array Area and 657.8 km from Mona Offshore Cable Corridor and Access Areas)
Récifs du talus du golfe de Gascogne SCI (687.1 km from Mona Array Area and 686.0 km from Mona Offshore Cable Corridor and Access Areas)
Anse de Vauville SCI (697.2 km from Mona Array Area and 696.1 km from Mona Offshore Cable Corridor and Access Areas)
Cap d'Erquy-Cap Fréhel SCI (698.5 km from Mona Array Area and 697.5 km from Mona Offshore Cable Corridor and Access Areas)
Baie de Saint-Brieuc – Est SCI (699.2 km from Mona Array Area and 698.1 km from Mona Offshore Cable Corridor and Access Areas)
Banc et récifs de Surtainville SCI (701.3 km from Mona Array Area and 700.2 km from Mona Offshore Cable Corridor and Access Areas)
Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard SCI (724.6 km from Mona Array Area and 723.5 km from Mona Offshore Cable Corridor and Access Areas)
Estuaire de la Rance SCI (737.8 km from Mona Array Area and 736.7 km from Mona Offshore Cable Corridor and Access Areas)
Baie du Mont Saint-Michel SCI (743.4 km from Mona Array Area and 742.4 km from Mona Offshore Cable Corridor and Access Areas)

Natura 2000 site feature (from Table	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
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3.2.2 – RED rows only)				
Harbour porpoise	Underwater sound from piling	During the construction phase sound emissions from the piling of foundations may lead to auditory injury and disturbance of marine mammals.	A detailed assessment of effects on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). <i>The species is a viable component of the site.</i> The UK SAC sites for harbour porpoise are beyond the 15 km effective deterrent range (EDR) for pin piles (JNCC, 2020). The only UK SAC for harbour porpoise to overlap the unweighted threshold of 143 dB re 1 µPa²s Sound Exposure Level single strike (SEL_{ss}) is North Anglesey Marine/Gogledd Môn Forol SAC, by a daily overlap of 4.33%, however this does not exceed the disturbance thresholds as outlined in Table 1.87 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>There is no significant disturbance of the species.</i> The maximum area of disturbance within the North Anglesey Marine/Gogledd Môn Forol SAC would be 140.67 km² (for a single piling activity on any given day) which does not surpass either	NO

			of the thresholds for significant disturbance. Underwater sound associated with piling is therefore not predicted to restrict the objective of no significant disturbance of the species within the site. All other UK SACs are outside the 15 km EDR for pin piles outlined in JNCC (2020) and none of the thresholds for significant disturbance would be exceeded. Underwater sound associated with piling is therefore not predicted to result in significant disturbance of the species. <i>The supporting habitats and processes relevant to harbour porpoises and their prey are maintained.</i> Habitats and processes will not be affected by underwater sound. With respect to prey species, some short-term disturbance is predicted to potential prey fish species, such as herring and cod spawning grounds (see Volume 2, Chapter 9: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3)). However harbour porpoise are considered to be generalist opportunistic feeders and are thus not reliant on a single prey species, with the ability to exploit other food sources. Effects are not considered to be long-term ensuring that the project will not affect prey species populations being maintained in the long term.	
	Underwater sound from clearance of UXO	UXO detonation during the construction phase may result in hearing damage/auditory injury or behavioural disturbance/displacement (including barrier effects) of marine mammals.	A detailed assessment of effects of UXO clearance on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf) and Section 1.4.3 of the Outline Marine Mammal Mitigation Protocol (MMMP) (Document Reference J21).	NO

			<i>The species is a viable component of the site.</i> Where low order/low yield measures are not possible there is a maximum risk of injury (predicted for harbour porpoise) out to 15 km for a 907 kg UXO (absolute maximum) and 8 km for a 130 kg UXO (most likely (common) maximum). There is no overlap between the potential impact zone and any of the UK SACs for harbour porpoise. Due to the mobile nature of harbour porpoise there is potential for harbour porpoise to be present within the impact zone. Whilst it is anticipated that there would be some measurable changes at an individual level, this would not manifest to population level effects demonstrated by the small proportion of the CIS MU potentially affected (0.32%). Disturbance (using TTS as a proxy) is very short term and reversible and therefore animals that experience this effect are anticipated to fully recover. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>There is no significant disturbance of the species.</i> Disturbance (using TTS as a proxy) is considered very short term and reversible, therefore animals that experience this effect are anticipated to fully recover. Any disturbance would occur during a short time period during the construction phase and is not anticipated to have long term population effects on the feature (i.e. features are anticipated to fully recover).	
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			There is no spatial overlap of the injury ranges associated with UXO detonation with the North Anglesey Marine/Gogledd Môn Forol SAC and the disturbance thresholds will not be exceeded (using TTS as a proxy presents a potential overlap of 1.79% with the North Anglesey Marine/Gogledd Môn Forol SAC for 907 kg UXO (absolute maximum), whilst using the EDR approach presents a potential daily overlap of 2.03%). Disturbance impacts associated with the Mona Offshore Wind Project will not surpass 20% of relevant area disturbed in any given day or 10% of the relevant area of the site over a season. As the other UK SACs for harbour porpoise are further away, they do not overlap the injury or disturbance ranges associated with UXO detonation, and therefore harbour porpoise will not be excluded from any part of these SACs and the disturbance thresholds will not be exceeded. <i>The supporting habitats and processes relevant to harbour porpoises and their prey are maintained.</i> Supporting habitats and processes will not be affected by underwater sound from UXO detonation, (i.e. there will be no habitat loss/disturbance from underwater sound associated with UXO detonation). With respect to prey species, although some short-term disturbance is predicted to potential prey fish species, effects are not considered to be long lasting ensuring that the Mona Offshore Wind Project will not affect prey species populations being maintained in the long term.	
	Underwater sound due to vessel use and other activities	Non-piling, sound producing activities and increased vessel movements during the construction phase have the potential to result in a range of impacts	A detailed assessment of effects on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs	YES

		on marine mammals such as avoidance behaviour or displacement and masking of vocalisations or changes in vocalisation rate. During the construction phase of the Mona Offshore Wind Project, the increased levels of vessel activity will contribute to the total underwater sound levels, but the movements will be limited to within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas and will likely follow existing shipping routes to/from the ports. Vessel use during the operations and maintenance phase of the Mona Offshore Wind Project may lead to injury and/or disturbance to Annex II marine mammal species. A variety of vessel types will be used during routine operations and maintenance activities, including crew transfer vessels/workboats, jack-up vessels, cable repair vessels, Service Operation Vessels (SOV) or similar vessels and excavators/backhoe dredgers.	Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). As detailed within NRW A representation dated 4 March 2025 there is a matter of disagreement between the applicant and NRW A surrounding the assessment methodology used within the ES associated with impact resulting from vessel movement. However it is noted that in this instance NRW A agree with the conclusion of the assessment. <i>The species is a viable component of the site.</i> <i>There is no significant disturbance of the species.</i> Given that there is no potential for injury and disturbance within range of the SAC, that harbour porpoise are likely to avoid vessels, the existing high level of vessel traffic and that there is likely recovery from disturbance, elevated underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not affect the survivability and reproductive potential of harbour porpoise using the designated site and harbour porpoise will remain a viable component of the site. Similarly, elevated underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not significantly disturb the species. <i>The supporting habitats and processes relevant to harbour porpoises and their prey are maintained.</i> There is no pathway for elevated underwater sound due to vessel use and other activities to result in adverse effects on the habitats of the	
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			qualifying species. Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3) also did not conclude any significant adverse effects on fish receptors as a result of underwater sound associated with vessels. Therefore, elevated underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not prevent the supporting habitats and processes from being maintained or reduce the availability of prey.	
	Changes in fish and shellfish communities affecting prey availability ⁵	There is the potential for changes in marine mammal prey (e.g. fish species) abundance and distribution to arise as a result of construction activities which physically disturb the seabed, result in increased SSC or which generate underwater sound. Potential impacts to prey species may result in changes in the ability/success of marine mammals to forage in the area of the Mona Offshore Wind Project.	A detailed assessment of effects on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). <i>The species is a viable component of the site.</i> <i>There is no significant disturbance of the species.</i> Harbour porpoise may be affected in response to changes in fish and shellfish communities affecting prey availability in the vicinity of the Mona Offshore Wind Project boundaries, however impacts to prey species are predicted to be localised, short term and intermittent, and harbour porpoise are expected to adapt (they are considered to be opportunistic feeders and are thus not reliant on a single prey species) and recover quickly. As such there is a negligible risk of disruption of foraging activities of harbour porpoise.	YES

⁵ This pathway only applies to North Anglesey Marine/Gogledd Môn Forol SAC.

			<i>The supporting habitats and processes relevant to harbour porpoises and their prey are maintained.</i> There is no pathway for changes in fish and shellfish communities affecting prey availability to result in adverse effects on the habitats of the qualifying species and there are no adverse effects expected for fish and shellfish species. No significant adverse effects were predicted to occur to most fish and shellfish species (marine mammal prey) as a result of the construction of the Mona Offshore Wind Project (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3)) but there may be an adverse significant effect on herring (spawning grounds). However, this adverse significant effect is only concluded during the spawning periods for herring and cod and harbour porpoise are considered to be generalist opportunistic feeders and are thus not reliant on a single prey species.	
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Bottlenose Dolphin SACs

<i>Pen Llŷn a'r Sarnau/Lleyn Peninsula and the Sarnau SAC (94.1 km from Mona Array Area and 93.0 km from Mona Offshore Cable Corridor and Access Areas)</i> <i>Cardigan Bay/Bae Ceredigion SAC (162.5 km from Mona Array Area and 161.5 km from Mona Offshore Cable Corridor and Access Areas)</i>				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
<i>Bottlenose dolphin</i>	Underwater sound from piling	During the construction phase sound emissions from the piling of foundations may lead to auditory injury and disturbance of marine mammals.	A detailed assessment of effects on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-	NO

			E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). <i>The population is maintaining itself on a long-term basis as a viable component of its natural habitat.</i> <i>Important elements are population size, structure, production, and condition of the species within the site.</i> <i>The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.</i> For bottlenose dolphin there was no overlap of the 160 dBrms (root mean squared) (strong disturbance) contour with any SAC designated for bottlenose dolphin or grey seal. For bottlenose dolphin the most conservative estimate of disturbance led to up to seven animals predicted to be disturbed within weighted SELss sound contours, which equates to 2.39% of the MU. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives. <i>The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing.</i>	
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			Habitats and processes will not be affected by underwater sound. With respect to prey species, although some short-term disturbance is predicted to potential prey fish species such as cod and herring spawning grounds (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3)), effects are not considered to be long-term ensuring that the project will not affect prey species populations being maintained in the long term. The presence, abundance, condition and diversity of habitats and species required to support this species will not be adversely affected. Underwater sound as a result of piling will not prevent the distribution, abundance and populations dynamics of the species within the site and population beyond the site, from remaining stable or increasing.	
	Underwater sound from clearance of UXO	UXO detonation during the construction phase may result in hearing damage/auditory injury or behavioural disturbance/displacement (including barrier effects) of marine mammals.	A detailed assessment of effects of UXO clearance on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf) and Section 1.4.3 of the Outline Marine Mammal Mitigation Protocol (MMMP) (Document Reference J21). <i>The population is maintaining itself on a long-term basis as a viable component of its natural habitat.</i> The number of animals at risk of potential PTS would be very small (less than one bottlenose dolphin and less than six grey seal). There may be some measurable changes at an individual level (<1 bottlenose dolphin and <6 grey seal), but that this would not manifest to population level effects demonstrated by the small proportion of the MUs potentially affected.	NO

			Potential disturbance impacts are very short term and reversible, therefore animals that experience this effect are anticipated to fully recover. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>Important elements are population size, structure, production, and condition of the species within the site.</i> <i>The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.</i> The number of animals at risk of potential PTS would be very small (less than one bottlenose dolphin and less than six grey seal). There may be some measurable changes at an individual level (less than one bottlenose dolphin and less than six grey seal), but that this would not manifest to population level effects demonstrated by the small proportion of the MUs potentially affected. Potential disturbance impacts are very short term and reversible, therefore animals that experience this effect this are anticipated to fully recover. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations</i>	
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			<i>dynamics of the species within the site and population beyond the site is stable or increasing.</i> The presence, abundance, condition and diversity of supporting habitats and processes will not be affected by underwater sound from UXO detonation, (i.e. there will be no habitat loss/disturbance from underwater sound associated with UXO detonation). With respect to prey species, although some short-term disturbance is predicted to potential prey fish species, effects are not considered to be long lasting ensuring that the Mona Offshore Wind Project will not affect the distribution, abundance and populations dynamics of the species within the site and population beyond the site from remaining stable or increasing.	
	Underwater sound due to vessel use and other activities	Non-piling, sound producing activities and increased vessel movements during the construction phase have the potential to result in a range of impacts on marine mammals such as avoidance behaviour or displacement and masking of vocalisations or changes in vocalisation rate. During the construction phase of the Mona Offshore Wind Project, the increased levels of vessel activity will contribute to the total underwater sound levels, but the movements will be limited to within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas and will likely follow existing shipping routes to/from the ports. Vessel use during the operations and maintenance phase of the Mona Offshore Wind Project may lead to injury and/or disturbance to Annex II marine mammal species. A variety of vessel	A detailed assessment of effects on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). As detailed within NRW A representation dated 4 March 2025 there is a matter of disagreement between the applicant and NRW A surrounding the assessment methodology used within the ES associated with impact resulting from vessel movement. However it is noted that in this instance NRW A agree with the conclusion of the assessment. <i>The population is maintaining itself on a long-term basis as a viable component of its natural habitat.</i>	YES

		types will be used during routine operations and maintenance activities, including crew transfer vessels/workboats, jack-up vessels, cable repair vessels, Service Operation Vessels (SOV) or similar vessels and excavators/backhoe dredgers.	<i>Important elements are population size, structure, production, and condition of the species within the site.</i> <i>The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.</i> Given that there is no potential for injury and disturbance within range of the SAC, the existing level of vessel traffic and that there is likely recovery from disturbance, elevated underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not prevent the populations of the qualifying marine mammal species from being maintained on a long-term basis as a viable component of its natural habitat. Similarly, elevated underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not reduce nor likely reduce for the foreseeable future the natural range of the populations of the qualifying marine mammal species. <i>The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing.</i> There is no pathway for elevated underwater sound due to vessel use and other activities to result in adverse effects on the habitats of the qualifying species. Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3) also did not conclude any significant adverse effects on fish	
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			receptors as a result of underwater sound associated with vessels. Therefore, elevated underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not affect the presence, abundance, condition and diversity of habitats and species required to support the distribution, abundance and populations dynamics of the populations of the qualifying marine mammal species.	
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Grey Seal SACs

<i>Pen Llŷn a'r Sarnau/Lleyrn Peninsula and the Sarnau SAC (94.1 km from Mona Array Area and 93.0 km from Mona Offshore Cable Corridor and Access Areas)</i> <i>Cardigan Bay/Bae Ceredigion SAC (162.5 km from Mona Array Area and 161.5 km from Mona Offshore Cable Corridor and Access Areas)</i> <i>The Maidens SAC (166.8 km from Mona Array Area and 179.8 km from Mona Offshore Cable Corridor and Access Areas)</i> <i>Pembrokeshire Marine/Sir Benfro Forol SAC (211.7 km from Mona Array Area and 210.7 km from Mona Offshore Cable Corridor and Access Areas)</i> <i>Lundy SAC (309.5 km from Mona Array Area and 308.5 km from Mona Offshore Cable Corridor and Access Areas)</i> <i>Isles of Scilly Complex SAC (439.3 km from Mona Array Area and 438.3 km from Mona Offshore Cable Corridor and Access Areas)</i> <i>Saltee Islands SAC (235.4 km from Mona Array Area and 234.4 km from Mona Offshore Cable Corridor and Access Areas)</i>				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
<i>Grey seal</i>	Underwater sound from piling	During the construction phase sound emissions from the piling of foundations may lead to auditory injury and disturbance of marine mammals.	A detailed assessment of effects on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf).	NO

			<i>The population is maintaining itself on a long-term basis as a viable component of its natural habitat.</i> <i>Important elements are population size, structure, production, and condition of the species within the site.</i> <i>The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.</i> <i>To maintain (or restore where appropriate) the grey seal feature to favourable condition.</i> <i>To maintain (and if feasible enhance) population numbers and distribution of grey seal.</i> <i>The populations of qualifying species [are maintained or restored].</i> <i>The distribution of qualifying species within the site [are maintained or restored].</i> There was no overlap of the 160 dB re 1 µPa Sound Pressure Level root mean squared (SPLrms) (strong disturbance) contour with any SAC designated for grey seal in the marine mammal study area. The most conservative estimate of disturbance using the unweighted sound threshold of 160 dB re 1 µPa SPLrms (strong disturbance) led to up to 31 animals which equates to 0.23% of the grey seal reference population or 0.05% of the OSPAR Region III population. Grey seal close to the coast could experience mild disturbance but that this would be unlikely to lead to barrier effects and considering the large foraging range	
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			of grey seal (up 448 km reported in Carter et al., 2022) seals could move to alternative foraging grounds during piling. The Interim Population Consequences of Disturbance Model (iPCoD) modelling presented in Volume 2, Chapter 4: Marine mammals of the Environmental Statement (Document reference F2.4) predicts that over the duration of the impact, and up to 25 years after the start of piling, there would be no long-term effects on the grey seal population. Therefore, underwater sound as a result of piling will not prevent the population of grey seal from maintaining itself on a long-term basis as a viable component of its natural habitat. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives. <i>The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing.</i> <i>Maintain and enhance, as appropriate, physical features used by grey seal within the site.</i> <i>The extent and distribution of habitats of qualifying species [are maintained or restored].</i> <i>The structure and function of the habitats of qualifying species [are maintained or restored].</i>	
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			<i>The supporting processes on which the habitats of qualifying species rely [are maintained or restored].</i> Habitats and processes will not be affected by underwater sound. With respect to prey species, although some short-term disturbance is predicted to potential prey fish species such as cod and herring spawning grounds (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3)), effects are not considered to be long-term ensuring that the project will not affect prey species populations being maintained in the long term. Therefore, underwater sound from piling associated with the Mona Offshore Wind Project will not prevent the extent and distribution of the habitats of qualifying species, the structure and function of the habitats of qualifying species or the supporting processes on which the habitats of qualifying species rely from being maintained or restored. The presence, abundance, condition and diversity of habitats and species required to support the qualifying species will not be adversely affected. Underwater sound as a result of piling will not prevent the distribution, abundance and populations dynamics of the species within the site and population beyond the site, from remaining stable or increasing.	
	Underwater sound from clearance of UXO	UXO detonation during the construction phase may result in hearing damage/auditory injury or behavioural disturbance/displacement (including barrier effects) of marine mammals.	A detailed assessment of effects on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf) and Section 1.4.3 of the Outline Marine Mammal Mitigation Protocol (MMMP) (Document Reference J21).	NO

			<i>The population is maintaining itself on a long-term basis as a viable component of its natural habitat.</i> <i>To maintain (or restore where appropriate) the grey seal feature to favourable condition.</i> <i>To maintain (and if feasible enhance) population numbers and distribution of grey seal.</i> <i>Important elements are population size, structure, production, and condition of the species within the site.</i> <i>The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.</i> <i>The populations of qualifying species [are maintained or restored].</i> <i>The distribution of qualifying species within the site [are maintained or restored].</i> The number of animals at risk of potential PTS would be very small (<6 animals). There may be some measurable changes at an individual level (for <6 animals) but that this would not manifest to population level effects demonstrated by the small proportion of the SMU potentially affected. Potential disturbance impacts are very short term and reversible, therefore animals that experience this effect this are anticipated to fully recover. Therefore, injury and disturbance from underwater sound generation from UXO detonation will not prevent the grey seal population from maintaining itself on a long-term basis as a viable component of its natural habitat. The applicant's assessment of effects against this	
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			conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing.</i> <i>Maintain and enhance, as appropriate, physical features used by grey seal within the site.</i> <i>The extent and distribution of habitats of qualifying species [are maintained or restored].</i> <i>The structure and function of the habitats of qualifying species [are maintained or restored].</i> <i>The supporting processes on which the habitats of qualifying species rely [are maintained or restored].</i> The presence, abundance, condition and diversity of supporting habitats and processes, including physical features used by grey seal within the site, will not be affected by underwater sound from UXO detonation, (i.e. there will be no habitat loss/disturbance from underwater sound associated with UXO detonation). Therefore, underwater sound from UXO detonation associated with the Mona Offshore Wind Project will not prevent the extent and distribution of the habitats, the structure and function or the	
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			supporting processes of qualifying species from being maintained or restored. With respect to prey species, although some short-term disturbance is predicted to potential prey fish species, effects are not considered to be long lasting ensuring that the Mona Offshore Wind Project will not prevent physical features from being maintained or enhanced, and will not affect the distribution, abundance and populations dynamics of the species within the site and population beyond the site from remaining stable or increasing.	
	Underwater sound due to vessel use and other activities	Non-piling, sound producing activities and increased vessel movements during the construction phase have the potential to result in a range of impacts on marine mammals such as avoidance behaviour or displacement and masking of vocalisations or changes in vocalisation rate. During the construction phase of the Mona Offshore Wind Project, the increased levels of vessel activity will contribute to the total underwater sound levels, but the movements will be limited to within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas and will likely follow existing shipping routes to/from the ports. Vessel use during the operations and maintenance phase of the Mona Offshore Wind Project may lead to injury and/or disturbance to Annex II marine mammal species. A variety of vessel types will be used during routine operations and maintenance activities, including crew transfer vessels/workboats, jack-up vessels, cable repair vessels, Service Operation	A detailed assessment of effects on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). As detailed within NRW A representation dated 4 March 2025 there is a matter of disagreement between the applicant and NRW A surrounding the assessment methodology used within the ES associated with impact resulting from vessel movement. However it is noted that in this instance NRW A agree with the conclusion of the assessment. <i>The population is maintaining itself on a long-term basis as a viable component of its natural habitat.</i> <i>To maintain (or restore where appropriate) the grey seal feature to favourable condition.</i> <i>To maintain (and if feasible enhance) population numbers and distribution of grey seal.</i>	YES

		Vessels (SOV) or similar vessels and excavators/backhoe dredgers.	<i>Important elements are population size, structure, production, and condition of the species within the site.</i> <i>The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.</i> <i>The populations of qualifying species [are maintained or restored].</i> <i>The distribution of qualifying species within the site [are maintained or restored].</i> Given that there is no potential for injury and disturbance within range of the SAC, the existing level of vessel traffic and that there is likely recovery from disturbance, elevated underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not prevent the grey seal feature from being maintained or restored to favourable condition. Similarly, underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not prevent the grey seal population numbers and distribution from being maintained, restored or enhanced, nor prevent the populations of the qualifying marine mammal species from being maintained on a long-term basis as a viable component of its natural habitat. It will also not reduce nor likely reduce for the foreseeable future the natural range of the populations of the qualifying marine mammal species. <i>The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and</i>	
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			<i>population beyond the site is stable or increasing.</i> <i>Maintain and enhance, as appropriate, physical features used by grey seal within the site.</i> <i>The extent and distribution of habitats of qualifying species [are maintained or restored].</i> <i>The structure and function of the habitats of qualifying species [are maintained or restored].</i> <i>The supporting processes on which the habitats of qualifying species rely [are maintained or restored].</i> There is no pathway for underwater sound due to vessel use and other activities to result in adverse effects on the habitats of the qualifying species nor the habitat structure, function and supporting processes, or the physical features used by grey seal within the site. Therefore, underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not prevent the extent and distribution of the habitats of qualifying species from being maintained or restored nor prevent physical features used by grey seal within the site from being maintained or enhanced. Similarly, underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not prevent the structure and function of the habitats of qualifying species from being maintained or restored nor prevent the supporting processes of the habitats of qualifying species from being maintained or restored. It will also not affect the presence, abundance, condition and diversity of habitats and species	
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			required to support the distribution, abundance and populations dynamics of the populations of the qualifying marine mammal species.	
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Harbour Seal SACs

Strangford Lough SAC (112.2 km from Mona Array Area and 125.1 km from Mona Offshore Cable Corridor and Access Areas) Murlough SAC (115.9 km from Mona Array Area and 127.1 km from Mona Offshore Cable Corridor and Access Areas)				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
Harbour seal	Underwater sound from piling	During the construction phase sound emissions from the piling of foundations may lead to auditory injury and disturbance of marine mammals.	A detailed assessment of effects on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). <i>To maintain (or restore where appropriate) the harbour seal feature to favourable condition.</i> <i>To maintain (and if feasible enhance) population numbers and distribution of harbour seal.</i> There was no overlap of the 160 dB re 1 µPa SPLrms (strong disturbance) contour with any SAC designated for harbour seal in the marine mammal study area. For harbour seal, the most conservative estimate of disturbance using the unweighted sound threshold of 160 dB rms led to less than one animal predicted to experience potential disturbance which equates to 0.01% of the	NO

			harbour seal reference population (HSRP). This could result in a very small effect on the distribution of harbour seal during piling only and may affect the fecundity of very small numbers in the context of the reference population (up to 0.01% of the combined total of MU population at any one time) over the medium term. However, due to the very small numbers and small proportion of the population affected the impact is not considered to lead to a population-level effect. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives. <i>Maintain and enhance, as appropriate, physical features used by harbour seal within the site.</i> There is no pathway for underwater sound from piling to result in adverse effects on the physical features used by harbour seal within the site. Therefore, underwater sound from piling associated with the Mona Offshore Wind Project will not prevent physical features used by harbour seal within the site from being maintained or enhanced.	
	Underwater sound from clearance of UXO	UXO detonation during the construction phase may result in hearing damage/auditory injury or behavioural disturbance/displacement (including barrier effects) of marine mammals.	A detailed assessment of effects on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf) and Section 1.4.3 of the Outline Marine Mammal Mitigation Protocol (MMMP) (Document Reference J21).	NO

			<i>To maintain (or restore where appropriate) the harbour seal feature to favourable condition.</i> <i>To maintain (and if feasible enhance) population numbers and distribution of harbour seal.</i> The number of animals at risk of potential PTS would be very small (less than one animal). There may be some measurable changes at an individual level (for less than one animal) but that this would not manifest to population level effects demonstrated by the small proportion of the MU potentially affected. Potential disturbance impacts are very short term and reversible, therefore animals that experience this effect are anticipated to fully recover. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>Maintain and enhance, as appropriate, physical features used by harbour seal within the site.</i> Physical features used by harbour seal within the site will not be affected by underwater sound from UXO detonation, (i.e. there will be no habitat loss/disturbance from underwater sound associated with UXO detonation). With respect to prey species, although some short-term disturbance is predicted to potential prey fish species, effects are not considered to be long lasting ensuring that the Mona Offshore Wind Project will not prevent physical features from being maintained or enhanced.	
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	Underwater sound due to vessel use and other activities	Non-piling, sound producing activities and increased vessel movements during the construction phase have the potential to result in a range of impacts on marine mammals such as avoidance behaviour or displacement and masking of vocalisations or changes in vocalisation rate. During the construction phase of the Mona Offshore Wind Project, the increased levels of vessel activity will contribute to the total underwater sound levels, but the movements will be limited to within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas and will likely follow existing shipping routes to/from the ports. Vessel use during the operations and maintenance phase of the Mona Offshore Wind Project may lead to injury and/or disturbance to Annex II marine mammal species. A variety of vessel types will be used during routine operations and maintenance activities, including crew transfer vessels/workboats, jack-up vessels, cable repair vessels, Service Operation Vessels (SOV) or similar vessels and excavators/backhoe dredgers.	A detailed assessment of effects on Annex II marine mammals is included in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). As detailed within NRW A representation dated 4 March 2025 there is a matter of disagreement between the applicant and NRW A surrounding the assessment methodology used within the ES associated with impact resulting from vessel movement. However it is noted that in this instance NRW A agree with the conclusion of the assessment. <i>To maintain (or restore where appropriate) the harbour seal feature to favourable condition.</i> <i>To maintain (and if feasible enhance) population numbers and distribution of harbour seal.</i> Given that there is no potential for injury and disturbance within range of the SAC, the existing level of vessel traffic and that there is likely recovery from disturbance, elevated underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not prevent the harbour seal feature from being maintained or restored to favourable condition. Similarly, elevated underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not prevent the harbour seal population from being maintained or enhanced.	YES
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			<i>Maintain and enhance, as appropriate, physical features used by harbour seal within the site.</i> There is no pathway for elevated underwater sound due to vessel use and other activities to result in adverse effects on the physical features used by harbour seal within the site. Therefore, elevated underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will prevent physical features used by harbour seal within the site from being maintained or enhance.	
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Liverpool Bay/Bae Lerpwl SPA

Liverpool Bay/Bae Lerpwl SPA (15.9km from Mona Array Area and 0 km from Mona Offshore Cable Corridor and Access Areas)				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
Red-throated diver	Temporary habitat loss/disturbance and increased SSCs	Seabirds may be indirectly displaced during the construction phase as a result of direct impacts on their habitat and increased SSCs, which may result in the loss of a food resource to birds in the Mona Array Area and along the Mona Offshore Cable Corridor and Access Areas. An increase in SSC would reduce	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). Construction phases <i>Maintain the size of the non-breeding population at a level which is at or above 1,800 individuals (mean peak, 2015, 2018, 2019 and 2020).</i> <i>Restore the distribution of the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting feature distribution.</i>	NO

		visibility and therefore the foraging success of pursuit diving species could be impacted. There is potential for temporary, direct habitat loss/disturbance as a result of site preparation activities in advance of construction activities, cable installation activities (including Unexploded Ordnance (UXO) detonation), pre-cabling seabed clearance and anchor placements. There is also the potential for temporary, direct habitat loss/disturbance and increased SSC during the operations and maintenance phase of the Mona Offshore Wind Project. This may occur if reburial or maintenance of the cable is required within the SPA.	<i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i> <i>Maintain the distribution, abundance and availability of key food and prey items (e.g. fish) to maintain the population.</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded that during the construction phase the impacts from temporary habitat loss/disturbance as a result of cable installation associated activities will be temporary, local, short-term and reversible, if it were to occur during winter when the largest number of birds are present. The total area impacted would be minute in comparison to the entire SPA. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives. <i>Restore the extent, distribution and availability of suitable habitat which supports the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting the extent and quality (including water quality).</i> The small fraction of benthic habitats (up to 0.06% of the SPA when considering a 20 m buffer around 20 km of offshore cable, per cable within the Liverpool Bay/Bae Lerpwl SPA) temporarily lost/disturbed by offshore cable installation are expected to fully recover or retain their function for the ornithological features. This would be a temporary impact with recovery occurring following the cessation of construction. The cable is fully buried and therefore the function of the habitats (both seabed and water column) will not be permanently changed and will recover within a short timeframe as discussed in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the Environmental Statement (Document Reference F2.2). Therefore, temporary habitat loss/disturbance and increased SSC during the construction phase will not prevent the structure and function of the habitats of the qualifying features from being restored. Operations and maintenance phase	
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			<i>Maintain the size of the non-breeding population at a level which is at or above 1,800 individuals (mean peak, 2015, 2018, 2019 and 2020).</i> <i>Restore the distribution of the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting feature distribution.</i> <i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i> <i>Maintain the distribution, abundance and availability of key food and prey items (e.g. fish) to maintain the population.</i> During the operations and maintenance phase the impacts from temporary habitat loss/disturbance as a result of offshore export cable reburial and repair associated activities will be temporary, local, short-term and reversible. If a reburial or repair event were to occur during winter when the largest number of red-throated diver are present the total area impacted during a repair or reburial event is minute in comparison to the entire SPA and the birds would easily be able to redistribute into adjacent, non-impacted areas. If the event were to occur in summer, the number of birds is vastly reduced, and an impact would be highly unlikely to occur. Therefore, temporary habitat loss/disturbance and increased SSC during the operations and maintenance phase will not prevent the population of each of the qualifying features from being maintained or restored. <i>Restore the extent, distribution and availability of suitable habitat which supports the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting the extent and quality (including water quality).</i> The small fraction of habitats (approximately 0.02% of the SPA) lost/disturbed by offshore export cable installation are expected to fully recover or retain their function for the ornithological features within a short time frame following the cessation of activity. The cable is fully buried and therefore the function of the habitats will not be permanently changed. Therefore, temporary habitat loss/disturbance and increased	
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			SSC during the construction phase will not prevent the structure and function of the habitats of the qualifying features from being restored.	
	Disturbance and displacement from airborne sound and presence of vessels and infrastructure	Airborne sound and the presence of vessels and infrastructure, during the construction, and operations and maintenance phases may disturb seabirds from offshore foraging or non-foraging areas (e.g. rafting, moulting). This includes preparation activities including, Unexploded Ordnance (UXO) clearance and cable laying activities including seabed clearance. This disturbance and subsequent displacement may cause changes in behaviour and may lead to a reduction in foraging opportunities or increased energy expenditure, resulting in decreased survival rates or productivity in the population.	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). Construction phase <i>Maintain the size of the non-breeding population at a level which is at or above 1,800 individuals (mean peak, 2015, 2018, 2019 and 2020).</i> Displacement and disturbance associated with construction activities on red-throated diver is expected to occur as a result of vessels associated with the Mona Offshore Wind Project. By its nature, the impact would be temporary, local, short-term, and reversible. The impact on the population of red-throated diver has been assessed to result in a minor increase in baseline mortality of 0.07% increase in baseline mortality if works were to occur during the winter period, when number of red-throated diver are at their highest. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>Restore the distribution of the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting feature distribution.</i> Displacement and disturbance associated with construction activities on red-throated diver is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. By its nature, the impact would be temporary, local, short-term, and reversible. Due to the temporary nature over which the birds would be impacted, it is not predicted that a permanent disturbance would occur and therefore this impact would not affect the ability for the distribution to be restored.	NO

			Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the construction phase will not prevent the distribution of the qualifying feature from being restored. <i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i> Displacement and disturbance associated with construction activities on red-throated diver is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. By its nature, the impact would be temporary, local, short-term, and reversible. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>Maintain the distribution, abundance and availability of key food and prey items (e.g. fish) to maintain the population.</i> <i>Restore the extent, distribution and availability of suitable habitat which supports the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting the extent and quality (including water quality).</i> There is no effect of airborne sound, underwater sound, and presence of vessels on the supporting habitats (and food availability). Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the construction phase will not prevent the extent and distribution, structure and function or the supporting processes of the habitats of the qualifying features from being maintained or restored. Operations and maintenance phase <i>Maintain the size of the non-breeding population at a level which is at or above 1,800 individuals (mean peak, 2015, 2018, 2019 and 2020).</i>	
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			Displacement and disturbance associated with operations and maintenance activities on red-throated diver is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. The effect is expected to have the potential to be permanent, local and long-term. The impact on the population of red-throated diver has been assessed to result in a minor increase in baseline mortality of 0.07% during winter and 0.01% during summer. Operations and maintenance will occur year round and therefore 0.07% is considered the most likely impact. At this level of mortality increase, the population will be maintained. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the operations and maintenance phase will not prevent the population of the qualifying feature from being maintained. <i>Restore the distribution of the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting feature distribution.</i> Displacement and disturbance associated with operations and maintenance activities on red-throated diver is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. The effect is expected to have the potential to be permanent, local and long-term. During the operations and maintenance phase, the increase of vessel movement produces an increase in the number of vessels by 5% within the areas of highest usage, which is considered minor. The likely impact will occur within areas of high usage already, where birds already show a level of habituation. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the operations and maintenance phase will not prevent the distribution of the qualifying feature from being restored. <i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i>	
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			Displacement and disturbance associated with operations and maintenance activities on red-throated diver is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. The effect is expected to have the potential to be permanent, local and long-term. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. Maintain the distribution, abundance and availability of key food and prey items (e.g. fish) to maintain the population. Restore the extent, distribution and availability of suitable habitat which supports the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting the extent and quality (including water quality). There is no effect of airborne sound, underwater sound, and presence of vessels on the supporting habitats (and food availability). Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the operations and maintenance phase will not prevent the extent and distribution, structure and function or the supporting processes of the habitats of the qualifying features from being maintained or restored.	
	Changes in prey availability (construction only)	There is the potential for changes in prey (e.g. fish species) abundance and distribution to arise as a result of construction activities. The main impact pathways assessed for fish and shellfish included underwater sound, increased SSC and associated deposition, temporary habitat loss/disturbance and	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). Maintain the size of the non-breeding population at a level which is at or above 1,800 individuals (mean peak, 2015, 2018, 2019 and 2020). Restore the distribution of the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting feature distribution.	YES

		accidental pollution. Reduction or disruption to prey availability to seabirds may cause displacement from foraging grounds or reduced energy intake, affecting survival rates or productivity in the population in the short-term.	Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected. Maintain the distribution, abundance and availability of key food and prey items (e.g. fish) to maintain the population. The impact of the Mona Offshore Export Cable installation will be temporary, short-term, and reversible, affecting only a small fraction of suitable habitat and prey species for qualifying ornithological features. Prey species are expected to quickly recolonise suitable habitat and recover to pre-construction levels. Therefore, changes in prey availability during the construction phase will not prevent the extent and distribution of the habitats of the qualifying features from being maintained or restored. Restore the extent, distribution and availability of suitable habitat which supports the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting the extent and quality (including water quality). There is no potential for this impact pathway to affect this conservation objective.	
	Accidental pollution	There is a risk of pollution being accidentally released during the construction, and operations and maintenance phases of the Mona Offshore Wind Project from sources including vessels/vehicles and equipment/machinery. Seabirds utilising the environment in the vicinity of a pollution incident may be vulnerable to either direct mortality from	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). Maintain the size of the non-breeding population at a level which is at or above 1,800 individuals (mean peak, 2015, 2018, 2019 and 2020). Restore the distribution of the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting feature distribution. Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.	NO

		oil coverage preventing flight for example, or indirectly via a reduction in ability to forage.	Maintain the distribution, abundance and availability of key food and prey items (e.g. fish) to maintain the population. Restore the extent, distribution and availability of suitable habitat which supports the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting the extent and quality (including water quality). The risk of accidental pollution is very low. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives.	
Common scoter	Temporary habitat loss/disturbance and increased SSCs	Seabirds may be indirectly displaced during the construction phase as a result of direct impacts on their habitat and increased SSCs, which may result in the loss of a food resource to birds in the Mona Array Area and along the Mona Offshore Cable Corridor and Access Areas. An increase in SSC would reduce visibility and therefore the foraging success of pursuit diving species could be impacted. There is potential for temporary, direct habitat loss/disturbance as a result of site	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). Construction phase Maintain the size of the non-breeding population at a level which is at or above 141,801 individuals (mean peak, 2015, 2018, 2019 and 2020). Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors. Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected. Maintain the distribution, abundance and availability of key food and prey items (e.g. molluscs and bivalves) to maintain the population. The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded that during the construction phase the impacts from temporary habitat loss/disturbance as a result of	NO

		preparation activities in advance of construction activities, cable installation activities (including Unexploded Ordnance (UXO) detonation), pre-cabling seabed clearance, and anchor placements. There is also the potential for temporary, direct habitat loss/disturbance and increased SSC during the operations and maintenance phase of the Mona Offshore Wind Project. This may occur if reburial or maintenance of the cable is required within the SPA.	offshore export cable installation associated activities will be temporary, local, short term and reversible, if it were to occurring during winter when the largest number of birds are present. The total area impacted is minute in comparison to the entire SPA. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives. <i>Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality).</i> The small fraction of benthic habitats (up to 0.06% of the SPA when considering a 20 m buffer around 20 km of offshore cable, per cable within the Liverpool Bay/Bae Lerpwl SPA) temporarily lost/disturbed by offshore cable installation are expected to fully recover or retain their function for the ornithological features within a short timeframe following the cessation of construction. The cable is fully buried and therefore the function of the habitats (both seabed and water column) will not be permanently changed and will recover within a short timeframe as discussed in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the Environmental Statement (Document Reference F2.2). Therefore, temporary habitat loss/disturbance and increased SSC during the construction phase will not prevent the structure and function of the habitats of the qualifying features from being maintained. Operations and maintenance phase <i>Maintain the size of the non-breeding population at a level which is at or above 141,801 individuals (mean peak, 2015, 2018, 2019 and 2020).</i> <i>Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors.</i> <i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i>	
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			<i>Maintain the distribution, abundance and availability of key food and prey items (e.g. molluscs and bivalves) to maintain the population.</i> During the operations and maintenance phase the impacts of temporary habitat loss/disturbance as a result of offshore export cable reburial and repair associated activities will be temporary, local, short-term and reversible. If a reburial or repair event it were to occur during winter the total area impacted during a repair or reburial event is minute in comparison to the entire SPA and the birds would easily be able to redistribute into adjacent, non-impacted areas. No common scoter were recorded during the summer months and therefore no impact would occur if a reburial or repair event occurred during summer. Therefore, temporary habitat loss/disturbance and increased SSC during the operations and maintenance phase will not prevent the population of each of the qualifying features from being maintained or restored. <i>Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality).</i> The small fraction of habitats (approximately 0.02% of the SPA) lost/disturbed by offshore export cable installation are expected to fully recover or retain their function for the ornithological features within a short period of time following the cessation of the activity. The cable is fully buried and therefore the function of the habitats will not be permanently changed. Therefore, temporary habitat loss/disturbance and increased SSC during the construction phase will not prevent the structure and function of the habitats of the qualifying features from being maintained.	
	Disturbance and displacement from airborne sound and presence of vessels and infrastructure	Airborne sound and the presence of vessels and infrastructure, during the construction, and operations and maintenance phases may disturb seabirds from offshore foraging or non-foraging areas (e.g. rafting,	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). Construction phase	NO

		moulting). This includes preparation activities including, Unexploded Ordnance (UXO) clearance and cable laying activities including seabed clearance. This disturbance and subsequent displacement may cause changes in behaviour and may lead to a reduction in foraging opportunities or increased energy expenditure, resulting in decreased survival rates or productivity in the population.	<i>Maintain the size of the non-breeding population at a level which is at or above 141,801 individuals (mean peak, 2015, 2018, 2019 and 2020).</i> Displacement and disturbance associated with construction activities on common scoter is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. By its nature, the impact would be temporary, local, short-term, and reversible. The impact on the population of common scoter has been assessed to be result in a minor increase in baseline mortality of 0.06% increase in baseline mortality if works were to occur during the winter period, when number of common scoter are at their highest. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors.</i> Displacement and disturbance associated with construction activities on common scoter is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. By its nature, the impact would be temporary, local, short-term, and reversible. Due to the temporary nature over which the birds would be impacted, it is not predicted that a permanent disturbance would occur and therefore this impact would not affect the ability for the distribution to be restored. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the construction phase will not prevent the distribution of the qualifying feature from being maintained. <i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i> Displacement and disturbance associated with construction activities on red-throated diver is expected to occur as a result of vessels associated	
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			of the Mona Offshore Wind Project. By its nature, the impact would be temporary, local, short-term, and reversible. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>Maintain the distribution, abundance and availability of key food and prey items (e.g. molluscs and bivalves) to maintain the population.</i> <i>Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality).</i> There is no effect of airborne sound, underwater sound, and presence of vessels on the supporting habitats (and food availability). Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the construction phase will not prevent the extent and distribution, structure and function or the supporting processes of the habitats of the qualifying features from being maintained or restored. Operations and maintenance phase <i>Maintain the size of the non-breeding population at a level which is at or above 141,801 individuals (mean peak, 2015, 2018, 2019 and 2020).</i> Displacement and disturbance associated with operations and maintenance activities on common scoter is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. The effect is expected to have the potential to be permanent, local and long-term. The impact on the population of common scoter has been assessed to result in a minor increase in baseline mortality of 0.06% during winter and no increase during summer (as birds are no present). Operations and maintenance will occur year round and therefore 0.06% is considered the most likely impact.	
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			At this level of mortality increase, the population will be maintained. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the operations and maintenance phase will not prevent the population of the qualifying feature from being maintained. <i>Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors.</i> Displacement and disturbance associated with operations and maintenance activities on common scoter is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. The effect is expected to have the potential to be permanent, local and long-term. During the operations and maintenance phase, the increase of vessel movement produces an increase in the number of vessels by 5% within the areas of highest usage, which is considered minor. The likely impact will occur within areas of high usage already, where birds already show a level of habituation. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the operations and maintenance phase will not prevent the distribution of the qualifying feature from being maintained. <i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i> Displacement and disturbance associated with operations and maintenance activities on common scoter is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. The effect is expected to have the potential to be permanent, local and long-term. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective.	
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			Maintain the distribution, abundance and availability of key food and prey items (e.g. molluscs and bivalves) to maintain the population. Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality). There is no effect of airborne sound, underwater sound, and presence of vessels on the supporting habitats (and food availability). Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the operations and maintenance phase will not prevent the extent and distribution, structure and function or the supporting processes of the habitats of the qualifying features from being maintained or restored.	
Changes in prey availability (construction only)	There is the potential for changes in prey (e.g. fish species) abundance and distribution to arise as a result of construction activities. The main impact pathways assessed for fish and shellfish included underwater sound, increased SSC and associated deposition, temporary habitat loss/disturbance and accidental pollution. Reduction or disruption to prey availability to seabirds may cause displacement from foraging grounds or reduced energy intake, affecting survival rates or	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). Maintain the size of the non-breeding population at a level which is at or above 141,801 individuals (mean peak, 2015, 2018, 2019 and 2020). Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors. Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected. Maintain the distribution, abundance and availability of key food and prey items (e.g. molluscs and bivalves) to maintain the population. The impact of the Mona Offshore Export Cable installation will be temporary, short-term, and reversible, affecting only a small fraction of suitable habitat and prey species for qualifying ornithological features. Prey species are expected to quickly recolonise suitable habitat and	YES	

		productivity in the population in the short-term.	recover to pre-construction levels. Therefore, changes in prey availability during the construction phase will not prevent the extent and distribution of the habitats of the qualifying features from being maintained or restored. <i>Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality).</i> There is no potential for this impact pathway to affect this conservation objective.	
	Accidental pollution	There is a risk of pollution being accidentally released during the construction, and operations and maintenance phases of the Mona Offshore Wind Project from sources including vessels/vehicles and equipment/machinery. Seabirds utilising the environment in the vicinity of a pollution incident may be vulnerable to either direct mortality from oil coverage preventing flight for example, or indirectly via a reduction in ability to forage.	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). <i>Maintain the size of the non-breeding population at a level which is at or above 141,801 individuals (mean peak, 2015, 2018, 2019 and 2020).</i> <i>Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors.</i> <i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i> <i>Maintain the distribution, abundance and availability of key food and prey items (e.g. molluscs and bivalves) to maintain the population.</i> <i>Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality).</i> The risk of accidental pollution is very low. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the	NO

			absence of any mitigation measures, however, there is a potential to compromise these conservation objectives.	
Little gull Common tern Little tern	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). There is no potential for impact to this species within the Liverpool Bay/Bae Lerpwl SPA from the Mona Offshore Wind project due to lack of birds present within the areas impacted, and no adverse effect on site integrity can be concluded.			YES
Waterbird assemblage	Temporary habitat loss/disturbance and increased SSCs	Seabirds may be indirectly displaced during the construction phase as a result of direct impacts on their habitat and increased SSCs, which may result in the loss of a food resource to birds in the Mona Array Area and along the Mona Offshore Cable Corridor and Access Areas. An increase in SSC would reduce visibility and therefore the foraging success of pursuit diving species could be impacted. There is potential for temporary, direct habitat loss/disturbance as a result of site preparation activities in advance of construction activities, cable installation activities (including	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). Construction phase <i>Maintain the size of the non-breeding population of component species at a level which is at or above 157,952 individuals (mean peak 2015, 2018, 2019 and 2020).</i> <i>Maintain the species diversity of the bird assemblage which should include common scoter, red-throated diver, little gull, red-breasted merganser and great cormorant.</i> <i>Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors.</i> <i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i> The Report to Inform Appropriate Assessment (document reference E.1.2) produced by the applicant concluded that during the construction phase the impacts from temporary habitat loss/disturbance as a result of cable installation associated activities will be temporary, local, short-term and reversible, if it were to occur during winter when the largest number of birds are present. The total area impacted is minute in comparison to the entire SPA. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have	NO

		Unexploded Ordnance (UXO) detonation), pre-cabling seabed clearance, and anchor placements. There is also the potential for temporary, direct habitat loss/disturbance and increased SSC during the operations and maintenance phase of the Mona Offshore Wind Project. This may occur if reburial or maintenance of the cable is required within the SPA.	been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives. <i>Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality).</i> The small fraction of benthic habitats (up to 0.06% of the SPA when considering a 20 m buffer around 20 km of offshore cable, per cable within the Liverpool Bay/Bae Lerpwl SPA) temporarily disturbed by offshore cable installation are expected to fully recover or retain their function for the ornithological features within a short timeframe following the cessation of construction. The cable is fully buried and therefore the function of the habitats (both seabed and water column) will not be permanently changed and will recover within a short timeframe as discussed in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology of the Environmental Statement (Document Reference F2.2). Therefore, temporary habitat loss/disturbance and increased SSC during the construction phase will not prevent the structure and function of the habitats of the qualifying features from being maintained. Operations and maintenance phase <i>Maintain the size of the non-breeding population of component species at a level which is at or above 157,952 individuals (mean peak 2015, 2018, 2019 and 2020).</i> <i>Maintain the species diversity of the bird assemblage which should include common scoter, red-throated diver, little gull, red-breasted merganser and great cormorant.</i> <i>Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors.</i> <i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i> During the operations and maintenance phase the impacts from temporary habitat loss/disturbance as a result of offshore export cable	
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			reburial and repair associated activities will be temporary, local, short-term and reversible, if it were to occur during winter when the largest number of birds are present. If the works were to occur during summer, the waterbird assemblage is present in Liverpool Bay/Bae Lerpwl SPA in vastly reduced numbers. The total area impacted is minute in comparison to the entire SPA. Therefore, temporary habitat loss/disturbance and increased SSC during the operations and maintenance phase will not prevent the population of each of the qualifying features from being maintained or restored. <i>Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality).</i> The small fraction of habitats (approximately 0.02% of the SPA) lost/disturbed by offshore export cable installation are expected to fully recover or retain their function for the ornithological features within a short period of time following the cessation of the activity. The cable is fully buried and therefore the function of the habitats will not be permanently changed. Therefore, temporary habitat loss/disturbance and increased SSC during the construction phase will not prevent the structure and function of the habitats of the qualifying features from being maintained.	
	Disturbance and displacement from airborne sound and presence of vessels and infrastructure	Airborne sound and the presence of vessels and infrastructure, during the construction, and operations and maintenance phases may disturb seabirds from offshore foraging or non-foraging areas (e.g. rafting, moulting). This includes preparation activities including, Unexploded Ordnance (UXO) clearance and cable laying activities	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). Construction phase <i>Maintain the size of the non-breeding population of component species at a level which is at or above 157,952 individuals (mean peak 2015, 2018, 2019 and 2020).</i> Displacement and disturbance associated with construction activities on the non-breeding waterbird assemblage is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. By its nature, the impact would be temporary, local, short-term, and reversible.	NO

		including seabed clearance. This disturbance and subsequent displacement may cause changes in behaviour and may lead to a reduction in foraging opportunities or increased energy expenditure, resulting in decreased survival rates or productivity in the population.	The impact on the population of non-breeding waterbird assemblage has been assessed specifically for red-throated diver, common scoter, red-breasted merganser and great cormorant as the most sensitive species to disturbance and displacement. The resulting increase in mortality of these species was always predicted to be <0.1%, which is considered insignificant and minor. This maximum impact might occur if the construction works were to occur in winter. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>Maintain the species diversity of the bird assemblage which should include common scoter, red-throated diver, little gull, red-breasted merganser and great cormorant.</i> There is no effect of airborne sound, underwater sound, and presence of vessels on the ability to maintain the species diversity. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the construction phase will not prevent the species diversity of the bird assemblage from being maintained. <i>Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors.</i> Displacement and disturbance associated with construction activities on the non-breeding waterbird assemblage is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. By its nature, the impact would be temporary, local, short-term, and reversible. Due to the temporary nature over which the birds would be impacted, it is not predicted that a permanent disturbance would occur and therefore this impact would not affect the ability for the distribution to be restored. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the construction phase will not prevent the distribution of the qualifying feature from being maintained.	
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			<i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i> Displacement and disturbance associated with construction activities on the non-breeding waterbird assemblage is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. By its nature, the impact would be temporary, local, short-term, and reversible. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality).</i> There is no effect of airborne sound, underwater sound, and presence of vessels on the supporting habitats. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the construction phase will not prevent the extent and distribution, structure and function or the supporting habitats of the qualifying features from being maintained or restored. Operations and maintenance phase <i>Maintain the size of the non-breeding population of component species at a level which is at or above 157,952 individuals (mean peak 2015, 2018, 2019 and 2020).</i> Displacement and disturbance associated with operations and maintenance activities on the non-breeding waterbird assemblage is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. The effect is expected to have the potential to be permanent, local and long-term. The impact on the population of non-breeding waterbird assemblage has been assessed specifically for red-throated diver, common scoter, red breasted merganser and great cormorant as the most sensitive species to disturbance and displacement. The resulting increase in mortality of	
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			these species was predicted to be <0.1%, which is considered insignificant and minor. At this level of mortality increase, the population will be maintained. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the operations and maintenance phase will not prevent the population of the qualifying feature from being maintained. <i>Maintain the species diversity of the bird assemblage which should include common scoter, red-throated diver, little gull, red-breasted merganser and great cormorant.</i> There is no effect of airborne sound, underwater sound, and presence of vessels on the ability to maintain the species diversity. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the operations and maintenance phase will not prevent the species diversity of the non-breeding waterbird assemblage from being maintained. <i>Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors.</i> Displacement and disturbance associated with operations and maintenance activities on the non-breeding waterbird assemblage is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. The effect is expected to have the potential to be permanent, local and long-term. During the operations and maintenance phase, the increase of vessel movement produces an increase in the number of vessels by 5% within the areas of highest usage, which is considered minor. The likely impact will occur within areas of high usage already, where birds already show a level of habituation. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the operations and maintenance phase will not prevent the distribution of the qualifying feature from being maintained.	
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		<i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i> Displacement and disturbance associated with operations and maintenance activities on the non-breeding waterbird assemblage is expected to occur as a result of vessels associated of the Mona Offshore Wind Project. The effect is expected to have the potential to be permanent, local and long-term. The applicant's assessment of effects against this conservation objective takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise this conservation objective. <i>Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality).</i> There is no effect of airborne sound, underwater sound, and presence of vessels on the supporting habitats. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the operations and maintenance phase will not prevent the extent and distribution, structure and function or the supporting habitats of the qualifying features from being maintained or restored.	
Changes in prey availability (construction only)	There is the potential for changes in prey (e.g. fish species) abundance and distribution to arise as a result of construction activities. The main impact pathways assessed for fish and shellfish included underwater sound, increased SSC and associated deposition, temporary habitat loss/disturbance and	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). <i>Maintain the size of the non-breeding population of component species at a level which is at or above 157,952 individuals (mean peak 2015, 2018, 2019 and 2020).</i> <i>Maintain the species diversity of the bird assemblage which should include common scoter, red-throated diver, little gull, red-breasted merganser and great cormorant.</i>	YES

		accidental pollution. Reduction or disruption to prey availability to seabirds may cause displacement from foraging grounds or reduced energy intake, affecting survival rates or productivity in the population in the short-term.	Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors. Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected. The impact of the Mona Offshore Export Cable installation will be temporary, short-term, and reversible, affecting only a small fraction of suitable habitat and prey species for qualifying ornithological features. Prey species are expected to quickly recolonise suitable habitat and recover to pre-construction levels. Therefore, changes in prey availability during the construction phase will not prevent the extent and distribution of the habitats of the qualifying features from being maintained or restored. Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality). There is no potential for this impact pathway to affect this conservation objective.	
	Accidental pollution	There is a risk of pollution being accidentally released during the construction, and operations and maintenance phases of the Mona Offshore Wind Project from sources including vessels/vehicles and equipment/machinery. Seabirds utilising the environment in the vicinity of a pollution incident may be vulnerable to either direct mortality from oil coverage	A detailed assessment of effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). Maintain the size of the non-breeding population of component species at a level which is at or above 157,952 individuals (mean peak 2015, 2018, 2019 and 2020). Maintain the species diversity of the bird assemblage which should include common scoter, red-throated diver, little gull, red-breasted merganser and great cormorant. Maintain the distribution of the feature; the extent should not be reduced by anthropogenic factors.	NO

		preventing flight for example, or indirectly via a reduction in ability to forage.	<i>Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.</i> <i>Maintain the extent, distribution and availability of suitable habitat which supports the feature; the quality and extent should not deteriorate by anthropogenic factors (including water quality).</i> The risk of accidental pollution is very low. The applicant's assessment of effects against these conservation objectives takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, there is a potential to compromise these conservation objectives.	
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Other SPAs

Irish Sea Front SPA (57.2 km from Mona Array Area and 60.5 km from Mona Offshore Cable Corridor and Access Areas)
Glannau Aberdaron ac Ynys Enlli/Aberdaron Coast and Bardsey Island SPA (99.3 km from Mona Array Area and 84.7 km from Mona Offshore Cable Corridor and Access Areas)
Lambay Island SPA (128.9 km from Mona Array Area and 132.5 km from Mona Offshore Cable Corridor and Access Areas)
Howth Head Coast SPA (134.4 km from Mona Array Area and 137.3 km from Mona Offshore Cable Corridor and Access Areas)
Ireland's Eye SPA (134.7 km from Mona Array Area and 137.7 km from Mona Offshore Cable Corridor and Access Areas)
Copeland Islands SPA (136.5 km from Mona Array Area and 152.0 km from Mona Offshore Cable Corridor and Access Areas)
Ailsa Craig SPA (174.5 km from Mona Array Area and 190.9 km from Mona Offshore Cable Corridor and Access Areas)
Wicklow Head SPA (148.8 km from Mona Array Area and 146.2 km from Mona Offshore Cable Corridor and Access Areas)
Rathlin Island SPA (211.9 km from Mona Array Area and 228.3 km from Mona Offshore Cable Corridor and Access Areas)
Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro SPA (221.6 km from Mona Array Area and 201.1 km from Mona Offshore Cable Corridor and Access Areas)
Grassholm SPA (230.3 km from Mona Array Area and 211.4 km from Mona Offshore Cable Corridor and Access Areas)
Saltee Islands SPA (236.8 km from Mona Array Area and 228.2 km from Mona Offshore Cable Corridor and Access Areas)
Flamborough and Filey Coast SPA (242.8 km from Mona Array Area and 237.7 km from Mona Offshore Cable Corridor and Access Areas)
North Colonsay and Western Cliffs SPA (281.7 km from Mona Array Area and 305.6 km from Mona Offshore Cable Corridor and Access Areas)
Rum SPA (370.6 km from Mona Array Area and 390.1 km from Mona Offshore Cable Corridor and Access Areas)
Fowlsheugh SPA (380.4 km from Mona Array Area and 379.1 km from Mona Offshore Cable Corridor and Access Areas)
Mingulay and Berneray SPA (413.5 km from Mona Array Area and 415.8 km from Mona Offshore Cable Corridor and Access Areas)
Canna and Sanday SPA (413.6 km from Mona Array Area and 408.7 km from Mona Offshore Cable Corridor and Access Areas)

Buchan Ness to Collieston SPA (431.0 km from Mona Array Area and 429.8 km from Mona Offshore Cable Corridor and Access Areas)
Troup, Pennan and Lions Heads SPA (462.0 km from Mona Array Area and 461.2 km from Mona Offshore Cable Corridor and Access Areas)
Skelligs SPA (236.8 km from Mona Array Area and 228.2 km from Mona Offshore Cable Corridor and Access Areas)
Shiant Isles SPA (472.7 km from Mona Array Area and 492.5 km from Mona Offshore Cable Corridor and Access Areas)
East Caithness Cliffs SPA (498.8 km from Mona Array Area and 499.4 km from Mona Offshore Cable Corridor and Access Areas)
Handa SPA (510.5 km from Mona Array Area and 530.6 km from Mona Offshore Cable Corridor and Access Areas)
St Kilda SPA (519.2 km from Mona Array Area and 537.2 km from Mona Offshore Cable Corridor and Access Areas)
Cape Wrath SPA (532.8 km from Mona Array Area and 553.4 km from Mona Offshore Cable Corridor and Access Areas)
Flannan Isles SPA (540.6 km from Mona Array Area and 559.8 km from Mona Offshore Cable Corridor and Access Areas)
North Caithness Cliffs SPA (548.2 km from Mona Array Area and 549.0 km from Mona Offshore Cable Corridor and Access Areas)
Sule Skerry and Sule Stack SPA (601.6 km from Mona Array Area and 599.2 km from Mona Offshore Cable Corridor and Access Areas)
North Rona and Sula Sgeir SPA (616.9 km from Mona Array Area and 618.2 km from Mona Offshore Cable Corridor and Access Areas)
West Westray SPA (630.7 km from Mona Array Area and 629.5 km from Mona Offshore Cable Corridor and Access Areas)
East Coast Marine pSPA

Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
Manx shearwater Black-legged kittiwake Northern gannet Common guillemot Razorbill	Disturbance and displacement from airborne sound and presence of vessels and infrastructure	Airborne sound and the presence of vessels and infrastructure, during the construction, and operations and maintenance phases may disturb seabirds from offshore foraging or non-foraging areas (e.g. rafting, moulting). This	A detailed assessment of the effects on bird features of the above SPAs is included in Section 1.5.3 1.6 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). There are sites which could be impacted during both the breeding and non-breeding season, (i.e. sites which are within the mean maximum foraging range (+1SD) (taken from Woodward et al., 2019)) for the specific qualifying feature. There are other sites that can only be impacted during the non-breeding season, (i.e. sites which are out with the mean maximum foraging range (+1SD) (taken from Woodward et al., 2019)) for the specific qualifying feature and contribute >1% of the population of the Biologically Defined Minimum Population Scales (BDMPS) population (Furness, 2015). These	YES

Atlantic puffin European storm petrel Lesser black-backed gull		disturbance and subsequent displacement may cause changes in behaviour and may lead to a reduction in foraging opportunities or increased energy expenditure, resulting in decreased survival rates or productivity in the population.	sites and features are set out in Table 1.4 of the MONA OFFSHORE WIND PROJECT HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document Number: MOCNS-J3303-RPS-10024 Document Reference: E1.3 APFP Regulations: 5(2)(g) February 2024 F01 (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). For all these sites, the predicted impact for the Mona Offshore Wind Project alone results in a <0.05% increase in the baseline mortality of the latest population estimate for a qualifying feature. An impact of <0.05% is deemed non-material and within natural fluctuations of the population. At these levels it can be ruled out beyond reasonable scientific doubt that there will be no AEOL. In addition, the licensable activities associated with the transmission assets (which is the subject of this HRA) would only provide a minimal contribution to the above impact considered by the applicant as part of the Mona Offshore Wind Project. The majority of this impact is associated with the generation assets, namely the collision risk and displacement effects of the offshore wind turbines, and therefore an AEOL from activities associated with the transmission assets can be ruled out. Within representation dated 7 March 2025 DAERA request that the HRA include the East Coast Marine pSPA for completeness but confirmed no adverse effect was predicted. Although East Coast Marine pSPA has not been included within the assessment presented by the applicant detailed above. Based on advice from DEARA and the assessment of the relevant features on nearer sites to the proposed development we are satisfied that adverse effect on the East Coast Marine pSPA can be ruled out.	
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Gob ny Rona, Maughold Head and Port Cornaa pRamsar site

Gob ny Rona, Maughold Head and Port Cornaa pRamsar site (approximately 58 km from Mona Offshore Wind Project)				
Natura 2000 site feature (from Table	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?

3.2.2 – RED rows only)				
Black-legged kittiwake Common guillemot	Disturbance and displacement from airborne sound and presence of vessels and infrastructure	Airborne sound and the presence of vessels and infrastructure, during the construction, and operations and maintenance phases may disturb seabirds from offshore foraging or non-foraging areas (e.g. rafting, moulting). This disturbance and subsequent displacement may cause changes in behaviour and may lead to a reduction in foraging opportunities or increased energy expenditure, resulting in decreased survival rates or productivity in the population.	There are no conservation objectives for this pRamsar site. A detailed assessment of the effects on bird features of the Gob ny Rona, Maughold Head and Port Cornaa pRamsar site is included in Section 1.5.1 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). There is no risk of an AEOI of the Gob ny Rona, Maughold Head & Port Cornaa pRamsar site from the Mona Offshore Wind Project alone when considering the rate of displacement (50%) and mortality (1%) plus collisions as the impact is <1% increase in baseline mortality. It should be noted that the licensable activities associated with the transmission assets (which is the subject of this HRA) would only provide a minimal contribution to this impact pathway considered by the applicant as part of the Mona Offshore Wind Project. The majority of this impact is associated with the generation assets, namely the collision risk and displacement effects of the offshore wind turbines, and therefore an AEOI from activities associated with the transmission assets can be ruled out.	YES
Salmon Trout	Underwater sound impacting fish and shellfish receptors	Some activities associated with the construction of the Mona Offshore Wind Project will generate underwater sound which has the potential to result in mortality, injury and/or disturbance to diadromous fish. Elevated underwater sound also has the potential to disrupt the migration of fish to their preferred spawning habitats (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental	There are no conservation objectives for this pRamsar site. An assessment of effects on fish features of the Gob ny Rona, Maughold Head & Port Cornaa pRamsar site is included in Section 1.5.1 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This is supplemented by evidence provided in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two:	NO

		Statement (Document Reference F2.3). The greatest potential impacts from underwater sound emissions are predicted to result from piling activities (for the installation of Offshore Substation Platform (OSP) foundations) and UXO clearance including detonation within the Mona Array Area. Underwater sound modelling for all relevant activities has been undertaken for the Mona Offshore Wind Project and full details are presented in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1). All other sound sources including cable installation and foundation drilling are non-percussive and will result in much lower sound levels and therefore much smaller injury ranges (in most cases no injury is predicted) than those predicted for piling operations (see Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1).	SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf) and Section 3.9.3 of Volume 2, Chapter 3: Fish and shellfish ecology (ORML2429T - F2.3_Mona_ES_Fish and Shellfish Ecology.pdf). The applicant's assessment of effects takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, it not possible to rule out an AEOL.	
	EMF from subsea electric cables	The presence and operation of inter-array, interconnector and offshore export cables within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas will lead to localised potential EMF impacts, which may affect Annex II diadromous fish features.	There are no conservation objectives for this pRamsar site. An assessment of effects on fish features of the Gob ny Rona, Maughold Head & Port Cornaa pRamsar site is included in Section 1.5.1 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This is supplemented by	YES

			evidence provided in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf) and Section 3.9.6 of Volume 2, Chapter 3: Fish and shellfish ecology (ORML2429T - F2.3_Mona_ES_Fish and Shellfish Ecology.pdf). Salmon and trout are considered to have low sensitivity to EMF. Based on the evidence presented by the applicant, EMF from subsea electric cables will not result in a barrier to migration to these fish species. There is therefore no risk of an AEOL as a result of EMF from subsea electrical cabling.	
Grey seal	Underwater sound from piling	During the construction phase sound emissions from the piling of foundations may lead to auditory injury and disturbance of marine mammals.	There are no conservation objectives for this pRamsar site. An assessment of effects on marine mammal features of the Gob ny Rona, Maughold Head & Port Cornaa pRamsar site is included in Section 1.5.1 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This is supplemented by evidence provided in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Based on the evidence presented by the applicant, underwater sound as a result of piling will not prevent the population of grey seal from maintaining itself on a long-term basis as a viable component of its natural habitat. The applicant's assessment takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, it not possible to rule out an AEOL.	NO
	Underwater sound from clearance of UXO	UXO detonation during the construction phase may result in hearing damage/auditory injury or behavioural	There are no conservation objectives for this pRamsar site. An assessment of effects on marine mammal features of the Gob ny Rona, Maughold Head & Port Cornaa pRamsar site is	NO

		disturbance/displacement (including barrier effects) of marine mammals.	included in Section 1.5.1 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This is supplemented by evidence provided in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Based on the evidence presented by the applicant, injury and disturbance from underwater sound generation from UXO detonation will not prevent the grey seal population from maintaining itself on a long-term basis as a viable component of its natural habitat. The applicant's assessment takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, it not possible to rule out an AEOL.	
	Underwater sound due to vessel use and other activities	Non-piling, sound producing activities and increased vessel movements during the construction phase have the potential to result in a range of impacts on marine mammals such as avoidance behaviour or displacement and masking of vocalisations or changes in vocalisation rate. During the construction phase of the Mona Offshore Wind Project, the increased levels of vessel activity will contribute to the total underwater sound levels, but the movements will be limited to within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas and will likely follow existing shipping routes to/from the ports.	There are no conservation objectives for this pRamsar site. An assessment of effects on marine mammal features of the Gob ny Rona, Maughold Head & Port Cornaa pRamsar site is included in Section 1.5.1 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This is supplemented by evidence provided in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Based on the evidence presented by the applicant, elevated underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not result in an AEOL.	YES

		Vessel use during the operations and maintenance phase of the Mona Offshore Wind Project may lead to injury and/or disturbance to Annex II marine mammal species. A variety of vessel types will be used during routine operations and maintenance activities, including crew transfer vessels/workboats, jack-up vessels, cable repair vessels, Service Operation Vessels (SOV) or similar vessels and excavators/backhoe dredgers.		
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Southern Coasts and Calf of Man pRamsar site

<i>Southern Coasts and Calf of Man pRamsar site (approximately 48 km from Mona Offshore Wind Project)</i>				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in italics)	Can adverse effect on site integrity be ruled out?
<i>Black-legged kittiwake</i> <i>Common guillemot</i> <i>Great black-backed gull</i> <i>Manx shearwater</i>	Disturbance and displacement from airborne sound and presence of vessels and infrastructure	Airborne sound and the presence of vessels and infrastructure, during the construction, and operations and maintenance phases may disturb seabirds from offshore foraging or non-foraging areas (e.g. rafting, moulting). This disturbance and subsequent displacement may cause changes in behaviour and may lead to a reduction in foraging opportunities or increased energy expenditure, resulting in decreased survival rates or productivity in the population.	There are no conservation objectives for this pRamsar site. A detailed assessment of the effects on bird features of the Southern Coasts and Calf of Man pRamsar site is included in Section 1.5.2 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). There is no risk of an AEOI of the Southern Coasts and Calf of Man pRamsar site from the Mona Offshore Wind Project alone when considering the rate of displacement (50%) and mortality (1%) plus collisions as the impact is <1% increase in baseline mortality.	YES

			It should be noted that the licensable activities associated with the transmission assets (which is the subject of this HRA) would only provide a minimal contribution to this impact pathway considered by the applicant as part of the Mona Offshore Wind Project. The majority of this impact is associated with the generation assets, namely the collision risk and displacement effects of the offshore wind turbines, and therefore an AEOL from activities associated with the transmission assets can be ruled out.	
Basking shark Plaice	Underwater sound impacting fish and shellfish receptors	Some activities associated with the construction of the Mona Offshore Wind Project will generate underwater sound which has the potential to result in mortality, injury and/or disturbance to diadromous fish. Elevated underwater sound also has the potential to disrupt the migration of fish to their preferred spawning habitats (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference F2.3)). The greatest potential impacts from underwater sound emissions are predicted to result from piling activities (for the installation of Offshore Substation Platform (OSP) foundations) and UXO clearance including detonation within the Mona Array Area. Underwater sound modelling for all relevant activities has been undertaken for the Mona Offshore Wind Project and full details are presented in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1). All other sound sources including cable installation and foundation drilling are non-percussive and will result in	There are no conservation objectives for this pRamsar site. An assessment of effects on fish features of the Southern Coasts and Calf of Man pRamsar site is included in Section 1.5.2 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This is supplemented by evidence provided in Section 3.9.3 of Volume 2, Chapter 3: Fish and shellfish ecology (ORML2429T - F2.3_Mona_ES_Fish and Shellfish Ecology.pdf). The applicant's assessment of effects takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, it not possible to rule out an AEOL.	NO

		much lower sound levels and therefore much smaller injury ranges (in most cases no injury is predicted) than those predicted for piling operations (see Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1)).		
	EMF from subsea electric cables	The presence and operation of inter-array, interconnector and offshore export cables within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas will lead to localised potential EMF impacts, which may affect Annex II diadromous fish features.	There are no conservation objectives for this pRamsar site. An assessment of effects on fish features of the Southern Coasts and Calf of Man pRamsar site is included in Section 1.5.2 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This is supplemented by evidence provided in Section 3.9.6 of Volume 2, Chapter 3: Fish and shellfish ecology (ORML2429T - F2.3_Mona_ES_Fish and Shellfish Ecology.pdf). Based on the evidence presented by the applicant, there is no risk of an AEOL as a result of EMF from subsea electrical cabling.	YES
Grey seal	Underwater sound from piling	During the construction phase sound emissions from the piling of foundations may lead to auditory injury and disturbance of marine mammals.	There are no conservation objectives for this pRamsar site. An assessment of effects on marine mammal features of the Southern Coasts and Calf of Man pRamsar site is included in Section 1.5.2 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This is supplemented by evidence provided in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-	NO

			E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Based on the evidence presented by the applicant, underwater sound as a result of piling will not prevent the population of grey seal from maintaining itself on a long-term basis as a viable component of its natural habitat. The applicant's assessment takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, it not possible to rule out an AEOL.	
	Underwater sound from clearance of UXO	UXO detonation during the construction phase may result in hearing damage/auditory injury or behavioural disturbance/displacement (including barrier effects) of marine mammals.	There are no conservation objectives for this pRamsar site. An assessment of effects on marine mammal features of the Southern Coasts and Calf of Man pRamsar site is included in Section 1.5.2 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This is supplemented by evidence provided in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Based on the evidence presented by the applicant, injury and disturbance from underwater sound generation from UXO detonation will not prevent the grey seal population from maintaining itself on a long-term basis as a viable component of its natural habitat. The applicant's assessment takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, it not possible to rule out an AEOL.	NO
	Underwater sound due to vessel use and other activities	Non-piling, sound producing activities and increased vessel movements during the construction phase have the potential to result in a range of impacts on marine mammals such as avoidance	There are no conservation objectives for this pRamsar site. An assessment of effects on marine mammal features of the Southern Coasts and Calf of Man pRamsar site is included in Section 1.5.2 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas	YES

		behaviour or displacement and masking of vocalisations or changes in vocalisation rate. During the construction phase of the Mona Offshore Wind Project, the increased levels of vessel activity will contribute to the total underwater sound levels, but the movements will be limited to within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas and will likely follow existing shipping routes to/from the ports. Vessel use during the operations and maintenance phase of the Mona Offshore Wind Project may lead to injury and/or disturbance to Annex II marine mammal species. A variety of vessel types will be used during routine operations and maintenance activities, including crew transfer vessels/workboats, jack-up vessels, cable repair vessels, Service Operation Vessels (SOV) or similar vessels and excavators/backhoe dredgers.	and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This is supplemented by evidence provided in Section 1.7.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Based on the evidence presented by the applicant, elevated underwater sound due to vessel use and other activities associated with the Mona Offshore Wind Project will not result in an AEOL.	
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The Ayres pRamsar site

<i>The Ayres pRamsar site (approximately 62 km from Mona Offshore Wind Project)</i>				
Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives (relevant conservation objectives in <i>italics</i>)	Can adverse effect on site integrity be ruled out?
Herring Salmon	Underwater sound impacting fish	Some activities associated with the construction of the Mona Offshore Wind Project will generate underwater sound which has the	There are no conservation objectives for this pRamsar site. An assessment of effects on fish features of The Ayres pRamsar site is included in Section 1.5.3 of the HRA Stage 2	NO

Trout	and shellfish receptors	potential to result in mortality, injury and/or disturbance to diadromous fish. Elevated underwater sound also has the potential to disrupt the migration of fish to their preferred spawning habitats (see Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference F2.3). The greatest potential impacts from underwater sound emissions are predicted to result from piling activities (for the installation of Offshore Substation Platform (OSP) foundations) and UXO clearance including detonation within the Mona Array Area. Underwater sound modelling for all relevant activities has been undertaken for the Mona Offshore Wind Project and full details are presented in Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1). All other sound sources including cable installation and foundation drilling are non-percussive and will result in much lower sound levels and therefore much smaller injury ranges (in most cases no injury is predicted) than those predicted for piling operations (see Volume 5, Annex 3.1: Underwater sound technical report of the Environmental Statement (Document reference: F5.3.1).	Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This is supplemented by evidence provided in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf) and Section 3.9.3 of Volume 2, Chapter 3: Fish and shellfish ecology (ORML2429T - F2.3_Mona_ES_Fish and Shellfish Ecology.pdf). The applicant's assessment of effects takes account of mitigation measures that have been adopted as part of the project. In the absence of any mitigation measures, however, it not possible to rule out an AEOL.	
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	EMF from subsea electric cables	The presence and operation of inter-array, interconnector and offshore export cables within the Mona Array Area and Mona Offshore Cable Corridor and Access Areas will lead to localised potential EMF impacts, which may affect Annex II diadromous fish features.	There are no conservation objectives for this pRamsar site. An assessment of effects on fish features of The Ayres pRamsar site is included in Section 1.5.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This is supplemented by evidence provided in Section 1.6.3 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf) and Section 3.9.6 of Volume 2, Chapter 3: Fish and shellfish ecology (ORML2429T - F2.3_Mona_ES_Fish and Shellfish Ecology.pdf). Herring, salmon and trout are considered to have low sensitivity to EMF. Based on the evidence presented by the applicant, there is therefore no risk of an AEOL as a result of EMF from subsea electrical cabling.	YES
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4.2 Assessment of the project taking into account additional mitigating measures, conditions or restrictions

Natura 2000 Feature (from Table 4.1 – ‘NO’ rows only)	Description of adverse effect(s)	Can adverse effect(s) be mitigated?	Description of mitigation measures, and how they would be applied (e.g. contractual obligations, consent conditions)	Can adverse effect on site integrity be ruled out?
Reefs Sandbanks which are slightly covered by	Increase in SSC and sediment deposition (Mona Offshore Cable Corridor and Access Areas only)	YES	Development and adherence to an Offshore Construction method statement (CMS) which includes a Cable specification and installation plan (CSIP) that does not permit sandwave clearance within the Menai Strait and Conwy Bay SAC. The Offshore CMS will be secured within the marine licence.	YES
	Increased risk of introduction and spread	YES	Development and adherence to an Offshore CMS which includes a CSIP that does not permit the percentage of export cable requiring cable protection to	YES

seawater all the time	of INNS (Mona Offshore Cable Corridor and Access Areas only)		exceed 10% of the total length of the export cable within the Menai Strait and Conwy Bay SAC. The Offshore CMS will be secured within the marine licence. Development of, and adherence to a Biosecurity Risk Assessment and an INNS Management Plan, including actions to minimise INNS. This will be secured within the marine licence.	
	Changes in physical processes (Mona Offshore Cable Corridor only)	YES	Development of, and adherence to, an Offshore Construction Method Statement (CMS), including a CSIP which will include cable burial where possible and cable protection. The Offshore CMS will be secured within the marine licence. Development and adherence to an Offshore CMS which includes a CSIP and details of scour protection management and cable protection management, to be used around offshore structures, cables and foundations to reduce scour, cable burial where possible and cable protection. This measure will be secured within the marine licence. Development and adherence to an Offshore CMS which includes a CSIP that does not permit the percentage of export cable requiring cable protection to exceed 10% of the total length of the export cable within the Menai Strait and Conwy Bay SAC. The Offshore CMS will be secured within the marine licence. Development and adherence to an Offshore CMS which includes a CSIP that does not permit cable protection higher than 70 cm to be installed within the Menai Strait and Conwy Bay SAC. The Offshore CMS will be secured within the marine licence. NRW A in representation dated 4 March agree with a commitment by the applicant as presented in J10 Mona Mitigation and Monitoring Schedule to limit change in water depths to 5% caused by the presence of cable protection along the export corridor. NRW A advise that consideration would need to be given to alternative positions and further physical process assessment should the developer seek approval to exceed the 5% limit. NRW A consider this should be incorporated into the offshore Construction Method Statement (oCMS) and Cable Specification Installation Plan (CSIP)	YES

			No more than 5% reduction in water depth (referenced to Chart Datum) will occur at any point along the Mona Offshore Cable Corridor unless otherwise approved.	
	Accidental pollution (Mona Offshore Cable Corridor and Access Areas only)	YES	This measure will be secured within the marine licence Development and adherence to an Offshore EMP that will include a Marine Pollution Contingency Plan (MPCP) which will include planning for accidental spills, address all potential contaminant releases and include key emergency details. The Offshore EMP will be secured within the marine licence.	YES
Sea lamprey River lamprey Atlantic salmon Freshwater pearl mussel Harbour porpoise Bottlenose dolphin Grey seal Harbour seal	Underwater sound impacting fish and shellfish receptors Underwater sound from piling Underwater sound from clearance of UXO	YES	Development of and adherence to a Marine Mammal Mitigation Protocol (MMMP), based on the Outline MMMP (Document Reference J21) included as part of the application. The Outline MMMP (Document Reference J21) presents appropriate mitigation for activities that could potentially lead to injurious effects on marine mammals including piling and UXO clearance. Although the MMMP is designed to mitigate impacts on marine mammals, it will also reduce impacts on other underwater noise sensitive interest features, including lamprey and Atlantic salmon. Following concerns raised by SNCBs surrounding UXO clearance, the applicant has committed to the use of low order unexploded ordnance clearance only under the licence. High order clearance would not be authorised under the licence and a separate consent would need to be sought by the applicant should high order clearance be required. This commitment has been presented within J16 Outline Underwater Sound Management Strategy F03. In addition, mitigation can be secured through the MMMP which commits to a mitigation hierarchy: • Avoid UXO • Clear UXO with low order techniques As detailed within the Marine Licence Principles Document (J9 Marine Licence Principles Document (Clean) F06), prior to any UXO clearance taking place a method statement would need to be submitted and approved by the licensing authority. In addition a MMMP would need to be submitted for approval which will include relevant mitigation in line with best practice and advice from SNCB and may include:	YES

			• Marine Mammal Observers (MMOs) • PAM • ADD The MMMP and UXO method statement can be secured through Marine Licence conditions. In addition, as noted above, no high order clearance will be authorised under the marine licence. The MMMP will be secured within the marine licence. Development of and adherence to an Underwater sound management strategy (document reference J16) that includes for consideration of NAS as part of mitigation options which will be developed in accordance with the Outline MMMP (Document Reference J21), will be made as part of a stepped strategy post consent and following the mitigation hierarchy - avoid, reduce, mitigate. Consequently, if NAS is required as an option a detailed exploration of available technologies will be undertaken post consent and information presented to demonstrate how such technology would contribute to the reduction in underwater sound from piling. Underwater sound management strategy will be secured within the marine licence.	
Harbour porpoise Bottlenose dolphin Grey seal Harbour seal	Underwater sound due to vessel use and other activities	YES	Development of, and adherence to an Offshore EMP including measures to minimise disturbance to marine mammals and rafting birds from transiting vessels (Document Reference J17), requiring them to: • Not deliberately approach marine mammals as a minimum • Avoid abrupt changes in course or speed should marine mammals approach the vessel to bow-ride, where appropriate and possible taking into account all technical considerations. The Offshore EMP will include a commitment that the site induction processes will incorporate the principles of the Wildlife Safe (WiSe) Scheme to ensure that key personnel are aware of the need to follow the WiSe Code of Conduct. The WiSe Scheme (https://www.wisescheme.org/), is a UK national training scheme for minimising disturbance to marine life. Key principles from the scheme will be followed to reduce the disturbance of	YES

			vessel transits on marine mammals and rafting birds visible at the water surface, or as otherwise agreed with the SNCBs.	
			Offshore EMP will be secured within the marine licence.	
Red-throated diver Common scoter Waterbird assemblage (Liverpool Bay/Bae Lerpwl SPA)	Temporary habitat loss/disturbance and increased SSCs	YES	Following concerns raised by SNCBs surrounding UXO clearance, the applicant has committed to the use of low order unexploded ordnance clearance only under the licence. High order clearance would not be authorised under the licence and a separate consent would need to be sought by the applicant should high order clearance be required. This commitment has been presented within J16 Outline Underwater Sound Management Strategy F03.	YES
	Disturbance and displacement from airborne sound and presence of vessels and infrastructure		An Offshore EMP that will include measures to minimise disturbance to rafting birds from transiting vessels (Document Reference J17). The Offshore EMP will include a commitment that the site induction process will incorporate the principles of the Wildlife Safe (WiSe) Scheme to ensure key personnel are aware of the need to follow the WiSe Code of Conduct. The WiSe Scheme (https://www.wisescheme.org/) is a UK national training scheme for minimising disturbance to marine life. Key principles from the scheme will be followed to reduce the disturbance of vessel transits on marine mammals and rafting birds visible at the water surface, or as otherwise agreed with the SNCBs. The Offshore EMP will be secured within the marine licence.	
			The Offshore EMP will include a timing restriction of no offshore export cable installation or low order UXO clearance activities during the period 1 November to 31 March within the Liverpool Bay/Bae Lerpwl SPA to minimise disturbance to rafting birds, specifically common scoter and red-throated diver as features of the SPA (Document Reference J17). This restriction is applicable to cable installation vessels undertaking active cable installation within the Liverpool Bay/Bae Lerpwl SPA only. This measure will apply to the Mona Offshore Cable Corridor, between the offshore extent of the Liverpool Bay/Bae Lerpwl SPA and the entry/exit location of the trenchless technique installation works at the landfall, within the nearshore waters of the Liverpool Bay/Bae Lerpwl SPA. The Offshore EMP will be secured within the marine licence.	

	Accidental pollution	YES	The Offshore EMP will include an MPCP which will provide planning for accidental spills, address all potential contaminant releases and include key emergency details. The Offshore EMP will be secured within the marine licence.	YES
<i>Manx shearwater</i> <i>Black-legged kittiwake</i> <i>Northern gannet</i> <i>Common guillemot</i> <i>Razorbill</i>	Disturbance and displacement from airborne sound and presence of vessels and infrastructure	YES	An Offshore EMP will include measures to minimise disturbance to rafting birds from transiting vessels (Document Reference J17). The Offshore EMP will be secured within the marine licence. The Offshore EMP will include a timing restriction of no offshore export cable installation or low order UXO clearance activities during the period 1 November to 31 March within the Liverpool Bay SPA as detailed above (Document Reference J17). The Offshore EMP will be secured within the marine licence. The Offshore EMP will include an MPCP which will provide planning for accidental spills, address all potential contaminant releases and include key emergency details. The Offshore EMP will be secured within the marine licence	YES

4.3 Concluding the appropriate assessment of the project alone

(a) If the right hand column of Table 4.1 and Table 4.2 (if applicable) is 'YES' for all features	It has been ascertained that the proposal, when considered alone, will not adversely affect the integrity of any Natura 2000 sites.
(c) Are there any residual effects of the project (net of any mitigation measures identified) which, though insignificant on their own, could be significant if considered in combination with the effects of other plans or projects?	YES

5. In combination assessment

5.1 Identifying possible in combination effects

For the Mona Offshore Wind Project in-combination assessment, a tiered approach has been adopted by the applicant. This approach provides a framework for placing relative weight on the potential for other projects and plans to ultimately be realised, based upon their current stage of maturity and certainty in their parameters. The allocation of each project, plan and activity into tiers is not affected by the screening process but is merely a categorisation applied to all projects, plans and activities that have been screened in for assessment.

The tiered approach uses the following categorisations:

- Tier 1
 - Under construction
 - Permitted application
 - Submitted application
 - Those currently operational that were not operational when baseline data were collected, and/or those that are operational but have an ongoing impact
- Tier 2
 - Scoping report has been submitted and is in the public domain
- Tier 3
 - Scoping report has not been submitted or is not in the public domain
 - Identified in a relevant development plan
 - Identified in other plans and programmes.

Further details of the tiered approach that has been applied to the in-combination assessment are provided in Section 1.4.5 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf).

Annex I Habitats

BLUE impact pathway from Table 3.2 and/or Residual effect (from appropriate	Natura 2000 site feature(s) concerned	Other plans/projects with effects that might interact with the effects of the project to render its effects significant (if any)	Nature of the in-combination effect (if any)	Is there likely to be any significant in-combination effect, in view of the site's
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assessment in section 4)				conservation objectives?
Increase in SSC and sediment deposition (Mona Offshore Cable Corridor and Access Areas only)	Reefs from the following site: - Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC Sandbanks which are slightly covered by seawater all the time from the following site: - Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC	Tier 1: - Awel y Môr Offshore Wind Farm. - Rhyl Flats offshore wind farm. - Gwynt y Môr offshore wind farm. - North Hoyle offshore wind farm. - Conwy River dredge disposal. - Hilbre Swash aggregate licence area. Tier 2: - Morgan Offshore Wind Project Generation Assets. - Morecambe Offshore Windfarm Generation Assets. - Morgan and Morecambe Offshore Windfarms Transmission Assets. - Eni Hynet CCS project. - Liverpool Bay Area 457 Aggregate Extraction Licence Area. Tier 3: - MaresConnect - Wales-Ireland Interconnector Cable.	A detailed assessment of in-combination effects on Annex I habitats is included in Section 1.5.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Any in-combination effects associated with increased SSC and associated sediment deposition will be limited spatial extent, short term duration, intermittent in nature. The potential for in-combination increases in SSCs and associated deposition for the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC is limited as most projects are located outside the boundary of the SAC. Only small increases in SSC are expected to occur which will be of limited spatial extent as a result of other projects/plans. As set out above, it's unlikely that these would combine with the plumes arising from the Mona Offshore Cable Corridor and Access Areas. Any in-combination impacts would be short term, intermittent and reversible. These activities will not restrict the distribution or extent of identified Annex I habitat features from increasing or remaining stable. Ensuring that the physical, biological, and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded.	NO
Increased risk of introduction and spread of INNS (Mona Offshore Cable Corridor)		Tier 1: Conwy River dredging and disposal. Tier 2:	A detailed assessment of in-combination effects on Annex I habitats is included in Section 1.5.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf).	NO

and Access Areas only)		• MaresConnect - Wales-Ireland Interconnector Cable.	The Mona Offshore Cable Corridor and Access Areas does not overlap with any Annex I features within the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC. The nearest Annex I reef feature is located 2.4 km from the Mona Offshore Cable Corridor and Access Areas, therefore considering this distance the likelihood of a stepping stone effect is limited. The Mona Offshore Wind Project is also committed to ensuring the percentage of export cable requiring cable protection will not exceed 10% of the total length of the export cable within the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC. The only other project that may overlap with the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC and has the potential to introduce hard substrate is the MaresConnect interconnector cable. There is however no information currently available on this project, but if cable protection is required in the SAC, similar measures will likely be required to minimise the extent of cable protection. An Offshore EMP will be implemented, which will include a Biosecurity Risk Assessment as well as an INNS Management Plan. With these measures in place, the risk of potential introduction and spread of INNS will be minimised. It is also likely that the MaresConnect interconnector cable would also be required to implement similar measures to reduce the risk from INNS. Therefore, the overall distribution and extent of the habitat features within the site, and each of their main component parts will remain stable or increasing. The physical, biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat will not be degraded and the presence, abundance, condition and diversity of typical species is such that habitat quality will not be degraded.	
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Changes in physical processes (Mona Offshore Cable Corridor only)		NA	A detailed assessment of in-combination effects on Annex I habitats is included in Section 1.5.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). There is no potential for changes in physical processes as a result of the Mona Offshore Wind Project to act together with other projects/plans and result in an in-combination effect on the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC. The alone assessment concluded that there would be no adverse effects on the integrity of the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC from the Mona Offshore Wind Project alone. This was concluded on the basis that effects for the Mona Offshore Wind Project alone are predicted to be limited to the immediate vicinity of the cable protection (i.e. within the boundary of the Mona Offshore Cable Corridor and Access Areas) and similarly for other projects (e.g. Awel y Môr) changes to physical processes are predicted to be similarly limited in extent and will not extend into the SAC. As such there is no potential for in-combination effects from other projects as all other projects are out with the boundary of the SAC.	NO
Accidental pollution (Mona Offshore Cable Corridor and Access Areas only)		Tier 1: • Awel y Môr Offshore Wind Farm. • Rhyl Flats offshore wind farm. • Gwynt y Môr offshore wind farm. • Conwy River dredge disposal. • Hilbre Swash aggregate licence area. Tier 2:	A detailed assessment of in-combination effects on Annex I habitats is included in Section 1.5.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). The risk of any in-combination effects associated with accidental pollution is very low however, should an event occur, any effects will be temporary, reversible, limited in spatial extent. All other projects/plans considered will also likely implement similar standard measures to the measures adopted as part of the Mona Offshore Wind Project, such as an Offshore EMP and MPCP. These measures will further reduce	NO

		• Morgan Offshore Wind Project Generation Assets. • Morecambe Offshore Windfarm Generation Assets. • Morgan and Morecambe Offshore Windfarms Transmission Assets. • Eni Hynet CCS project. • MaresConnect - Wales-Ireland Interconnector Cable.	the likelihood of an accidental pollution event occurring. Therefore, these activities will not restrict the distribution or extent of identified Annex I habitat features from increasing or remaining stable. Accidental pollution effects will not affect the physical, biological and chemical structure and function of the Annex I reef and sandbanks features. The typical species associated with the Annex I reef and sandbanks features will not be affected in such a way that the habitat quality will be degraded.	
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Annex II Diadromous Fish Species

BLUE impact pathway from Table 3.2 and/or Residual effect (from appropriate assessment in section 4)	Natura 2000 site feature(s) concerned	Other plans/projects with effects that might interact with the effects of the project to render its effects significant (if any)	Nature of the in-combination effect (if any)	Is there likely to be any significant in-combination effect, in view of the site's conservation objectives?
Underwater sound impacting fish and shellfish receptors	Sea lamprey from the following sites: • Dee Estuary/Aber Dyfrdwy SAC • River Dee and Bala Lake/Afon Dyfrydwy a Llyn Tegid SAC • River Eden SAC • River Derwent and Bassenthwaite Lake SAC • Solway Firth SAC	Tier 1: • Awel y Môr Offshore Wind Farm. Tier 2: • Morgan Offshore Wind Project Generation Assets. • Morecambe Offshore Windfarm Generation Assets. • Morgan and Morecambe Offshore Windfarms Transmission Assets.	A detailed assessment of in-combination effects on Annex II diadromous fish species is included in Section 1.6.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). This is supplemented by evidence provided in Section 1.5 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf) and	NO

	River lamprey from the following sites: • Dee Estuary/Aber Dyfrdwy SAC • River Dee and Bala Lake/Afon Dyfrydwy a Llyn Tegid SAC • River Eden SAC • River Derwent and Bassenthwaite Lake SAC • Solway Firth SAC Atlantic salmon from the following sites: • River Dee and Bala Lake/Afon Dyfrydwy a Llyn Tegid SAC • River Ehen SAC • River Eden SAC • Afon Gwyrfaï a Llyn Cwellyn SAC • River Derwent and Bassenthwaite Lake SAC • River Bladnoch SAC • Gob ny Rona, Maughold Head & Port Cornaa pRamsar site • The Ayres pRamsar site Freshwater pearl mussel from the following sites: • River Ehen SAC • River Kent SAC		Section 3.11.3 of the Volume 2, Chapter 3: Fish and shellfish ecology (ORML2429T - F2.3_Mona_ES_Fish and Shellfish Ecology.pdf). Underwater sound associated with the Mona Offshore Wind Project in-combination with other projects will be intermittent, all projects will likely implement mitigation measures such as soft starts and diadromous fish features are expected to have low sensitivity to the effect. The migratory passage of both adult and juvenile interest features will therefore remain unobstructed by physical barriers and/or poor water quality. Underwater sound associated with the Mona Offshore Wind Project in-combination with other projects will be intermittent, all projects are likely to implement mitigation measures such as soft starts and diadromous fish features are expected to have low sensitivity to the effect. In-combination impacts are also not predicted to result in adverse impacts on Atlantic salmon (the host species for freshwater pearl mussel). Therefore the Mona Offshore Wind Project in-combination with other projects will not result in the reduction of feature populations. In addition, the feature populations within the site will not be prevented from remaining stable or increasing in the long term. In other words, the populations and distributions of the qualifying species will not be prevented from being maintained or restored. In addition, the feature's natural range will neither be reduced or is likely to be reduced in the foreseeable future. The distribution of the qualifying species will also not be prevented from being restored throughout the site. Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3) concluded that impacts to herring (considered to be a prey species for sea lamprey, river lamprey and Atlantic salmon) from underwater sound resulting from	
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	Trout from the following site: - Gob ny Rona, Maughold Head & Port Cornaa pRamsar site - The Ayres pRamsar site Basking shark from the following site: - Southern Coasts and Calf of Man pRamsar site Plaice from the following site: - Southern Coasts and Calf of Man pRamsar site Herring from the following site: - The Ayres pRamsar site		tier 2 projects were moderate adverse which is significant in EIA terms during the herring spawning season only. However, as stated for the project alone assessment, herring is predicted to form only a very small proportion of the feature's diet and these features are predicted to be able to switch prey to other species such as sprat, flounder and small gadoids. The development of an Underwater sound management strategy with an Outline underwater sound management strategy submitted as part of the application, (Document Reference J16), to reduce the magnitude associated with significant impacts (in this case to negligible or low) such that there will be no residual significant effect for the project alone. In doing so, this is anticipated to reduce the significance of effect to herring to minor adverse. Other tier 2 projects are also likely to implement mitigation measures such as soft starts which will further reduce any potential impacts on herring. Therefore the abundance of prey species forming the features' food resource within the estuary will be maintained, and in-combination underwater sound will not prevent the habitats supporting the species within the site and availability of food from being restored. There is no pathway for underwater sound associated with the Mona Offshore Wind Project to result in adverse effects on the habitats of the qualifying species, therefore, there will be no reduction in the area or quality of habitat for the feature populations SACs/pRamsar sites on a long-term basis. In addition, the extent and distribution, structure and function and supporting processes on which the habitats of qualifying species rely will not be prevented from being maintained or restored.	
EMF from subsea electric cables		Tier 1: Awel y Môr Offshore Wind Farm. Tier 2:	A detailed assessment of in-combination effects on Annex II diadromous fish species is included in Section 1.6.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas	NO

		• Morgan Offshore Wind Project Generation Assets. • Morecambe Offshore Windfarm Generation Assets. • Morgan and Morecambe Offshore Windfarms Transmission Assets. • Mooir Vannin Offshore Wind Farm. Tier 3: • MaresConnect - Wales-Ireland Interconnector Cable.	of Conservation (SAC).pdf). This is supplemented by evidence provided in Section 1.5 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf) and Section 3.11.6 of the Volume 2, Chapter 3: Fish and shellfish ecology (ORML2429T - F2.3_Mona_ES_Fish and Shellfish Ecology.pdf). EMF effects associated with the Mona Offshore Wind Project in-combination with other projects will be localised in spatial extent, all projects will likely implement mitigation measures such as cable burial. In addition, Annex II diadromous fish are considered to have low sensitivity to EMF. The migratory passage of both adult and juvenile interest features will therefore remain unobstructed by physical barriers and/or poor water quality. Given that EMF effects associated with the Mona Offshore Wind Project in-combination with other projects will be localised in spatial extent, all projects are likely to implement mitigation measures such as cable burial and that Annex II diadromous fish are considered to have low sensitivity to EMF. In-combination impacts are also not predicted to result in adverse impacts on Atlantic salmon (the host species for freshwater pearl mussel). Therefore the Mona Offshore Wind Project in-combination with other projects will not result in the reduction of feature populations. In addition, the feature populations within the site will not be prevented from remaining stable or increasing in the long term. In other words, the populations and distributions of the qualifying species will not be prevented from being maintained or restored. In addition, the feature's natural range will neither be reduced or is likely to be reduced in the	
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			foreseeable future. The distribution of the qualifying species will also not be prevented from being restored throughout the site. Given that EMF effects associated with the Mona Offshore Wind Project in-combination with other projects will be localised in spatial extent, all projects are likely to implement mitigation measures such as cable burial, the abundance of prey species forming the features' food resource within the estuary, will be maintained. There is no pathway for EMF in-combination effects to affect the habitats of the qualifying features, there will be no reduction in the area or quality of habitat for the feature populations in the SAC/pRamsar site on a long-term basis. In addition, the extent and distribution, structure and function and supporting processes on which the habitats of qualifying species rely will not be prevented from being maintained or restored.	
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Annex II Marine Mammals

BLUE impact pathway from Table 3.2 and/or Residual effect (from appropriate assessment in section 4)	Natura 2000 site feature(s) concerned	Other plans/projects with effects that might interact with the effects of the project to render its effects significant (if any)	Nature of the in-combination effect (if any)	Is there likely to be any significant in-combination effect, in view of the site's conservation objectives?
Potential for adverse effects on marine mammal prey during the operations and	Harbour porpoise from the following sites: North Anglesey Marine/Gogledd Môn Forol SAC	Tier 1: - Awel y Môr Offshore Wind Farm. - West Anglesey Demonstration Zone tidal site.	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas	NO

maintenance phase	• North Channel SAC • West Wales Marine/Gorllewin Cymru Forol SAC • Bristol Channel Approaches/Dynesfeydd Môr Hafren SAC • Rockabill to Dalkey Island SAC • Roaringwater Bay and Islands SAC • Blasket Islands SAC • Mers Celtiques – Talus du golfe de Gascogne SCI; • Abers – Côte des legends SCI; • Ouessant-Molène SCI; • Côte de Granit rose-Sept-Iles SCI; • Anse de Goulven, dunes de Keremma SCI; • Tregor Goëlo SCI; • Côtes de Crozon SCI; • Chaussée de Sein SCI; • Cap Sizun SCI; • Récifs du talus du golfe de Gascogne SCI; • Anse de Vauville SCI; • Cap d'Erquy-Cap Fréhel SCI; • Baie de Saint-Brieuc – Est SCI; • Banc et récifs de Surtainville SCI; • Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard SCI;	• White Cross Demonstration Floating Wind Farm. • Twin Hub Floating Offshore Wind Platforms. Tier 2: • Morgan Offshore Wind Project Generation Assets. • Morecambe Offshore Windfarm Generation Assets. • Morgan and Morecambe Offshore Windfarms Transmission Assets. • Mooir Vannin Wind Farm Lease Area. • North Irish Sea Array Offshore Wind Farm. • Codling Wind Park Offshore Wind Farm. • Dublin Array Offshore Wind Farm. • North Channel Wind 2 Floating Offshore Wind Farm. • Oriel Windfarm Offshore Wind Farm. • Arklow Bank Wind Park Phase 2. • North Channel Wind 1. • Shelmalere Offshore Wind Farm. • North Celtic Sea Offshore Wind Farm. • Llŷr 2 Floating Demonstration Project. • Llŷr 1 Floating Demonstration Project. • Project Valorous Floating Offshore Wind Farm.	of Conservation (SAC).pdf). This is supplemented by evidence provided in Section 1.5 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). This pathway is unlikely to result in a significant in-combination effect given that the only key source of underwater noise during operations and maintenance phase will be from vessels which are assessed as having no AEOI on any marine mammal features.	
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	• Estuaire de la Rance SCI; • Baie du Mont Saint-Michel SCI Bottlenose dolphin from the following sites: • Pen Llŷn a'r Sarnau/Lleyn Peninsula and the Sarnau SAC • Cardigan Bay/Bae Ceredigion SAC Grey seal from the following sites: • Pen Llŷn a'r Sarnau/Lleyn Peninsula and the Sarnau SAC • Cardigan Bay/Bae Ceredigion SAC • The Maidens SAC • Pembrokeshire Marine/Sir Benfro Forol SAC • Lundy SAC • Isles of Scilly Complex SAC • Saltee Islands SAC • Gob ny Rona, Maughold Head & Port Cornaa pRamsar site • Southern Coasts and Calf of Man pRamsar site Harbour seal from the following sites:	• Inis Ealga Marine Energy. • Park Floating Offshore Wind Farm. • Simply Blue Emerald Floating Offshore Wind Farm. • Project Ilen Floating Offshore Wind Farm. • Spiorad na Mara – Offshore Wind Project. Tier 3: • Eni Hynet CCS. • MaresConnect - Wales-Ireland Interconnector Cable. • Lir Offshore Array. • Braymore Point Offshore Wind Farm. • Realt na Mara Offshore Wind Farm. • Cooley Point Offshore Wind Farm. • Setanta Offshore Wind Park. • Clogher Head Offshore Wind Farm. • Codling Wind Park. • Extension Offshore Wind Farm. • Mac Lir Offshore Wind Farm. • Celtic Sea Array Offshore Wind Farm. • Blackwater Offshore Wind Farm. • Malin Sea Wind. • South Pembrokeshire Wave Energy Demonstration Zone.		
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	• Strangford Lough SAC • Murlough SAC	• Bore Array Offshore Wind Farm. • Celtic Horizon Offshore Wind Farm. • Nomadic Offshore Wind. • East Celtic Offshore Wind Farm. • Haven Offshore Array Wind Farm. • Machair Wind – Hybrid Energy Project. • Péarla Offshore Wind Farm. • Aniar Offshore Array (Fixed). • Voyage Offshore Array. • Arranmore Offshore Wind Farm. • Aniar Offshore Array Floating Offshore Wind Farm. • Inis Offshore Wind Munster. • Project Saoirse Wave Energy Demonstration Project. • Tulca Offshore Array Phase 2. • Tralee Offshore Wind Farm. • Cork Offshore Wind Farm. • Moneypoint Offshore One Offshore Wind Farm. • Urban Sea Floating Offshore Wind Farm. • Valentia Phase 1 Floating Offshore Wind Farm. • Valentia Phase 2 Floating Offshore Wind Farm. • Rian Offshore Array Phase 2.		
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		Talisk Floating Offshore Wind Farm.		
Underwater sound from piling	Harbour porpoise from the following sites: - North Anglesey Marine/Gogledd Môn Forol SAC - North Channel SAC - West Wales Marine/Gorllewin Cymru Forol SAC - Bristol Channel Approaches/Dynesfeydd Môr Hafren SAC - Rockabill to Dalkey Island SAC - Roaringwater Bay and Islands SAC - Blasket Islands SAC - Mers Celtiques – Talus du golfe de Gascogne SCI; - Abers – Côte des legends SCI; - Ouessant-Molène SCI; - Côte de Granit rose-Sept-Iles SCI; - Anse de Goulven, dunes de Keremma SCI; - Tregor Goëlo SCI; - Côtes de Crozon SCI; - Chaussée de Sein SCI; - Cap Sizun SCI; - Récifs du talus du golfe de Gascogne SCI; - Anse de Vauville SCI; - Cap d'Erquy-Cap Fréhel SCI;	Tier 1: - Awel y Môr Offshore Wind Farm. - Project Erebus Floating Demonstration Projects. - White Cross Demonstration Floating Wind Farm. Tier 2: - Arklow Bank Wind Park Phase 2. - Codling Wind Park Offshore Wind Farm. - Dublin Array Offshore Wind Farm. - Inis Ealga Marine Energy Park - Llŷr 1. - Llŷr 2. - Morecambe Offshore Windfarm Generation Assets - Morgan and Morecambe Offshore Windfarms Transmission Assets. - Morgan Offshore Wind Project Generation Assets. - North Celtic Sea Offshore Wind Farm - North Channel Wind 1. - North Channel Wind 2. - North Irish Sea Array Offshore Wind Farm. - Oriel Windfarm Offshore Wind Farm. - Project Ilen. - Project Valorous.	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). The maximum area of disturbance within the North Anglesey Marine/Gogledd Môn Forol SAC resulting from projects considered within the in-combination assessment would be 0.84% (on any given day) which does not exceed either the daily or seasonal thresholds for significant disturbance. The 15 km EDR for the Mona Offshore Wind Project does not overlap with any other SACs/SCIs. Therefore, underwater sound from piling associated with the Mona Offshore Wind Project in-combination with other projects will not affect the survivability and reproductive potential of harbour porpoise using the SAC/SCI and harbour porpoise will remain a viable component of the site. Underwater sound from piling associated with the Mona Offshore Wind Project in-combination with other projects will also not cause significant disturbance of the species. Habitats and processes will not be affected by underwater sound. With respect to prey species, although some short-term disturbance is predicted to potential prey fish species as a result of the Mona Offshore Wind Project (see section Volume 2, Chapter 9: Fish and shellfish ecology of the Environmental Statement (Document Reference F2.3)), effects are not considered to be long-term ensuring that the project will not affect prey species populations being maintained in the long term.	NO

	• Baie de Saint-Brieuc – Est SCI; • Banc et récifs de Surtainville SCI; • Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard SCI; • Estuaire de la Rance SCI; • Baie du Mont Saint-Michel SCI	• Shelmalere Offshore Wind Farm. • Simply Blue Emerald. Tier 3: • Celtic Sea Array Offshore Wind Farm. • Cork Offshore Wind Project, Bore Array. • Celtic Horizon. • Mac Lir. • Realt na Mara. • Setanta Offshore Wind Park. • Blackwater Offshore Wind Farm. • Braymore Point. • Clogher Head Offshore Wind Farm. • Codling Wind Park Extension Offshore Wind Farm. • Cooley Point Offshore Wind Farm. • Inis Offshore Wind Munster. • MaresConnect. • Project Saoirse. • South Pembrokeshire Demonstration Zone. • Aniar Offshore Array (Fixed). • East Celtic. • Lir Offshore Array. • Moneypoint Offshore One. • Péarla Offshore Wind Farm. • Rian Offshore Array Phase 2. • Tralee.		
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		• Tulca Offshore Array Phase 2. • Urban Sea. • Valentia Phase 1. • Valentia Phase 2.		
Underwater sound from clearance of UXO		Tier 1: • Awel y Môr Offshore Wind Farm. • Project Erebus Floating Demonstration Projects. • White Cross Demonstration Floating Wind Farm. Tier 2: • Morecambe Offshore Windfarm Generation Assets. • Morgan and Morecambe Offshore Windfarms Transmission Assets. • Morgan Offshore Wind Project Generation Assets. • Shelmalee Offshore Wind Farm. • Llŷr 1. • Llŷr 2. • Inis Ealga Marine Energy Park. • Codling Wind Park Offshore Wind Farm. • Project Valorous. • Simply Blue Emerald. • Project Ilen. • North Celtic Sea Offshore Wind Farm. • North Channel Wind 1. • North Channel Wind 2.	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Assuming standard industry measures (e.g. the measures adopted as part of the Mona Offshore Wind Project) are applied for each project, it is anticipated that harbour porpoise would be deterred from the injury zone and therefore the risk of PTS would be low. Disturbance (using TTS as a proxy) is very short term and reversible and therefore not considered likely to lead to any long-term effects on the individual. Therefore, underwater sound from UXO detonation associated with the Mona Offshore Wind Project in-combination with other projects will not affect the survivability and reproductive potential of harbour porpoise using the SAC/SCI and harbour porpoise will remain a viable component of the site. There is no spatial overlap of the injury ranges (PTS) associated with UXO detonation and the SAC/SCI, and therefore harbour porpoise will not be excluded from any part of any SAC/SCI. The disturbance (TTS used as a proxy) range of impact and the 26 km EDR associated with the Mona Offshore Wind Project and relevant tier 1 projects will not surpass 20% of relevant area disturbed in any	NO

			given day or 10% of the relevant area of the site over a season with projects located in closer vicinity to the North Anglesey Marine/Gogledd Môn Forol SAC and therefore disturbance as a result of UXO clearance in-combination with other projects is unlikely to be significant. As disturbance impacts resulting from the Mona Offshore Wind Project will not overlap with any other SACs/SCIs, the Mona Offshore Wind Project will not contribute to an in-combination impact with other projects. Therefore underwater sound from UXO detonation associated with the Mona Offshore Wind Project in-combination with other projects will not significantly disturb the species. There is no pathway for underwater sound in-combination effects from UXO detonation to result in adverse effects on the habitats of the qualifying species, (i.e. there will be no habitat loss/disturbance from underwater sound associated with UXO detonation). With respect to prey species, although some short-term disturbance is predicted to potential prey fish species as a result of the Mona Offshore Wind Project in-combination with other plans and projects, effects are not considered to be r long-term ensuring that the project will not affect prey species populations being maintained in the long term. Therefore, underwater sound from UXO detonation associated with the Mona Offshore Wind Project in-combination with other projects will not hinder the condition of supporting habitats and processes or reduce the availability of prey.	
Underwater sound due to vessel use and other activities		Tier 1: • Awel y Môr Offshore Wind Farm. • West Anglesey Demonstration Zone tidal site. • Project Erebus Floating Demonstration Projects.	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf).	NO

		• White Cross Demonstration Floating Wind Farm. • Twin Hub Floating Offshore Wind Platforms. Tier 2: • Inis Ealga Marine Energy Park. • Morgan and Morecambe Offshore Windfarms Transmission Assets. • Morgan Offshore Wind Project Generation Assets. • North Channel Wind 1 and 2. • Shelmalere Offshore Wind Farm. • White Cross. • Codling Wind Park Offshore Wind Farm. • Dublin Array Offshore Wind Farm. • Llŷr Projects (Llŷr 1 and Llŷr 2). • North Irish Sea Array Offshore Wind Farm. • Project Valorous. • Arklow Bank Wind Park Phase 2. • Morecambe Offshore Windfarm Generation Assets. • North Celtic Sea Offshore Wind Farm. • Oriel Windfarm Offshore Wind Farm. • Project Ilen. • Simply Blue Emerald. Tier 3:	Given that there is no potential for injury within range of the SAC, limited disturbance within the SAC when compared with available foraging habitat, the existing high level of vessel traffic and that there is likely recovery from disturbance, underwater sound from vessels and other activities associated with the Mona Offshore Wind Project in-combination with other projects will not affect the survivability and reproductive potential of harbour porpoise using the designated site and harbour porpoise will remain a viable component of the site. Similarly, underwater sound from vessels and other activities associated with the Mona Offshore Wind Project in-combination with other projects will not significantly disturb the species. There is no pathway for underwater sound in-combination effects from vessels and other activities to result in adverse effects on the habitats of the qualifying species. Therefore, underwater sound from vessels and other activities associated with the Mona Offshore Wind Project in-combination with other projects will not hinder the condition of supporting habitats and processes or reduce the availability of prey.	
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		• Blackwater Offshore Wind Farm. • Braymore Point. • Celtic Sea Array Offshore Wind Farm. • Cork offshore wind project. • Clogher Head Offshore Wind Farm. • Codling Wind Park Extension Offshore Wind Farm. • Cooley Point Offshore Wind Farm. • Eni Hynet CCS. • Inis Offshore Wind Munster. • Isle of Man wind farm lease area. • MaresConnect. • Project Saoirse. • South Pembrokeshire Demonstration Zone.		
Changes in fish and shellfish communities affecting prey availability ⁶		Tier 1: • Awel y Môr Offshore Wind Farm. Tier 2: • Morgan and Morecambe Offshore Windfarms Transmission Assets. • Morgan Offshore Wind Project Generation Assets. • Morecambe Offshore Wind Project Generation Assets. Tier 3:	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Any in-combination effects are predicted to be of local to regional spatial extent, medium term duration, intermittent and the effect of behavioural disturbance is of high reversibility. The Annex II marine mammal features of the SAC prey on a wide variety of fish species and therefore are likely to be able to adapt to a minor shift in availability of some prey items and are known to forage over wide areas and exploit a range	NO

⁶ This pathway only applies to North Anglesey Marine/Gogledd Môn Forol SAC.

		• MaresConnect Wales-Ireland Interconnector Cable.	of prey species. Therefore, whilst there may be some potential in-combination effects to fish and shellfish communities, these effects will be highly localised and short term and therefore marine mammals are likely to be able to compensate and move to alternative foraging grounds. In addition, any projects/plans which may act in-combination with the Mona Offshore Wind Project will also have mitigation measures which will further reduce the potential for in-combination effects on prey availability. Therefore, changes in fish and shellfish communities affecting prey availability associated with the Mona Offshore Wind Project in-combination with other projects will not affect the survivability and reproductive potential of harbour porpoise using the designated site and harbour porpoise will remain a viable component of the site. Harbour porpoise may experience behavioural effects in response to change in prey availability in the vicinity of the Mona Offshore Wind Project boundaries, however, impacts to prey species are predicted to be localised, short term and intermittent, and harbour porpoise are expected to adapt and recover quickly. As such there is a negligible risk of disruption of foraging activities of harbour porpoise. Therefore, changes in fish and shellfish communities affecting prey availability associated with the Mona Offshore Wind Project will not significantly disturb the species. There is no pathway for changes in fish and shellfish communities affecting prey availability to result in adverse effects on the habitats of the qualifying species and there are no adverse effects expected for fish and shellfish species. Therefore, changes in fish and shellfish communities affecting prey availability associated with the Mona Offshore Wind Project will not prevent the condition of habitats and their processes and the availability of prey from being maintained.	
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Underwater sound from piling	Bottlenose dolphin from the following sites: • Pen Llŷn a'r Sarnau/Lleyn Peninsula and the Sarnau SAC • Cardigan Bay/Bae Ceredigion SAC	Tier 1: • Awel y Môr Offshore Wind Farm. • Project Erebus Floating Demonstration Projects. • White Cross Demonstration Floating Wind Farm. Tier 2: • Arklow Bank Wind Park Phase 2. • Codling Wind Park Offshore Wind Farm. • Dublin Array Offshore Wind Farm. • Inis Ealga Marine Energy Park • Llŷr 1. • Llŷr 2. • Morecambe Offshore Windfarm Generation Assets • Morgan and Morecambe Offshore Windfarms Transmission Assets. • Morgan Offshore Wind Project Generation Assets. • North Celtic Sea Offshore Wind Farm • North Channel Wind 1. • North Channel Wind 2. • North Irish Sea Array Offshore Wind Farm. • Oriel Windfarm Offshore Wind Farm. • Project Ilen. • Project Valorous. • Shermalere Offshore Wind Farm.	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Piling at other projects may result in disturbance of Annex II bottlenose dolphin features of the SAC. Whilst the population may be declining in the short term (10 years), it is deemed stable in the medium term. The decline in recent years is also likely to be related to animals moving away from the study area and spending the majority of their time in other parts of Wales or beyond. The Outline underwater sound management strategy (Document Reference J16) sets out the process for investigating options to manage underwater sound levels (such as Noise Abatement System (NAS), temporal and spatial piling restrictions, piling methods, soft start) in order to reduce the magnitude for the project alone. Therefore, potential impacts on the SAC from the Mona Offshore Wind Project alone will be reduced thus reducing the potential for the Mona Offshore Wind Project to contribute to any in combination effect. On this basis, underwater sound from piling associated with the Mona Offshore Wind Project in-combination with other projects will not prevent the population from maintaining itself on a long-term basis as a viable component of its natural habitat. Piling at other projects will also result in disturbance of Annex II bottlenose dolphin features of the SAC, however, recovery is also anticipated to occur between piling events, which will be intermittent for in-combination projects. In particular, baseline levels of activity are anticipated to resume where there are long	NO
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		• Simply Blue Emerald. Tier 3: • Celtic Sea Array Offshore Wind Farm. • Cork Offshore Wind Project, Bore Array. • Celtic Horizon. • Mac Lir. • Realt na Mara. • Setanta Offshore Wind Park. • Blackwater Offshore Wind Farm. • Braymore Point. • Clogher Head Offshore Wind Farm. • Codling Wind Park Extension Offshore Wind Farm. • Cooley Point Offshore Wind Farm. • Inis Offshore Wind Munster. • MaresConnect. • Project Saoirse. • South Pembrokeshire Demonstration Zone. • Aniar Offshore Array (Fixed). • East Celtic. • Lir Offshore Array. • Moneypoint Offshore One. • Péarla Offshore Wind Farm. • Rian Offshore Array Phase 2. • Tralee. • Tulca Offshore Array Phase 2. • Urban Sea.	gaps between piling of respective projects, such as between the end of piling at Project Erebus in 2025 and commencement of piling phase at the Mona Offshore Wind Project and Awel y Môr in 2028. The Outline underwater sound management strategy (Document Reference J16) sets out the process for investigating options to manage underwater sound levels (such as NAS, temporal and spatial piling restrictions, piling methods, soft start) in order to reduce the magnitude for the project alone. Therefore, underwater sound from piling associated with the Mona Offshore Wind Project in-combination with other projects will not result in species population within the site and the natural range of the population from being reduced or likely reduced for the foreseeable future. The presence, abundance, condition and diversity of habitats will not be affected by underwater sound. With respect to prey species, although some short-term disturbance is predicted to potential prey fish species as a result of the Mona Offshore Wind Project (see section Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3)), effects are not considered to be long-term ensuring that the project will not affect prey species populations being maintained in the long term. The distribution, abundance and populations dynamics of the species within the site and population beyond the site will not be prevented from remaining stable or increasing.	
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		- Valentia Phase 1. - Valentia Phase 2.		
Underwater sound from clearance of UXO		Tier 1: - Awel y Môr Offshore Wind Farm. - Project Erebus Floating Demonstration Projects. - White Cross Demonstration Floating Wind Farm. Tier 2: - Morecambe Offshore Windfarm Generation Assets. - Morgan and Morecambe Offshore Windfarms Transmission Assets. - Morgan Offshore Wind Project Generation Assets. - Shelmalere Offshore Wind Farm. - Llŷr 1. - Llŷr 2. - Inis Ealga Marine Energy Park. - Codling Wind Park Offshore Wind Farm. - Project Valorous. - Simply Blue Emerald. - Project Ilen. - North Celtic Sea Offshore Wind Farm. - North Channel Wind 1. - North Channel Wind 2.	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). The nearest SAC for bottlenose dolphin, Pen Llŷn a'r Sarnau/Lleyn Peninsula and the Sarnau SAC lies 94.1 km from the Mona Offshore Wind Project. Assuming standard industry measures (e.g. the measures adopted as part of the Mona Offshore Wind Project) are applied for each project, it is anticipated that bottlenose dolphin would be deterred from the injury zone and therefore the risk of PTS would be low. Disturbance impacts (TTS as a proxy) are very short term and reversible, therefore animals that experience this effect are anticipated to fully recover. Whilst some ecological functions could be inhibited in the short-term due to disturbance, these are reversible on recovery of the animal's hearing and therefore not considered likely to lead to any long-term effects on the individual. Therefore, underwater sound from UXO detonation associated with the Mona Offshore Wind Project in-combination with other projects will not affect the survivability and reproductive potential of bottlenose dolphin using the SAC and bottlenose dolphin will remain a viable component of its natural habitat. Furthermore, the species population within the SACs is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future as a result of the Mona Offshore Wind Project in combination with other projects.	NO

			There is no pathway for underwater sound in-combination effects from UXO detonation to result in adverse effects on the habitats of bottlenose dolphin (i.e. there will be no habitat loss/disturbance from underwater sound associated with UXO detonation). With respect to prey species, although some short-term disturbance is predicted to potential prey fish species as a result of the Mona Offshore Wind Project in-combination with other plans and projects, effects are not considered to be long-term ensuring that the project will not affect prey species populations being maintained in the long term. Therefore, underwater sound from UXO detonation associated with the Mona Offshore Wind Project in-combination with other projects will not affect the presence, abundance, condition and diversity of habitats and species required to support the distribution, abundance and populations dynamics of the populations of the qualifying marine mammal species.	
Underwater sound due to vessel use and other activities		Tier 1: • Awel y Môr Offshore Wind Farm. • West Anglesey Demonstration Zone tidal site. • Project Erebus Floating Demonstration Projects. • White Cross Demonstration Floating Wind Farm. • Twin Hub Floating Offshore Wind Platforms. Tier 2: • Inis Ealga Marine Energy Park. • Morgan and Morecambe Offshore Windfarms Transmission Assets.	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Given that there is no potential for injury or disturbance within range of the SAC, the existing high level of vessel traffic and that there is likely recovery from disturbance, underwater sound from vessels and other activities associated with the Mona Offshore Wind Project in-combination with other projects will not prevent the populations of the qualifying marine mammal species from being maintained on a long-term basis as a viable component of its natural habitat. Similarly, underwater sound from vessels and other activities associated with the Mona Offshore Wind Project in-combination with other projects will	NO

		• Morgan Offshore Wind Project Generation Assets. • North Channel Wind 1 and 2. • Shelmalere Offshore Wind Farm. • White Cross. • Codling Wind Park Offshore Wind Farm. • Dublin Array Offshore Wind Farm. • Llŷr Projects (Llŷr 1 and Llŷr 2). • North Irish Sea Array Offshore Wind Farm. • Project Valorous. • Arklow Bank Wind Park Phase 2. • Morecambe Offshore Windfarm Generation Assets. • North Celtic Sea Offshore Wind Farm. • Oriel Windfarm Offshore Wind Farm. • Project Ilen. • Simply Blue Emerald. Tier 3: • Blackwater Offshore Wind Farm. • Braymore Point. • Celtic Sea Array Offshore Wind Farm. • Cork offshore wind project. • Clogher Head Offshore Wind Farm.	not reduce nor likely reduce the natural range of the populations of the qualifying bottlenose dolphin and grey seal features for the foreseeable future. There is no pathway for underwater sound in-combination effects from vessels and other activities to result in adverse effects on the habitats of the qualifying species. Therefore, underwater sound from vessels and other activities associated with the Mona Offshore Wind Project in-combination with other projects will not affect the presence, abundance, condition and diversity of habitats and species required to support the distribution, abundance and populations dynamics of the populations of the qualifying marine mammal species.	
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		• Codling Wind Park Extension Offshore Wind Farm. • Cooley Point Offshore Wind Farm. • Eni Hynet CCS. • Inis Offshore Wind Munster. • Isle of Man wind farm lease area. • MaresConnect. • Project Saoirse. • South Pembrokeshire Demonstration Zone.		
Underwater sound from piling	Grey seal from the following sites: • Pen Llŷn a'r Sarnau/Lleyn Peninsula and the Sarnau SAC • Cardigan Bay/Bae Ceredigion SAC • The Maidens SAC • Pembrokeshire Marine/Sir Benfro Forol SAC • Lundy SAC • Isles of Scilly Complex SAC • Saltee Islands SAC • Gob ny Rona, Maughold Head & Port Cornaa pRamsar site • Southern Coasts and Calf of Man pRamsar site	Tier 1: • Awel y Môr Offshore Wind Farm. • Project Erebus Floating Demonstration Projects. • White Cross Demonstration Floating Wind Farm. Tier 2: • Arklow Bank Wind Park Phase 2. • Codling Wind Park Offshore Wind Farm. • Dublin Array Offshore Wind Farm. • Inis Ealga Marine Energy Park. • Llŷr 1. • Llŷr 2. • Morecambe Offshore Windfarm Generation Assets. • Morgan and Morecambe Offshore Windfarms Transmission Assets.	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). This is supplemented by evidence provided in Section 1.5 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Annex E1.3.2: Assessment of proposed Ramsar Sites within the Isle of Man (E1.3.2_Mona_Assessment of proposed Ramsar Sites within the Isle of Man F02 (Clean).pdf). Piling at other projects may result in disturbance of Annex II grey seal features of the SAC, however the numbers are inconsequential in the context of the grey seal reference population and OSPAR III region. Furthermore, grey seal has a large foraging range (up to 448 km reported in Carter et al., 2022) and could therefore move to alternative foraging grounds during piling associated with the Mona Offshore Wind Project and other projects considered in the in-combination assessment. The iPCoD modelling for grey seal also concluded that there is no potential for a long-term	NO

		• Morgan Offshore Wind Project Generation Assets. • North Celtic Sea Offshore Wind Farm. • North Channel Wind 1. • North Channel Wind 2. • North Irish Sea Array Offshore Wind Farm. • Oriel Windfarm Offshore Wind Farm. • Project Ilen. • Project Valorous. • Shelmalere Offshore Wind Farm. • Simply Blue Emerald. Tier 3: • Celtic Sea Array Offshore Wind Farm. • Cork Offshore Wind Project, Bore Array. • Celtic Horizon. • Mac Lir. • Realt na Mara. • Setanta Offshore Wind Park. • Blackwater Offshore Wind Farm. • Braymore Point. • Clogher Head Offshore Wind Farm. • Codling Wind Park Extension Offshore Wind Farm. • Cooley Point Offshore Wind Farm. • Inis Offshore Wind Munster. • MaresConnect. • Project Saoirse.	effects on this species. Therefore, underwater sound from piling associated with the Mona Offshore Wind Project in-combination with other projects will not prevent the grey seal feature from being maintained at or restored to favourable condition. The Outline underwater sound management strategy (Document Reference J16) sets out the process for investigating options to manage underwater sound levels (such as NAS, temporal and spatial piling restrictions, piling methods, soft start) in order to reduce the magnitude for the project alone. Therefore, potential impacts on the SAC from the Mona Offshore Wind Project alone will be reduced thus reducing the potential for the Mona Offshore Wind Project to contribute to any in combination effect. On this basis, underwater sound from piling associated with the Mona Offshore Wind Project in-combination with other projects will not prevent the population from maintaining itself on a long-term basis as a viable component of its natural habitat. Piling at other projects will result in disturbance of Annex II grey seal features of the SAC, however the numbers are inconsequential in the context of the grey seal reference population (GSRP) and OSPAR III region. Recovery is also anticipated to occur between piling events, which will be intermittent for in-combination projects. In particular, baseline levels of activity are anticipated to resume where there are long gaps between piling of respective projects, such as between the end of piling at Project Erebus in 2025 and commencement of piling phase at Mona Offshore Wind Project and Awel y Môr in 2028. Therefore, underwater sound from piling associated with the Mona Offshore Wind Project in-combination with other projects will not prevent population numbers and distribution of grey seal from being maintained or restored. It will also not result in species	
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		• South Pembrokeshire Demonstration Zone. • Aniar Offshore Array (Fixed). • East Celtic. • Lir Offshore Array. • Moneypoint Offshore One. • Péarla Offshore Wind Farm. • Rian Offshore Array Phase 2. • Tralee. • Tulca Offshore Array Phase 2. • Urban Sea. • Valentia Phase 1. • Valentia Phase 2.	population within the site and the natural range of the population from being reduced or likely reduced for the foreseeable future. The presence, abundance, condition and diversity of habitats will not be affected by underwater sound. Therefore, underwater sound from piling associated with the Mona Offshore Wind Project in-combination with other projects and will not prevent the extent and distribution, the structure and function or supporting processes of the habitats of qualifying species from being maintained or restored. With respect to prey species, although some short-term disturbance is predicted to potential prey fish species as a result of the Mona Offshore Wind Project (see section Volume 2, Chapter 3: Fish and shellfish ecology of the Environmental Statement (Document Reference: F2.3)), effects are not considered to be long-term ensuring that the project will not affect prey species populations being maintained in the long term. The distribution, abundance and populations dynamics of the species within the site and population beyond the site will not be prevented from remaining stable or increasing. There is no pathway for underwater sound in-combination effects from piling to result in adverse effects on the physical features used by the grey seal features within the site.	
Underwater sound from clearance of UXO		Tier 1: • Awel y Môr Offshore Wind Farm. • Project Erebus Floating Demonstration Projects. • White Cross Demonstration Floating Wind Farm. Tier 2:	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). The nearest SAC for grey seal, Pen Llŷn a'r Sarnau/Lleyn Peninsula and the Sarnau SAC, lies 94.1 km from the Mona Offshore Wind Project.	NO

		• Morecambe Offshore Windfarm Generation Assets. • Morgan and Morecambe Offshore Windfarms Transmission Assets. • Morgan Offshore Wind Project Generation Assets. • Shelmalere Offshore Wind Farm. • Llŷr 1. • Llŷr 2. • Inis Ealga Marine Energy Park. • Codling Wind Park Offshore Wind Farm. • Project Valorous. • Simply Blue Emerald. • Project llen. • North Celtic Sea Offshore Wind Farm. • North Channel Wind 1. • North Channel Wind 2.	Assuming standard industry measures (e.g. the measures adopted as part of the Mona Offshore Wind Project) are applied for each project, it is anticipated that grey seal would be deterred from the injury zone and therefore the risk of PTS would be low. Disturbance impacts (TTS as a proxy) are very short term and reversible, therefore animals that experience this effect are anticipated to fully recover. Whilst some ecological functions could be inhibited in the short-term due to disturbance, these are reversible on recovery of the animal's hearing and therefore not considered likely to lead to any long-term effects on the individual. Therefore, underwater sound from UXO detonation associated with the Mona Offshore Wind Project in-combination with other projects will not affect the survivability and reproductive potential of grey seal using the SAC and grey seal will remain a viable component of its natural habitat. Furthermore, the species population within the SACs is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future as a result of the Mona Offshore Wind Project in combination with other projects. Underwater sound from UXO detonation associated with the Mona Offshore Wind Project in-combination with other projects will also not prevent the distribution of grey seal from being maintained or enhanced. There is no pathway for underwater sound in-combination effects from UXO detonation to result in adverse effects on the habitats of grey seal (i.e. there will be no habitat loss/disturbance from underwater sound associated with UXO detonation). Therefore, there will be no adverse effects on the physical features used by the grey seal features within the site. With respect to prey species, although some short-term disturbance is predicted to potential prey fish species as a result of the Mona Offshore Wind Project	
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			in-combination with other plans and projects, effects are not considered to be long-term ensuring that the project will not affect prey species populations being maintained in the long term. Therefore, underwater sound from UXO detonation associated with the Mona Offshore Wind Project in-combination with other projects will not affect the presence, abundance, condition and diversity of habitats and species required to support the distribution, abundance and populations dynamics of the populations of the qualifying marine mammal species.	
Underwater sound due to vessel use and other activities		Tier 1: • Awel y Môr Offshore Wind Farm. • West Anglesey Demonstration Zone tidal site. • Project Erebus Floating Demonstration Projects. • White Cross Demonstration Floating Wind Farm. • Twin Hub Floating Offshore Wind Platforms. Tier 2: • Inis Ealga Marine Energy Park. • Morgan and Morecambe Offshore Windfarms Transmission Assets. • Morgan Offshore Wind Project Generation Assets. • North Channel Wind 1 and 2. • Shelmalere Offshore Wind Farm. • White Cross.	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Given that there is no potential for injury or disturbance within range of the SAC, the existing high level of vessel traffic and that there is likely recovery from disturbance, underwater sound from vessels and other activities associated with the Mona Offshore Wind Project in-combination with other projects will not prevent the populations of the qualifying marine mammal species from being maintained on a long-term basis as a viable component of its natural habitat. Similarly, underwater sound from vessels and other activities associated with the Mona Offshore Wind Project in-combination with other projects will not reduce nor likely reduce the natural range of the populations of the qualifying bottlenose dolphin and grey seal features for the foreseeable future. It will also not prevent the grey seal population numbers and distribution from being maintained or enhanced/restored.	NO

		• Codling Wind Park Offshore Wind Farm. • Dublin Array Offshore Wind Farm. • LIŷr Projects (LIŷr 1 and LIŷr 2). • North Irish Sea Array Offshore Wind Farm. • Project Valorous. • Arklow Bank Wind Park Phase 2. • Morecambe Offshore Windfarm Generation Assets. • North Celtic Sea Offshore Wind Farm. • Oriel Windfarm Offshore Wind Farm. • Project Ilen. • Simply Blue Emerald. Tier 3: • Blackwater Offshore Wind Farm. • Braymore Point. • Celtic Sea Array Offshore Wind Farm. • Cork offshore wind project. • Clogher Head Offshore Wind Farm. • Codling Wind Park Extension Offshore Wind Farm. • Cooley Point Offshore Wind Farm. • Eni Hynet CCS. • Inis Offshore Wind Munster. • Isle of Man wind farm lease area.	There is no pathway for underwater sound in-combination effects from vessels and other activities to result in adverse effects on the habitats of the qualifying species. Therefore, underwater sound from vessels and other activities associated with the Mona Offshore Wind Project in-combination with other projects will not affect the presence, abundance, condition and diversity of habitats and species required to support the distribution, abundance and populations dynamics of the populations of the qualifying marine mammal species. It will also not prevent physical features used by grey seal within the site from being maintained or enhance/restored.	
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		• MaresConnect. • Project Saoirse. • South Pembrokeshire Demonstration Zone.		
Underwater sound from piling	Harbour seal from the following sites: • Strangford Lough SAC • Murlough SAC	Tier 1: • Awel y Môr Offshore Wind Farm. • Project Erebus Floating Demonstration Projects. • White Cross Demonstration Floating Wind Farm. Tier 2: • Arklow Bank Wind Park Phase 2. • Codling Wind Park Offshore Wind Farm. • Dublin Array Offshore Wind Farm. • Inis Ealga Marine Energy Park • Llŷr 1. • Llŷr 2. • Morecambe Offshore Windfarm Generation Assets • Morgan and Morecambe Offshore Windfarms Transmission Assets. • Morgan Offshore Wind Project Generation Assets. • North Celtic Sea Offshore Wind Farm • North Channel Wind 1. • North Channel Wind 2. • North Irish Sea Array Offshore Wind Farm. • Oriel Windfarm Offshore Wind Farm.	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Piling at other projects may result in disturbance of Annex II harbour seal features of the SAC, however the numbers are inconsequential in the context of the harbour seal reference population. Harbour seal also have a large foraging range (up 273 km reported in Carter et al., 2022) and could therefore move to alternative foraging grounds during piling associated with the Mona Offshore Wind Project and other projects considered in the in-combination assessment. Therefore, underwater sound from piling associated with the Mona Offshore Wind Project in-combination with other projects will not prevent the harbour seal population from being maintained at or restored to favourable condition. Similarly, it will not prevent the harbour seal population from being maintained or enhanced. There is no pathway for underwater sound in-combination effects from piling to result in adverse effects on the physical features used by the harbour seal features within the site.	NO

		• Project Ilén. • Project Valorous. • Shelmalere Offshore Wind Farm. • Simply Blue Emerald. Tier 3: • Celtic Sea Array Offshore Wind Farm. • Cork Offshore Wind Project, Bore Array. • Celtic Horizon. • Mac Lir. • Realt na Mara. • Setanta Offshore Wind Park. • Blackwater Offshore Wind Farm. • Braymore Point. • Clogher Head Offshore Wind Farm. • Codling Wind Park Extension Offshore Wind Farm. • Cooley Point Offshore Wind Farm. • Inis Offshore Wind Munster. • MaresConnect. • Project Saoirse. • South Pembrokeshire Demonstration Zone. • Aniar Offshore Array (Fixed). • East Celtic. • Lir Offshore Array. • Moneypoint Offshore One. • Péarla Offshore Wind Farm. • Rian Offshore Array Phase 2.		
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		• Tralee. • Tulca Offshore Array Phase 2. • Urban Sea. • Valentia Phase 1. • Valentia Phase 2.		
Underwater sound from clearance of UXO		Tier 1: • Awel y Môr Offshore Wind Farm. • Project Erebus Floating Demonstration Projects. • White Cross Demonstration Floating Wind Farm. Tier 2: • Morecambe Offshore Windfarm Generation Assets. • Morgan and Morecambe Offshore Windfarms Transmission Assets. • Morgan Offshore Wind Project Generation Assets. • Shelmalere Offshore Wind Farm. • Liŷr 1. • Liŷr 2. • Inis Ealga Marine Energy Park. • Codling Wind Park Offshore Wind Farm. • Project Valorous. • Simply Blue Emerald. • Project Ilen. • North Celtic Sea Offshore Wind Farm. • North Channel Wind 1. • North Channel Wind 2.	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). The other projects and plans which are considered to have the potential to contribute to an in-combination effect with the Mona Offshore Wind Project are the Morgan Generation Assets, Morgan and Morecambe Offshore Wind Farms: Transmission Assets and Morecambe Offshore Wind Farm Generation Assets. However, it is assumed that standard industry mitigation measures such as those outlined for the Mona Offshore Wind Project will also be applied for each project outlined above. It is anticipated that mitigation such as ADDs will deter animals from the injury zone and therefore the risk of PTS would be low for the projects considered. Whilst the implementation of mitigation such as ADDs may exacerbate the number of animals at risk of TTS, this impact is considered to be short-term and full recovery of the animal's hearing is anticipated therefore no long-term effects on the individual are expected to occur. Therefore, underwater sound from UXO detonation associated with the Mona Offshore Wind Project in-combination with other projects will not prevent the harbour seal feature from being maintained or restored at favourable condition. On this basis, underwater sound from UXO detonation associated with the Mona Offshore Wind Project in-combination	NO

			with other projects will also not prevent the harbour seal population from being maintained or enhanced. There is no pathway for underwater sound in-combination effects from UXO detonation, (i.e. there will be no habitat loss/disturbance from underwater sound associated with UXO detonation). Therefore, there will be no adverse effects on the physical features used by the harbour seal features within the site.	
Underwater sound due to vessel use and other activities		Tier 1: • Awel y Môr Offshore Wind Farm. • West Anglesey Demonstration Zone tidal site. • Project Erebus Floating Demonstration Projects. • White Cross Demonstration Floating Wind Farm. • Twin Hub Floating Offshore Wind Platforms. Tier 2: • Inis Ealga Marine Energy Park. • Morgan and Morecambe Offshore Windfarms Transmission Assets. • Morgan Offshore Wind Project Generation Assets. • North Channel Wind 1 and 2. • Shelmalere Offshore Wind Farm. • White Cross. • Codling Wind Park Offshore Wind Farm. • Dublin Array Offshore Wind Farm.	A detailed assessment of in-combination effects on Annex II marine mammal species is included in Section 1.7.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Two: SACs Assessments Document (EN010137-000139-E1.2_Mona_HRA Stage 2 ISAA Part 2 Special Areas of Conservation (SAC).pdf). Given that there is no potential for injury or disturbance within range of the SAC, the existing high level of vessel traffic and that there is likely recovery from disturbance, underwater sound from vessels and other activities associated with the Mona Offshore Wind Project in-combination with other projects will not prevent the harbour seal feature from being maintained or restored to favourable condition. Similarly, underwater sound from vessels and other activities associated with the Mona Offshore Wind Project in-combination with other projects will not prevent the harbour seal population from being maintained or enhanced. There is no pathway for underwater sound in-combination effects from vessels and other activities to result in adverse effects on the habitats of the qualifying species. Therefore, underwater sound from vessels and other activities associated with the Mona Offshore Wind Project in-combination with other projects will not prevent physical features used by harbour seal within the site from being maintained or enhance.	NO

		• LIŷr Projects (LIŷr 1 and LIŷr 2). • North Irish Sea Array Offshore Wind Farm. • Project Valorous. • Arklow Bank Wind Park Phase 2. • Morecambe Offshore Windfarm Generation Assets. • North Celtic Sea Offshore Wind Farm. • Oriel Windfarm Offshore Wind Farm. • Project Ilen. • Simply Blue Emerald. Tier 3: • Blackwater Offshore Wind Farm. • Braymore Point. • Celtic Sea Array Offshore Wind Farm. • Cork offshore wind project. • Clogher Head Offshore Wind Farm. • Codling Wind Park Extension Offshore Wind Farm. • Cooley Point Offshore Wind Farm. • Eni Hynet CCS. • Inis Offshore Wind Munster. • Isle of Man wind farm lease area. • MaresConnect. • Project Saoirse. • South Pembrokeshire Demonstration Zone.		
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Birds

BLUE impact pathway from Table 3.2 and/or Residual effect (from appropriate assessment in section 4)	Natura 2000 site feature(s) concerned	Other plans/projects with effects that might interact with the effects of the project to render its effects significant (if any)	Nature of the in-combination effect (if any)	Is there likely to be any significant in-combination effect, in view of the site's conservation objectives?
Disturbance and displacement from airborne sound and presence of vessels and infrastructure	Red-throated diver from the following site: Liverpool Bay/Bae Lerpwl SPA	Tier 1: - Awel y Môr Offshore Wind Farm - Burbo Bank Offshore Wind Farm - Burbo Bank Extension Offshore Wind Farm - Gwynt y Môr Offshore Wind Farm - North Hoyle Offshore Wind Farm - Rhyl Flats Offshore Wind Farm Tier 2: - Morgan and Morecambe Wind Farms Transmission Assets	A detailed assessment of in-combination effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf). Displacement and disturbance on red-throated diver is expected to occur as a result of vessels associated of the Mona Offshore Wind Project and other plans and projects in-combination during all phases of development. The effect is expected to have the potential to be permanent, local and long-term. The impact on the population of red-throated diver has been assessed to result in an increase in baseline mortality of 0.62%. This impact occurred during the operations and maintenance phases for all projects. As the increase in baseline mortality is <1% it is highly unlikely that at this level of mortality increase, the population will decline. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during all phases will not prevent the population of each of the qualifying features from being maintained.	NO

			Due to the temporary nature over which the birds would be impacted (as a vessels transits through the SPA), it is not predicted that a permanent disturbance would occur and therefore this impact would not affect the ability for the distribution to be restored. However with the levels of vessels continuing to increase their will get to a limit whereby the distribution of birds would avoid the navigation channels. Red-throated diver already exhibited this behaviour when the SPA was designated and therefore it would be considered part of the baseline distribution. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during all phases will not prevent the distribution of the qualifying feature from being restored. Some other plans and projects have adopted an EMP, similar to Mona Offshore Wind Project which minimises the disturbance. Following of set routes and set times in co-ordination with other plans and projects to the offshore wind farms could reduce the frequency, duration and intensity of disturbance. There is no effect of airborne sound, underwater sound, and presence of vessels on the supporting habitats (and food availability). Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the operations and maintenance phase will not prevent the extent and distribution, structure and function or the supporting processes of the habitats of the qualifying features from being maintained or restored.	
Disturbance and displacement from airborne sound and presence of vessels and infrastructure	Common scoter from the following site: Liverpool Bay/Bae Lerpwl SPA	Tier 1: • Awel y Môr Offshore Wind Farm • Burbo Bank Offshore Wind Farm • Burbo Bank Extension Offshore Wind Farm	A detailed assessment of in-combination effects on Liverpool Bay/Bae Lerpwl SPA is included in Section 1.6.4 of the HRA Stage 2 Information to Support an Appropriate Assessment Part Three: Special Protection Areas and Ramsar sites Assessments Document (EN010137-000109-E1.3_Mona_HRA Stage 2 ISAA Part 3 - SPA and Ramsar site assessment.pdf).	NO

		• Gwynt y Môr Offshore Wind Farm • North Hoyle Offshore Wind Farm • Rhyl Flats Offshore Wind Farm Tier 2: • Morgan and Morecambe Wind Farms Transmission Assets	Displacement and disturbance on common scoter is expected to occur as a result of vessels associated of the Mona Offshore Wind Project and other plans and projects in-combination during all phases of development. The effect is expected to have the potential to be permanent, local and long-term. The impact on the population of common scoter has been assessed to result in an increase in baseline mortality of 0.17%. This impact occurred during the operations and maintenance phases for all projects. As the increase in baseline mortality is <1% it is highly unlikely that at this level of mortality increase, the population will decline. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during all phases will not prevent the population of each of the qualifying features from being maintained. Due to the temporary nature over which the birds would be impacted (as a vessels transits through the SPA), it is not predicted that a permanent disturbance would occur and therefore this impact would not affect the ability for the distribution to be restored. However with the levels of vessels continuing to increase their will get to a limit whereby the distribution of birds would avoid the navigation channels. Common scoter already exhibited this behaviour when the SPA was designated and therefore it would be considered part of the baseline distribution. Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during all phases will not prevent the distribution of the qualifying feature from being restored. Some other plans and projects have adopted an EMP, similar to Mona Offshore Wind Project which minimises the disturbance. Following of set routes and set times in co-ordination with other plans and projects to the offshore wind farms could reduce the frequency, duration and intensity of disturbance.	
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			There is no effect of airborne sound, underwater sound, and presence of vessels on the supporting habitats (and food availability). Therefore, disturbance and displacement from airborne sound and presence of vessels and infrastructure during the operations and maintenance phase will not prevent the extent and distribution, structure and function or the supporting processes of the habitats of the qualifying features from being maintained or restored.	
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(a) If the right hand column is 'NO' for all rows	The project, when considered in combination with other plans and projects, is either not likely to have a significant effect on, or will not adversely affect the integrity of any Natura 2000 site.
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6. Conclusion

HRA is not required because the whole of the project is directly connected with or necessary to the management of one or more Natura 2000/Ramsar sites, for the purposes of conserving the habitats or species for which the site(s) is/are designated, <u>and</u> the project is not likely to have a significant effect on any other Natura 2000/Ramsar sites. (As documented in section 2.1 and 2.2 of this form)	
HRA is not required because there is no conceivable impact pathway to any Natura 2000/Ramsar site (As documented in section 2.3 of this form)	
This project is a renewal of a current permission which complies with NRW agreed criteria for ruling out significant effects of a renewal without conducting a project-specific LSE test. Therefore it is considered not likely to have a significant effect on any Natura 2000/Ramsar sites, either alone or in-combination with other plans and projects. (As documented in section 3.1 of this form)	
The project has been screened for likelihood of significant effects and, taking account of the advice received from protected sites advisors, is considered not likely to have a significant effect on any Natura 2000/Ramsar site (As documented in section 3.2 of this form, or section 5 if applicable)	
In light of the conclusions of an appropriate assessment, and taking account of the advice received from protected sites advisors, it has been established that the project will not adversely affect the integrity of any Natura 2000/Ramsar site, taking into account any conditions or restrictions as applicable, either alone or in-combination with other plans and projects. (As documented in section 4 of this form, and section 5 if applicable)	X
In light of the conclusions of the appropriate assessment, it has <u>not</u> been ascertained that the project will not adversely affect the integrity of any Natura 2000/Ramsar site, as documented in section 4 of this form, and section 5 is applicable. Approval for the project <u>cannot</u> be given unless either: the project specification, and/or the terms under which it might be approved, are modified so as to remove the risk of adverse effects, and a revised HRA report is prepared, or	

the project satisfies the requirements of Article 6(4) of the Habitats Directive, an Article 6(4) Statement of Case is prepared (OGN 200 Form 3) and submitted for consideration by the appropriate authority, normally Welsh Ministers	
Name: Peter Morrison Position: Lead Specialist Officer (Marine Licensing) Date: 28 July 2025	

7. Consultation with protected sites advisor(s) and how sections 2, 3, 4 and 5 of this HRA report (as applicable) take into account that advice.

Relevant section of the HRA report	Date(s) of correspondence* and any meeting(s) with protected sites advisor(s)	Description of how the comments from protected sites advisors have been taken into account
4	4 March 2025 – NRW A representation	<u>Marine Ornithology</u> Section 4.1 Appropriate Assessment has been updated for the red throated diver, common Scoter and the Waterbird assemblage of the Liverpool Bay SPA to make clear that the assessment of disturbance includes preparation activities including, Unexploded Ordnance (UXO) clearance and cable laying activities including seabed clearance. Section 4.2 has also been updated relating to the features above to highlight the applicants commitment to the use of low order unexploded ordnance clearance only under the licence. With a separate Marine licence application being required should high order clearance be required. <u>Marine Mammals</u> Section 4.1 has been updated for marine mammal features referencing NRW A disagreement with the assessment methodology used within the ES associated with impact resulting from vessel movement. However noting despite this NRW A agree with the conclusion of the assessment. <u>Physical Processes</u> Section 4.2 additional text has been added to the mitigation required for reef and sandbank features relating to changes in physical processes, specifically in relation to the commitment that no more than 5% reduction in water depths would occur at any point along the Mona Offshore Cable Corridor without written approval. Additional text has been added to clarify that NRW A would expect alternative positions and may require further physical assessment to take place should approval be sought. <u>Section 4.2</u> Following advice received from NRW A text detailing that certain mitigation “can” be secured through the Marine Licence has been amended to “will” .
4	3 March 2025 – JNCC representation	Amendments made to Marine Ornithology in line with that detailed above.

3and 4	7 March 2026 – DAERA representation	Inclusion of East Coast Marine pSPA within the screening and appropriate assessment.

Appendix 1 –SNCB advice

NRW Advisory Representation

JNCC Representation

DAERA Representation

Appendix 2 - NRW A HRA Form 2

Appropriate nature conservation body (ANCB) response to an internal HRA consultation

This form should be completed by the team or individual providing the ANCB advice to the competent authority team

TO:

Peter Morrison (Lead Specialist Officer, Marine Licensing)

FROM:

Nia Phillips (Senior Marine Advisor: OREP) and Emma Lowe (Senior Marine Advisor):

Marine Area Advice and Management Team

SUBJECT:

ORML2429T: Habitats Regulations Assessment of the Transmission Assets for the Mona Offshore Windfarm in the East Irish Sea

Thank you for consulting Marine Area Advice and Management Team on the above. Our comments are as follows:

1. Marine Ornithology

Whilst we largely agree with the conclusions of the draft HRA for the features of the Liverpool Bay SPA, we do note that the draft HRA does not currently consider the impact of UXO clearance and other pre-commencement activities as a pathway to disturbance impacts of Liverpool Bay SPA features, particularly RTD, common scoter and the waterbird assemblage features. This was a key consideration and point of discussion during the DCO Examination (as set out above regarding applicability of mitigation measures). Therefore, we advise that the draft HRA is amended accordingly to include consideration of this impact pathway.

We note that all the mitigation measures the Applicant has committed to that are relevant to minimising impacts to the RTD, common scoter and waterbird assemblage qualifying features of the Liverpool Bay SPA have been included in Section 4.2 of the draft HRA regarding the assessment taking into account additional mitigating measures, conditions or restrictions in relation to the relevant features of the SPA (pages 136-137 of draft HRA), namely:

- An Offshore EMP that will include measures to minimise disturbance to rafting birds from transiting vessels, as set out in document J17: Measures to Minimise Disturbance to Marine Mammals and Rafting Birds F03

- The Offshore EMP will include a timing restriction of no offshore export cable installation or low order UXO clearance activities during the period 1 November to 31 March within the Liverpool Bay SPA.
- The Offshore EMP will include an MPCP which will provide planning for accidental spills, address all potential contaminant releases and include key emergency details.

We note that within the draft HRA for each of these mitigation measures the text states: 'The Offshore EMP can be secured within the marine licence.' Given that we consider that these measures need to be appropriately secured and conditioned within the deemed ML and standalone ML in order for an AEoSI to be ruled out for the RTD, common scoter and waterbird assemblage features of the Liverpool Bay SPA, we advise that the wording in the draft HRA is amended to state that: 'The Offshore EMP should be secured within the Marine Licence.'

2. Marine Mammals

With regard to marine mammals, NRW (A) confirm that we agree with the screening assessment within the HRA, and, with the exception of the requested amendment below, with the Appropriate Assessment. We agree with the conclusions and that the mitigation measures are appropriate in order to reach conclusions of No AEoSI on sites / features.

As per our comments detailed within our full response, the ES requires amendment to reflect the agreed clarification regarding disturbance from vessel traffic, and as the MLT Form 1 HRA defers detailed assessment to the Applicant's documentation (E1.2 HRA Stage 2 ISAA Part 2 Special Areas of Conservation F02, which in turn references F2.4 Volume 2, Chapter 4 marine mammals F02), this also affects MLT's HRA. However as noted, we can agree with the overall conclusions regarding magnitude for vessel traffic.

Further detail can be found within the Marine Mammals section (Section 2) of our full consultation response submitted to NRW Marine Licensing.

3. Fish and Shellfish

NRW (A) agrees with the sites and features scoped into MLT's draft HRA and with the conclusions reached of no AEoSI to the Welsh diadromous fish sites within the scope of the development. Whilst it is unclear why piling noise and UXO is amalgamated for fish receptors, but included as separate impacts for marine mammals, this point does not, however, alter our agreement with the documents' conclusions and assessment.

4. Physical Processes

Overall we agree with the conclusions of the HRA from a Physical Processes perspective. We do however advise the following amendments: We note that in section 4.2 of MLT's HRA, the mitigation measures detailed for impacts to reef and sandbank features

related to changes in physical processes are “No more than 5% reduction in water depth (referenced to Chart Datum) will occur at any point along the Mona Offshore Cable Corridor unless otherwise approved. This measure can be secured within the marine licence.”

We advise that this should be amended to include the provision that in the event that the 5% restriction in water depth is exceeded, that the Marine Licencing team consults NRW (A) in writing in agreeing an alternative position, which may require further physical processes assessment. Please refer to the Physical Processes section (Section 4) our full consultation response for further detail.

In addition, we advise that the wording in the draft HRA that states “This measure can be secured within the marine licence” should be changed to “This measure should be secured within the marine licence”, given that we consider that this mitigation measure needs to be appropriately secured and conditioned within the deemed ML and standalone ML.

Provided that the above amendment is carried out, we confirm that we have no further comments and agree with the conclusions of the HRA.

5. Benthic Ecology

With the exception of the comments made in the Physical Processes section above, with respect to requirement for consultation with NRW (A) in agreeing an alternative position in the event that the 5% restriction in water depth is exceeded along the cable corridor, and a slight re-wording of the listed mitigation, NRW (A) agrees with the conclusions of the draft HRA from a benthic ecology perspective

6. Marine Water and Sediment Quality

Overall Comments

NRW (A) agrees with the conclusion that there is no potential for LSE on Annex I habitats of the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC as a result of [1] an increase in SSC (suspended sediment concentration) and sediment deposition; or [2] accidental pollution where the impacts can be mitigated through the implementation of an Offshore EMP and MPCP; during the construction and decommissioning phases and the operational and maintenance phases of the proposed activities.

Screening of designated sites

NRW (A) agrees with the output of the numerical modelling of the sediment plume (and so the Zol on sediment and water quality for the proposed activity) that concludes the proposed activity overlaps with only one SAC (Menai Strait and Conwy Bay/Y Fenai a Bae Conwy) for indirect impacts. We accept the conclusion that beyond the modelled buffer, any increases in SSC and sediment deposition would be within the range expected to be observed within natural background variation levels and so would not cause a likely significant effect on any designated feature of the SAC.

Adverse effect on site integrity –

SSC Adverse effects on qualifying features

The Applicant concluded that seabed preparation and the installation of offshore export cables may cause an increase in SSC (suspended sediment concentration) and sediment deposition during the construction phase of the proposed activities and that the Annex 1 designated features of the Y Fenai a Bae Conwy/ Menai Strait and Conwy Bay SAC are potentially vulnerable to reduced water clarity and smothering.

NRW (A) acknowledge the commitment of the Applicant to the development of an offshore construction method statement (CMS) that will minimise the potential impacts on the designated features by not permitting sandwave clearance within the SAC.

NRW (A) agree with the HRA conclusion that there will be no adverse effect on the qualifying features of the SAC from SSC or sedimentation during the construction phase of the project if the proposed mitigation to be developed for the CMS is adhered to.

NRW (A) agrees with the HRA conclusion that the impacts of activities related to the operations and maintenance phases of the project are likely to be substantially lower than during the construction phase. As such we agree with the conclusion of no adverse effect on the qualifying features of the SAC from SSC or sedimentation during this phase of the proposed activity.

Recommendation:

We advise NRW MLT to include mitigation of adverse effects of SSC through the development of and adherence to an offshore construction method statement (CMS), which includes a Cable specification and installation plan (CSIP), as a licence condition to the proposed activity.

In-combination effects

NRW (A) agrees with the HRA conclusion that there will be no adverse effects on the qualifying features linked to the conservation objectives of the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC from an in-combination increased SSC and associated sediment deposition during the construction and decommissioning phases of the Mona Offshore Wind Project (E1.2 para 1.5.4.16) or the operations and maintenance phases (E1.2 para 1.5.4.40).

The HRA concluded that the effects associated with sediment deposition will be limited in spatial extent and of short duration. The potential for in-combination effects is limited as the majority of other activities in the region are occurring outside of the SAC and their impacts are unlikely to overlap with the sediment plume generated by activity from the Mona Offshore Wind proposed activity.

Adverse effect on site integrity - accidental pollution

Adverse effects on qualifying features

NRW (A) agrees with the Applicant's conclusion that although without mitigation there is potential for LSE on Annex I habitats of the Menai Strait and Conwy Bay/Y Fenai a Bae Conwy SAC from accidental pollution during the construction and decommissioning phases and the operations and maintenance phases of the proposed activities, these impacts can be mitigated through the implementation of an Offshore EMP and MPCP.

NRW (A) agrees that the source of this pressure is likely to occur from the vessels operating in the transmission cable corridor

NRW (A) agrees that should an event occur, effects will be temporary, reversible and limited in spatial extent for both reefs and sandbanks.

Recommendation

We advise NRW MLT to include mitigation through the development of and adherence to an offshore EMP and MPCP as a licence condition to the proposed activity. The plans should set out industry good practice and OSPAR (Oslo-Paris), IMO (International Maritime Organization) and MARPOL (International Convention for the Prevention of Pollution from Ships) guidelines for preventing pollution at sea.

In-combination effects

NRW (A) agrees that based on the assessment, there will be no in-combination effects from other plans or projects where no LSE alone has been concluded.

Adverse effect on site integrity – remobilisation of sediment bound contaminants

Adverse effects on qualifying features

Disturbance/remobilisation of sediment-bound contaminants may result in harmful and adverse effects on benthic communities. The highly localised nature of the proposed activities combined with the low levels of contaminants found in the site-specific sediment samples are unlikely to cause significant effect. We have previously advised that this impact pathway can be screened out for assessment (E1.4 HRA stage 1 screening report).

We have no concerns that this impact pathway has not been included for assessment in the HRA.

In-combination effects

The in-combination effects of the remobilisation of sediment bound contaminants from other plans or projects with the proposed activities do not need to be assessed for its potential for LSE.