



Natural England
protecting and enhancing the
natural environment

*The Climate Change Bill, the issues, and
the rise of adaptation*

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Natural England's vision

Natural England is here to conserve and enhance the natural environment, for its intrinsic value, the well-being and enjoyment of people, and the economic prosperity that it brings.



Natural England's profile

- A non-departmental public body (NDPB)
- A merger of English Nature and parts of the Countryside Agency and the Rural Development Service
- Approximately 2500 employees based at over 50 regional offices
- Headquarters in Sheffield



Natural England's strategic direction

Four strategic outcomes to focus our activities and resources:

- A healthy natural environment
- Enjoyment of the natural environment
- Sustainable use of the natural environment
- A secure environmental future

Climate change: the challenges



- One of the most serious threats to the natural environment
 - Loss of ecosystem services
 - Loss of habitats
 - Loss of biodiversity
 - Loss of landscape character
- But precisely how much, where, and by when – these are our known unknowns

Locked-in change



- Some level of climate change is now inevitable
- Decades of unchecked emissions of greenhouse gases
- But we can avoid making things any worse
- And we can do a great deal to adapt through many ‘no-regret’ actions now

The Climate Change Bill



- Is a world first and deserves support
- Addresses both mitigation *and* adaptation
- DEFRA – inclusive, open, and listening
- Natural England – some big asks, some gains secured, though not all

Natural England



- A national framework for adaptation
- Ensure the natural environment is protected from the worst impacts
- Inclusion of other greenhouse gases
- Incentives for mitigation and adaptation by land owners and managers
- Public reporting on progress on adaptation against pre-agreed aims
- Independent scrutiny of progress

DEFRA's response



- An adaptation policy framework, risk assessments, and a national programme of action
- New power for SoS to require public bodies to report on adaptation risks and measures
- New statutory guidance for those public bodies
- Acceptance that a resilient natural environment is essential for sustainable adaptation
- Public reporting on progress
- Independent scrutiny of progress – though the how isn't finalised

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Adaptation

- To more extreme weather conditions, leading to
 - Higher average temperatures
 - Summer heat deaths replacing winter hypothermia
 - Drier soils
 - Flash floods
 - Growth patterns altered
 - Habitats becoming less habitable

In the built environment



- Green infrastructure
 - Cools the air
 - Improves amenity and aesthetics
 - Provides wildlife corridors and ‘connectivity’
- Adapted buildings and green space
 - Harvests rain water and diverts flow safely
 - More water efficient
 - Shading of windows in summer

Connectivity?







- To survive and thrive, many UK species will need to move inland, uphill, and north
- They can't do that if their habitats are isolated
- Nor can they do it if their path to a viable new home is blocked by build development
- Most of the landscape is fragmented, making connectivity very difficult or worse

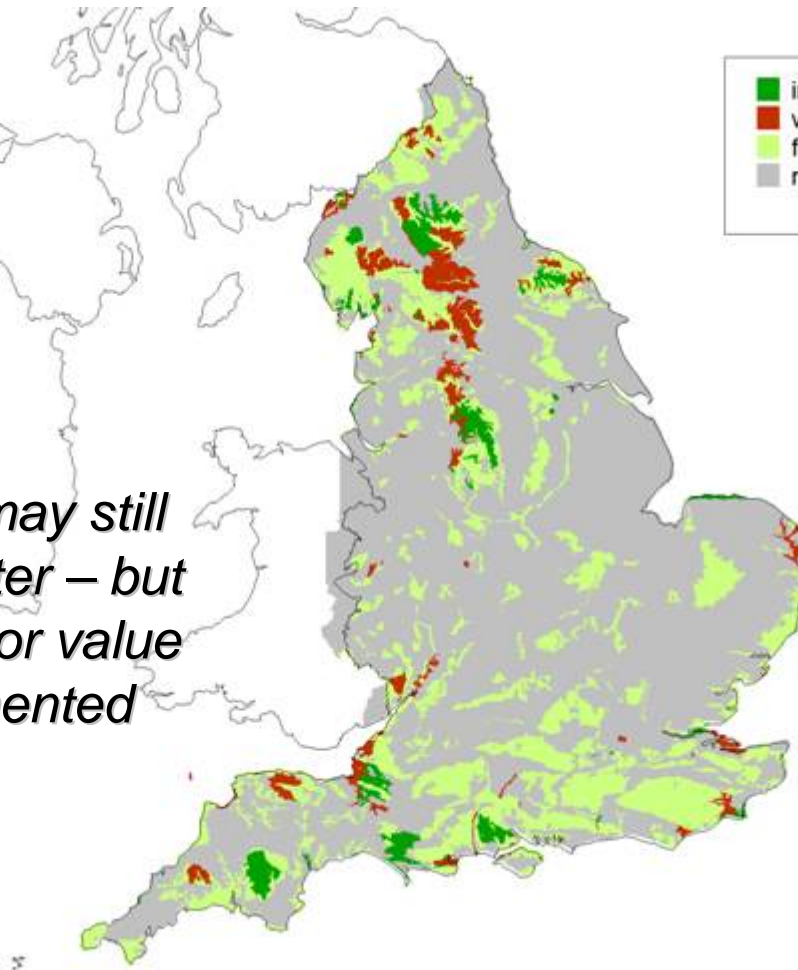
Fragmentation of English landscape



intact
variegated
fragmented
relictual

	intact	(75)
	variegated	(101)
	fragmented	(744)
	relictual	(2149)

fragmented landscapes may still be valued for their character – but they won't lose character or value by becoming less fragmented



In the rural environment



- Connectivity between habitats, e.g.
 - a newly wooded landscape joining two or more protected forested sites
- Greater effort invested in building up natural resilience, e.g.
 - Rich, diverse habitats
 - Excellent land management
 - Effective water catchment
 - Protection and strengthening of carbon sinks

Implementing the Climate Change Bill - challenges



- Action has to be across Whitehall and beyond, it's not just a DEFRA issue
- Action needs to be facilitated by
 - Bills on Energy, Marine, and Planning
 - Government estate management
 - Local Government performance and leadership
 - Solid cost-benefit-analyses of adaptation v non or mal-adaptation
 - Delivering connectivity of the landscape