UK Government

Marine Conservation Zone Assessment for an Application Under the Planning Act 2008

North Falls Offshore Wind Farm

The Marine and Coastal Access Act 2009

May 2026

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List of abbreviations

Term	Abbreviation
Advice on Operations	AoO
Blackwater, Crouch, Roach and Colne Estuaries	BCRC Estuaries
Deemed Marine Licence	DML
Development Consent Order	DCO
Environmental Statement	ES
Examining Authority	ExA
Joint Nature Conservation Committee	JNCC
Kentish Knock East	KKE
Marine and Coastal Access Act 2009	MCAA 2009
Marine Conservation Zone	MCZ
Measures of Equivalent Environmental Benefit	MEEB
Natural England	NE
Natural Resources Wales	NRW
Offshore Converter Platform	OCP
Offshore Substation Platforms	OPS
Offshore Wind Farm	OWF
Planning Inspectorate	PINS
Preliminary Environmental Information Report	PEIR
risk of hindering an MCZ's conservation objectives	RHCO
RWE Renewables UK Swindon Limited	RWE
SSE Renewables Offshore Windfarm Holdings Limited	SSER
suspended sediment concentrations	SSC
Zone of Influence	ZoI

1. Project Details

1.1 Introduction

This is a record of the Marine Conservation Zone ("MCZ") Assessment that the Secretary of State for Energy Security and Net Zero ("the Secretary of State") has undertaken under s126 of the Marine and Coastal Access Act 2009 ("MCAA 2009") in respect of the Development Consent Order ("DCO") and Deemed Marine Licences ("DMLs") for the North Falls Offshore Wind Farm and its associated infrastructure. The Examining Authority ("ExA") defines this as the "Proposed Development", within this MCZ Assessment it is defined as the "Project". The Project application was submitted by SSE Renewables Offshore Windfarm Holdings Limited ("SSER") and RWE Renewables UK Swindon Limited ("RWE"), trading as North Falls Offshore Wind Farm Ltd (the "Applicant"). For the purposes of s126 of the MCAA, the Secretary of State is the public authority.

This report is a record of the Secretary of State's assessment of whether the Project has the potential to affect (other than insignificantly) the features and conservation objectives of an MCZ. The MCZ Assessment undertaken by the Secretary of State involves a Screening Stage which considers all MCZs where there is a potential for impact, using Natural England's ("NE") Advice on Operations ("AoO") to identify the potential pathways to features. Where an effect greater than insignificant is identified the Secretary of State takes those features and impact pathways through to a Stage 1 Assessment; this is where effects are considered in more detail regarding the potential to hinder the conservation objectives and where additional mitigation can be suggested by the Secretary of State. If the impacts cannot be mitigated and effects remain significant after Stage 1, a Stage 2 assessment is undertaken, considering whether the conditions in Sections 126(7) of the MCAA can be met; determining if there are other means of proceeding, the public benefit from the project and the provision of Measures of Equivalent Environmental Benefit ("MEEB").

For this Project a 30km search radius was used to identify three MCZs for inclusion in the assessment, Blackwater: Crouch, Roach and Colne Estuaries ("BCRC Estuaries") MCZ; Kentish Knock East ("KKE") MCZ; and Orford Inshore MCZ.

1.2 Legislation

Marine Conservation Zones are designated under Part 5, Chapter 1 of the MCAA 2009 through designation orders made under section 116 of the Act. These designation orders establish the protected features of each site and set the conservation objectives that apply. This statutory framework provides for the protection of nationally important marine habitats, species, and geological and geomorphological features.

Public authorities must comply with the duties set out in sections 125 to 128 of the Act when exercising any function that may affect an MCZ.

Under section 125, a public authority must exercise its functions in the manner it considers will best further, or where that is not possible, least hinder the achievement of an MCZ's conservation objectives for an MCZ. Where the authority believes that a proposed activity may significantly hinder those objectives, it must notify the relevant statutory nature conservation body.

Under section 126, when determining applications for authorisation (including DMLs granted through a DCO), a public authority must not grant authorisation unless it is satisfied that there is no significant risk of hindering an MCZ's conservation objectives ("RHCO") or, where such a risk exists, that the statutory tests relating to alternatives, public benefit, and measures of equivalent environmental benefit have been met.

Section 127 enables statutory nature conservation bodies: NE; Natural Resources Wales ("NRW"); and the Joint Nature Conservation Committee ("JNCC"), to provide advice and guidance to public authorities on activities capable of affecting protected features and on measures required to maintain or restore them. Public authorities are required to have regard to such advice when exercising relevant functions.

Section 128 provides a mechanism for accountability. Where a statutory nature conservation body considers that a public authority has failed to comply with its duties under sections 125 or 126, or has not acted in accordance with advice or guidance provided under section 127, it may request a written explanation which the authority must provide.

Together, these provisions require the Secretary of State, as the public authority determining the DCO and associated DMLs, to consider whether the Project is capable of affecting MCZ features, to take relevant statutory conservation advice in to account, and to undertake an MCZ Assessment to determine whether the Project may hinder the achievement of the conservation objectives for any relevant MCZ. The Secretary of State has undertaken this MCZ Assessment in accordance with sections 125 to 128 of the MCAA 2009.

1.3 Background

The Project was accepted by the Planning Inspectorate ("PINS") on 22 August 2024, and five Inspectors were appointed as the ExA for the application. The Examination of the Project application began on 28 January 2025 and concluded on 28 July 2025. The ExA submitted its report of the Examination, including its recommendation ("the ExA's Report"), to the Secretary of State on 28 October 2025. Numbered references to the ExA's Report are presented in the format "[ER *.*.*]". Other documents which were submitted during Examination are referenced using the reference numbers published in

PINS' Examination Library[1]. Post Examination submissions, in responses to information requests for the Secretary of State are also referenced.

The Project is an extension to the Greater Gabbard Offshore Wind Farm, located off the coast of Suffolk, England. Further details of the Project can be found in Table 1 below:

Table 1: Proposed plan or project details

Title of project	North Falls Offshore Wind Farm ("The Project")
Applicant name	North Falls Offshore Wind Farm Ltd.
DCO Application	EN010119
Location of works	See Annex 1 for a map of the Offshore Project Area, located of the East Anglian Coast, in relation to MCZ designations.
Description of proposed project	The Project is an Offshore Wind Farm ("OWF") that would involve the construction and operation of up to 57 wind turbine generators accompanied by a network of subsea cables linking the turbines to up to two Offshore Substation Platforms ("OPSs") and one Offshore Converter Platform ("OCP"). The Project would also include the construction of a new onshore substation and transmission cables to connect to the offshore components. A full description of the Project is provided in Chapter 5 of the Applicant's Environmental Statement ("ES") [APP-019].
Relevant Documents[2]	Marine Conservation Zone MCZ Appendix 1 Screening [APP-238] Marine Conservation Zone Assessment Report [REP7-019] Hydrodynamic and Dispersion Modelling Report [REP7-041] Natural England's Risk and Issues Log [REP8-099] Offshore In-Principle Monitoring Plan [REP8-009]

1.4 Marine Conservation Zones Considered

In accordance with s126(1)(b) MCAA 2009 the Secretary of State has undertaken an assessment of the impacts of the Project on MCZs where it has been identified that the Project is capable of affecting (other than insignificantly):

1. the protected features of an MCZ; and
2. any ecological or geomorphological process on which the conservation of any protected feature of an MCZ is (wholly or in part) dependent.

Details of the MCZs identified to be included in the MCZ screening can be found in Table 2 below. The impact pathways and potentially impacted features have been identified alongside the Zone of Influence ("ZoI") of the Project and by using NE's conservation advice packages for these sites. These packages provide details on site information,

[1] EN010119-000542-6. Examination-Library-North-Falls-PUBLISH.pdf
[2] Documents can be found in the examination library: EN010119-000542-6. Examination-Library-North-Falls-PUBLISH.pdf

supplementary advice on designated features and AoO. The AoO is what is used predominantly to identify pathways while the supplementary advice provides information on the features, targets and conservation objectives of the site.

Table 2: Details of MCZs identified

Name of MCZ site: Kentish Knock East MCZ **Location (distance):** Adjacent to the Project array area at the South-West point (see Annex 1) and 6.2km from the offshore export cable corridor.
Activities and the pathways likely to impact the MCZ: Construction/decommissioning activities within the offshore export cable corridor and array area as well as maintenance activities and the presence of scour and cable protection in the operational phase. The potential impact pathways are listed below and are all considered indirect as no activities would occur directly in the MCZ: • Increased suspended sediment concentrations; • Effects on bedload sediment transport; and • Smothering and Siltation.
Conservation Advice package used at the time of writing: https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UKMCZ0080&SiteName=Kentish&SiteNameDisplay=Kentish%20Knock%20East%20MCZ&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&HasCA=1&NumMarineSeasonality=0&SiteNameDisplay=Kentish%20Knock%20East%20MCZ
Name of MCZ site: Blackwater, Crouch, Roach and Colne Estuaries MCZ **Location (distance/direction):** 49km West of the Project array area and 5.9km South-West of the offshore export cable corridor (around landfall).
Activities and the pathways likely to impact the MCZ: Construction/decommissioning activities within the offshore export cable corridor as well as maintenance activities and the presence of cable protection in the operational phase. The potential impact pathways are listed below and are all considered indirect, as no activities would occur directly in the MCZ: • Increased suspended sediment concentrations; • Effects on bedload sediment transport; and • Smothering and Siltation.
Conservation Advice package used at the time of writing: https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UKMCZ0003&SiteName=blackwater&SiteNameDisplay=Blackwater,%20Crouch,%20Roach%20and%20Colne%20Estuaries%20MCZ&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&HasCA=1&NumMarineSeasonality=0&SiteNameDisplay=Blackwater,%20Crouch,%20Roach%20and%20Colne%20Estuaries%20MCZ
Name of MCZ site: Orford Inshore MCZ **Location (distance/direction):** 29km North of the Project array area and 23.8km North of the offshore export cable corridor.

Activities and the pathways likely to impact the MCZ: Construction/decommissioning/maintenance activities within the offshore export cable corridor and Project array area. The potential impact pathways are listed below and are all considered indirect, as no activities occur directly in the MCZ: • Increased suspended sediment concentrations; • Effects on bedload sediment transport; and • Smothering and Siltation.
Conservation Advice package used at the time of writing: https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UKMCZ0081&SiteName=orford&SiteNameDisplay=Orford%20Inshore%20MCZ&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&HasCA=1&NumMarineSeasonality=0&SiteNameDisplay=Orford%20Inshore%20MCZ

2. MCZ Screening

2.1 Screening Considerations

In carrying out the MCZ Screening Assessment, NE Conservation Advice Packages (as provided in Table 2) have been considered and the following principles applied:

- Where available, the AoO matrix to determine pressures associated with the proposed activities that may potentially harm the qualifying habitat features and/or species of the sites has been used.
- Features are assessed against the proximity to the works and relevant seasonality considerations. If no pathway is identified between the Project (source) and feature (receptor) then no further consideration is given to those features in the MCZ Assessment.
- Low risk pressures, unless there is evidence or site-specific factors that increase the risk or there is uncertainty on the level of pressure on a receptor, are not taken through forward into the Screening Assessment.
- Features deemed sensitive to pressures (medium and high risk) for both direct and indirect pathways, as appropriate, are taken forward into the Screening Assessment unless screened out for proximity or seasonality.
- The individual pressure/feature interactions categorised as 'Not Sensitive' at the benchmark are not taken forward into the Screening Assessment unless a specific case related pressure is identified such that the impacts to these features will reach above the benchmarks specified for these pressure/ feature interactions.
- For pressure/ feature interactions categorised as 'Not Relevant' these are not taken forward into the Screening Assessment.
- Pressure/ feature interactions categorised as either 'Insufficient Evidence' or 'Not Assessed' are taken forward into the Screening assessment in accordance with the precautionary principle.
- It is noted that the Applicant has considered additional pressures within its MCZ Assessment which the Secretary of State has chosen not to take through to the Screening stage of the assessment due to the pressure either being low risk or the feature not being sensitive.

The AoO category of marine activities used includes:

- Electricity from Renewable Energy-Offshore wind: during construction;
- Electricity from Renewable Energy-Offshore wind: during operation and maintenance; and
- Electricity from Renewable Energy-Offshore wind: during decommissioning.

2.2 MCZ Screening Assessment

The Secretary of State's Screening Assessment is provided in Table 3 below:

Table 3: Screening table for Kentish Knock East MCZ, Blackwater, Crouch, Roach and Colne Estuaries MCZ and Orford Inshore MCZ

Feature or supporting habitat	Pressures	Capable of affecting (other than insignificantly) the MCZ[3]?	Justification
KKE MCZ			
Subtidal Coarse Sediment Subtidal Mixed Sediment Subtidal Sand	Abrasion/disturbance of the substrate on the surface of the seabed Habitat Structure changes-removal of substratum (extraction) Penetration and/or disturbance of the substratum below the surface of the seabed, including abrasion. Water flow (tidal current) changes, including sediment transport considerations	Yes, for: Water flow (tidal current) changes, including sediment transport considerations	**Abrasion** - There will be no direct disturbance of the sediment or the surface of the seabed within the MCZ as the works will take place, at closest, adjacent to the MCZ rather than within. **Habitat changes due to removal of substratum** - There will be no works carried out within the MCZ and as such there will be no removal of sediment from the site. **Penetration** - There will be no works carried out within the MCZ and therefore there are no pathways for the Project to cause direct disturbance to the substrates below the seabed surface. **Water flow/ sediment transportation** - Changes to bedload sediment transport may occur (and is relevant to all the KKE MCZ features) as a result of seabed preparation and installation of cable/scour protection as well as their physical presence in operation, with the array area adjacent to the site.

[3] In terms of either (i) the protected features of the MCZ; or (ii) any ecological or geomorphological process on which the conservation of any protected feature of the MCZ is (wholly or in part) dependant

			Conclusion Based on the evidence before him, the Secretary of State considers there is potential that the water flow/sediment transportation pressure could impact the features and the conservation objectives of the KKE MCZ and therefore considers further assessment is required. This pressure and all features will be taken forward to stage 1 of this MCZ Assessment.
Subtidal Coarse Sediment Subtidal Mixed Sediment Subtidal Sand	Physical change (to another seabed type) Physical change (to another sediment type)	No	Physical changes to seabed type or sediment type will not occur as a result of the Project due to works not taking place within the MCZ directly. While there is likely to be changes to the volume of suspended solids sediment/sediment transportation that could impact these features, it is considered unlikely to change the sediment type or seabed type from its current state. This is evidenced by the Applicant's assessment of the dominant sediment type recorded in the array area during the site-specific benthic surveys being medium to coarse sand (16-83% in all samples) with only 15% of all samples containing mud. Given the temporary nature of construction works and the location of works outside the MCZ it is concluded there would not be any detectable physical change to the seabed or sediment type. **Conclusion** Based on the evidence before him, the Secretary of State does not consider these pressures to impact the protected features of the KKE MCZ or any of its conservation objectives. No further assessment of these pressures for this site is required.
Subtidal Coarse Sediment	Smothering and siltation rate changes (light and heavy)	Yes	During the construction of the Project there will be activities that will result in sediment disturbance and increased suspended sediment concentration ("SSC") with the potential for

Subtidal Mixed Sediment Subtidal Sand	Changes in suspended solids (water clarity)		subsequent smothering of the features of the MCZ as a result of sediment deposition. Activities include seabed preparation, foundation installation, cable installation and vessel jack-up and anchoring. These activities will increase SSC which could be transported into the MCZ due to the proximity of the site to Project array. The Applicant has carried out modelling that shows that seabed preparation works for foundations would not exceed 5cm and are considered indiscernible, however the other activities yield a higher depth of deposition. The initial deposition following array cable installation, as reported by the Applicant, would occur along the edge of the MCZ adjacent to the Project array area with varying depths of 5-60cm. **Conclusion** Based on the evidence before him, the Secretary of State considers there is potential that these pressures could impact the features and the conservation objectives of the KKE MCZ and therefore considers further assessment to be required. These pressure and all features will be taken forward to stage 1 of this MCZ Assessment.
BCRC Estuaries MCZ			
Native oyster *Ostrea edulis* beds Native oyster Ostrea edulis Intertidal mix sediment	Abrasion/disturbance of the substrate on the surface of the seabed Habitat Structure changes-removal of substratum (extraction) Penetration and/or disturbance of the	No	**Abrasion** - There will be no direct disturbance of the sediment or the surface of the seabed within the BCRC Estuaries MCZ MCZ as the works will take place 5.9km away from the MCZ at the closest part of the offshore export cable corridor. **Habitat changes due to removal of substratum** - There will be no works carried out within the MCZ and as such there will be no removal of sediment.

Clacton Cliffs and Foreshore	substratum below the surface of the seabed, including abrasion. Physical change (to another seabed type) Physical change (to another sediment type) Water flow (tidal current) changes, including sediment transport considerations		**Penetration** - There will be no works carried out within the MCZ and therefore there are no pathways for the Project to cause direct disturbance to the substrates below the seabed surface. **Physical changes** - Due to the distance from the MCZ, construction within the array area and the presence of infrastructure in operation would not impact the BCRC Estuaries MCZ. The closest section of the offshore export cable corridor is 5.9km away, and there is not considered a pathway from the seabed preparation and cable installation works, or operational presence of infrastructure, that would lead to a significant physical change to the MCZ features. **Water flow (tidal current) changes** - Due to the distance from the MCZ, construction within the array area and offshore export cable corridor or the presence of infrastructure during operation would not constitute a significant impact on the water flow within the BCRC Estuaries MCZ. **Conclusion** Based on the evidence before him, the Secretary of State does not consider these pressures to impact the protected features of the BCRC Estuaries MCZ or any of its conservation objectives. No further assessment of these pressures for the BCRC Estuaries MCZ is required.
Native oyster *Ostrea edulis* beds Native oyster Ostrea edulis	Smothering and siltation rate changes (light and heavy) Changes in suspended solids (water clarity)	Yes	Works within the cable corridor are close enough (5.9km north-east of the MCZ at the closest point) that there are potential impacts on the Native Oyster and the Native Oyster beds features through increased SSC/smothering. Native Oysters are sensitive to changes in SSC so there is the potential for an impact from this pressure/feature combination. In addition, a

			negative impact would not support the “restore” objective of the site. **Conclusion** Based on the evidence before him, the Secretary of State considers there is potential that these pressures could impact the features and the conservation objectives of the BCRC Estuaries MCZ and therefore considers further assessment to be required. These pressure and feature combinations will be taken forward to stage 1 of this MCZ Assessment.
Orford Inshore MCZ			
Subtidal Mixed Sediment	Abrasion/disturbance of the substrate on the surface of the seabed Habitat Structure changes-removal of substratum (extraction) Penetration and/or disturbance of the substratum below the surface of the seabed, including abrasion. Physical change (to another seabed type) Physical change (to another sediment type)	No	The Orford Inshore MCZ is outside the ZoI identified by the Applicant (15km) as is 23.8km away from the offshore export cable corridor and 29km away from the array area at the closest points. There are no works within the MCZ, thus direct effects, and it is anticipated that all indirect effect would likely return to background levels immediately outside the excursion of one spring tidal ellipse (approximately 15km). **Conclusion** Based on the evidence before him, the Secretary of State does not consider these pressures to impact the protected features of the Orford Inshore MCZ or any of its conservation objectives. No further assessment of these pressures for the Orford Inshore MCZ is required.

	Smothering and siltation rate changes (light) Water flow (tidal current) changes, including sediment transport considerations		

2.3 MCZ Screening Conclusion

The Secretary of State considers that the Project has the potential to hinder the conservation objectives of the below (Table 4) MCZs, alone or in-combination[4]. This is primarily due to seabed preparation and cable installation leading to increased SSC which can lead to sediment deposition as well as the presence of infrastructure (scour/cable protection). No Interested Party ("IP") raised any concerns during the Examination on the MCZs that had been identified by the Applicant or conclusions of the screening Assessment undertaken by the Applicant.

Table 4: Feature/pressure interactions from Screening to be taken to Stage 1

MCZ Name	Feature(s)	Pressure(s)
KKE MCZ	Subtidal Coarse Sediment Subtidal Mixed Sediment Subtidal Sand	Smothering and siltation rate changes (light and heavy) Changes in suspended solids (water clarity) Water flow (tidal current) changes, including sediment transport considerations
BCRC Estuaries MCZ	Native oyster *Ostrea edulis* beds Native oyster Ostrea edulis	Smothering and siltation rate changes (light and heavy) Changes in suspended solids (water clarity)

[4] In-combination projects are detailed in Section 3.2

3. Stage 1 MCZ Assessment

3.1 Project Alone Assessment

The Secretary of State's Stage 1 Assessment is provided below in Table 5 for the KKE and BCRC Estuaries MCZ. The Applicant undertook a Stage 1 Assessment for the KKE MCZ and BCRC Estuaries MCZ in the MCZ Assessment report [REP7-019].

Table 5: Project Alone Assessment

Qualifying feature or species[5]	Pressure	Assessment Conclusion	Justification
KKE MCZ			
Subtidal Coarse Sediment Subtidal Mixed Sediment Subtidal Sand	Changes in suspended solids (water clarity)	No RHCO	The Applicant considers that all pathways to increased SSC would be temporary during construction, maintenance and decommissioning phases of the Project. It is noted that the Applicant's dispersion modelling (see Hydrodynamic and Sediment Dispersion Modelling Report [REP7-041]) showed that the worst-case scenario would impact the eastern side of the KKE MCZ (adjacent to the Project array). Seabed preparation for the foundations would result in a maximum near seabed SSC of 800mg/l, for foundations and array cables combined would be 16,000mg/l and for offshore export cables 290mg/l. However, for all scenarios it was stated that the plume would only exceed 15mg/l for around 1.5hrs post completion of works before returning to ambient concentrations (see Plates 8-3 and 8-4 in [REP7-019]). These worst-case scenarios include where a Mass Flow Excavator ("MFE") methodology is used, which involves blasting sediment with seawater. The Applicant highlighted that there are alternative methods that could be used to reduce SSC. However, the assessment was based on the MFE as the worst-case scenario as the exact methodology has not yet been agreed at this stage and would not be finalised until post consent. The Applicant [REP7-019] goes on further to state that given the short-term temporary impact over a small area of the KKE MCZ, the benchmark set out by the Marine Evidence Sensitivity Assessment ("MarESA") would not be met. MarESA defines the changes in suspended solids as "a change in one frank on the Water

[5] Including sub-features and supporting habitats

			Framework Directive (WFD") scale e.g. from clear to intermediate for one year". Given this, the Applicant concluded that at no stage of the Project would it reach this benchmark of changes to increased SSC and there would be a negligible impact magnitude on the physical attributes and protected features of the KKE MCZ. **Conclusion** Based on the information before him and comments from NE [REP8-099-C5] the Secretary of State is satisfied that the Project alone will not negatively impact the protected features of the KKE MCZ or it's conservation objectives though changes in suspended solids, and no additional mitigation has been identified by the Secretary of State, noting that deposition is considered below.
Subtidal Coarse Sediment Subtidal Mixed Sediment Subtidal Sand	Smothering and siltation rate changes (light and heavy) Water flow (tidal current) changes, including sediment transport considerations	No RHCO	**Smothering and siltation** The Applicant carried out modelling [REP7-041] to assess the worst-case scenario for each activity type as well as for overlapping effects of multiple construction activities taking place concurrently. The Applicant considered that sediment deposition within the MCZ as a result of seabed preparation for foundations, drilling and disposal of dredged materials will not exceed 5cm and therefore be indiscernible from natural fluctuations. Since the seabed preparation for the foundations were modelled as indiscernible, the overlapping impacts are the same as the predicted array cable levelling modelling. For the array cable levelling, the initial deposition was reported by the Applicant to be 5-60cm, over what the Applicant considered a small area of the MCZ (see Plate 8-6 of [REP7-019]). The Applicant considered this will likely be re-distributed by waves and tidal currents and therefore will not be considered to have a negative impact on the site or its conservation objectives. In addition to this, it was noted by the Applicant that the sediment type that will be deposited within the MCZ would be comparable sediment types of those protected features and overall, a relatively small proportion of the MCZ would be impacted. Overall, the Applicant considered there to be a negligible impact magnitude on the features of the KKE MCZ features from smothering.

			As well as responding to matters raised by NE [REP7-087], the Applicant provided a without prejudice Outline Benthic Compensation/MEEB Implementation and Monitoring Plan [REP8-038] but maintained the position that there would not be an impact on the features or conservation objectives of the KKE MCZ. At the close of Examination, NE had stated in its Risks and Issues Log [REP8-099] that it agreed with the Applicant's conclusions that the conservation objectives would not be hindered. However, in NE's response to the Secretary of State's request for further information [C1-008] NE stated that the deposition ranges did not align with those secured in named plans. NE noted that the deposition range for <60cm covered over a 1.5km radius of the MCZ. NE commented that whilst the depth and distance could be seen as unrealistic, it is the worst-case scenario that has been proposed and therefore while the risk to the conservation objectives and impacts to the features of the MCZ from smothering are considered low, it cannot be excluded. **Water flow/Sediment transportation** The Applicant has modelled the sandwaves within the array area which indicates there is some bedload sediment transport with a net direction of south-west to north-east [APP-022]. The Applicant considers that seabed morphology and bedload sediment transport would not be affected far outside the direct footprint of the construction works and would likely be temporary. The Applicant has committed to, where practicable, sediment dredged during seabed preparation will be deposited as close to the location of origin. Keeping the dredged sand within the sand bank system would enable the sand to be naturally transported back into the previously cleared sandwave sites to re-establish the sand banks. It is therefore considered by the Applicant that the pattern of sediment transportation would not be affected significantly. The Applicant also noted that during the operational phase of the Project that changes to tidal current speeds would be less than 3% of the baseline current speeds and localised around the foundations with negligible changes along the eastern edge of the KKE MCZ [RE7-019]. **Mitigation and Monitoring**

			The Applicant proposed mitigation to further reduce the impact of the Project on the MCZ features which are detailed within the "Sediment Disposal Plan" [REP8-045]. This plan details that sediment disposal will be at a distance of 1km or greater from the MCZ site to ensure natural sedimentary processes are unimpacted. The Applicant has also committed to a 50m buffer between the MCZ boundary and the installation of the offshore wind turbine foundations and interconnector cables (and any associated scour and cable protection) and proposed a condition in response to the Secretary of States further information requests which this could also be secured in the DCO [C1-014]. This has been applied to the Order within Schedule 8. In addition to the provided mitigation, the Applicant has also committed to monitoring within the Offshore In-Principle Monitoring Plan [C3-013], which is reflected in Schedule 12 of the Order. Following updates in response to the Secretary of State's information requests, this includes pre-construction geophysical surveys to inform the baseline and post-construction monitoring (as required) of the MCZ in terms of the marine habitat features, and the benthic organisms associated with them. Monitoring is secured via the finalisation of the Monitoring Plan (in line with the Offshore IPMP) which in turn is secured through the generation DML (Schedule 8). **Conclusion** Based on the information before him, the Applicant's documents and comments from NE during the Examination and in response to his requests for further information, the Secretary of State is satisfied that the Project alone will not negatively impact the protected features of the KKE MCZ or hinder it's conservation objectives though these impact pathway. While NE's final position on this remained that smothering impacts were considered low, but were unable to exclude them, the Secretary of State considers that the Applicant has identified appropriate mitigation to ensure the impacts are reduced as far as practicably possible, while also committing to monitoring to confirm predictions, and is satisfied that there is no significant RHCO.

BCRC Estuaries MCZ			
Native Oyster Native Oyster beds	Smothering and siltation rate changes (light and heavy) Changes in suspended solids (water clarity)	No RHCO	**Changes in suspended solids (water clarity)** The Applicant noted that many activities during the construction, maintenance and decommissioning phases of the Project activities will result in an increased SSC. This impact is considered to be localised to the area of works and given that the nearest section of the Project (a section of export cable corridor) is 5.9km north-east of the MCZ there is not considered by the Applicant to be any lasting or significant effects. The Applicant supported this with modelling for the sandwave clearance and cable trenching activities that showed that SSC south-west of the offshore cable corridor would likely increase by 5-10mg/l within a 4km distance from the works, which would not overlap with the MCZ. However, further modelling showed that depending on the tidal variation, there was the potential for SSC up to 40mg/l 10km south of the cable corridor which would likely impact the MCZ. The Applicant still considered this to be a small impact and predicted it would only take two hours for this to disperse. The Applicant also stated that the 40mg/l SSC was much smaller than the natural level of background level of SSC occurring close to the coast which has been recorded as up to 100mg/l in the area. **Smothering and Siltation rate changes (light and heavy**) The Applicant noted that during the construction, maintenance and decommissioning activities of the Project there is the potential for siltation/smothering to occur. The Applicant considered this potential impact by undertaking modelling of sandwave levelling and cable trenching activities and the effects it will have on the surrounding area. The results showed that within the nearshore area, where the nearest section of this MCZ is located, a deposition of 0.8m of sediment would occur within 500m (outside of the MCZ) of the offshore cable corridor for sandwave clearance with trenching activities only showing a deposition of <5cm within 500m (outside of the MCZ). Due to the location of the MCZ in relation to the offshore export cable corridor (5.9km south-west of the nearest section of cable corridor), the Applicant concluded that there will be no smothering impacts to the native oysters of the MCZ.

			In its Relevant Representation [RR-243] NE confirmed they agreed with the Applicant's conclusions of no impact to the BCRC Estuaries MCZ features or conservation objectives. **Conclusion** Based on the information before him and the comments made by NE [RR-243], the Secretary of State is satisfied that the Project alone will not negatively impact the protected features of the BCRC Estuaries MCZ or it's conservation objectives though this impact pathway. This is due to the distance between the Project and the MCZ being sufficiently far enough away that the effects are considered to be indiscernible for increased SSC and not applicable for smothering, and no additional mitigation has been identified by the Secretary of State.

3.2 In-combination Assessment

The Applicant has used the tier system devised by NE and DEFRA, 2022[6] to identify projects to consider in the in-combination effect assessment as part of the of MCZ Report [REP7-019]. The tiers are:

- Tier 1: built and operational projects;
- Tier 2: projects under construction;
- Tier 3: projects that have been consented (but construction has not yet commenced);
- Tier 4: projects that have an application submitted to the appropriate regulatory body that have not yet been determined;
- Tier 5: projects that have produced a Preliminary Environmental Information Report ("PEIR") and have characterisation data within the public domain;
- Tier 6: projects that the regulatory body are expecting to be submitted for determination (e.g., projects listed under the Planning Inspectorate programme of projects); and
- Tier 7: projects that have been identified in relevant strategic plans or programmes.

The Secretary of State is content with this approach for identifying plans and projects that should be considered in-combination with this Project. The plans and projects identified to be relevant to the in-combination assessment are provided in Table 6 for the KKE MCA and Table 8 for BCRC Estuaries MCZ. The in-combination assessments are provided in Table 7 and 9 respectively for the KKE MCA and BCRC Estuaries MCZ.

Table 6: Named Plans or Projects considered within the Assessment for KKE MCZ[7]

Name of identified plan or project for which there is a pathway to MCZ	Compatible pressures with assessed project
Galloper Offshore Windfarm (GWF)	Changes in suspended solids (water clarity) (maintenance phase only) Smothering and siltation rate changes (light and heavy) (maintenance phase only)

[6] Natural England and DEFRA (2022) Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards; Phase III: Expectations for data analysis and presentation at examination for offshore wind applications.

[7] The Applicant used a conservative range of two spring tidal ellipse excursions (i.e. 30km) from the North Falls offshore Project area to identify plans and projects. Plans and projects prior to 2018 have been considered in the baseline, so only those established since have been considered in this assessment.

Greater Gabbard Offshore Windfarm (GGOW)	Changes in suspended solids (water clarity) (maintenance phase only) Smothering and siltation rate changes (light and heavy) (maintenance phase only)
Five Estuaries Offshore Windfarm	Changes in suspended solids (water clarity) Smothering and siltation rate changes (light and heavy)
Neuconnect (interconnector)	Changes in suspended solids (water clarity) Smothering and siltation rate changes (light and heavy)
South and East Anglia (SEA) Link	Changes in suspended solids (water clarity) Smothering and siltation rate changes (light and heavy)
Thames D aggregates production agreement area 524	Changes in suspended solids (water clarity) Smothering and siltation rate changes (light and heavy)

Table 7: In-combination Assessment for KKE MCZ

Qualifying feature or species[8]	Pressure	Assessment Conclusion	Justification
Subtidal Coarse Sediment Subtidal Mixed Sediment Subtidal Sand	Changes in suspended solids (water clarity) Smothering and siltation rate changes (light and heavy)	No RHCO	The impacts, discussed above in Table 5, for the Project alone on the KKE MCZ are considered to be temporary and localised, so there is reduced scope for there to be overlapping in-combination impacts with other projects. The Applicant considered in-combination effects from in-combination projects to be negligible for the KKE MCZ. NE had no comments to make in relation to the in-combination assessment in relation to MCZs [RR-243-C47] and did not comment on it again throughout examination. **Conclusion** Based on the information before him the Secretary of State is content that there will be no significant effects arising from the Project in-combination on the KKE MCZ. The temporary nature of the works and/or the spatial extent of effects, as well as the location of in-combination projects in relation to the MCZ reduces the risk of in-combination effects combined with the already considered small and/or temporary scale of the Project alone effects.

[8] Including sub-features and supporting habitats

Table 8: Named Plans or Projects considered within the Assessment for BCRC Estuaries MCZ[9]

Name of identified plan or project for which there is a pathway to MCZ.	**Compatible pressures with assessed project**
Five Estuaries Offshore Windfarm	Changes in suspended solids (water clarity) Smothering and siltation rate changes (light and heavy)
Neuconnect (interconnector)	Changes in suspended solids (water clarity) Smothering and siltation rate changes (light and heavy)

[9] The Applicant used a conservative range of two spring tidal ellipse excursions (i.e. 30km) from the North Falls offshore Project area to identify plans and projects. Plans and projects prior to 2018 have been considered in the baseline, so only those established since have been considered in this assessment.

Table 9: In-combination Assessment for BCRC Estuaries MCZ

Qualifying feature or species[10]	Pressure	Assessment Conclusion	Justification
Native Oyster Native Oyster beds	Changes in suspended solids (water clarity) Smothering and siltation rate changes (light and heavy)	No RHCO	The impacts discussed in Table 5 in relation to the Project alone on the BCRC Estuaries MCZ are considered to be temporary and localised, so there is reduced scope for there to be overlapping in-combination impacts with other projects. As the Project alone is considered too far from the BCRC Estuaries MCZ to cause an impact to Native Oysters through Changes in SSC and subsequent smothering, it is not identified that there is a pathway to contribute to an in-combination overlap effect with other projects. As discussed in the Project alone section, increased sedimentation would occur within 500m of the construction or operational activities and the MCZ is 5.9km away from the closest point of the cable corridor. The Applicant has considered in-combination effects from in-combination projects to be negligible for the BCRC Estuaries MCZ. NE had no comments to make in relation to the in-combination assessment in relation to MCZs [RR-243-C47] and did not comment on it again throughout examination. **Conclusion** Based on the information before him the Secretary of State is content that there will be no significant in-combination effects arising from this Project on the BCRC Estuaries MCZ. The location of the Project away from the MCZ and the temporary nature and scale of the impacts arising from the Project alone reduces the risk of in-combination effects.

[10] Including sub-features and supporting habitats

4. MCZ Assessment Conclusion

The MCZ Screening Assessment (Table 3) determined that the Project is **capable** of affecting, either (i) the protected features of an MCZ; or (ii) any ecological or geomorphological process on which the conservation of any protected feature of an MCZ is (wholly or in part) dependant, of the following site(s):

- Kentish Knock East MCZ; and
- Blackwater, Crouch, Roach and Colne Estuaries MCZ.

An alone and in-combination Stage 1 MCZ Assessment has been undertaken of the implications of the Project for the applicable conservation objectives, with no requirement to progress to Stage 2.

The Secretary of State is satisfied that there is no risk of the Project hindering the conservation objectives for any MCZ. This conclusion is based on the Applicant's MCZ report [REP7-019] and analysis within its modelling report [REP7-041], comments received during the Examination of this Project from NE, as well as all responses to the Secretary of State's further information requests. The Applicant justified that any operational impacts would remain localised to the area of activity and that in regard to construction the baseline level of SSC will return to background levels after works conclude with no long term or significant impacts to any MCZ.

The Applicant, in line with requests from NE, also developed a Sediment Deposal Management Plan [REP8-045] that sets out mitigation to reduce the volume of deposition within the KKE MCZ. This includes imposing a limitation on where sediment can be disposed of after clearance events (at least 1km away from the KKE MCZ). The Applicant also committed to a buffer zone to ensure no infrastructure is placed within 50m of the KKE MCZ. This has been secured within Schedule 8 of the Order. In addition, the Applicant has committed to pre-and post-construction monitoring [C3-013] to validate that no effects occur outside those predicted and to confirm conclusions of no long-term impact to the KKE MCZ. These mitigations and provision of monitoring have been secured as required in the Order by the Secretary of State.

The Secretary of State is satisfied that the Applicant has adequately followed the mitigation hierarchy, and no further mitigation measures have been identified as being required to reduce any residual effects.

Annex 1

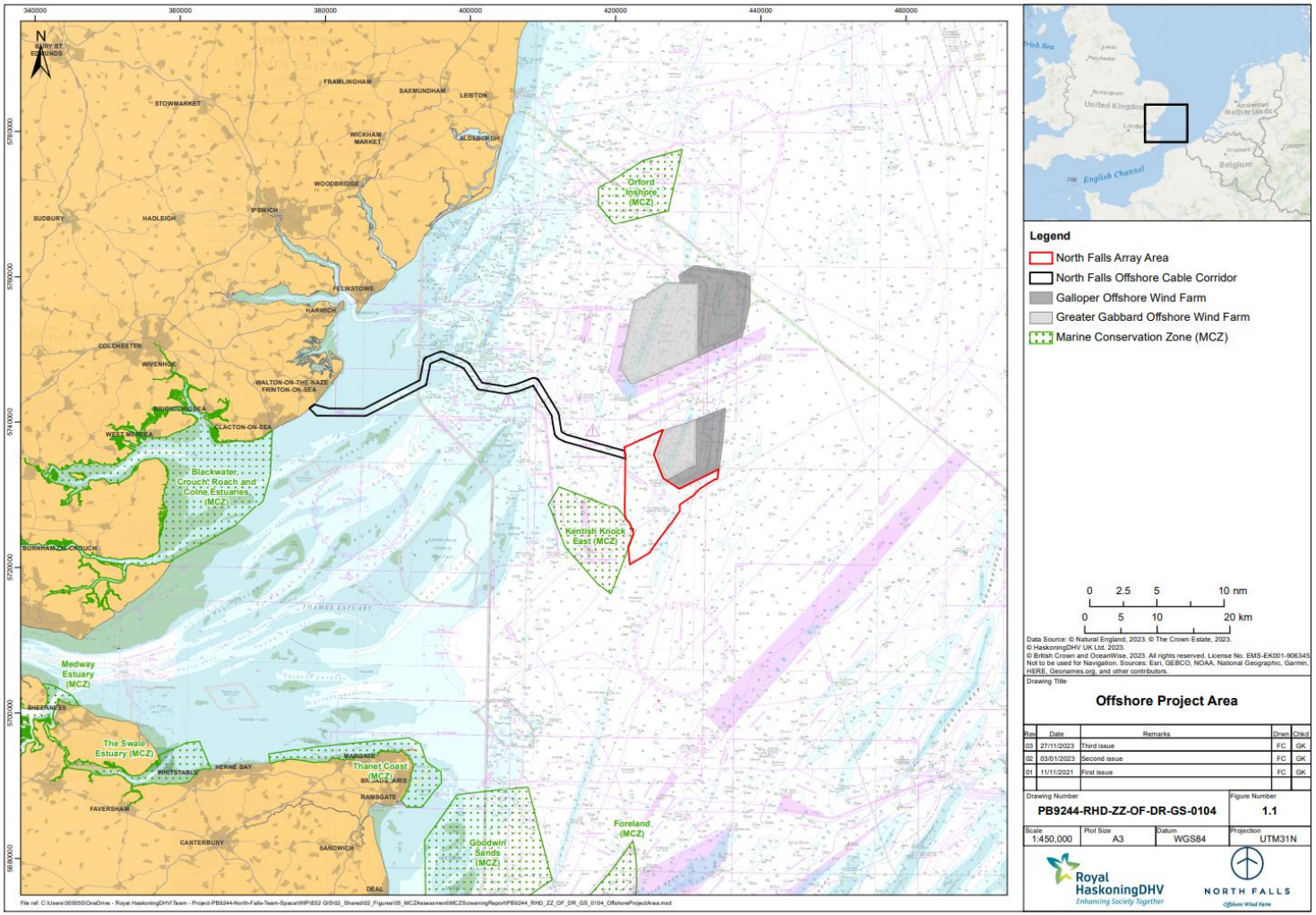

Figure 1: Location of the North Falls Array Area (red boundary line) in relation to the MCZs (green dots).