



Environment  
Agency

# The Alkborough tidal defence scheme

Alkborough Flats are on the south bank of the Humber Estuary, on the eastern side of the confluence between the River Trent and the River Humber. The site is around 440 hectares of agricultural land, of which approximately 375 hectares are protected by a flood embankment constructed in the late 1950s.

The Alkborough tidal defence scheme cost £10.2 million and is a fundamental part of the Environment Agency's long-term strategy for managing flood risk on the Humber Estuary.

More than 90,000 hectares of land and 300,000 properties around the Humber are below high tide levels and rely on the system of flood defences around the estuary. Under the Humber Strategy, more than £80 million will be spent on flood defence improvement work over the next five years and investment will total around £1 billion over the next 100 years.



## Details of the scheme

The Alkborough tidal defence scheme increases the level of flood protection to an area stretching from the Humber Bridge to Goole up the tidal River Ouse and as far as Keadby Bridge on the tidal River Trent.

The scheme features include a 20 metre-wide breach of the existing flood bank, a 1,500 metre length of lowered embankment or spillway and a new section of floodbank to protect assets at the edge of the site.

The scheme has been designed to:

- reduce the impact of sea level rise;
- safeguard the internationally important nature conservation interest of the Humber by creating new wetland habitat;
- provide a focus for education and access opportunities for local communities.

Funding for the scheme has come from the Environment Agency via the Department for Environment, Food and Rural Affairs (Defra,) Yorkshire Forward, the Heritage Lottery Fund and the European Union (EU) through the Interreg programme. The Alkborough Flats project is one of five being funded by the EU through the Interreg programme to promote new approaches to the impacts of sea level rise. Associated British Ports (ABP) have also contributed by allowing some of their land to be used as part of the scheme.



The scheme has been developed by a partnership of the Environment Agency, English Nature, The Countryside Agency, ABP and North Lincolnshire Council.

For a flood event with a 0.5 per cent chance of happening in any year (1 in 200)\* the scheme at Alkborough will reduce extreme water levels by more than 150 mm.

Providing flood storage at Alkborough has made it possible to defer improvements to other flood defences in the tidal rivers upstream of the site that would otherwise be needed to counter the effects of sea level rise. The Environment Agency will save many millions of pounds as a result of being able to defer these schemes, money which can be diverted to other, more pressing, flood alleviation projects.

**Habitat at Alkborough**

Studies we carried out on the Humber Estuary show that valuable saltmarsh and wetland – known as inter-tidal habitat – will be lost over the next 100 years as a result of sea level rise.

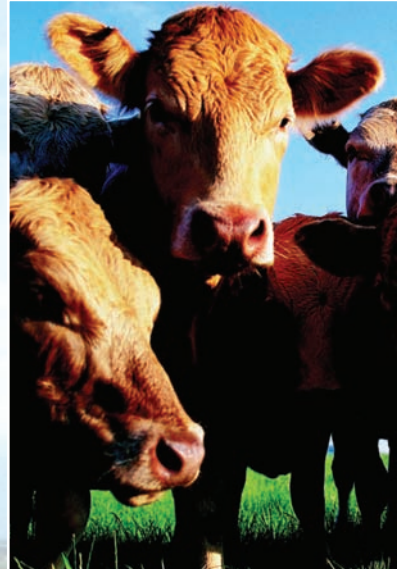
The scheme at Alkborough is part of our approach to replacing these losses and will recreate more than 150 hectares of wetland and increase the biodiversity of the area. Other smaller managed realignment projects are being developed in other parts of the estuary to help address this problem.

The new wetland habitats at Alkborough will meet all of our national Biodiversity Action Plan targets for saltmarsh and mudflat habitat creation for 2006-2007. Part of the site is being developed as freshwater reedbeds to support a different range of species from the main inter-tidal area. As well as providing this new habitat the higher parts of the site will be used for grazing which will add to the range of plants and animals which the site will support.

**Recreation and access at Alkborough**

Alkborough tidal defence scheme is part of several larger projects being promoted along the South Humber bank. The Heritage Lottery Fund has provided more than £500,000 for a variety of access, education and interpretation projects.

North Lincolnshire Council is also leading a £4 million project funded by Yorkshire Forward to develop a range of new visitor and tourism opportunities along the Humber from Barton to Alkborough.



\*Floods are categorised by their size and frequency with which they are expected to occur. A 1 in 5 year flood has only a 20% chance of happening in any year. A 1 in 100 year flood has only a 1% chance of happening in any one year, but its effects can be enormous

