Swallow Sand (NG 16) Evidence Review

Region	Net Gain	
Site Name/number	Swallow Sand NG 16	
ENG Features present and proposed for inclusion within MCZ designation	BSH	• Subtidal coarse sediment • Subtidal sand
	Habitat FOCI	• Subtidal sands and gravels
	SOCI	-
ENG Features present but not proposed for inclusion within MCZ designation	BSH	-
	Habitat FOCI	-
	SOCI	• *Arctica islandica*
Non-ENG Features (Geological/geomorphological)		• North Sea glacial tunnel valleys (Swallow hole)

Evidence Summary – data provided by Regional MCZ Projects

Feature	Evidence Summary	Key Sources
Subtidal coarse sediment	The occurrence of this broad-scale habitat was supported by 2 Combined MESH/UKSeaMap GB001055 polygons and 2 UKSeaMap GB001055 polygons. No point data were available.	UKSeaMap Combined MESH/UKSeaMap
Subtidal sand	The occurrence of this broad-scale habitat was supported by 3 Combined MESH/UKSeaMap GB001055 polygons and 3 UKSeaMap GB001055 polygons.	UKSeaMap Combined MESH/UKSeaMap
Subtidal sands and gravels	The occurrence of tis habitat FOCI was supported by polygon data derived from 3 Combined MESH/UKSeaMap GB001055 polygons, 3 UKSeaMap GB001055 polygons and 1 MB0102 BGS modelled subtidal sands and gravels polygon. In total six point records were available within the rMCZ in support of this habitat FOCI.	MB0102 UKSeaMap Combined MESH/UKSeaMap

Description of New Evidence Identified by MB0116 project

Evidence Description	Source	Feature
Point data were also available from four locations, derived from Cefas surveys; CIR 5B/01, CIR 3A/02 and C END 12/08 surveys.	Cefas	Subtidal sand Subtidal sands and gravels

Evidence That Could Not Be Acquired by MB0116 project

Evidence Description	Source	Feature
Bolam, S.G., Barrio-Frojan, C.R.S. and Eggleton, J.D., 2010. Macrofaunal production along the UK continental shelf. *Journal of Sea Research*, 64: 166-179	Christopher.Barrio@cefas.co.uk	Unknown
Kenny, A.J., Rees, H.L. and Lees, R.G., 1991. An inter-regional comparison of gravel assemblages off the English east and south coasts: preliminary results. C.M. - International Council for the Exploration of the Sea, CM 1991 (E:27). ICES [s.l.]. 6 + annexes pp	Andrew.Kenny@cefas.co.uk	Unknown
Cooper, K.M., Curtis, M., Wan Hussin, W.M.R., Barrio Froján, C.R.S., Defew, E.C., Nye, V. and Patterson, D.M., 2011. Implications of dredging induced changes in sediment particle size composition for the structure and function of marine benthic macrofaunal communities. *Marine Pollution Bulletin*, 62: 2087-2094.	Keith.Cooper@cefas.co.uk	Unknown
BGS seabed sediments data points	BGS/JNCC	Subtidal coarse sediment Subtidal sand Subtidal sands and gravels
Cefas habitat points	Cefas	Subtidal coarse sediment Subtidal sand Subtidal sands and gravels

Confidence Assessment undertaken by MB0116 project

Feature	Presence	Extent	Condition	Boundaries (site)
Subtidal coarse sediment	Low	Low	Low	Low
Subtidal sand	High	High	Low	
Subtidal sands and gravels	High	High	Low	

The occurrence of the broad-scale habitat ‘subtidal coarse sediment’ was supported by predictive modelled data (UKSeaMap) only. There were no point records and a lack of supporting predictive modelled data which meant that confidence in the presence was regarded as ‘low’ for this habitat. As there was no survey data available, confidence in the extent of the feature was categorised as ‘low’.

The occurrence of the broad-scale habitat ‘subtidal sand’ was supported by predictive modelled data (UKSeaMap). There were 3 sample points (derived from Cefas surveys) which verified the habitat polygon and therefore confidence in the presence of this feature was categorised as ‘high’. The survey data were distributed over >50% of the feature, meaning that confidence in the extent of the feature was categorised as ‘high’.

The occurrence of the habitat FOCI ‘subtidal sands and gravels’ was supported by polygon data (MESH and MB0102 BGS Modelled subtidal sands and gravels) and predicted modelled data (UKSeaMap). This was corroborated by point data from Cefas which were distributed over >50% of the rMCZ. Therefore, confidence in both the presence and extent of the feature were categorised as ‘high’.

The condition assessment for all the features was based on a Vulnerability Assessment and could not be improved beyond a ‘low’ confidence score. Similarly, the confidence assessment in the boundary of the site was classified as low primarily because the site boundary was not closely aligned to the boundary of the individual features. The mapped extent of the ‘subtidal coarse sediments’ and ‘subtidal sand’ features, for example, were far more extensive than the boundary of the rMCZ.