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Spatial planning for biodiversity in our changing climate

Review and recommendations by Oxford Brookes University for the BRANCH¹ project

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Introduction

Our changing climate and sea level rise set spatial planners particular challenges for the protection of our biodiversity wealth. We need to understand how we can use spatial planning to allow for change and at the same time meet international and national commitments; protect what is special and what is general and focus on sites as well as landscapes at international, national, regional and local levels. This is particularly the case in SE England and other countries in NW Europe where the climate is likely to change significantly over a short time period and sea levels are rising relatively rapidly.

What was done

The work focused on assessing the effectiveness of policies and other mechanisms for spatial planning at international (EU), national (France, Netherlands and England), regional and local levels to provide for the protection and enhancement of biodiversity in a changing climate. It provides recommendations, including new tools and mechanisms to improve effectiveness.

A broad selection of policies and spatial plans at all levels was reviewed for each country together with EU environmental legislation, to see how far the likely impact of climate change upon biodiversity was recognised and what measures are being taken to address this.

Stakeholders (planners and policy-makers) were consulted in the partner countries to identify trends in policy and planned measures, and shortcomings in the current process. Case studies of designated and non-designated sites in coastal and inland areas and other initiatives were examined to demonstrate the issues that arise as climate change affects environments valued by wildlife.

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Results and conclusions

Awareness of potential climate change impacts upon biodiversity is increasing in all three countries. Specific policy measures to address predicted changes include policies which ensure good functioning of ecosystems as well as promoting greater connection between sites through habitat restoration or biodiversity-friendly land uses.

Shortcomings in the spatial planning process were identified; leadership and guidance are needed with regards to timescales, appraisal tools; implementation powers and more information on appropriate measures and likely success. The recognition of the importance of ecosystems in assisting with adaptation to climate change is an important step. A dynamic and flexible approach is needed, given uncertainties about future change, and the varying needs and dispersal capacities of wildlife species.

Spatial planning measures such as SEA and sustainability appraisal, and river basin management planning offer opportunities for implementing appropriate measures, together with plan integration and climate-proofing, risk assessment and legal agreements with developers.

English Nature's viewpoint

This work is the first known attempt to summarise what is currently available to planners and other decision makers in planning land management, in its widest sense, which will allow our wildlife heritage and inheritance to thrive and develop as climate and sea level change in NW Europe. The use of case studies tests current mechanisms and ideas.

This work takes forward English Nature's climate change agenda into the arena of spatial planning where decisions are made on the ground.

Selected references (all references are included in the main report)

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