flood risk management



Minsmere Flood Risk Management Project

We have overall responsibility for flood risk management in England and Wales. Our aim is to reduce the threat of flooding to people and property whilst achieving the greatest environmental, social and economic benefits in line with the Government's principles of sustainable development. Over recent years there have been a number of major flood events, which have increased the demand for resources. In the face of such challenges we need to be sure we are getting the best value for money. To help identify sustainable ways of managing defences in the future, we are preparing flood risk management strategies and studies in many areas.

This information sheet explains work we plan to do at Minsmere over the next five years as a result of small-scale flooding and damage to the flood defences by the sea in recent winters. This work follows on from detailed studies and discussions with the various organisations and landowners. Comments from interested individuals and organisations are invited.

Managing flood risk at Minsmere

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. It supports internationally important flora and fauna, making up a large part of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty. The valley also contains the RSPB's Minsmere Nature Reserve and part of the National Trust property of Dunwich Heath.

Minsmere is protected from coastal flooding by a line of semi-natural sand dunes from Minsmere Cliffs in the north, to the Sizewell power stations in the south (the primary defence). A clay embankment, which runs along the back of the dunes in the northern part of the site, provides a secondary line of defence. Along with these current coastal flood defences, ditches drain freshwater by gravity through a sluice, which outfalls into the sea midway along the beach.

Part of the site is managed by the RSPB to maintain suitable water levels for wildlife. In the past we have worked with the RSPB, Natural England and the National Trust to maintain the present line of coastal defence and the sluice outfall. However, the coastal defences at the northern end of the site are being eroded by the sea, which is threatening their long term stability. In addition, climate change is causing sea levels to rise. This will increase the pressure on the existing defences and increase the risk that the defences will breach in the future.

We have already seen the effects that this can have, when in November 2006 a storm surge caused the primary dune north of the sluice to breach. Further damage occurred during another storm surge in November 2007. Both events led to flooding of the area between the dunes and secondary embankment and blocked the sluice outfall with shingle causing freshwater flooding of the site. At the same time, saline water also entered the site close to the sluice, due to problems with one of the sluice gates.

To manage this increasing risk of flooding from the sea we have identified works that can be carried out within the next 5 years to provide continued and sustainable protection to people, property and the special landscape and wildlife of the Minsmere Valley.

What work are we planning to do?

We have been working with the partners on the Minsmere Steering Group (see Table 1) to identify a sustainable solution to manage the immediate issue of flood risk at Minsmere.

Table 1: Minsmere Flood Risk Management Steering Group

British Energy Natural England

English Heritage RSPB

Environment Agency Suffolk Coastal District Council

Magnox Suffolk Coast and Heaths Management Unit

National Trust Suffolk County Council

To counter increasing flood risk from the sea to the whole valley due to the future loss of the flood defences through erosion in the north of the site, we need to move our line of defence landward. This solution will allow us to continue protecting the majority of the Minsmere valley without interfering with natural coastal process or damaging important coastal habitats, landscape and access to the coastal path with heavy engineering.

To do this we will:

- over time allow the banks at the northern end of the site to breach and shingle habitat to move inland under natural processes. In the short term, we will repair any breaches to the secondary defence if necessary, however, it is not envisaged that the northern end of the site will become intertidal, but will become subject to more frequent overtopping in the longer term.
- Industrial undertake works to improve the existing Coney Hill cross bank (also known as the North Wall) to prevent future inundation of the Minsmere Valley and to isolate future inundation by the sea to the area northwards known as North Marsh.
- make some minor improvements to the secondary defence and the sluice to ensure that the site is adequately protected against flood risk in the short term.
- monitor the condition of the defences and the continued effects of coastal processes to help inform future decisions regarding the management of the site.
- 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.
- continue to engage with and contribute to a management group considering the longer term issues and needs of the area.

The freshwater reedbed habitat within the North Marsh area of the RSPB Reserve will change and we will find replacement habitat to support nesting areas for bittern, marsh harrier and bearded tit that will be lost over time.

This solution is presented in Figure 1.

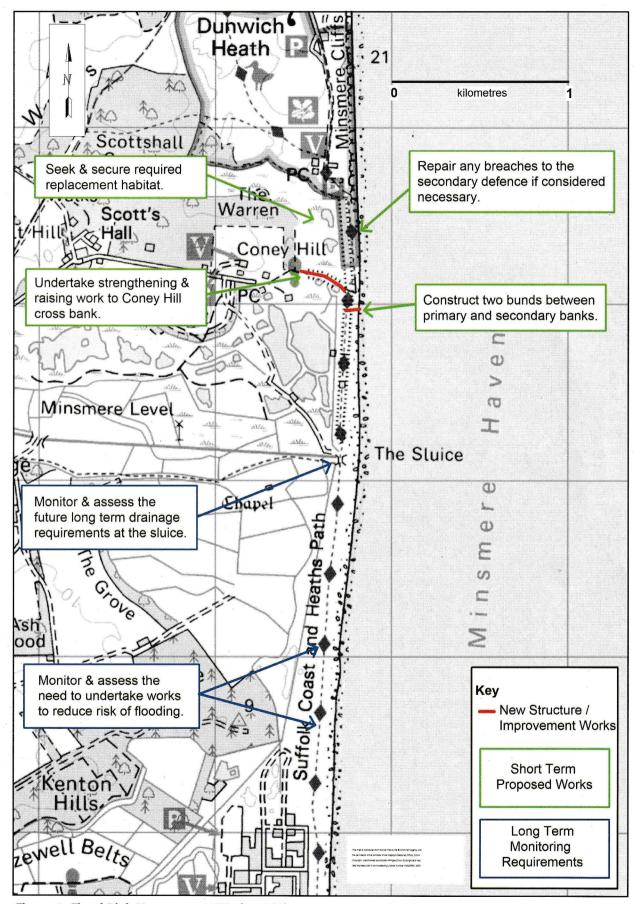


Figure 1: Flood Risk Management Works at Minsmere

Where can I find more detailed information?

We have produced a more detailed information document which describes how we have chosen this solution. The document outlines how we have tested the sustainability of a number of options and explains the legal issues we are required to consider in undertaking flood risk management works in such special environments. A copy of this document is available to view in local libraries at Leiston, Saxmundham and Aldeburgh, at the Environment Agency offices at Cobham Road Ipswich, or can be downloaded from the Environment Agency website at www.environment-agency.gov.uk

How can I register my views about the planned improvement works at Minsmere?

We welcome your comments on the proposed works at Minsmere. We will take account of all comments received by Friday 13th February 2009 before finalising our proposals.

You can write to us at: Minsmere Flood Risk Management, The Environment Agency, Kingfisher House, Goldhay Way, Orton Goldhay, PE2 5ZR or email MinsmereFRM@environment-agency.gov.uk

What happens next?

Following consideration of the responses we receive from this consultation, the next stages of the study will be to:

- Complete the initial design of our proposals;
- Undertake an environmental assessment of the proposed work;
- Prepare a business case to obtain funding for the works; and,
- Submit an application for planning and any other necessary consents.

Depending on the comments we receive and the time the next stages take, we hope that the works at Minsmere can commence by autumn 2010.