Environmental Impact Assessment Report
Volume 3, Appendix 10.5: MarESA / FeAST Sensitivity Scores

MarramWind Offshore Wind Farm

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MarramWind

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Prepared by:	WSP UK Limited
Checked by:	WSP UK Limited
Approved by:	MarramWind Limited

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1. Marine Evidence-based Sensitivity Assessment / Feature Activity Sensitivity Tool Sensitivity Scores

1.1.1.1 This Appendix provides the receptor values and Marine Life Information Network (MarLIN) Marine Evidence-based Sensitivity Assessment (MarESA) (Tyler-Walters *et al*., 2016) / Marine Scotland's Feature Activity Sensitivity Tool (FeAST) (Marine Scotland, 2022) sensitivity scores used to inform the benthic, epibenthic and intertidal ecology assessment.

1.1.1.2 The following tables relate to the specific assessments of effects:

- **Table 1.1** informs Impact C1: temporary disturbance of seabed habitat (see Section 10.9.2 of **Volume 1, Chapter 10: Benthic, Epibenthic and Intertidal Ecology**);
- **Table 1.2** informs Impact C2: temporary increase in suspended sediment and deposition (see Section 10.9.3 of **Volume 1, Chapter 10: Benthic, Epibenthic and Intertidal Ecology**);
- **Table 1.3** informs Impact C3: mobilisation of sediment associated contaminant (for example heavy metals, hydrocarbons (see Section 10.9.4 of **Volume 1, Chapter 10: Benthic, Epibenthic and Intertidal Ecology**);
- **Table 1.4** informs Impact C4: increased risk of introduction or spread of marine invasive non-native species (INNS) (see Section 10.9.5 of **Volume 1, Chapter 10: Benthic, Epibenthic and Intertidal Ecology**); and
- **Table 1.5** informs Impact O4: long-term habitat loss (see Section 10.10.5 of **Volume 1, Chapter 10: Benthic, Epibenthic and Intertidal Ecology**).

Table 1.1 Receptor value and MarESA / FeAST sensitivity scores for habitat / substrate disturbance

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[1]
Subtidal habitats and species					
MD42 Offshore circalittoral mixed sediment	**Medium**	Offshore export cable corridor.	No information available.		
MC52 Sublittoral sand and muddy sands	**Medium**	Offshore export cable corridor.	No information available.		
MC12 High energy circalittoral rock	**Medium**	Offshore export cable corridor.	No information available.		
MC32 Circalittoral coarse sediment	**Medium**	Offshore export cable corridor.	No information available.		
A5.142 *Mediomastus fragilis*, *Lumbrineris spp*. and venerid bivalves in circalittoral coarse sand or gravel	**Medium**	Offshore export cable corridor.	• No resistance to 'habitat structure changes – removal of substratum (extraction)'. • Medium resistance to 'abrasion / disturbance of the substratum or seabed'. • Medium resistance to 'penetration and / or disturbance of the substratum subsurface'.	• Medium resilience to 'habitat structure changes – removal of substratum (extraction)'. • High resilience to 'abrasion / disturbance of the substratum or seabed'. • High resilience to 'penetration and / or disturbance of the substratum subsurface'.	• **Medium** sensitivity to 'habitat structure changes – removal of substratum (extraction)'. • **Low** sensitivity to 'abrasion / disturbance of the substratum or seabed'. • **Low** sensitivity to 'penetration and / or disturbance of the substratum subsurface'.

[1] Specific sensitivity is the sensitivity of a receptor to a defined pathway and criteria detailed by MarLIN and FeAST. This term should not be confused with overall sensitivity which incorporates the value of the receptor and specific sensitivity.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[1]
A5.145 *Branchiostoma lanceolatum* in circalittoral coarse sand with shell gravel	**Medium**	Offshore export cable corridor.	• No resistance to 'habitat structure changes – removal of substratum (extraction)'. • Medium resistance to 'abrasion / disturbance of the substratum or seabed'. • Low resistance to 'penetration and / or disturbance of the substratum subsurface'.	• Medium resilience to 'habitat structure changes – removal of substratum (extraction)'. • High resilience to 'abrasion / disturbance of the substratum or seabed'. • Medium resilience to 'penetration and / or disturbance of the substratum subsurface'.	• **Medium** sensitivity to 'habitat structure changes – removal of substratum (extraction)'. • **Low** sensitivity to 'abrasion / disturbance of the substratum or seabed'. • **Medium** sensitivity to 'penetration and / or disturbance of the substratum subsurface'.
A5.251 *Echinocyamus pusillus, Ophelia borealis* and *Abra prismatica* in circalittoral fine sand	**Medium**	Offshore export cable corridor.	• No resistance to 'habitat structure changes – removal of substratum (extraction)'. • Medium resistance to 'abrasion / disturbance of the substratum or seabed'. • Medium resistance to 'penetration and / or disturbance of the substratum subsurface'.	• Medium resilience to 'habitat structure changes – removal of substratum (extraction)'. • High resilience to 'abrasion / disturbance of the substratum or seabed'. • High resilience to 'penetration and / or disturbance of the substratum subsurface'.	• **Medium** sensitivity to 'habitat structure changes – removal of substratum (extraction)'. • **Low** sensitivity to 'abrasion / disturbance of the substratum or seabed'. • **Low** sensitivity to 'penetration and / or disturbance of the substratum subsurface'.
Shellfish					
Norway lobster	**High**	Offshore export cable corridor and the Option Agreement Area (OAA).	• High resistance to 'habitat structure changes – removal of substratum (extraction)'. • Medium resistance to 'abrasion and physical disturbance'. • N/A resistance to 'penetration and / or	• Medium resilience to 'habitat structure changes – removal of substratum (extraction)'. • High resilience to 'abrasion and physical disturbance'. • N/A resilience to 'penetration and / or	• **Low** sensitivity to 'habitat structure changes – removal of substratum (extraction). • **Low** sensitivity to 'abrasion and physical disturbance''. • **No sensitivity** value for 'penetration and / or disturbance of the substratum subsurface'.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[1]
			disturbance of the substratum surface'.	disturbance of the substratum surface'.	
Brown crab	**Medium**	Offshore export cable corridor and OAA.	• Medium resistance to 'habitat structure changes – removal of substratum (extraction)'. • Medium resistance to 'abrasion and physical disturbance'. • N/A resistance to 'penetration and / or disturbance of the substratum surface'.	• Medium resilience to 'habitat structure changes – removal of substratum (extraction)'. • High resilience to 'abrasion and physical disturbance'. • N/A resilience to 'penetration and / or disturbance of the substratum surface'.	• **Medium** sensitivity to 'habitat structure changes – removal of substratum (extraction)'. • **Low** sensitivity to 'abrasion and physical disturbance'. • **No sensitivity** value for 'penetration and / or disturbance of the substratum subsurface'.
Velvet crab	**Medium**	Offshore export cable corridor and OAA.	No information available.		
Cuttlefish	**Medium**	Offshore export cable corridor and OAA.	• Low resistance to 'habitat structure changes – removal of substratum (extraction)'. • Low resistance to 'abrasion / disturbance of the substratum or seabed'. • Low resistance to 'penetration and / or disturbance of the substratum subsurface'.	• Medium resilience to 'habitat structure changes – removal of substratum (extraction)'. • Medium resilience to 'abrasion / disturbance of the substratum or seabed'. • Medium resilience to 'penetration and / or disturbance of the substratum subsurface'.	• **Medium** sensitivity to 'habitat structure changes – removal of substratum (extraction)'. • **Medium** sensitivity to 'abrasion / disturbance of the substratum or seabed'. • **Medium** sensitivity to 'penetration and / or disturbance of the substratum subsurface'.
King scallop	**Medium**	Offshore export cable corridor and OAA.	• High resistance to 'abrasion and physical disturbance'.	• High resilience to 'abrasion and physical disturbance'.	• **Low** sensitivity to 'abrasion and physical disturbance'.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[1]
Habitats of conservation importance					
Sea-pens and burrowing megafauna in circalittoral fine mud	**High**	Offshore export cable corridor and OAA.	• No resistance to 'habitat structure changes – removal of substratum (extraction)'. • Medium resistance to 'abrasion / disturbance of the substratum or seabed'. • Low resistance to 'penetration and / or disturbance of the substratum subsurface'.	• Low resilience to 'habitat structure changes – removal of substratum (extraction)'. • Low resilience to 'abrasion / disturbance of the substratum or seabed'. • Low resilience to 'penetration and / or disturbance of the substratum subsurface'.	• **High** sensitivity to 'habitat structure changes – removal of substratum (extraction)'. • **Medium** sensitivity to 'abrasion / disturbance of the substratum or seabed'. • **High** sensitivity to 'penetration and / or disturbance of the substratum subsurface'.
Annex I Biogenic Reef as: • **A5.611 *Sabellaria spinulosa* on stable circalittoral mixed sediment; and** • **A4.221 *Sabellaria spinulosa* encrusted circalittoral rock**	**High**	Offshore export cable corridor.	• No resistance to 'habitat structure changes – removal of substratum (extraction)'. • Low resistance to 'abrasion / disturbance of the substratum or seabed'. • No resistance to 'penetration and / or disturbance of the substratum subsurface'.	• Medium resilience to 'habitat structure changes – removal of substratum (extraction)'. • Medium resilience to 'abrasion / disturbance of the substratum or seabed'. • Medium resilience to 'penetration and / or disturbance of the substratum subsurface'.	• **Medium** sensitivity to 'habitat structure changes – removal of substratum (extraction)'. • **Medium** sensitivity to 'abrasion / disturbance of the substratum or seabed'. • **Medium** sensitivity to 'penetration and / or disturbance of the substratum subsurface'.
Annex I Bedrock and / or Stony Reef[2] as: • **Faunal turf communities on**	**High**	Offshore export cable corridor.	• No resistance to 'habitat structure changes – removal of substratum (extraction)'.	• Medium resilience to 'habitat structure changes – removal of substratum (extraction)'.	• **Medium** sensitivity to 'habitat structure changes – removal of substratum (extraction)'.

[2] Annex I bedrock and / or stony reef is an overarching habitat description that covers a wide range of bedrock and stony reef habitats (10 separate biotopes). The biotopes 'Faunal turf communities' (CR.HCR.XFa), 'Echinoderms and crustose communities' (CR.MCR.EcCr) and '*Sabellaria spinulosa* encrusted circalittoral rock' (CR.MCR.CSab.Sspi)' have been used to assign sensitivity within this chapter to this overarching habitat.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[1]
Atlantic circalittoral rock (MC121); • **Echinoderms and crustose communities on Atlantic circalittoral rock (MC122); and** • **A4.221 *Sabellaria spinulosa* encrusted Atlantic circalittoral rock**			• Low resistance to 'abrasion / disturbance of the substratum or seabed'. • No resistance to 'penetration and / or disturbance of the substratum subsurface'.	• Medium resilience to 'abrasion / disturbance of the substratum or seabed'. • Medium resilience to 'penetration and / or disturbance of the substratum subsurface'.	• **Medium** sensitivity to 'abrasion / disturbance of the substratum or seabed'. • **Medium** sensitivity to 'penetration and / or disturbance of the substratum subsurface'.
Offshore subtidal sands and gravels[3] which include: • **A5.14 Circalittoral coarse sediment;** • **A2.25 Circalittoral fine sand; and** • **A5.26 Circalittoral muddy sand**	**High**	Offshore export cable corridor and OAA.	No information available from MarESA assessments. See Section 10.9.2 of **Volume 1, Chapter 10: Benthic, Epibenthic and Intertidal Ecology** on 'Habitats of conservation importance' for information available from FeAST 2023.		
Annex I habitat *Caryophyllia smithii*, sponges and crustose communities on wave-exposed circalittoral rock	**High**	Offshore export cable corridor and OAA.	• No relevant information available for 'habitat structure changes – removal of substratum (extraction). • Medium resistance to 'abrasion / disturbance of	• No relevant information available for 'habitat structure changes – removal of substratum (extraction). • High resilience to 'abrasion / disturbance of the surface of the substratum or seabed.	• **No relevant information** available for 'habitat structure changes – removal of substratum (extraction). • **Low** sensitivity to 'abrasion / disturbance of the surface of the substratum or seabed'. • **No relevant information** available for 'penetration or

[3] Offshore subtidal sands and gravels are considered by the Scottish Government FeAST tool under the illustrative biotopes: A5.14 Circalittoral coarse sediment; A2.25 Circalittoral fine sand; and A5.26 Circalittoral muddy sand (continental shelf sands and continental shelf coarse sediments).

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[1]
			the surface of the substratum or seabed'. • No relevant information available for 'penetration or disturbance of the substratum subsurface'.	• No relevant information available for 'penetration or disturbance of the substratum subsurface'.	disturbance of the substratum subsurface'.
Burrowed Mud	**High**	Offshore export cable corridor and OAA.	No information available.	No information available.	• **Medium** sensitivity to 'physical removal (extraction of substratum)' (FeAST). • **Medium** sensitivity to 'surface abrasion' (FeAST). • **Medium** sensitivity to 'sub-surface abrasion / penetration' (FeAST).
Species of conservation importance					
Ocean quahog *Arctica islandica*	**High**	Offshore export cable corridor and OAA.	• No resistance to 'habitat structure changes – removal of substratum (extraction)'. • Low resistance to 'abrasion / disturbance of the substratum or seabed'. • Low resistance to 'penetration and / or disturbance of the substratum subsurface'.	• Low resilience to 'habitat structure changes – removal of substratum (extraction)'. • Very low resilience to 'abrasion / disturbance of the substratum or seabed'. • Very low resilience to 'penetration and / or disturbance of the substratum subsurface'.	• **High** sensitivity to 'habitat structure changes – removal of substratum (extraction)'. • **High** sensitivity to 'abrasion / disturbance of the substratum or seabed'. • **High** sensitivity to 'penetration and / or disturbance of the substratum subsurface'. • **High** sensitivity to sub-surface abrasion / penetration (FeAST).

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[1]
Edible sea urchin *Echinus esculentus*	**High**	Offshore export cable corridor.	• Medium resistance to 'abrasion and physical disturbance'.	• High resilience to 'abrasion and physical disturbance'.	• **Low** sensitivity to 'abrasion and physical disturbance'.
Northern Sea fan *Callistephanus pallida* and sponge communities	**High**	Offshore export cable corridor and OAA.	• Medium resistance to 'abrasion and physical disturbance'.	• Medium resilience to 'abrasion and physical disturbance'.	• **Medium** sensitivity to 'abrasion and physical disturbance'. • **Medium** sensitivity to 'surface abrasion' (FeAST).
Timid burrowing anemone *Edwardsia timida*	**High**	Offshore export cable corridor and OAA.	No information available.		

Table 1.2 Receptor value and MarESA sensitivity scores for sediment resuspension and settlement

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[4]
Intertidal habitats and species					
A1.113 *Semibalanus balanoides* on exposed to moderately exposed or vertical sheltered eulittoral rock	**Low**	Between Mean Low Water Springs (MLWS) and Mean High Water Springs (MHWS).	• Medium resistance to 'changes in suspended solids (water clarity)'. • Low resistance to 'smothering and siltation rate changes (light)'. • No resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • Medium resilience to 'smothering and siltation rate changes (light)'. • Medium resilience to 'smothering and siltation rate changes (heavy)'.	• **Low** sensitivity to 'changes in suspended solids (water clarity). • **Medium** sensitivity to 'smothering and siltation rate changes (light)'. • **Medium** sensitivity to 'smothering and siltation rate changes (heavy)'.
A1.313 *Fucus vesiculosis* on moderately exposed to sheltered mid eulittoral rock	**Low**	Between MLWS and MHWS.	• Medium resistance to 'changes in suspended solids (water clarity)'. • Medium resistance to 'smothering and siltation rate changes (light)'. • Low resistance to 'smothering and siltation rate changes (heavy)'.	• Medium resilience to 'changes in suspended solids (water clarity)'. • Medium resilience to 'smothering and siltation rate changes (light)'. • Medium resistance to 'smothering and siltation rate changes (heavy)'.	• **Medium** sensitivity to 'changes in suspended solids (water clarity); • **Medium** sensitivity to 'smothering and siltation rate changes (light)'. • **Medium** sensitivity to 'smothering and siltation rate changes (heavy)'.
A1.314 *Ascophyllum nodosum* on very sheltered mid eulittoral rock	**Low**	Between MLWS and MHWS.	• High resistance to 'changes in suspended solids (water clarity)'. • Medium resistance to 'smothering and siltation rate changes (light)'.	• High resilience to 'changes in suspended solids (water clarity)'. • Medium resilience to 'smothering and siltation rate changes (light)'.	• **Not sensitive** to 'changes in suspended solids (water clarity). • **Medium** sensitivity to 'smothering and siltation rate changes (light)'.

[4] Specific sensitivity is the sensitivity of a receptor to a defined pathway and criteria detailed by MarLIN and FeAST. This term should not be confused with overall sensitivity which incorporates the value of the receptor and specific sensitivity.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[4]
			• Low resistance to 'smothering siltation rate changes (heavy)'.	• Low resilience to 'smothering and siltation rate changes (heavy)'.	• **High** sensitivity to 'smothering and siltation rate changes (heavy)'.
A1.452 *Porphyra purpurea* and *Ulva spp.* on sand-scoured mid or lower eulittoral rock	**Low**	Between MLWS and MHWS.	• High resistance to 'changes in suspended solids (water clarity)'. • Low resistance to 'smothering and siltation rate changes (light)'. • Low resistance to 'smothering siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • High resilience to 'smothering and siltation rate changes (heavy)'.	• **Not sensitive** to 'changes in suspended solids (water clarity). • **Low** sensitivity to 'smothering and siltation rate changes (light). • **Low** sensitivity to 'smothering and siltation rate changes (heavy)'.
A1.214 *Fucus serratus* on moderately exposed lower eulittoral rock	**Low**	Between MLWS and MHWS.	• Medium resistance to 'changes in suspended solids (water clarity)'. • Medium resistance to 'smothering and siltation rate changes (light)'. • Low resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • Low resilience to 'smothering and siltation rate changes (heavy)'.	• **Low** sensitivity to 'changes in suspended solids (water clarity). • **Low** sensitivity to 'smothering and siltation rate changes (light)'. • **High** sensitivity to 'smothering and siltation rate changes (heavy)'.
A2.211 Talitrids on the upper shore and strandline	**Low**	Between MLWS and MHWS.	• High resistance to 'changes in suspended solids (water clarity)'. • High resistance to 'smothering and siltation rate changes (light)'. • No resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • High resilience to 'smothering and siltation rate changes (heavy)'.	• **Not sensitive** to 'changes in suspended solids (water clarity). • **Not sensitive** to 'smothering and siltation rate changes (light)'. • **Medium** sensitivity to 'smothering and siltation rate changes (heavy)'.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[4]
A2.221 Barren Atlantic littoral coarse sand	**Very low**	Between MLWS and MHWS.	• High resistance to 'changes in suspended solids (water clarity)'. • High resistance to 'smothering and siltation rate changes (light)'. • High resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • High resilience to 'smothering and siltation rate changes (heavy)'.	• **Not sensitive** to 'changes in suspended solids (water clarity). • **Not sensitive** to 'smothering and siltation rate changes (light)'. • **Not sensitive** to 'smothering and siltation rate changes (heavy)'.
A2.2221 Oligochaetes in full salinity Atlantic littoral mobile sand	**Low**	Between MLWS and MHWS.	• Medium resistance to 'changes in suspended solids (water clarity)'. • High resistance to 'smothering and siltation rate changes (light)'. • Low resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • High resilience to 'smothering and siltation rate changes (heavy)'.	• **Low** sensitivity to 'changes in suspended solids (water clarity). • **Not sensitive** to 'smothering and siltation rate changes (light)'. • **Low** sensitivity to 'smothering and siltation rate changes (heavy)'.
A2.223 Amphipods and *Scolelepis spp.* in littoral medium-fine sand	**Low**	Between MLWS and MHWS.	• Medium resistance to 'changes in suspended solids (water clarity)'. • High resistance to 'smothering and siltation rate changes (light)'. • Low resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • High resilience to 'smothering and siltation rate changes (heavy)'.	• **Low** sensitivity to 'changes in suspended solids (water clarity). • **Not sensitive** to 'smothering and siltation rate changes (light)'. • **Low sensitivity** to 'smothering and siltation rate changes (heavy)'.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[4]
Subtidal habitats and species					
Offshore circalittoral mixed sediment (MD42)	**Medium**	Offshore export cable corridor.	No information available.		
Sublittoral sand and muddy sands (MC52)	**Medium**	Offshore export cable corridor.	No information available.		
High energy circalittoral rock (MC12)	**Medium**	Offshore export cable corridor.	No information available.		
Circalittoral coarse sediment (MC32)	**Medium**	Offshore export cable corridor.	No information available.		
A5.142 *Mediomastus fragilis*, *Lumbrineris spp.* and venerid bivalves in circalittoral coarse sand or gravel	**Medium**	Offshore export cable corridor.	• Medium resistance to 'changes in suspended solids (water clarity)'. • Medium resistance to 'smothering and siltation rate changes (light)'. • Medium resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • Medium resilience to 'smothering and siltation rate changes (heavy)'.	• **Low s**ensitivity to 'changes in suspended solids (water clarity). • **Low** sensitivity to 'smothering and siltation rate changes (light)'. • **Medium** sensitivity to 'smothering and siltation rate changes (heavy)'.
A5.145 *Branchiostoma lanceolatum* in circalittoral	**Medium**	Offshore export cable corridor.	• High resistance to 'changes in suspended solids (water clarity)'.	• High resilience to 'changes in suspended solids (water clarity)'.	• **Not sensitive** to 'changes in suspended solids (water clarity).

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[4]
coarse sand with shell gravel			• Low resistance to 'smothering and siltation rate changes (light)'. • Low resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'smothering and siltation rate changes (light)'. • High resilience to 'smothering and siltation rate changes (heavy)'.	• **Low** sensitivity to 'smothering and siltation rate changes (light)'. • **Low** sensitivity to 'smothering and siltation rate changes (heavy)'.
A5.251 *Echinocyamus pusillus, Ophelia borealis* and *Abra prismatica* in circalittoral fine sand	**Medium**	Offshore export cable corridor.	• Medium resistance to 'changes in suspended solids (water clarity)'. • Medium resistance to 'smothering and siltation rate changes (light)'. • Low resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • Medium resilience to 'smothering and siltation rate changes (heavy)'.	• **Low** sensitivity to 'changes in suspended solids (water clarity). • **Low** sensitivity to 'smothering and siltation rate changes (light)'. • **Medium** sensitivity to 'smothering and siltation rate changes (heavy)'.
Shellfish					
Norway lobster	**High**	Offshore export cable corridor and OAA.	• High resistance to an 'increase in suspended sediment'. • High resistance to 'smothering'.	• No information available.	• **Not sensitive** to an 'increase in suspended sediment'. • **Not sensitive** to 'smothering'.
Brown crab	**Medium**	Offshore export cable corridor and OAA.	• High resistance to an 'increase in suspended sediment'. • High resistance to 'smothering'.	• High resilience to an 'increase in suspended sediment'. • Very high resilience to 'smothering'.	• **Low** sensitivity to an 'increase in suspended sediment'. • **Very low** sensitivity to 'smothering'.
Velvet crab	**Medium**	Offshore export cable corridor and OAA.	No information available.		

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[4]
Cuttlefish	**Medium**	Offshore export cable corridor and OAA.	• High resistance to 'changes in suspended solids (water clarity)'. • High resistance to 'smothering and siltation rate changes (light)'. • High resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience for 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • High resilience to 'smothering and siltation rate changes (heavy)'.	• **Not sensitive** to 'changes in suspended solids (water clarity). • **Not sensitive** to 'smothering and siltation rate changes (light)'. • **Not sensitive** to 'smothering and siltation rate changes (heavy)'.
King scallop	**Medium**	Offshore export cable corridor and OAA.	• High resistance to an 'increase in suspended sediment'; and • High resistance to 'smothering'.	• High resilience to an 'increase in suspended sediment'. • High resilience to 'smothering'.	• **Low** sensitivity to an 'increase in suspended sediment'. • **Low** sensitivity to 'smothering'.
Habitats of conservation importance					
Sea-pens and burrowing megafauna in circalittoral fine mud (MC6216)	**High**	Offshore export cable corridor and OAA.	• High resistance to 'changes in suspended solids (water clarity)' • High resistance to 'smothering and siltation rate changes (light)'; and • High resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • High resilience to 'smothering and siltation rate changes (heavy)'.	• **Not sensitive** to 'changes in suspended solids (water clarity). • **Not sensitive** to 'smothering and siltation rate changes (light)'. • **Not sensitive** to 'smothering and siltation rate changes (heavy)'.
Annex I Biogenic Reef as: • **A5.611 *Sabellaria spinulosa* on**	**High**	Offshore export cable corridor.	• High resistance to 'changes in suspended solids (water clarity)'.	• High resilience to 'changes in suspended solids (water clarity)'.	• **Not sensitive** to 'changes in suspended solids (water clarity).

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[4]
stable circalittoral mixed sediment; and • **A4.221 *Sabellaria spinulosa* encrusted circalittoral rock**			• High resistance to 'smothering and siltation rate changes (light)'. • No resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'smothering and siltation rate changes (light)'. • Medium resilience to 'smothering and siltation rate changes (heavy)'.	• **Not sensitive** to 'smothering and siltation rate changes (light)'. • **Medium** sensitivity to 'smothering and siltation rate changes (heavy)'.
Annex I Bedrock and / or Stony Reef[5] as: • **Faunal turf communities on Atlantic circalittoral rock (MC121);** • **Echinoderms and crustose communities on Atlantic circalittoral rock (MC122); and**	**High**	Offshore export cable corridor.	• High resistance to 'changes in suspended solids (water clarity)'. • High resistance to 'smothering and siltation rate changes (light)'. • No resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • Medium resilience to 'smothering and siltation rate changes (heavy)'.	• **Not sensitive** to 'changes in suspended solids (water clarity). • **Not sensitive** to 'smothering and siltation rate changes (light)'. • **Medium** sensitivity to 'smothering and siltation rate changes (heavy)'.

[5] Annex I bedrock and / or stony reef is an overarching habitat description that covers a wide range of bedrock and stony reef habitats (ten separate biotopes). The biotopes 'Faunal turf communities' (CR.HCR.XFa), 'Echinoderms and crustose communities' (CR.MCR.EcCr) and '*Sabellaria spinulosa* encrusted circalittoral rock' (CR.MCR.CSab.Sspi)' have been used to assign sensitivity within this chapter to this overarching habitat.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[4]
• **A4.221 *Sabellaria spinulosa* encrusted Atlantic circalittoral rock**					
Offshore subtidal sands and gravels[6] which include: • **A5.14 Circalittoral coarse sediment;** • **A2.25 Circalittoral fine sand; and** • **A5.26 Circalittoral muddy sand**	**High**	Offshore export cable corridor and OAA.	No information available from MarESA assessments. See Section 10.9.3 of **Volume 1, Chapter 10: Benthic, Epibenthic and Intertidal Ecology** on 'Habitats of conservation importance' for information available from FeAST 2023.		
Annex I habitat *Caryophyllia smithii*, sponges and crustose communities on wave exposed circalittoral rock	**High**	Offshore export cable corridor and OAA.	• High resistance to 'changes in suspended solids (water clarity). • High resistance to smothering and siltation rate changes (light).	• High resilience to 'changes in suspended solids (water clarity). • High resilience to 'smothering and siltation rate changes (light)'.	• **Not sensitive** to 'changes in suspended solids (water clarity)'. • **Not sensitive** to 'smothering and siltation rate changes (light)'.

[6] Offshore subtidal sands and gravels are considered by the Scottish Government FeAST tool under the illustrative biotopes: A5.14 Circalittoral coarse sediment; A2.25 Circalittoral fine sand; and A5.26 Circalittoral muddy sand (continental shelf sands and continental shelf coarse sediments).

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[4]
			• Medium resistance to smothering and siltation rate changes (heavy).	• High resilience to 'smothering and siltation rate changes (heavy)'.	• **Low** sensitivity to 'smothering and siltation rate changes (heavy)'.
Potential Burrowed Mud	**High**	Offshore export cable corridor and OAA.	No information available.	No information available.	• **Low** sensitivity to 'water clarity changes' (FeAST). • **Low** sensitivity to 'siltation rate changes (light) (FeAST). • **Medium** sensitivity to 'siltation rate changes (heavy) (FeAST).
Species of conservation importance					
Ocean quahog *Arctica islandica*	**High**	Offshore export cable corridor and OAA.	• High resistance to 'changes in suspended solids (water clarity)'. • High resistance to 'smothering and siltation rate changes (light)'. • High resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • High resilience to 'smothering and siltation rate changes (heavy)'.	• **Not sensitive** to 'changes in suspended solids (water clarity). • **Not sensitive** to 'smothering and siltation rate changes (light)'. • **Not sensitive** to 'smothering and siltation changes (heavy)'.
Edible sea urchin *Echinus esculentus*	**High**	Offshore export cable corridor.	• High resistance to 'increase in suspended sediment'. • Medium resistance to 'smothering'.	• High resilience to 'increase in suspended sediment'. • High resilience to 'smothering'.	• **Low** sensitivity to 'increase in suspended sediment'. • **Low** sensitivity to 'smothering'.
Northern Sea fan *Callistephanus pallida* and sponge communities	**High**	Offshore export cable corridor and OAA.	• High resistance to 'increase in suspended sediment. • Medium resistance to 'smothering'.	• No relevant information for 'increase in suspended sediment • Low resilience to 'smothering'	• **Medium** sensitivity to 'increase in suspended sediment'. • **Medium** sensitivity to 'smothering'.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[4]
Timid burrowing anemone *Edwardsia timida*	**High**	Offshore export cable corridor and OAA.	No information available.		
Blue Carbon					
A3.211 *Laminaria digitata* on moderately exposed Atlantic sublittoral fringe rock (MB1217)	**High**	Outside of OAA and Offshore export cable corridor, Red Line Boundary, wider study area.	• Medium resistance to 'changes in suspended solids (water clarity)'. • High resistance to 'smothering and siltation rate changes (light)'. • Medium resistance to 'smothering and siltation rate changes (heavy)'.	• High resilience to 'changes in suspended solids (water clarity)'. • High resilience to 'smothering and siltation rate changes (light)'. • High resilience to 'smothering and siltation rate changes (heavy)'.	• **Low** sensitivity to 'changes in suspended solids (water clarity)'. • **Not sensitive** to 'smothering and siltation rate changes (light)'. • **Low** sensitivity to 'smothering and siltation rate changes (heavy)'.

Table 1.3 Value of receptor and MarESA sensitivity scores for mobilisation of sediment associated contaminants

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[7]
Intertidal habitat and species					
A1.113 *Semibalanus balanoides* on exposed to moderately exposed or vertical sheltered eulittoral rock	**Low**	Between MLWS and MHWS.	No information available.		
A1.313 *Fucus vesiculosis* on moderately exposed to sheltered mid eulittoral rock	**Low**	Between MLWS and MHWS.	No information available.		
A1.314 *Ascophyllum nodosum* on very sheltered mid eulittoral rock	**Low**	Between MLWS and MHWS.	No information available.		
A1.452 *Porphyra purpurea* and	**Low**	Between MLWS and MHWS.	No information available.		

[7] Specific sensitivity is the sensitivity of a receptor to a defined pathway and criteria detailed by MarLIN and FeAST. This term should not be confused with overall sensitivity which incorporates the value of the receptor and specific sensitivity.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[7]
***Ulva spp.* on sand-scoured mid or lower eulittoral rock**					
A1.214 *Fucus serratus* on moderately exposed lower eulittoral rock	**Low**	Between MLWS and MHWS.	No information available.		
A2.211 Talitrids on the upper shore and strandline	**Low**	Between MLWS and MHWS.	No information available.		
A2.221 Barren Atlantic littoral coarse sand	**Very low**	Between MLWS and MHWS.	No information available.		
A2.2221 Oligochaetes in full salinity Atlantic littoral mobile sand	**Low**	Between MLWS and MHWS.	No information available.		
A2.223 Amphipods and *Scolelepis spp.* in littoral medium-fine sand	**Low**	Between MLWS and MHWS.	No information available.		

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[7]
Subtidal habitats and species					
Offshore circalittoral mixed sediment (MD42)	**Medium**	Offshore export cable corridor.	No information available.		
Sublittoral sand and muddy sands (MC52)	**Medium**	Offshore export cable corridor.	No information available.		
High energy circalittoral rock (MC12)	**Medium**	Offshore export cable corridor.	No information available.		
Circalittoral coarse sediment (MC32)	**Medium**	Offshore export cable corridor.	No information available.		
A5.142 *Mediomastus fragilis*, *Lumbrineris spp.* and venerid bivalves in circalittoral coarse sand or gravel	**Medium**	Offshore export cable corridor.	No information available.		
A5.145 *Branchiostoma lanceolatum* in circalittoral coarse sand with shell gravel	**Medium**	Offshore export cable corridor.	No information available.		

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[7]
A5.251 *Echinocyamus pusillus, Ophelia borealis* and *Abra prismatica* in circalittoral fine sand	**Medium**	Offshore export cable corridor.	No information available.		
Shellfish					
Norway lobster	**High**	Offshore export cable corridor and OAA.	• Medium resistance to heavy metal contamination. • No information available regarding hydrocarbon contamination.	• High resilience to heavy metal contamination. • No information available regarding hydrocarbon contamination.	• **Low** sensitivity to heavy metal contamination. • No information regarding hydrocarbon contamination.
Brown crab	**Medium**	Offshore export cable corridor and OAA.	• High resistance to heavy metal contamination. • Medium resistance to hydrocarbon contamination.	• High resilience to heavy metal contamination. • High resilience to hydrocarbon contamination.	• **Low** sensitivity to heavy metal contamination. • **Low** sensitivity to hydrocarbon contamination.
Velvet crab	**Medium**	Offshore export cable corridor and OAA.	No information available.		
Cuttlefish	**Medium**	Offshore export cable corridor and OAA.	No information available.		
King scallop	**Medium**	Offshore export cable corridor and OAA.	• Medium resistance to 'heavy metal contamination'.	• High resilience to 'heavy metal contamination'.	• **Low** sensitivity to 'heavy metal contamination'.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[7]
			• High resistance to 'hydrocarbon contamination'.	• High resilience to 'hydrocarbon contamination'.	• **Low** sensitivity to 'hydrocarbon contamination'.
Habitats of conservation importance					
Sea-pens and burrowing megafauna in circalittoral fine mud	**High**	Offshore export cable corridor and OAA.	• Low resistance to transition elements and organo-metal contamination. • Low resistance to hydrocarbon and polycyclic aromatic hydrocarbon (PAH) contamination.	• Low resilience to transition elements and organo-metal contamination. • Low resilience to hydrocarbon and PAH contamination.	• **High** sensitivity to transition elements and organo-metal contamination. • **High** sensitivity to hydrocarbon and PAH contamination.
Annex I Biogenic Reef as: • **A5.611 *Sabellaria spinulosa* on stable circalittoral mixed sediment; and** • **A4.221 *Sabellaria spinulosa* encrusted circalittoral rock**	**High**	Offshore export cable corridor.	No information available.		

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[7]
Annex I Bedrock and / or Stony Reef[8] as: • **Faunal turf communities on Atlantic circalittoral rock (MC121);** • **Echinoderms and crustose communities on Atlantic circalittoral rock (MC122); and** • **A4.221 *Sabellaria spinulosa* encrusted Atlantic circalittoral rock**	**High**	Offshore export cable corridor.	No information available.		
Offshore subtidal sands and gravels[9] which include:	**High**	Offshore export cable corridor and OAA.	No information available.		

[8] Annex I bedrock and / or stony reef is an overarching habitat description that covers a wide range of bedrock and stony reef habitats (ten separate biotopes). The biotopes 'Faunal turf communities' (CR.HCR.XFa), 'Echinoderms and crustose communities' (CR.MCR.EcCr) and '*Sabellaria spinulosa* encrusted circalittoral rock' (CR.MCR.CSab.Sspi)' have been used to assign sensitivity within this chapter to this overarching habitat.
[9] Offshore subtidal sands and gravels are considered by the Scottish Government FeAST tool under the illustrative biotopes: A5.14 Circalittoral coarse sediment; A2.25 Circalittoral fine sand; and A5.26 Circalittoral muddy sand (continental shelf sands and continental shelf coarse sediments).

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[7]
• **A5.14 Circalittoral coarse sediment;** • **A2.25 Circalittoral fine sand; and** • **A5.26 Circalittoral muddy sand**					
Annex I habitat *Caryophyllia smithii*, sponges and crustose communities on wave-exposed circalittoral rock	**High**	Offshore export cable corridor and OAA.	No information available.		
Potential Burrowed Mud	**High**	Offshore export cable corridor and OAA.	No information available.	No information available.	• Sensitive to 'transition elements and organo-metal (for example, Chromium, Copper, tributyltin (TBT)) contamination' (FeAST). • Sensitive to 'hydrocarbon and PAH contamination)' (FeAST).

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[7]
Species of conservation importance					
Ocean quahog *Arctica islandica*	**High**	Offshore export cable corridor and OAA.	No information available.		
Edible sea urchin *Echinus esculentus*	**High**	Offshore export cable corridor.	• Low resistance to 'heavy metal contamination'. • Low intolerance to 'hydrocarbon contamination'.	• High resilience to 'heavy metal contamination'. • High resilience to 'hydrocarbon contamination'.	• **Low** sensitivity to 'heavy metal contamination. • **Low** sensitivity to 'hydrocarbon contamination'.
Northern Sea fan *Callistephanus pallida* and sponge communities	**High**	Offshore export cable corridor and OAA.	No information available.	No information available.	• Sensitive to 'transition elements and organo-metal (for example, Chromium, Copper, TBT) contamination' (FeAST). • Sensitive to 'hydrocarbon *and PAH* contamination' (FeAST).
Timid burrowing anemone *Edwardsia timida*	**High**	Offshore export cable corridor and OAA.	No information available.		
Blue carbon					
A3.211 *Laminaria digitata* on moderately exposed Atlantic sublittoral fringe rock (MB1217)	**High**	Outside of OAA and offshore export cable corridor, Red Line Boundary, wider study area.	No information available.		

Table 1.4 Value of receptor and MarESA / FeAST sensitivity scores for introduction or spread of INNS

Biotope / species name	Value	Location	Resistance	Resilience	Specific Sensitivity[10]
Intertidal habitats and species					
A1.113 *Semibalanus balanoides* on exposed to moderately exposed or vertical sheltered eulittoral rock	**Low**	Between MLWS and MHWS.	• Low resistance to introduction or spread of INNS.	• Very low resilience to introduction or spread of INNS.	• **High** sensitivity to introduction or spread of INNS.
A1.313 *Fucus vesiculosus* on moderately exposed to sheltered mid eulittoral rock	**Low**	Between MLWS and MHWS.	• Low resistance to introduction or spread of INNS.	• Very low resilience to introduction or spread of INNS.	• **High** sensitivity to introduction or spread of INNS.
A1.314 *Ascophyllum nodosum* on very sheltered mid eulittoral rock	**Low**	Between MLWS and MHWS.	• Medium resistance to introduction or spread of INNS.	• Very low resilience to introduction or spread of INNS.	• **Medium** sensitivity to introduction or spread of INNS.
A1.452 *Porphyra purpurea* and *Ulva spp.* on sand-scoured	**Low**	Between MLWS and MHWS.	• High resistance to introduction or spread of INNS.	• High resilience to introduction or spread of INNS.	• **Not sensitive** to introduction or spread of INNS.

[10] Specific sensitivity is the sensitivity of a receptor to a defined pathway and criteria detailed by MarLIN and FeAST. This term should not be confused with overall sensitivity which incorporates the value of the receptor and specific sensitivity.

Biotope / species name	Value	Location	Resistance	Resilience	Specific Sensitivity[10]
mid or lower eulittoral rock					
A1.214 *Fucus serratus* on moderately exposed lower eulittoral rock	**Low**	Between MLWS and MHWS.	• Medium resistance to introduction or spread of INNS.	• Very low resilience to introduction or spread of INNS.	• **Medium** sensitivity to introduction or spread of INNS.
A2.211 Talitrids on the upper shore and strandline	**Low**	Between MLWS and MHWS.	• High resistance to introduction or spread of INNS.	• High resilience to introduction or spread of INNS.	• **Not sensitive** to introduction or spread of INNS.
A2.221 Barren Atlantic littoral coarse sand	**Very low**	Between MLWS and MHWS.	No information available.		
A2.2221 Oligochaetes in full salinity Atlantic littoral mobile sand	**Low**	Between MLWS and MHWS.	• High resistance to introduction or spread of INNS.	• High resilience to introduction or spread of INNS.	• **Not sensitive** to introduction or spread of INNS.
A2.223 Amphipods and *Scolelepis spp* in littoral medium-fine sand	**Low**	Between MLWS and MHWS.	• High resistance to introduction or spread of INNS.	• High resilience to introduction or spread of INNS.	• **Not sensitive** to introduction or spread of INNS.

Biotope / species name	Value	Location	Resistance	Resilience	Specific Sensitivity[10]
Subtidal Habitats and Species					
MD42 Offshore circalittoral mixed sediment	**Medium**	Offshore export cable corridor.	No information available.		
MC52 Sublittoral sand and muddy sands	**Medium**	Offshore export cable corridor.	No information available.		
MC12 High energy circalittoral rock	**Medium**	Offshore export cable corridor.	No information available.		
MC32 Circalittoral coarse sediment	**Medium**	Offshore export cable corridor.	No information available.		
A5.142 *Mediomastus fragilis*, *Lumbrineris spp.* and venerid bivalves in circalittoral coarse sand or gravel	**Medium**	Offshore export cable corridor.	• Low resistance to introduction or spread of INNS.	• Very low resilience to introduction or spread of INNS.	• **High** sensitivity to introduction or spread of INNS.
A5.145 *Branchiostoma lanceolatum* in circalittoral coarse sand with shell gravel	**Medium**	Offshore export cable corridor.	• Low resistance to introduction or spread of INNS.	• Very low resilience to introduction or spread of INNS.	• **High** sensitivity to introduction or spread of INNS.

Biotope / species name	Value	Location	Resistance	Resilience	Specific Sensitivity[10]
A5.251 *Echinocyamus pusillus, Ophelia borealis* and *Abra prismatica* in circalittoral fine sand	**Medium**	Offshore export cable corridor.	• No resistance to introduction or spread of INNS.	• Very low resilience to introduction or spread of INNS.	• **High** sensitivity to introduction or spread of INNS.
Shellfish					
Norway lobster	**High**	Offshore export cable corridor and OAA.	No information available.		
Brown crab	**Medium**	Offshore export cable corridor and OAA.	No information available.		
Velvet crab	**Medium**	Offshore export cable corridor and OAA.	No information available.		
Cuttlefish	**Medium**	Offshore export cable corridor and OAA.	No information available.		
King scallop	**Medium**	Offshore export cable corridor and OAA.	No information available.		
Habitats of conservation importance					
Sea-pens and burrowing megafauna in circalittoral fine mud	**High**	Offshore export cable corridor and OAA.	No information available.		

Biotope / species name	Value	Location	Resistance	Resilience	Specific Sensitivity[10]
Annex I Biogenic Reef as: • **A5.611 *Sabellaria spinulosa* on stable circalittoral mixed sediment; and** • **A4.221 *Sabellaria spinulosa* encrusted circalittoral rock**	**High**	Offshore export cable corridor.	• Medium resistance to introduction or spread of INNS.	• Very low resilience to introduction or spread of INNS.	• **Medium** sensitivity to introduction or spread of INNS.
Annex I Bedrock and / or Stony Reef[11] as: • **Faunal turf communities on Atlantic circalittoral rock (MC121);**	**High**	Offshore export cable corridor.	• Medium resistance to introduction or spread of INNS.	• Very low resilience to introduction or spread of INNS.	• **Medium** sensitivity to introduction or spread of INNS.

[11] Annex I bedrock and / or stony reef is an overarching habitat description that covers a wide range of bedrock and stony reef habitats (ten separate biotopes). The biotopes 'Faunal turf communities' (CR.HCR.XFa), 'Echinoderms and crustose communities' (CR.MCR.EcCr) and '*Sabellaria spinulosa* encrusted circalittoral rock' (CR.MCR.CSab.Sspi)' have been used to assign sensitivity within this chapter to this overarching habitat.

Biotope / species name	Value	Location	Resistance	Resilience	Specific Sensitivity[10]
• **Echinoderms and crustose communities on Atlantic circalittoral rock (MC122); and** • **A4.221 *Sabellaria spinulosa* encrusted Atlantic circalittoral rock**					
Offshore subtidal sands and gravels[12] which include: • **A5.14 Circalittoral coarse sediment;** • **A2.25 Circalittoral fine sand; and** • **A5.26 Circalittoral muddy sand**	**High**	Offshore export cable corridor and OAA.	No information available from MarESA assessments. See Section 10.9.5 of **Volume 1, Chapter 10: Benthic, Epibenthic and Intertidal Ecology** on 'Habitats of conservation importance' for information available from FeAST 2023.		

[12] Offshore subtidal sands and gravels are considered by the Scottish Government FeAST tool under the illustrative biotopes: A5.14 Circalittoral coarse sediment; A2.25 Circalittoral fine sand; and A5.26 Circalittoral muddy sand (continental shelf sands and continental shelf coarse sediments).

Biotope / species name	Value	Location	Resistance	Resilience	Specific Sensitivity[10]
Annex I habitat *Caryophyllia smithii,* sponges and crustose communities on wave-exposed circalittoral rock	**High**	Offshore export cable corridor and OAA.	No information available.		
Potential Burrowed Mud	**High**	Offshore export cable corridor and OAA.	No information available.		
Species of conservation importance					
Ocean quahog (*Arctica islandica*)	**High**	Offshore export cable corridor and OAA.	No information available.		
Edible sea urchin (*Echinus esculentus*)	**High**	Offshore export cable corridor.	No information available.		
Northern Sea fan (*Callistephanus pallida*) and sponge communities	**High**	Offshore export cable corridor and OAA.	No information available.		
Timid burrowing anemone (*Edwardsia timida*)	**High**	Offshore export cable corridor and OAA.	No information available.		

Biotope / species name	Value	Location	Resistance	Resilience	Specific Sensitivity[10]
Blue carbon					
A3.211 *Laminaria digitata* on moderately exposed Atlantic sublittoral fringe rock (MB1217)	**High**	Outside of OAA and offshore export cable corridor Red Line Boundary, wider study area.	• Low resistance to introduction or spread of INNS.	• Very low resilience to introduction or spread of INNS.	• **High** sensitivity to introduction or spread of INNS.

Table 1.5 Value of receptor and MarESA / FeAST sensitivity scores for habitat loss / alteration

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[13]
Subtidal habitats and species					
Offshore circalittoral mixed sediment (MD42)	**Medium**	Offshore export cable corridor.	No information available.		
Sublittoral sand and muddy sands (MC52)	**Medium**	Offshore export cable corridor.	No information available.		
High energy circalittoral rock (MC12)	**Medium**	Offshore export cable corridor.	No information available.		
Circalittoral coarse sediment (MC32)	**Medium**	Offshore export cable corridor.	No information available.		
A5.142 *Mediomastus fragilis*, *Lumbrineris spp*. and venerid bivalves in circalittoral coarse sand or gravel	**Medium**	Offshore export cable corridor.	• No resistance to 'physical change (to another seabed type)'.	• Very low resilience to 'physical change (to another seabed type)'.	• **High** sensitivity to 'physical change (to another seabed type)'.
A5.145 *Branchiostoma lanceolatum* in circalittoral coarse sand with shell gravel	**Medium**	Offshore export cable corridor.	• No resistance to 'physical change (to another seabed type)'.	• Very low resilience to 'physical change (to another seabed type)'.	• **High** sensitivity to 'physical change (to another seabed type)'.

[13] Specific sensitivity is the sensitivity of a receptor to a defined pathway and criteria detailed by MarLIN and FeAST. This term should not be confused with overall sensitivity which incorporates the value of the receptor and specific sensitivity.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[13]
A5.251 *Echinocyamus pusillus, Ophelia borealis* and *Abra prismatica* in circalittoral fine sand	**Medium**	Offshore export cable corridor.	• No resistance to 'physical change (to another seabed type)'.	• Very low resilience to 'physical change (to another seabed type)'.	• **High** sensitivity to 'physical change (to another seabed type)'.
Shellfish					
Norway lobster	**High**	Offshore export cable corridor and OAA.	• Low resistance to 'substratum loss'	• Medium resilience to 'substratum loss'.	• **Medium** sensitivity to 'substratum loss'.
Brown crab	**Medium**	Offshore export cable corridor and OAA.	• Medium resistance to 'substratum loss'	• Medium resilience to 'substratum loss'.	• **Medium** sensitivity to 'substratum loss'.
Velvet crab	**Medium**	Offshore export cable corridor and OAA.	No information available.		
Cuttlefish	**Medium**	Offshore export cable corridor and OAA.	• Medium resistance to 'physical change (to another seabed type)'.	• Medium resilience to 'physical change (to another seabed type)'.	• **Medium** sensitivity to 'physical change (to another seabed type)'.
King scallop	**Medium**	Offshore export cable corridor and OAA.	• Low resistance to 'substratum loss'.	• High resilience to 'substratum loss'.	• **Medium** sensitivity to 'substratum loss'.
Habitats of conservation importance					
Sea-pens and burrowing megafauna in circalittoral fine mud (MC6216)	**High**	Offshore export cable corridor and OAA.	• No resistance to 'physical change (to another seabed type).	• Very low resilience to 'physical change (to another seabed type)'.	• **High** sensitivity to 'physical change (to another seabed type)'.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[13]
Annex I Biogenic Reef as: • **A5.611 *Sabellaria spinulosa* on stable circalittoral mixed sediment; and** • **A4.221 *Sabellaria spinulosa* encrusted circalittoral rock**	**High**	Offshore export cable corridor.	• No resistance to 'physical change (to another seabed type)'.	• Very low resilience to 'physical change (to another seabed type)'.	• **High** sensitivity to 'physical change (to another seabed type)'.
Annex I Bedrock and / or Stony Reef[14] as: - • **Faunal turf communities on Atlantic circalittoral rock (MC121);** • **Echinoderms and crustose communities on Atlantic circalittoral rock (MC122); and** • **A4.221 *Sabellaria spinulosa* encrusted Atlantic circalittoral rock**	**High**	Offshore export cable corridor.	• No resistance to 'physical change (to another seabed type)'.	• Very low resilience to 'physical change (to another seabed type)'.	• **High** sensitivity to 'physical change (to another seabed type)'.

[14] Annex I bedrock and / or stony reef is an overarching habitat description that covers a wide range of bedrock and stony reef habitats (10 separate biotopes). The biotopes 'Faunal turf communities' (CR.HCR.XFa), 'Echinoderms and crustose communities' (CR.MCR.EcCr) and '*Sabellaria spinulosa* encrusted circalittoral rock' (CR.MCR.CSab.Sspi)' have been used to assign sensitivity within this chapter to this overarching habitat.

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[13]
Offshore subtidal sands and gravels[15] which include: • **A5.14 Circalittoral coarse sediment;** • **A2.25 Circalittoral fine sand; and** • **A5.26 Circalittoral muddy sand**	**High**	Offshore export cable corridor and OAA.	No information available from MarESA assessments. See **Section 10.10.5** of **Chapter 10, Benthic, Epibenthic and Intertidal Ecology** on 'Habitats of conservation importance' for information available from FeAST 2023.		
Annex I habitat *Caryophyllia smithii*, sponges and crustose communities on wave-exposed circalittoral rock	**High**	Offshore export cable corridor and OAA.	• No resistance to 'physical change (to another seabed type)'.	• Very low resilience to 'physical change (to another seabed type)'.	• **High** sensitivity to 'physical change (to another seabed type)'.
Potential Burrowed Mud	**High**	Offshore export cable corridor and OAA.	• No information available.	• No information available.	• **High** sensitivity to 'physical change (to another seabed type)' (FeAST).
Species of conservation importance					
Ocean quahog (*Arctica islandica*)	**High**	Offshore export cable corridor and OAA.	• No resistance to 'physical change (to another seabed type).	• Very low resilience to 'physical change (to	• **High** sensitivity to 'physical change (to another seabed type)'.

[15] Offshore subtidal sands and gravels are considered by the Scottish Government FeAST tool under the illustrative biotopes: A5.14 Circalittoral coarse sediment; A2.25 Circalittoral fine sand; and A5.26 Circalittoral muddy sand (continental shelf sands and continental shelf coarse sediments).

Biotope / species name	Value	Location	Resistance	Resilience	Specific sensitivity[13]
				another seabed type).	
Edible sea urchin (*Echinus esculentus*)	**High**	Offshore export cable corridor.	• Low resistance to 'substratum loss'.	• High resilience to 'substratum loss'.	• **Medium** sensitivity to 'substratum loss'.
Northern Sea fan (*Callistephanus pallida*) and sponge communities	**High**	Offshore export cable corridor and OAA.	• Low resistance to 'substratum loss'.	• Very low resilience to 'substratum loss'.	• **High** sensitivity to 'physical change (to another seabed type)' (FeAST).
Timid burrowing anemone (*Edwardsia timida*)	**High**	Offshore export cable corridor and OAA.	No information available.		

2. References

Marine Scotland, (2022). *Feature Activity Sensitivity Tool (FEAST).* [online] Available at: https://www.marine.scotland.gov.uk/feast/ [Accessed: 03 September 2025].

Tyler-Walters, H., Tillin, H.M., Perry, F., Stamp, T. and d'Avack, E.A.S., (2018). *Marine Evidence-Based Sensitivity Assessment – A Guide.* Plymouth: Marine Biological Association of the United Kingdom [online] Available at: https://www.marlin.ac.uk/assets/pdf/marlin%20guidance%20final%20for%20web.pdf [Accessed: 03 September 2025].

3. Glossary of Terms and Abbreviations

3.1 Abbreviations

Acronym	Definition
FeAST	Feature Activity Sensitivity Tool
INNS	Invasive Non-Native Species
MarESA	Marine Evidence-bases Sensitivity Assessment
MarLIN	Marine Life Information Network
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
OAA	Option Agreement Area
PAH	Polycyclic Aromatic Hydrocarbon
TBT	Tributyltin

3.2 Glossary of terms

Term	Definition
Annex I reef	Refers to a marine habitat listed under Habitat 1170 of the EU Habitats Directive (92/43/EEC). Hard compact substrata on solid and soft bottoms, which arise from the sea floor in sublittoral and littoral zones.
Shellfish	Aquatic invertebrates characterised by an external shell or shell-like exoskeleton. They are commonly divided into two primary groups: molluscs and crustaceans.
Resilience	Refers to the ability of a receptor to recover from disturbance or stress.
Resistance	Indicates whether a receptor can absorb disturbance or stress without changing character.

MarramWind