

Working with the tide

A sustainable coastline for people and wildlife on the Steart Peninsula



1981 floods



**ENVIRONMENT
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Lead Partner

Opportunity of a lifetime

A tremendous opportunity has emerged to transform the Steart Peninsula – for people, for wildlife, for the future.

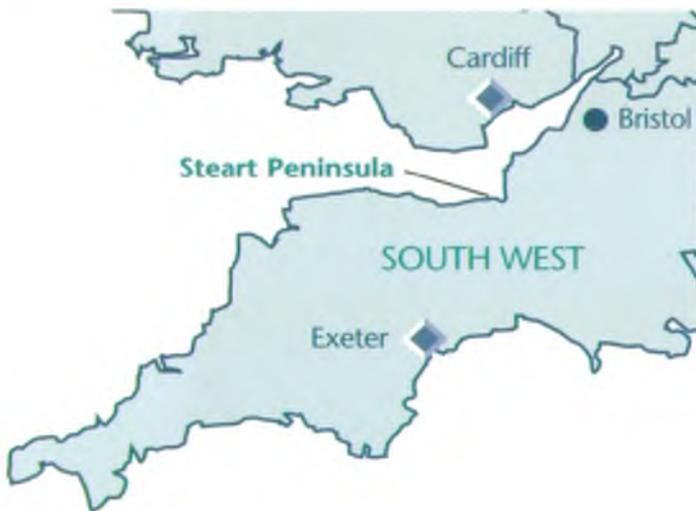
On a narrow strip of land between the estuaries of the rivers Severn and Parrett, the local community faces the constant fear and uncertainty of flooding.

Their only protection from the huge tidal range of the Severn is a series of deteriorating flood defences. Climate change is likely to increase the risk to life, property and livelihood.

Rather than sit back and accept the threat to their way of life, local people have been working with concerned organisations to map out a

LOCATION

The Steart peninsula is made up of 900 hectares – equivalent to more than 2,000 football pitches – of low-lying land between the Severn Estuary and the River Parrett. The land is made up of a mixture of traditional grazing, high quality arable, temporary grass leys and poultry rearing.



NATURE

Adjacent to the internationally important wildlife site of the Severn Estuary, new intertidal and saline habitats at Steart could create a major new asset for wildlife and the local community. Saltmarsh, small pools and lagoons with reedbeds grading through to grazing marshes would create an outstanding new complex of wonderful plant and bird rich habitats.

Careful controlled management could turn relatively wildlife poor grasslands into an outstanding new wildlife rich coastal scene, where people and life are protected while also being provided with new opportunities.



FLOODING



Flood defences of varying age protect the low-lying Steart Peninsula on the Severn Estuary, which has the second highest tidal range in the world. An earth flood embankment along the River Parrett is vulnerable to erosion, while flood defences along Bridgwater Bay comprise a variety of embankments.

Two factors affect the vulnerability of the peninsula to flooding: a projected sea level rise due to climate change, and the loss of the intertidal habitat such as the mudflats which create large expanses of shallow water. Waves lose most of their energy when they meet the mudflats. Lower mudflats mean larger, more destructive waves can reach the shoreline, and overtop, or wash away, the flood defences.

The Environment Agency is looking at various options that will be sustainable for the next 50 years and beyond. The broad options for appraisal are:

- do nothing;
- repair and maintain defences at current height, but not improve;
- improve the defences on the current alignment;
- advance defences seaward, possibly including coastal protection;
- realign defences landward, replacing the intertidal ecosystems to be lost to coastal squeeze and creating a new landscape.

positive alternative that will boost their quality of life, the local economy and the natural environment, and develop a sustainable flood defence solution.

This leaflet has been produced by the Environment Agency to set out the background and highlight some of the many ideas for a way

forward. A wide range of individuals and organisations can help turn this vision into reality. The Agency is working with Defra, English Nature, RSPB and other partners in the project.

The Steart Peninsula is potentially the UK's largest managed realignment project and could form part of a key European habitat for wildlife.

A POSSIBLE FUTURE



Local people have produced this vision for a sustainable future for the Steart Peninsula. The proposals include: realigned sea defences to create a new salt marsh habitat; a freshwater/brackish habitat; new hides for bird-watching; reed and withy beds; an area for winter floodwater storage; a raised access road to Steart village; and nature trails, cycle tracks and bridleways.

PROJECT PARTNERS

The Steart Peninsula project is being run by a steering group of representatives of a wide range of organisations. The group members and their organisations are:

Vanessa Straker, English Heritage



Andy King, English Nature



Tony Owen, Richard Symonds & Nick Moore, Environment Agency



Peter Lee, North Devon & Somerset Coastal Group

Mark Robins, RSPB



Alan Lovell, Somerset Local Flood Defence Committee

Colin Passmore, Stockland Drainage Board



Humphrey Temperley, Wessex Regional Flood Defence Committee

David Ayers, Defra (as observer)





WHERE NEXT?

This country has an international obligation to protect ecosystems that have been designated, such as those of the Steart Peninsula. That is why a key aim of the project is to create a large area of unique habitat. But to the people of the peninsula, protecting their homes and access to their homes are of paramount importance, and it is also vital that they remain a part of the decision-making process.

The next steps in the project will be to:

- Develop the partnership further.
- Work out how the project will be funded – as well as grant aid from Defra, possible sources of funds include the EU, Heritage Lottery Fund, contributions from developers and funding from partners.
- Carry out more research into the physical functioning of Bridgwater Bay and technical issues in possible flood defences.
- Assess the impact of flood defence options on farming, and research diversifying into activities such as tourism.
- Develop a Coastal Habitat Management Plan (CHaMP) and assess the ecological impact of new inter-tidal habitats to find out how quickly they are colonised by organisms the birds feed on, what birds will come and what species might be lost.
- Draw up an environment charter to define opportunities.
- Choose the preferred strategic solution, research its feasibility and design it.
- Apply for consents from the Environment Agency, Defra and other authorities.
- Acquire the necessary land and build the chosen solution.



Fisherman using a traditional 'mud horse' on Steart mudflats



Maintaining existing defences in the short term

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