

# Adapting to change in the Broads

The Broads is ever changing in response to interactions between people, environment and climate.

## The Norfolk and Suffolk Broads

is known as the UK's premier wetland, a mosaic of rivers, broads, fen, marsh and woodland rich in rare species, with 200 km of navigable waterways to explore. Home to around 6,500 people and attracting millions of visitors a year, the Broads is nationally and internationally recognized for its nature conservation, landscape and cultural features.

The Broads is a dynamic landscape, ever changing over the centuries in response to interactions between people, environment and climate. However, sea level rise and the predicted more rapid changes to the climate pose considerable challenges to the long-term future of this easterly, low-lying landscape.

As a member of the UK family of National Parks and global network of protected landscapes, the Broads has an important role in demonstrating how precious wetland resources can be managed sustainably for the benefit of people and nature.

**The UK Climate Projections** look at how greenhouse gas emissions are likely to change in different scenarios and what this will mean in terms of climate change. The projections also look at the exposure, sensitivity and adaptive capacity of different landscape types, including wetlands.

The 2009 'medium emissions' scenario for the East of England predicts:

- Warmer, wetter winters
- Drier, hotter summers
- More frequent extreme events (e.g. storms and heavier rainfall)
- Sea level rise off the Norfolk and Suffolk coast of 37cm

Planning now in response to sea level rise and climate change will help us to minimize future adverse impacts and take advantage of the potential benefits and opportunities for this special wetland landscape.



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### Assets and vulnerabilities

The predicted impacts of sea level rise and climate change will bring significant challenges and opportunities to the special qualities of the Broads and the ways it is managed and enjoyed.

95% of the Broads Executive Area lies within the floodplain, and water therefore plays a dominant role, providing a range of services.

While flooding is a natural process within a flood plain, it can cause considerable disruption and damage if not properly managed.

Higher sea levels hold back water trying to drain from the rivers; surge tides push water up the rivers, putting flood defences under threat and causing possible inundation and increasing incursion of saline water into a predominantly freshwater ecosystem. There are also likely to be changes to siltation rates and patterns in the waterways, and to aquatic plant types and growth in navigation channels.

While the current strategic policy for the North Norfolk coast is to maintain existing sea defence structures, other options to manage flood risk will need to be considered if this approach becomes unsustainable in future.

Adaptation planning for the Broads will also need to focus on issues such as:

- Changes in the distribution of habitats and species, with net loss of native biodiversity, introduction of new species, and increasing pressure from invasive non-native species
- Changes in visual landscape character, such as raised flood defences, new areas of washland, loss of/damage to property and to cultural and heritage assets, new build designs and technologies
- Changes to agricultural practices, including new cropping and land management options
- Variations in tourism patterns and visitor numbers, and changes to infrastructure and facilities such as boatyards, boat design, access routes

A climate change adaptation plan for the Broads is in preparation, and is due to be submitted to Defra in mid-2014.

For more information, and to be involved, contact Broads °Community.