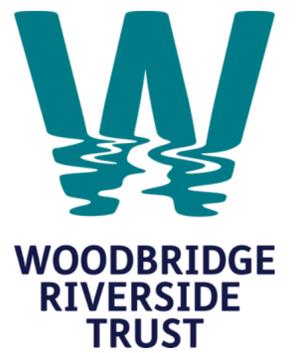




Do you know?

How the Deben Estuary is affected by tidal flow.



The Flood Risk Management Story - the estuarine environment.

An estuary has a constantly changing mixture of salt and fresh water and it has fine sedimentary material carried from the sea and from rivers which settles in the estuary to form mudflats.

HOW IS FLOOD RISK MANAGED?

STAGE 1

At first, rely on natural soft defences and build above flood level.

SOFT DEFENCES Mudflats and salt marshes naturally contribute to flood defence. Clay walls and turf defences were traditionally built by land owners to reclaim land from the flood plain for agriculture and development.



Suffolk Coast and Heaths AONB

Hemley Marsh is an example where historically a defence wall has failed and saltmarsh has established

STAGE 2

Estimate the value of what needs to be protected and decide to:

- **Do nothing** - stop all maintenance, repair and renewal.
- **Hold the line** - maintain existing defences with a view to improvement needed over time - this may require new defences in front of the old or raising the height of defence walls.
- **Managed realignment** - allow defences to breach moving the flood risk higher up. It may be necessary to put in place a secondary defence wall to stop the tide going too far inland.

STAGE 3

It may be decided to build more substantial, hard defences to protect land and developments.

HARD DEFENCES to protect land and property.

- **Sea Walls** - usually built from steel or concrete to protect settlements where there are lots of properties or special assets to be found.
- **Revetments** - a hard facing to a soft defence wall where it is vulnerable to the effects of tidal action. They absorb wave energy and prevent erosion.



Waldringfield Flood Defence Group

Waldringfield defence works under construction