



1. Requirement overview:

Requirements	To identify areas of current or projected coastal squeeze, define the extent of habitat loss as a result of coastal squeeze and assess impacts on vulnerable sites.
Requirement detail	<p>Marine plans need to address issues at the coast as well as in the seas around England. Coastal squeeze is an issue that is regularly highlighted as a concern by stakeholders during the development of marine plans.</p> <p>To support the development of marine plans, the MMO is looking to:</p> <ul style="list-style-type: none"> <li>• use existing data on habitat extent and fixed structures to identify areas of current and potential coastal squeeze</li> <li>• identify which measures prevent coastal squeeze, or mitigate and potentially compensate for its impacts, and would be appropriate for use in marine plans</li> <li>• highlight how opportunities for synergy with existing activity, for example the work of the Environment Agency on coastal and flood defence</li> </ul> <p>Work to fulfil this requirement would look at where coastal squeeze is an issue now or could be in the future and what methods might be most appropriately deployed in different locations.</p> <p>For the purposes of this requirement, coastal squeeze is defined, 'as one form of coastal habitat loss, where intertidal habitat is lost due to the high water mark being fixed by a defence or structure (i.e. the high water mark residing against a hard structure such as a seawall) and the low water mark migrating landwards in response to sea level rise' (<a href="#">Pontee (2013)</a>).</p>
MMO use	<p><b>Marine Planning:</b></p> <ul style="list-style-type: none"> <li>• improve identification of areas where coastal squeeze may be an issue now or in the future</li> <li>• improve how marine plans consider the issue of coastal squeeze, including potentially through plan policies</li> </ul>
External interest	Natural England, Environment Agency
Delivery target	2018, Q1

## 2. Aims and objectives

Aim:

Identify areas where coastal squeeze is an issue and consider methods to address it in marine plans

Objectives:

- identify areas of current and potential coastal squeeze
- identify measures to prevent coastal squeeze, or mitigate and potentially compensate for its impacts, that could be used in marine plans
- highlight opportunities for synergy with existing activity

## 3. Existing evidence

MMO	The <a href="#">Marine Information System</a> (MIS) has a layer showing all shoreline management plan policies around the English coastline. MMO1109 and MMO1110 (yet-to-be published) analyse all subnational plans for the north east, north west, south east and south west marine plans, including local plans and shoreline management plans.
Academic	<a href="#">Pontee (2013)</a> discusses different definitions of coastal squeeze and proposes the one used in this document. <a href="#">Doody (2013)</a> highlights the different approaches to management of land that may experience coastal squeeze, from a historical perspective.
Other	Defra have published <a href="#">guidance</a> on how to account for coastal squeeze in relation to the requirements of the European Habitats and Birds Directives. English Nature (2006) highlight how saltmarsh (one of the habitats susceptible to coastal squeeze) have changed in a number of Special Protection Areas since their designation. The <a href="#">European Commission (2007)</a> published clarification on compensatory measures, which would be useful where coastal squeeze had been identified as an impact in a development. <a href="#">ABPMer (2013)</a> reviewed how this had worked for marine sites in the UK.

## 4. Current activity

The MMO is not currently involved in any activity related to this requirement

## 5. Associated evidence requirements

Ref	Title
R020	The location, condition and features of significant sites for habitat creation or restoration

More information on this is available [here](#)

## 6. Potential delivery route

The MMO will look to partner with organisations of relevance to widen the potential impact of any work undertaken in this area. Similarly, where appropriate, the MMO will explore opportunities to influence the research of others to gather evidence that can be applied within a marine management context. As work progresses it is implicit that knowledge exchange is required throughout the duration of this requirement and not limited to when delivery is complete.

### Partnering

#### **Delivery window: Q1, 2017 to Q1, 2018**

There is currently interest across the Defra group in understanding coastal squeeze further. Partnering with interested organisations could maximise resources and opportunities for learning from this requirement.

### Knowledge exchange

#### **Delivery window: Q2, 2016 to Q1, 2020**

Upon completion of any work or projects relating to this evidence request a period of knowledge exchange will be required to communicate the information as well as allowing assimilation into the MMOs ongoing marine management processes.

See table 1 for timescales.

## 7. Contact

For more information or to add further research to the existing evidence list please email [evidence@marinemanagement.org.uk](mailto:evidence@marinemanagement.org.uk)

**Table 1: Delivery timescales 2017 to 2020**

Delivery Route	2017				2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Partnering																
Knowledge exchange																