# Aln Estuary Marine Conservation Zone

#### Where is this site?

Aln Estuary MCZ is an inshore site on the Northumberland Coast, which extends from the estuary mouth to the upper tidal limit. It is the smallest MCZ being designated covering an area of 0.39 km². The site partly overlaps with the Alnmouth Saltmarsh & Dunes Site of Special Scientific Interest which already protects some of the coastal saltmarsh within the estuary.

## Why is this site important?

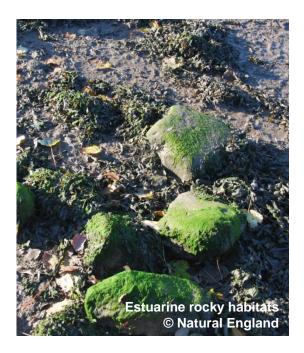
Conditions in estuaries are typically more sheltered than other coastal areas; this creates an environment which can support some species that are not found in more exposed areas. The Aln estuary contains intertidal mud deposits as well as saltmarshes and unusual estuarine rocky habitats, which create an environment capable of supporting a diverse range of species. These habitats support a range of migrating and wintering water birds and are likely to create nursery areas for a range of fish species such as sprat or flounder.





## What does this Marine Conservation Zone protect?

Finding rocky habitats within estuaries is relatively uncommon as most are made up of mud and sediments. In fact there are only a few examples of this habitat within this area of the UK. Rocky habitats typically occur only in small patches within the estuary but contribute greatly to the biodiversity. The range of sheltered environments, rock pools and lower levels of salinity create a habitat which supports many different plant and animal species such as kelps, wracks, anemones, barnacles and sea squirts.



Coastal saltmarshes and saline reedbeds are recognised as being one of the world's most productive ecosystems with many birds, juvenile fish, crustaceans and molluscs using marshes as nurseries. Salt marshes are also important in relation to climate change. They are known to accumulate sediment and organic matter at a rate that may keep up with sea level rise, as well as providing carbon storage at approximately 10 times the rate measured in temperate forests.

Intertidal mud is a highly productive ecosystem and is an important feeding ground for wading and migratory birds that is available all year round. This habitat plays a crucial role in the process of primary production: on the surface of the mud there is a biofilm layer of microalgae and these tiny plants convert carbon dioxide from the air and water into substances such as glucose, that provide a source of energy for the animals that eat them. Intertidal mudflats can also contribute significantly to carbon storage on account of their high sedimentation rates.

Features	General management approach
Coastal saltmarshes and saline reedbeds	Maintain in favourable condition
Intertidal mud	Maintain in favourable condition
Estuarine rocky habitats	Maintain in favourable condition
Sheltered muddy gravels	Maintain in favourable condition

#### **Who will manage Marine Conservation Zones?**

Many activities within the marine environment are regulated through marine licences. More information regarding the marine licensing process in relation to MCZs can be found on the MMO website www.marinemanagement.org.uk/licensing/marine.htm

Other activities are regulated through different mechanisms. For example fishing activities are managed through European legislation, national statutory instruments, byelaws and self-imposed voluntary agreements. Similar arrangements are in place to manage the range of activities that may impact MCZs including pollution, coastal development and recreation.



Management of sites is currently being prioritised nationally according to the potential or actual adverse impacts of activities on the features designated in relation to fishing activities. This prioritisation will be further refined at a local level taking into account relevant information and will guide regulators to those sites which may need protection before others.

Any management measures that are required for MCZs will be applied on a case-bycase basis. Management measures will be implemented at sites most at risk of damage first, regulating only those activities which have a detrimental impact on the features. In cases where there is a high risk to designated features being damaged emergency measures may be put in place to ensure the protection of vulnerable habitats and species.

## What happens now this site has been designated?

The site specific information below provides an overview of which activities may be affected by the designation of the MCZ and the current management measures. As with all management measures, they may, of course, be subject to change in the light of new evidence becoming available.

Current activities identified at this site which could be impacted include port and harbour operations which will be regulated through the appropriate licensing regimes. MCZ designation will need to be taken into consideration when assessing environmental impacts of marine works as part of the licensing application process.

With regards to fisheries management this site is within the jurisdiction of the Northumberland IFCA. All relevant IFCA district-wide byelaws will apply to this site, in addition to all relevant national and EU fisheries legislation.

For further information visit the IFCA and MMO websites at <a href="https://www.marinemanagement.org.uk/fisheries/monitoring/regulations\_bluebook.htm">www.marinemanagement.org.uk/fisheries/monitoring/regulations\_bluebook.htm</a> or <a href="https://www.nifca.gov.uk">www.nifca.gov.uk</a>

Any potential management measures to further the conservation objectives of each site will be developed in consultation with relevant regulators and, where appropriate, other bodies.

#### Where can I find out further information?

An interactive map showing this MCZs and other marine protected areas is available at <a href="http://jncc.defra.gov.uk/page-5201">http://jncc.defra.gov.uk/page-5201</a>

Additional information about this site and other MCZs is available at <a href="https://www.gov.uk/government/policies/protecting-and-sustainably-using-the-marine-environment">https://www.gov.uk/government/policies/protecting-and-sustainably-using-the-marine-environment</a>

and within Natural England's advice available at <a href="http://publications.naturalengland.org.uk/category/1499649">http://publications.naturalengland.org.uk/category/1499649</a>





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# **Annex: Management**

Lead organisation	Activities
Inshore Fisheries and Conservation Authorities (IFCAs)	Fisheries (0-6nm) including commercial fisheries and recreational fishing activities such as sea angling     For further information visit <a href="https://www.association-ifca.org.uk">www.association-ifca.org.uk</a>
Marine Management Organisation (MMO)	<ul> <li>Fisheries (management) (6-12nm)</li> <li>Fisheries (enforcement) national and EU legislation</li> <li>Licensable activities such as deposit and removal activities below mean high water springs, including subsea cables (up to 12nm), construction (including renewables &lt;100MW, ports and costal protection), dredging and disposal</li> <li>Harbour Orders and Harbour Empowerment Orders</li> <li>Section 36 and safety zone consents</li> <li>Enforcement of licensable activity and other consents (including deemed marine licences)</li> <li>Development of marine plans integrating the social requirements, economic potential and environmental priorities of marine plan areas</li> <li>Activities requiring a wildlife licence</li> <li>For further information visit <a href="www.marinemanagement.org.uk/fisheries.">www.marinemanagement.org.uk/fisheries.</a> or</li> <li>www.marinemanagement.org.uk/licensing/marine.htm</li> </ul>
Environment Agency (EA)	<ul> <li>Fisheries management for migratory and fresh water fish</li> <li>Coastal protection and flood management</li> <li>Water quality</li> <li>Permitted discharges from terrestrial sources</li> <li>For further information visit <a href="www.environment-agency.gov.uk/default.aspx">www.environment-agency.gov.uk/default.aspx</a></li> </ul>
Department of Energy and Climate Change (DECC)	<ul> <li>Oil and Gas related activities</li> <li>Renewable energy related activities</li> <li>For further information visit</li> <li>www.gov.uk/government/organisations/department-of-energy-climate-change</li> </ul>
Harbour Authorities and local planning authorities	<ul> <li>Harbour authorities have management responsibilities for the port and coastal waters within their jurisdiction</li> <li>Local authorities have role to manage, regulate and facilitate activities at the coast. These include management of coastal recreation, tourism, economic regeneration, flood protection, spatial planning and coastal zone and estuary management,</li> <li>For further information contact your local authority or IFCA</li> </ul>
Department for Transport (DfT)	Responsible for shipping, harbours, ship pollution and offshore safety For further information visit     www.gov.uk/government/organisations/department-for-transport
Natural England (NE)	Public access  For further information visit <u>www.naturalengland.org.uk/</u>