

# What are we telling you about?

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Several areas along the Suffolk coastline are at risk of flooding from the sea. One particular area is the Minsmere Valley, which extends inland from the coast to Middleton and to Leiston Common.

Minsmere Valley supports important flora and fauna and lies within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty. The valley contains the RSPB's Minsmere Nature Reserve and part of the National Trust property of Dunwich Heath.

Minsmere Valley and the surrounding area are important tourist destinations and as such important to the local economy.

They are protected from coastal flooding by a line of sand dunes from Minsmere Cliffs in the north, to the Sizewell power station in the south – these are the first line of defence.

A clay embankment which runs along the back of the dunes in the northern part of the site provides a second line of defence.

## What will we be doing?

We are working closely with the RSPB and other key organisations and have consulted the local community about this work. The proposal is to allow the sea defences at the northern end of the site to breach and the shingle habitat to move inland under natural processes in response to rising sea levels.

To protect the majority (218ha) of the flood plain from the sea, we will raise and improve the Coney Hill Cross Bank (also known as the North Wall) to provide a 1 in 10 year standard of protection for the area to the south.

Our plans will continue to protect 58 residential properties and 6 non-residential properties.

In addition this will allow us to continue protecting the majority of the Minsmere Valley without interfering with natural coastal processes or damaging important coastal habitats, landscape and access to the coastal path.

Two bunds will be built connecting the primary and secondary defences just south of Coney Hill Cross Bank. This will control the movement of water between the two embankments to reduce erosion of the primary and secondary flood defences during storm surges.

We anticipate that the area immediately north of the Coney Hill Cross Bank will become more saline due to increased seawater flooding. We will identify and secure 28ha of suitable replacement habitat for the eventual loss of freshwater habitat north of the Coney Hill Cross Bank (North Marsh) due to sea level rise.

In the short term we will repair breaches to the secondary defence clay embankment. We will need to consider a number of factors when assessing the need for repair work, including the extent of the damage, the timing of the breach, the presence of protected habitats and species. When habitat has been replaced elsewhere, natural process will return this area of land to saline conditions in the long term.

We will actively monitor and assess the need for minor works in the future to the north of Sizewell power stations to reduce the risk of breaching and overtopping. However, the nuclear power stations at Sizewell are on raised ground and are not at risk of flooding.

## Why are we doing this work?

Our coastal defences are under significant erosion from the sea, which is threatening their long term stability. Climate change is also causing sea levels to rise. As a result, the shingle beach is being squeezed between the defences and the sea, which is further increasing the erosion.



The sea defences have suffered in recent years, most notably in December 2005 and November 2006 and 2007 when storm surges caused damage to the dunes resulting in localised tidal flooding.

This flood risk affects internationally important habitats which are designated as Special Protection Areas or Special Areas of Conservation under the European Habitats Directive. These form part of the Natura 2000 complex. The majority of the area is also designated nationally as a Site of Special Scientific Interest. We have a duty to take appropriate steps to prevent these sites from deteriorating.

Any surrounding properties within the tidal floodplain lie on high ground and are only likely to be at risk from very extreme weather events.

# Where is this happening?

The work will take place at Minsmere Nature Reserve. The Coney Hill Cross Bank will be raised and widened, a new water control structure and culvert through this bank will be constructed, and two bunds built between the primary and secondary embankments next to the sea.

## When will this happen?

The works are due to start in August 2011 and will be complete by February 2012.

In advance of construction, we will be starting some site investigation work in September this year. The purpose of the site investigation is to establish the condition of the existing embankment and the ground conditions to the north of the embankment where the embankment will be widened. This work will take 1 to 2 weeks to complete and there may be restricted access in parts of the site at this time.

## How will this benefit you?

Our plans will continue to protect 58 residential properties, 6 non-residential properties.

The work will also give continued protection from flooding to the internationally important flora and fauna that live on the 246ha of Natura 2000 habitat that is important to Minsmere locally as a tourist attraction. The work will also increase the protection for the planned new visitors centre on the RSPB reserve.

# What should you do and how can you get involved?

If you would like to be kept informed about our work or you are a community group or organisation who would benefit from us coming to talk with you, please either write or e-mail us at the address below.

# Contact

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## Additional work at Minsmere

Repairs will also be carried out to Minsmere Tidal Sluice during summer 2011. Work will include replacement of tidal gates, improving the operational capabilities of the sluice along with urgent health and safety work to aid access for our workforce and to improve public safety.

Further work will also be carried out to the tidal embankments along the Minsmere New Cut. In areas where the embankments have been weakened through localised erosion during times of high river flows, we will be removing some of the older parts of the defence built in the late 1960s and then strengthening this bank further to extend the life of these defences. Some smaller sluices which aid drainage from the adjacent marshes will also be improved.

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