

## Aln Estuary (NG 13a) Evidence Review

Region	Net Gain	
Site Name/number	Aln Estuary NG 13a	
ENG Features present and proposed for inclusion within MCZ designation	BSH	<ul style="list-style-type: none"> <li>• Intertidal mud</li> <li>• Coastal saltmarshes and saline reedbeds</li> <li>• High energy infralittoral rock</li> </ul>
	Habitat FOCI	<ul style="list-style-type: none"> <li>• Estuarine rocky habitats</li> <li>• Sheltered muddy gravels</li> <li>• Subtidal sands and gravels</li> </ul>
	SOCI	-
ENG Features present but not proposed for inclusion within MCZ designation	BSH	<ul style="list-style-type: none"> <li>• Subtidal sand</li> </ul>
	Habitat FOCI	-
	SOCI	-
Non-ENG Features (Geological/geomorphological)		-

### Evidence Summary – data provided by Regional MCZ Projects

Feature	Evidence Summary	Key Sources
Intertidal mud	The occurrence of this broad-scale habitat was supported by Combined MESH/UKSeaMap GB001072 polygons MB0102 GB001072 and 3 MESH points derived from JNCCMNCR10005331 & JNCCMNCR10005334. Landscape photographs provided by NE and CCO imagery	MB0102 Combined MESH/UKSeaMap NE and CCO
Coastal saltmarshes and saline reedbeds	No geographical information was available in support of this broad-scale habitat. Landscape photographs provided by NE and CCO imagery	NE and CCO
High energy infralittoral rock	Modelled data only (UKSeaMap, GB001055) with no MESH confidence score (10% coverage). 1 disagreeing MESH point in BSH polygon (derived from JNCCMNCR10005331).	Combined MESH/UKSeaMap
Estuarine rocky habitats	No polygon data. >1 HOCl type in rMCZ. Five point records verified the occurrence of this habitat (derived from JNCCMNCR10000314 & JNCCMNCR10005334)	MB0102 Combined MESH/UKSeaMap
Sheltered muddy gravels	No polygon data. >1 HOCl type in rMCZ. Three point records verified the occurrence of this habitat (derived from JNCCMNCR10000314 & JNCCMNCR10005334)	MB0102 Combined MESH/UKSeaMap
Subtidal sands	Polygon data derived from Combined	Combined

and gravels	MESH/UKSeaMap (GB001055), MB0102 (GB100026). No point data.	MESH/UKSeaMap MB0102
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### Description of New Evidence Identified by MB0116 project

No new evidence identified.

### Evidence That Could Not Be Acquired by MB0116 project

Evidence Description	Source	Feature
Environment Agency. 2011. Saltmarsh extents – AfA137. Polygon data layer showing the extent of Saltmarsh in Coastal and Transitional waters for use by both Flood and Coastal Risk Management and the implementation of the Water Framework Directive	Environment Agency	Coastal saltmarshes and saline reedbeds
Brodie, J., John, D. M., Tittley, I., Holmes, M.J. Williamson, D.B., 2007. Important Plant Areas for algae: a provisional review of sites and areas of importance for algae in the United Kingdom. Plantlife International, Salisbury, UK	j.brodie@nhm.ac.uk	Habitat FOCI
Bolam, S.G., Barrio-Frojan, C.R.S., Eggleton, J.D., 2010. Macrofaunal production along the UK continental shelf. <i>Journal of Sea Research</i> , 64 166-179	Cefas	Unknown
Buck, A.L. 1997. An inventory of UK estuaries. Eastern England. Joint Nature Conservation Committee. Peterborough.	JNCC	Unknown
Posford Duvivier Environment 1999. Overview of coastal sand dunes, saltmarsh and vegetated shingle by Natural Area. 317.	Unknown	Coastal saltmarshes
Foster-Smith, J. 2000. The marine fauna and flora of the Cullercoats District. Marine species records for the North East coast of England. University of Newcastle, Department of Marine Sciences and Coastal Management. Newcastle upon Tyne.	<a href="mailto:r.foster-smith@envision.uk.com">r.foster-smith@envision.uk.com</a>  University of Newcastle, Department of Marine Sciences and Coastal Management. Newcastle upon Tyne.	Unknown

Geo-referenced photographic evidence	NE	Coastal saltmarshes and saline reedbeds Intertidal mud Estuarine rocky habitats
Data from Geomatics group	Environment Agency	Coastal saltmarshes and saline reedbeds

### Confidence Assessment undertaken by MB0116 project

Feature	Presence	Extent	Condition	Boundaries (site)
Intertidal mud	High	High	Low	Low
Coastal saltmarshes and saline reedbeds	High	Low	Low	
High energy infralittoral rock	Low	Low	Low	
Estuarine rocky habitats	Low	Low	Low	
Sheltered muddy gravels	Low	Low	Low	
Subtidal sands and gravels	Low	Low	Low	

Polygon data with a MESH confidence score of 36 supported the occurrence of the broad-scale habitat 'intertidal mud', and although there were 3 sample points (derived from an MNCR survey) within the polygon, only 1 corroborated the habitat type. However landscape photographs of BSH features taken from a geo-referenced point from surveys of specific MCZ features supplied by Natural England and aerial photography from CCO verifies habitat presence and extent. Confidence in the presence and extent of the feature was therefore categorised as 'high'.

There was no geographic information available for the broad-scale habitat 'coastal saltmarshes and saline reedbeds'. However landscape photographs of BSH features taken from a geo-referenced point from surveys of specific MCZ features supplied by Natural England and aerial photography from CCO verifies habitat presence and extent. Confidence in the presence of the feature was therefore categorised as 'high'. Aerial photography gives visual confirmation of the feature presence however with no other validating GI data only a low score is achieved for extent.

The occurrence of the broad-scale habitat 'high energy infralittoral rock' was supported by predictive modelled data (UKSeaMap). Only 1 sample point was identified within the polygons (derived from an MNCR survey) and this did not corroborate the habitat type assigned, this meant that confidence in the presence of this habitat could not be categorised. A lack of survey data meant that the confidence in the extent of the feature was categorised as 'low'.

There were 5 sample points which supported the occurrence of the habitat FOCI 'estuarine rocky habitats' and 3 that verified the presence of 'sheltered muddy gravels', these were

derived from a number of projects including MB0102, MNCR and MESH. In the absence of any corroborating polygon data the presence and extent of these habitats was categorised as 'low'.

The occurrence of the habitat FOCI 'subtidal sands and gravels' was supported by polygon data from MB0102, however an absence of point data meant that confidence in both the presence and the extent of this feature was categorised as 'low'.

The condition assessment for all the features was based on a Vulnerability Assessment and could not be improved beyond a 'low' confidence score. The confidence assessment in the boundary of the site was classified as low primarily because the overall confidence in the extent of the respective BSH and Habitat FOCI was determined as low.