



SPACE for NATURE

Biodiversity and land use conflicts

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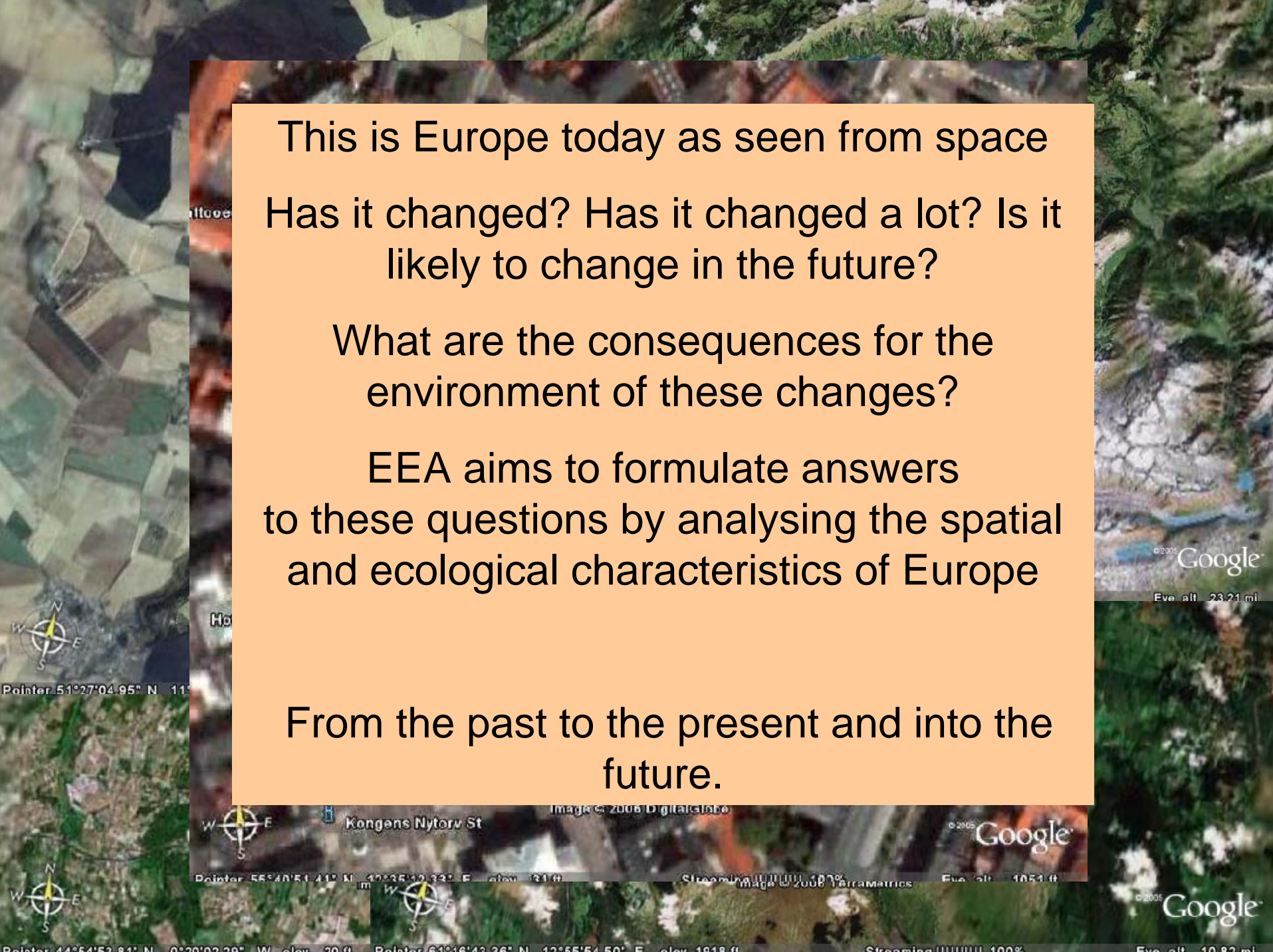
EEA



Image © 2006 TerraMetrics

Image © 2006 NASA

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The image is a composite of satellite imagery from Google Earth, showing various parts of Europe. A large, semi-transparent orange text box is centered over the image. The background shows a mix of agricultural fields, forests, and urban areas. The text box contains three paragraphs of text. The overall image is a collage of different satellite views, with some showing a compass rose and coordinate information.

This is Europe today as seen from space
Has it changed? Has it changed a lot? Is it
likely to change in the future?

What are the consequences for the
environment of these changes?

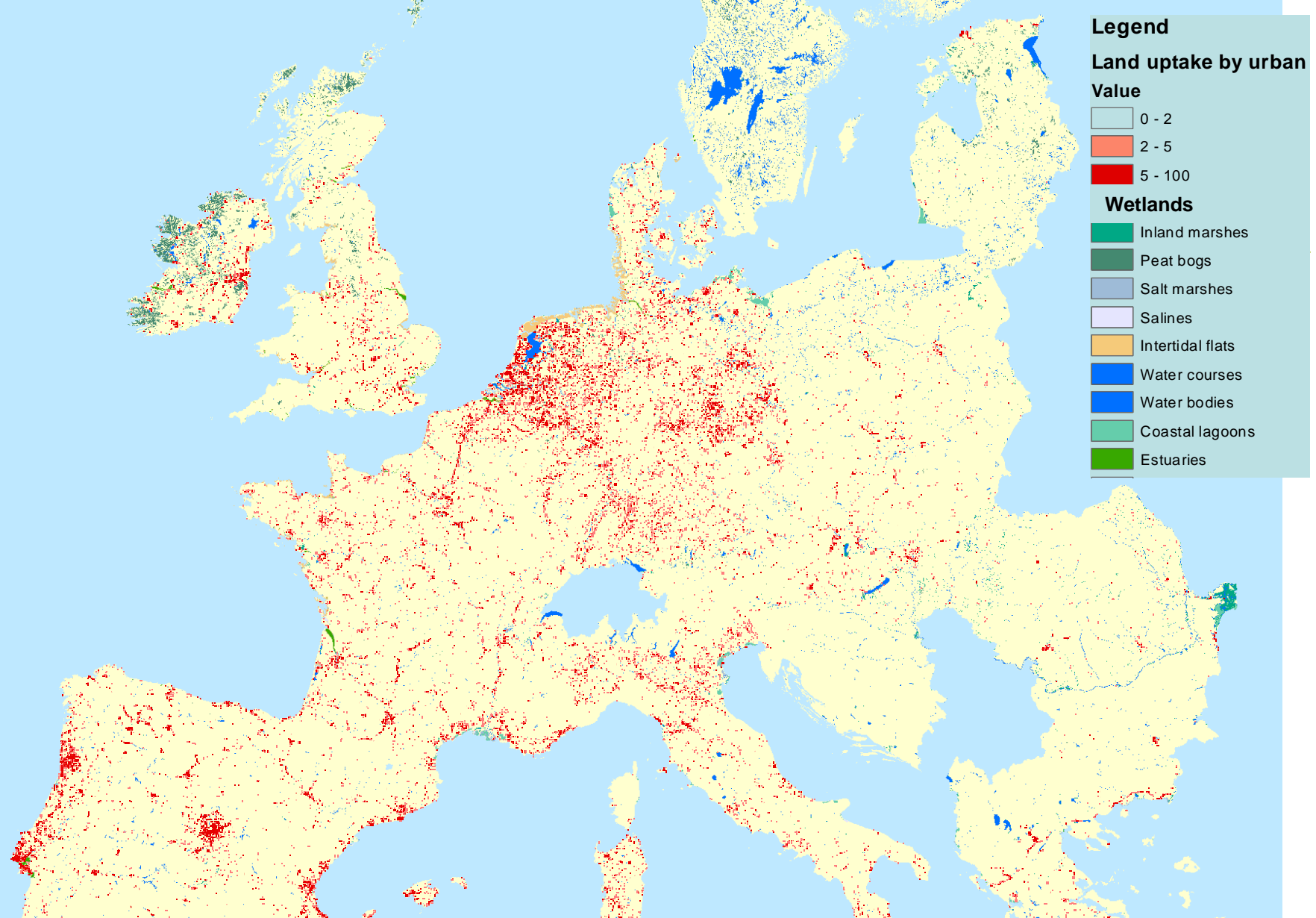
EEA aims to formulate answers
to these questions by analysing the spatial
and ecological characteristics of Europe

From the past to the present and into the
future.

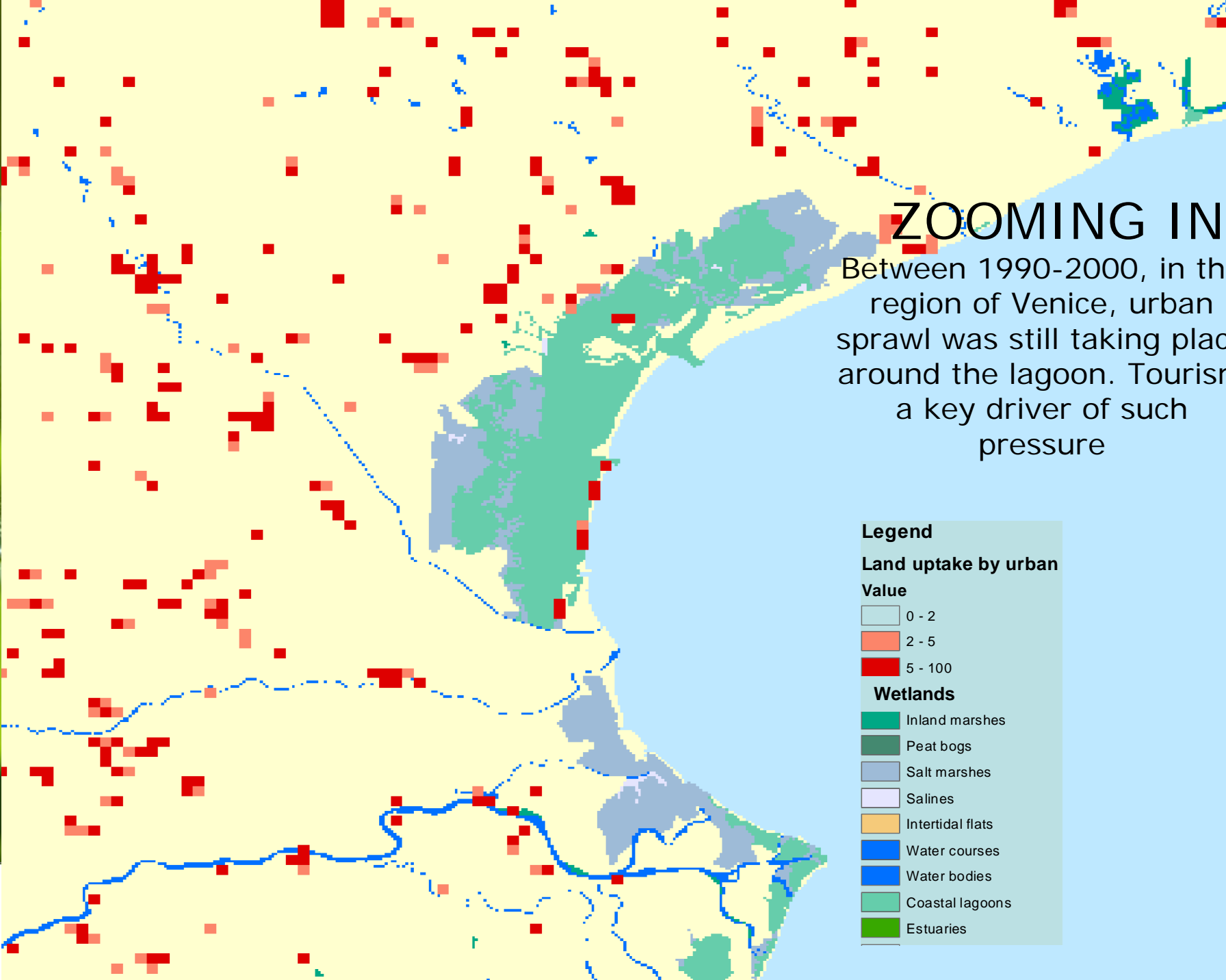
Biodiversity and Ecosystems: the EEA role

- ☀ **Knowledge about the state:** Indicators of the status and trends of ecosystems, habitats and species
- ☀ **Sustainable use:** Integrated analysis the key drivers of ecosystem change such as urbanisation, agriculture and forestry
- ☀ **Knowledge about threats:** Analytical tools to analyse challenges from socio-economic change, including scenarios of possible futures
- ☀ **Policy analysis:** How environment and socio-economic policies can together deliver change
- ☀ **Economic value of ecosystem:** Estimates of the economic and social value of biodiversity and ecosystems, including the costs of inaction.





Land use and ecosystems: wetlands and land uptake by urban development



ZOOMING IN

Between 1990-2000, in the region of Venice, urban sprawl was still taking place around the lagoon. Tourism is a key driver of such pressure

Legend

Land uptake by urban

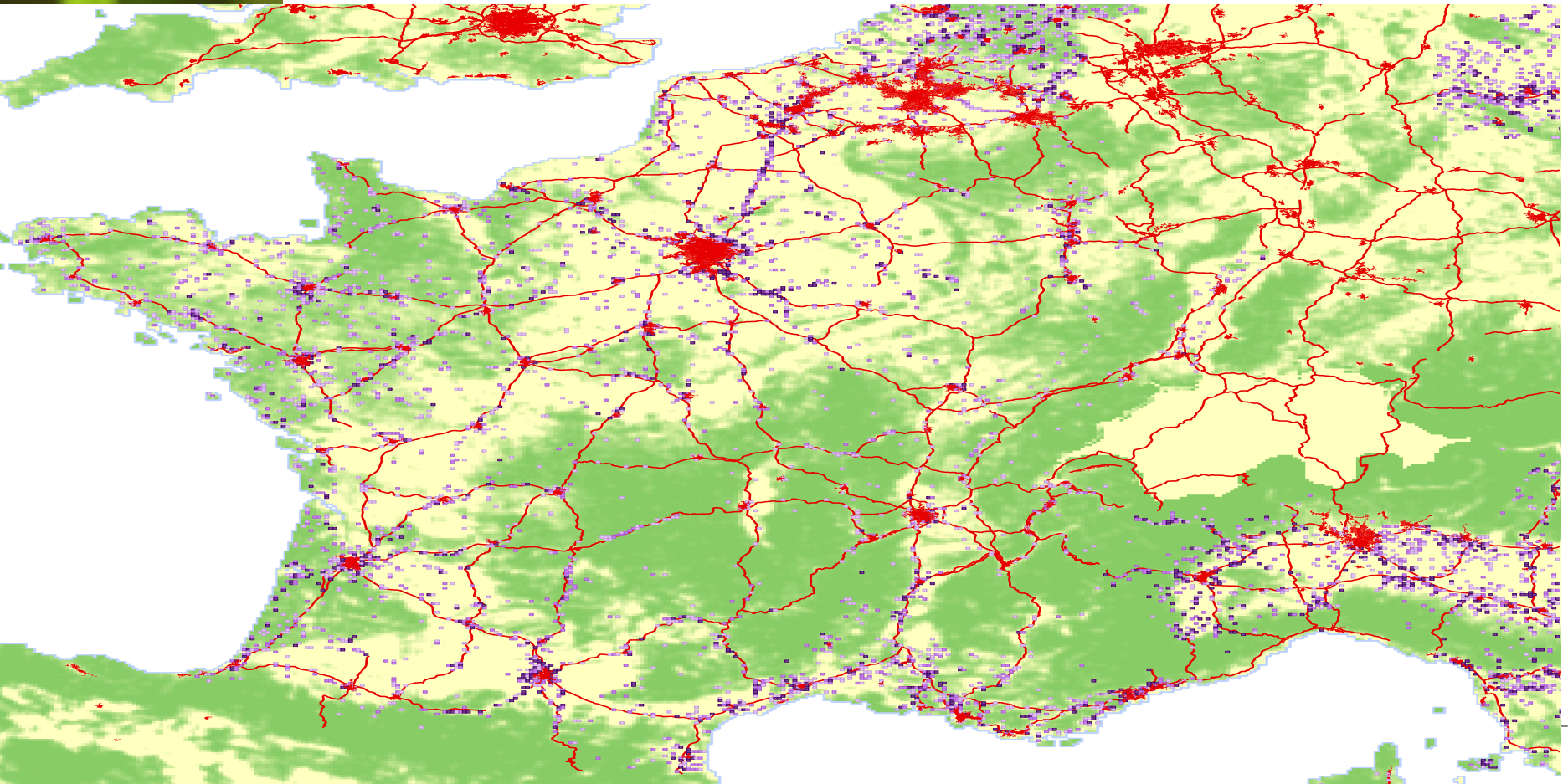
Value

- 0 - 2
- 2 - 5
- 5 - 100

Wetlands

- Inland marshes
- Peat bogs
- Salt marshes
- Salines
- Intertidal flats
- Water courses
- Water bodies
- Coastal lagoons
- Estuaries

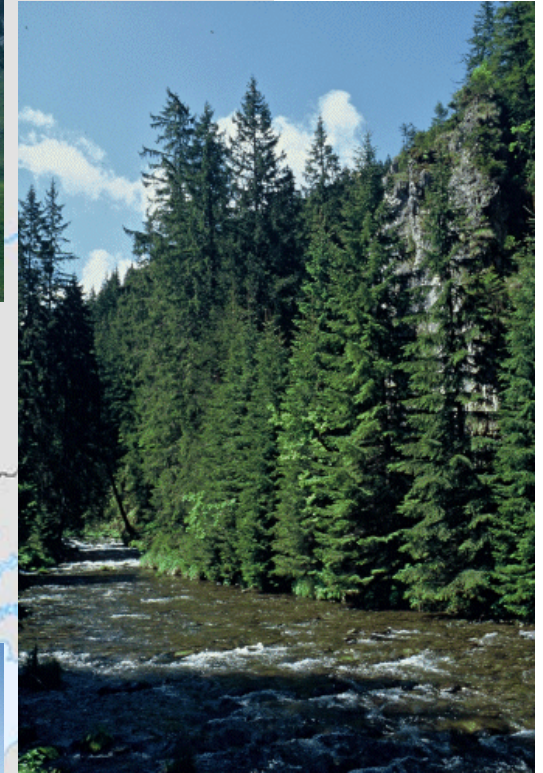
and transport infrastructures attract
urban sprawl and fragmentation of
landscapes



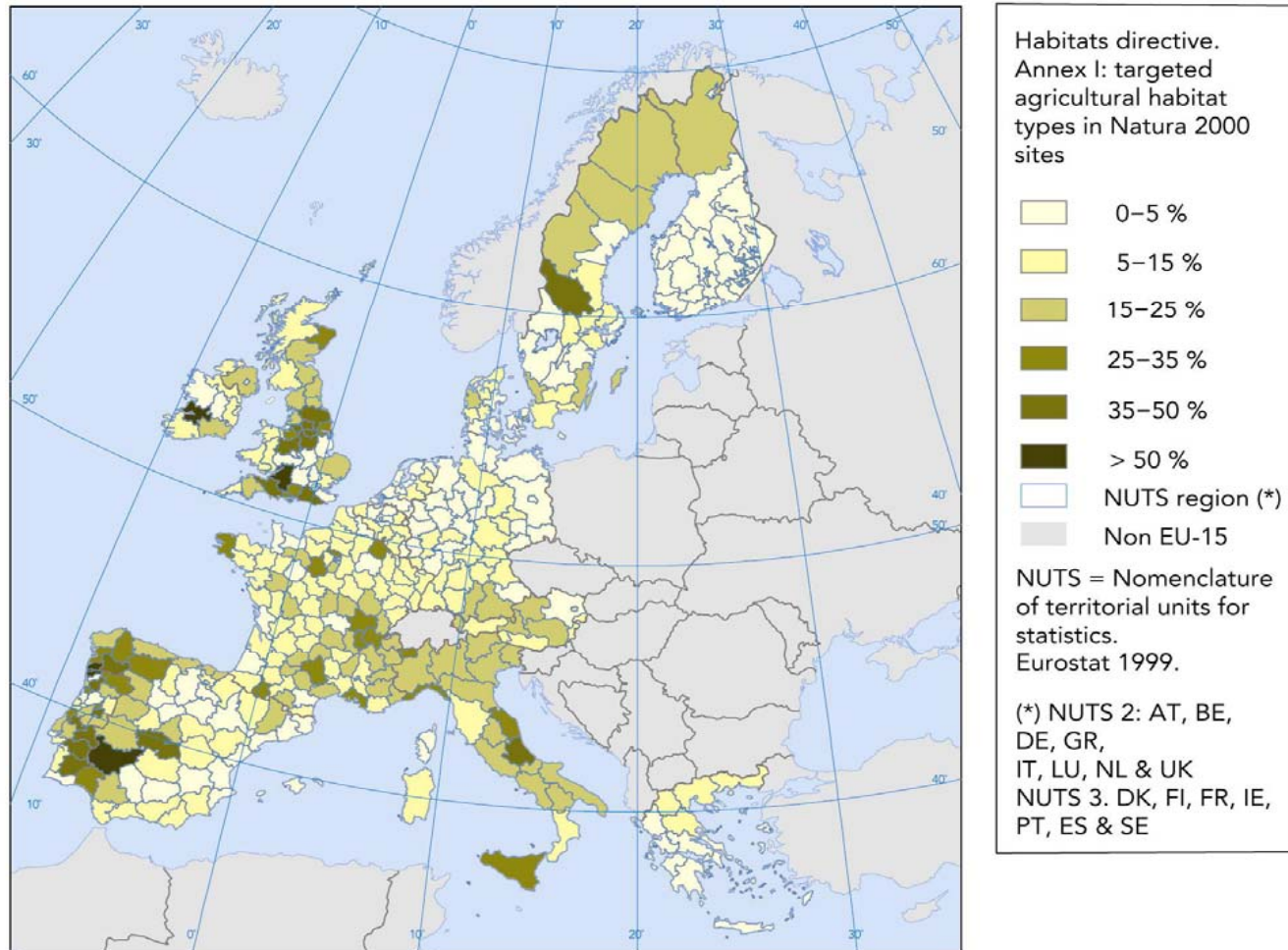


**Anticipate urban sprawl in new
EU...**

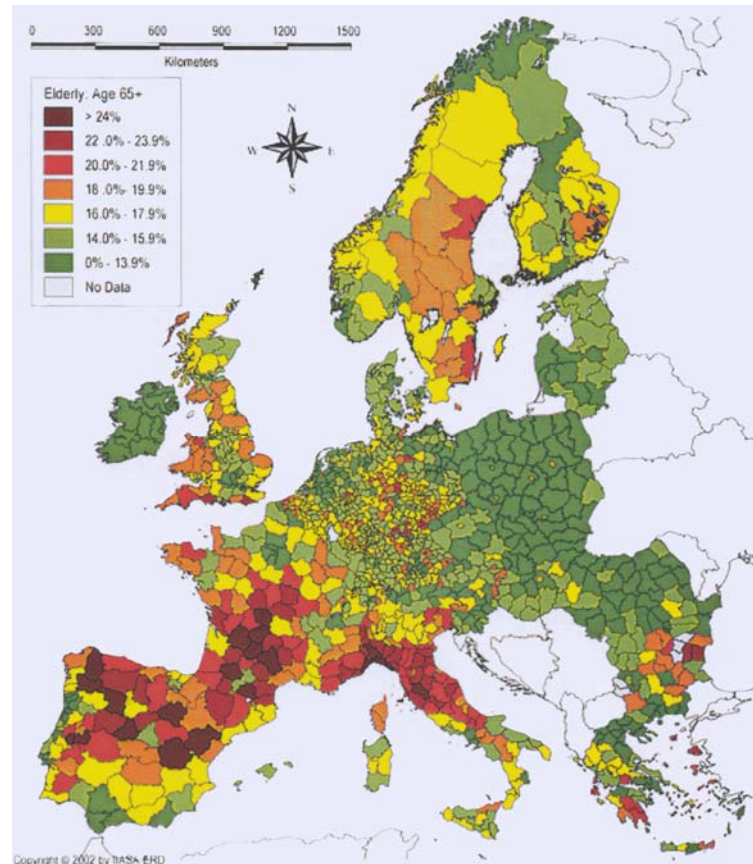
Europe's protected areas: a network of special places



Agriculture: essential for maintaining many protected areas

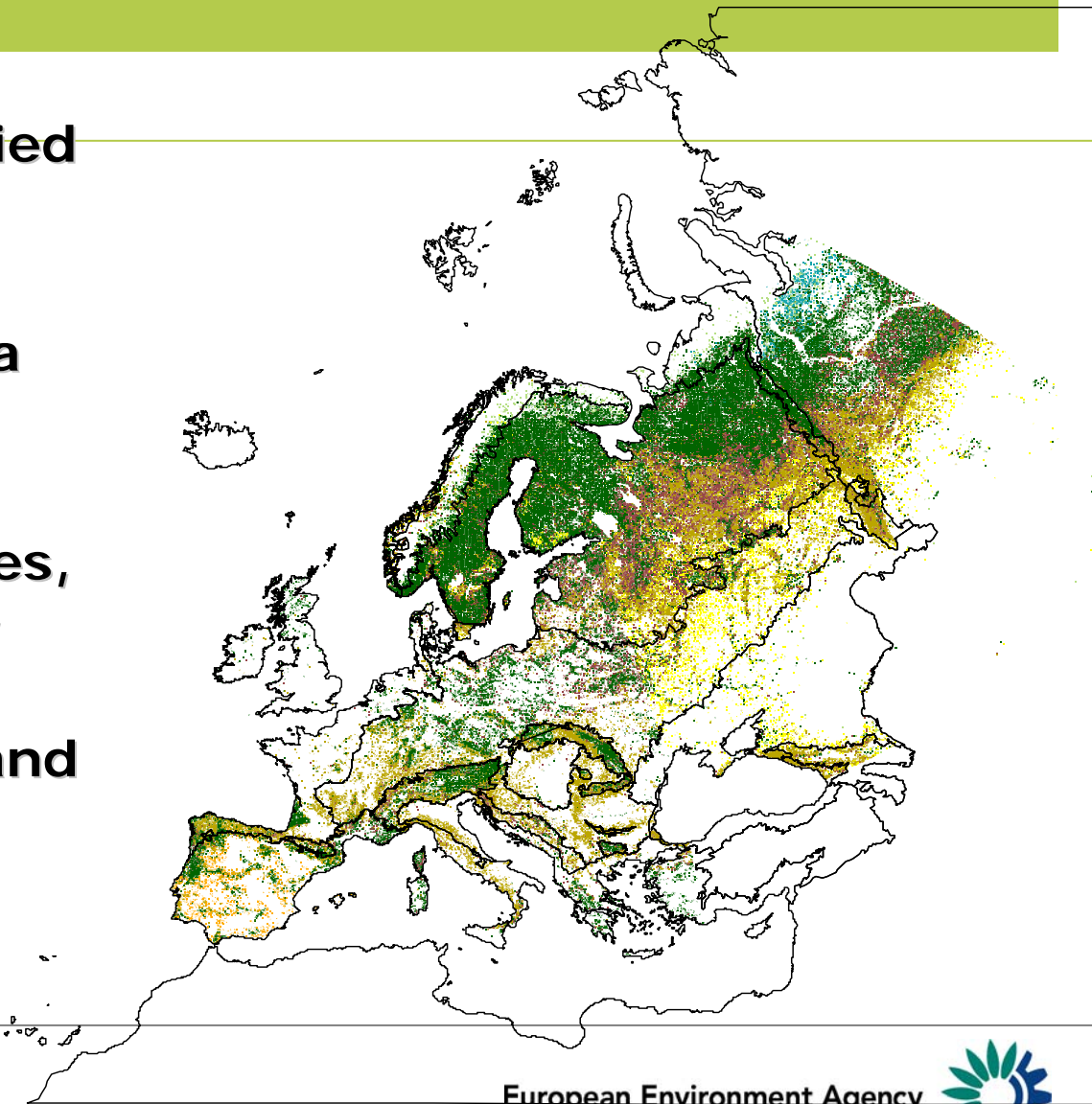


Proportion of elderly people (65+) across Europe



A few words on forestry

- ☀ **Most of Europe's forests are modified ('semi-natural'). Very few natural areas left**
- ☀ **Today, forest area is increasing**
- ☀ **Main problems ahead: safeguard ecosystem services, promote biofuels, adapt to climate change, carefully manage species and habitats**



SOER2005 & Outlooks



Explore sustainability of baseline projections (2020-2030), alternative scenarios and variants (up to 2100)

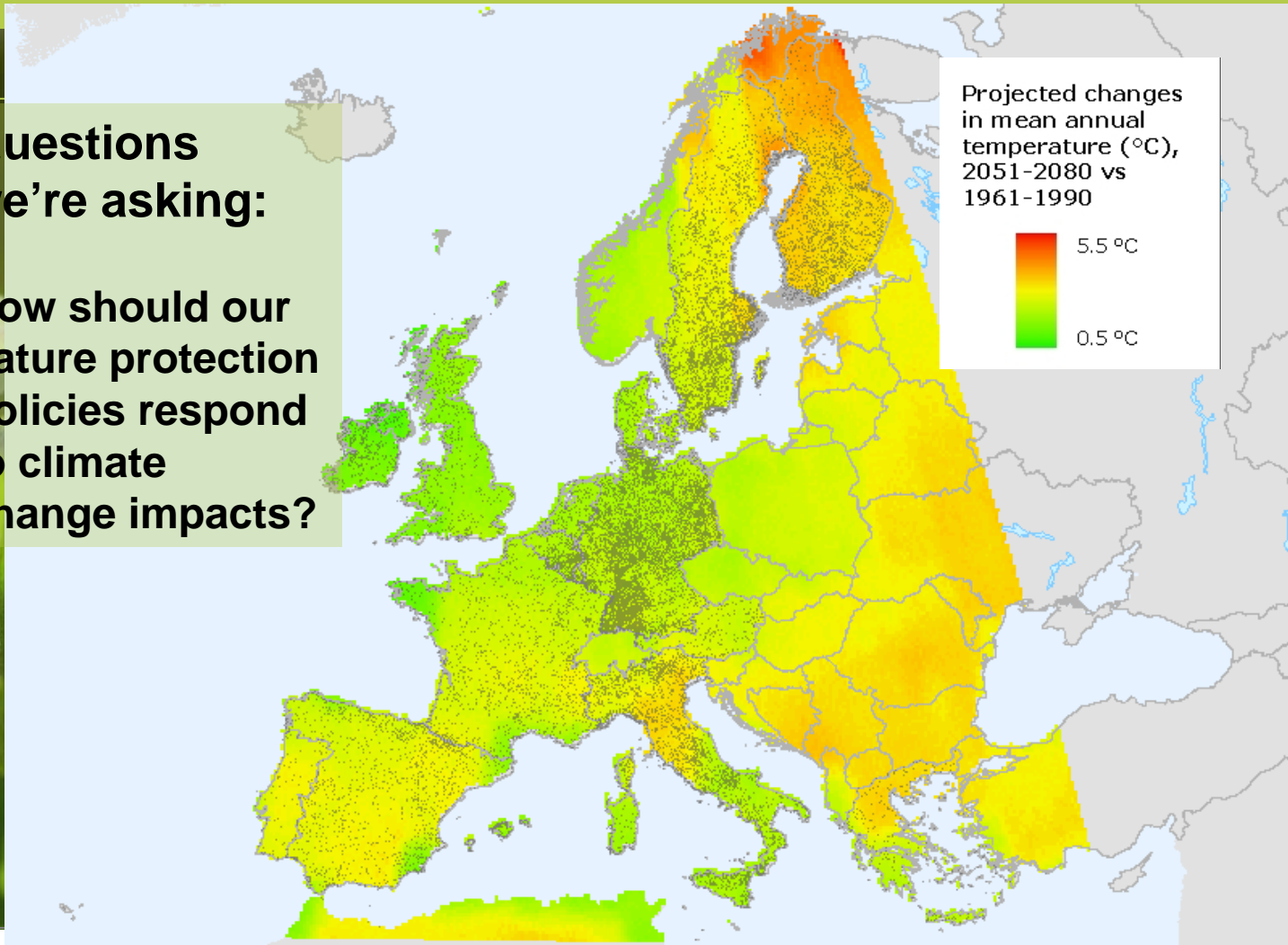
Assess environmental consequences of key socio-economic developments

Key messages / early warnings for policy-makers

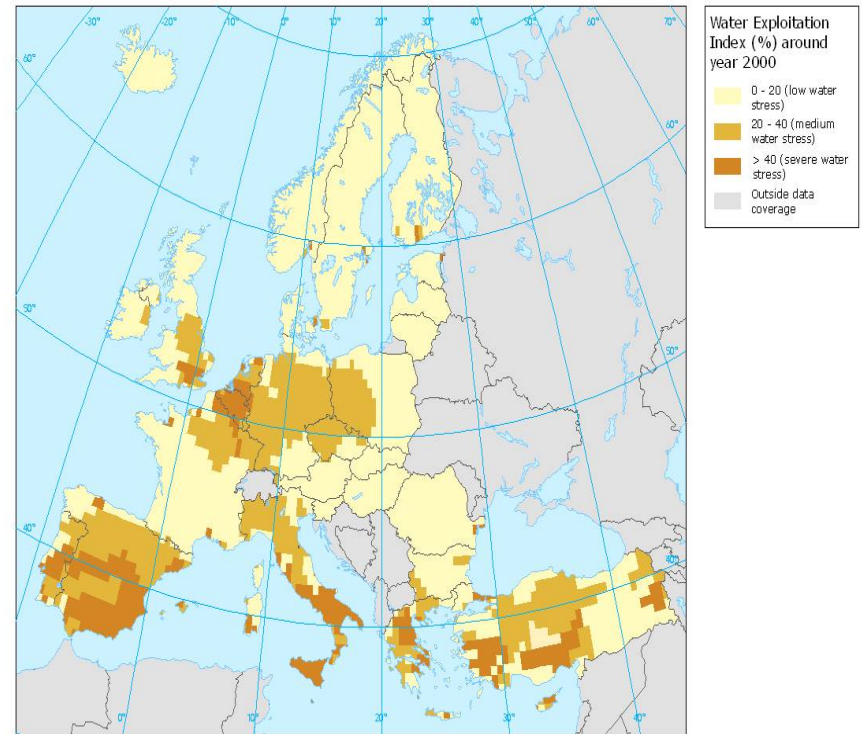
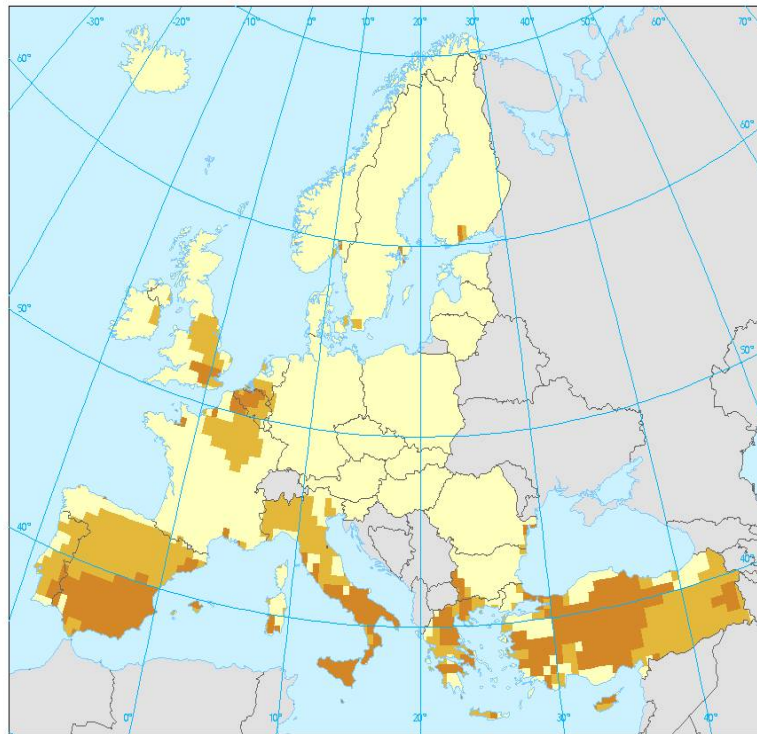
Climate change: temperature change outlook to 2080

**Questions
we're asking:**

**How should our
nature protection
policies respond
to climate
change impacts?**



Outlook for water stress in large European river basins, 2000 and 2030



Possible futures: scenarios

What will be the environmental consequences of:

- ☀ changes in demographic patterns?
- ☀ major breakthroughs in technology?
- ☀ changes in the way we live and consume?
- ☀ disruptive external events?

How will we anticipate change?

How can we prepare?

How can we communicate?



A PRELUDE of Europe's future

Prospective **E**nvironmental analysis of **L**and **U**se **D**evelopment in **E**urope

What will Europe look like in 30 years from now on? Will the countryside be a lively place, or a desert?

How will the environment be impacted as a result of possible changes?

5 contrasting yet plausible environmental scenarios of future changes in land use and European landscape



SCENARIOS

All five scenarios feature major changes in society and political responses which might be triggered by environmental disasters or technological developments.

Coordinated regional development and spatial planning at the European level become important in 'Evolved Society', 'Clustered Networks' and 'Big Crisis', whereas the other two scenarios build more on autonomous developments and regional solutions.

'Great Escape' and 'Clustered Networks' assume that globalisation will continue, whereas the other scenarios are characterised by stronger emphasis on regional markets.

Governance primarily at
Regional scale ↔ European scale



GREAT ESCAPE

Europe of Contrasts

evolved society

Europe of Harmony

CLUSTERED NETWORKS

Europe of Structure

lettuce surprise u

Europe of Innovation

BIG CRISIS

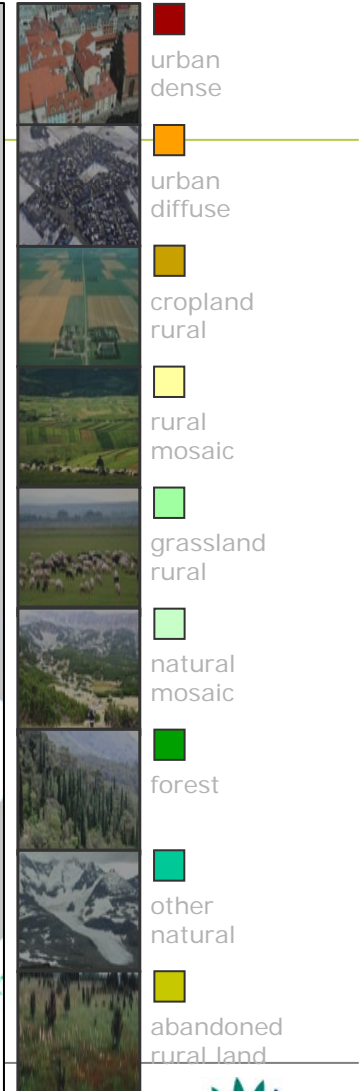
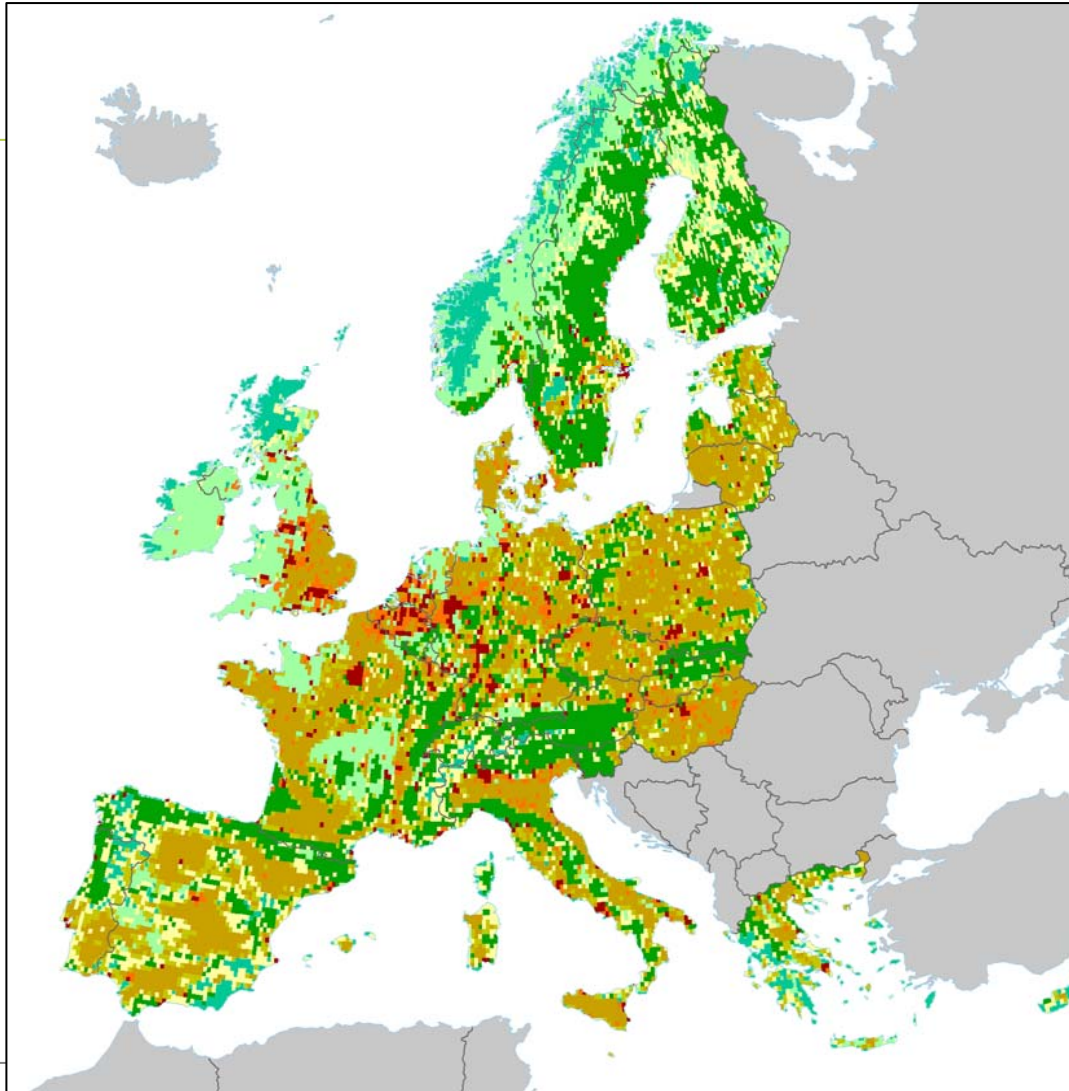
Europe of Cohesion

LIBRARY

Disclaimer

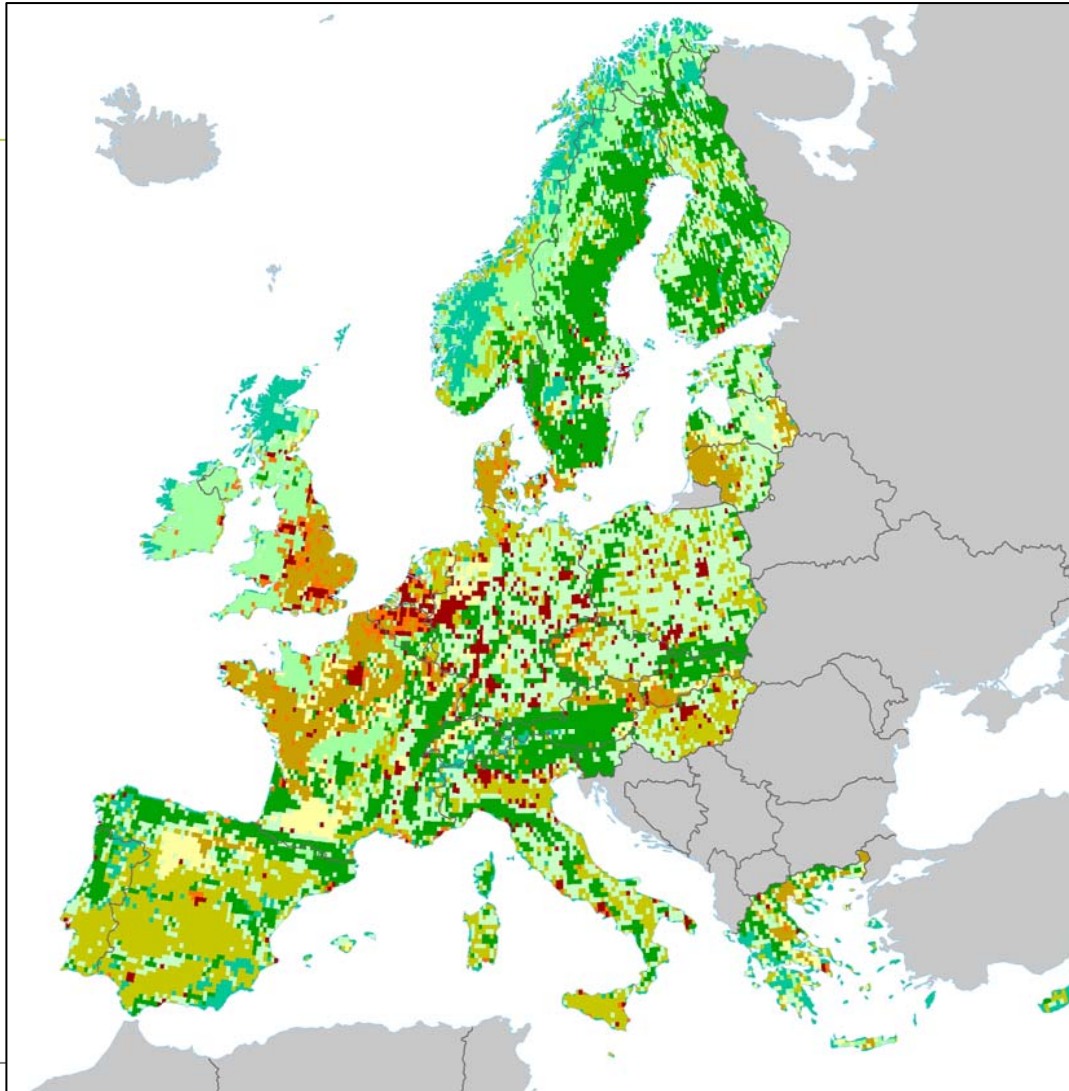


2005

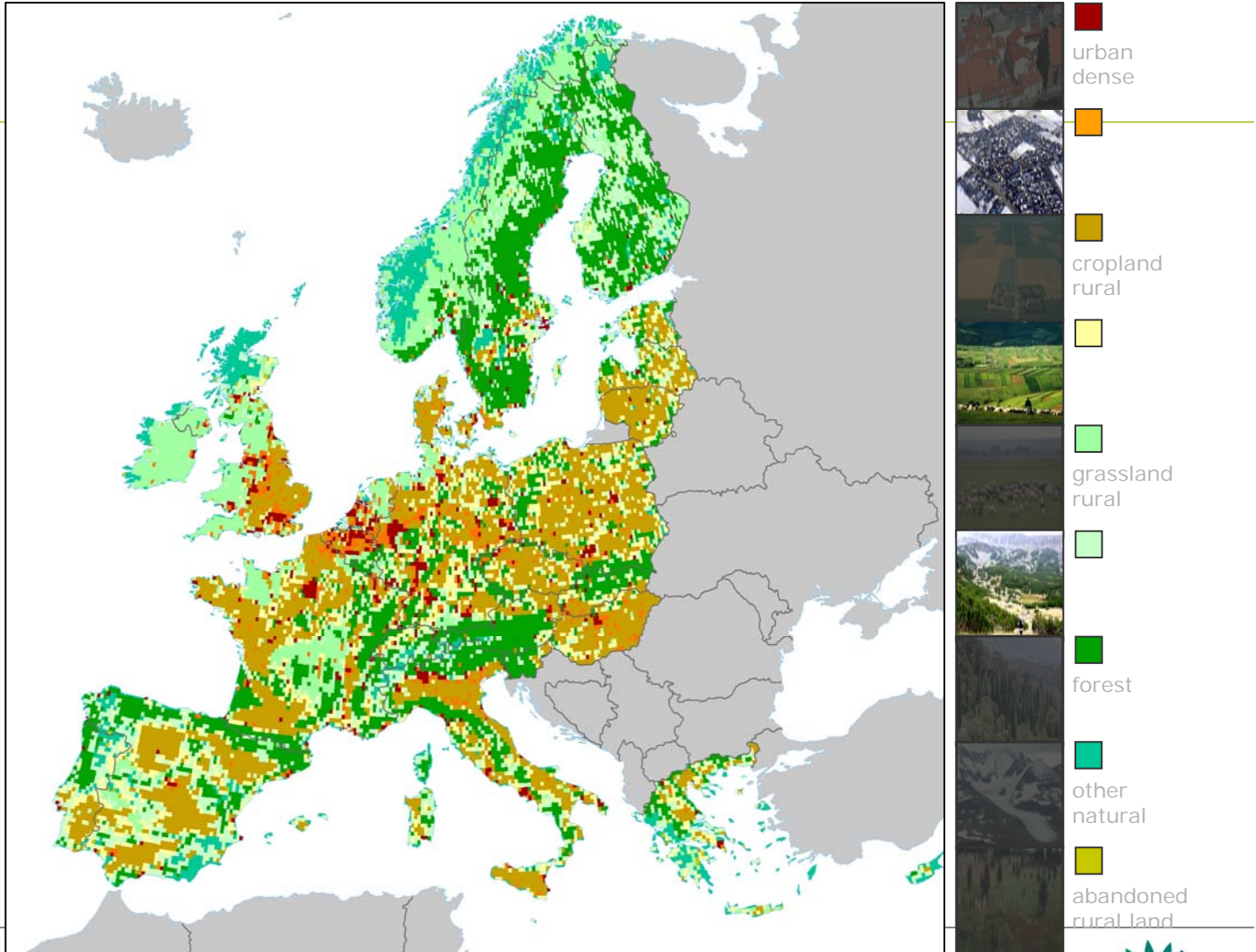


2035

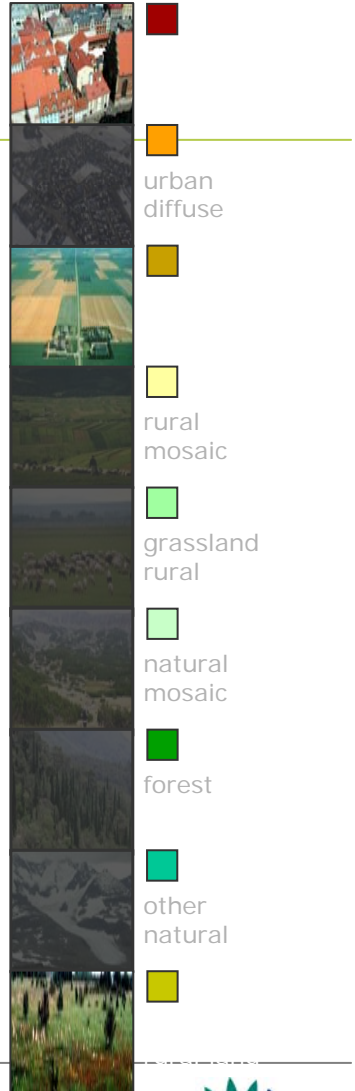
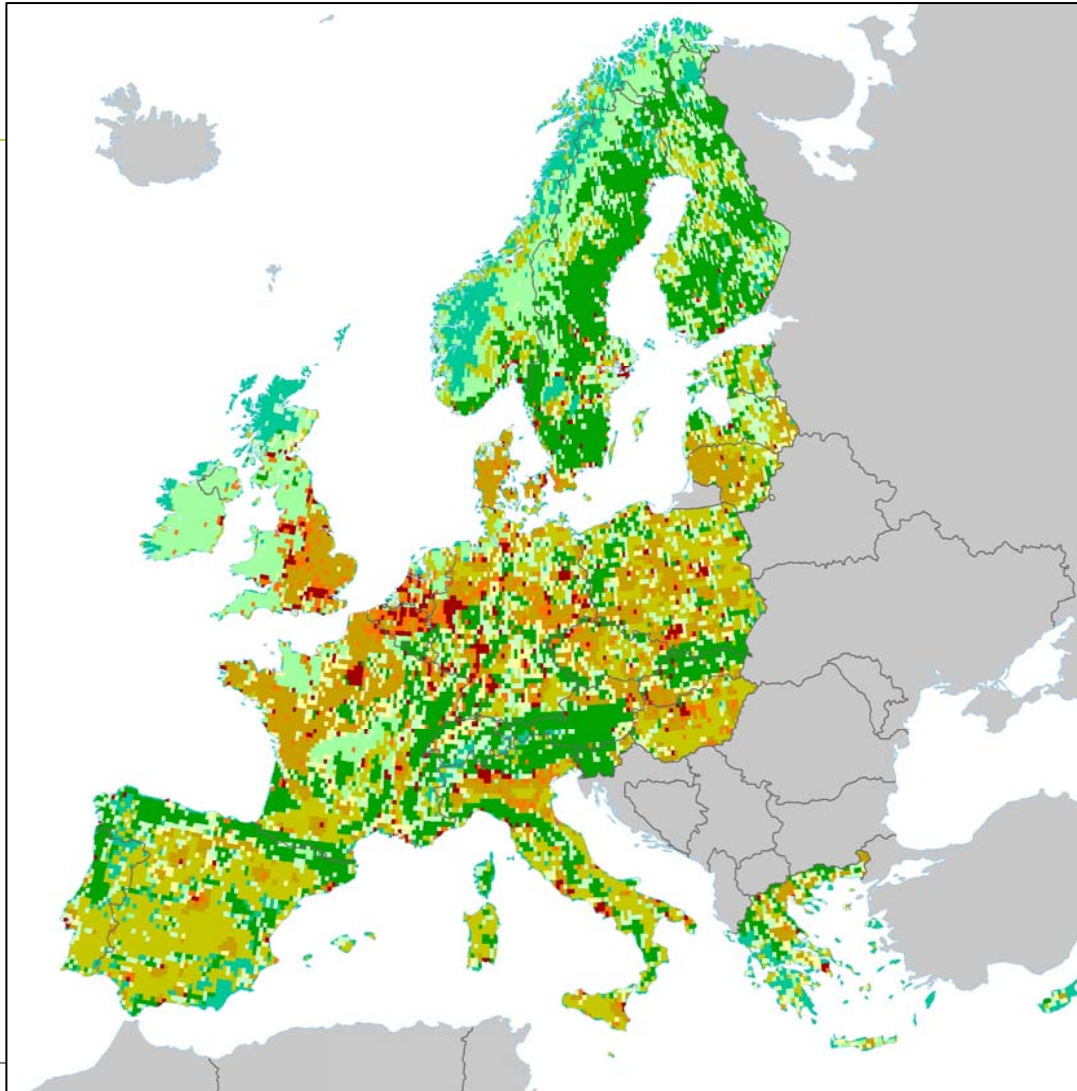
GREAT ESCAPE
Europe of Contrasts



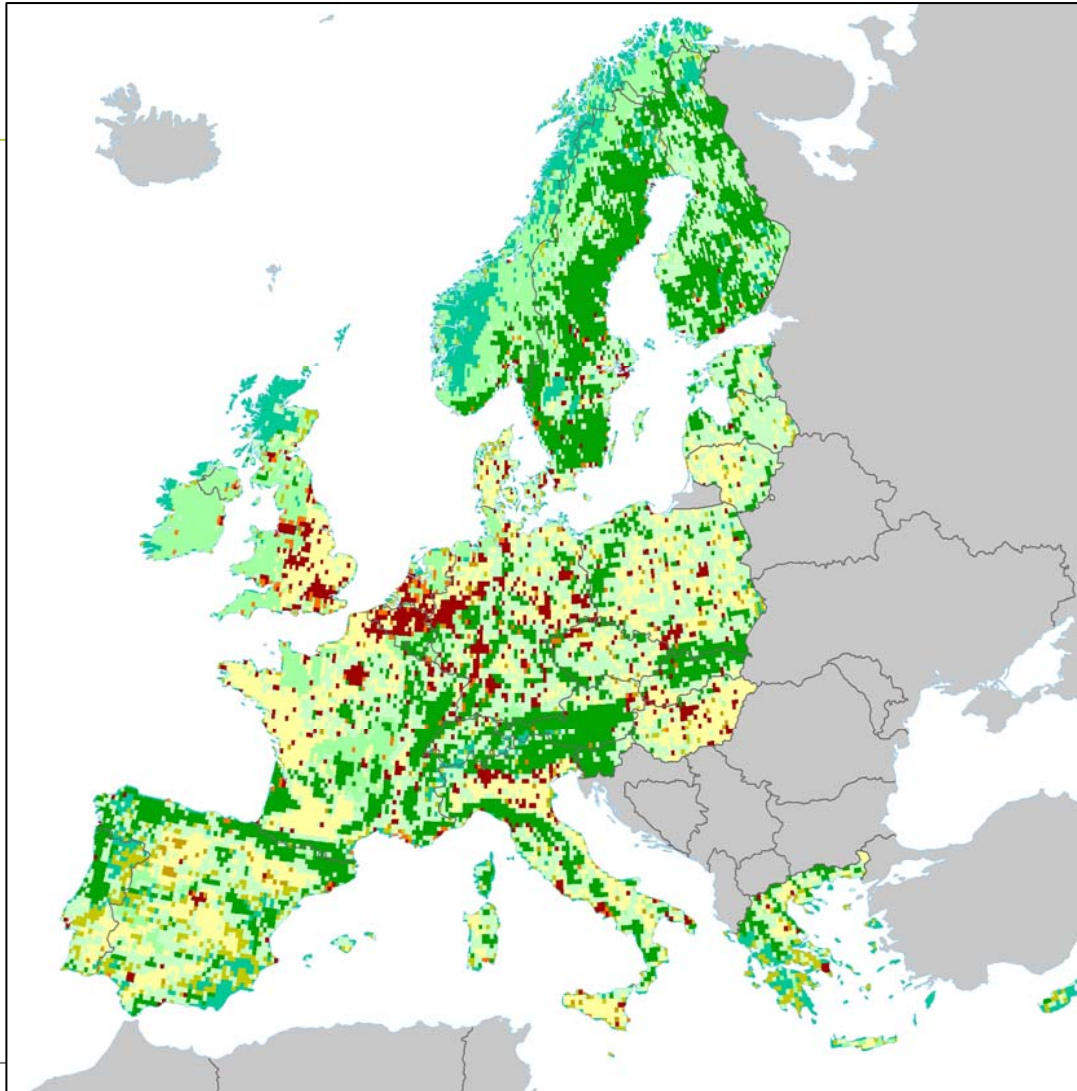
evolved society
Europe of Harmony



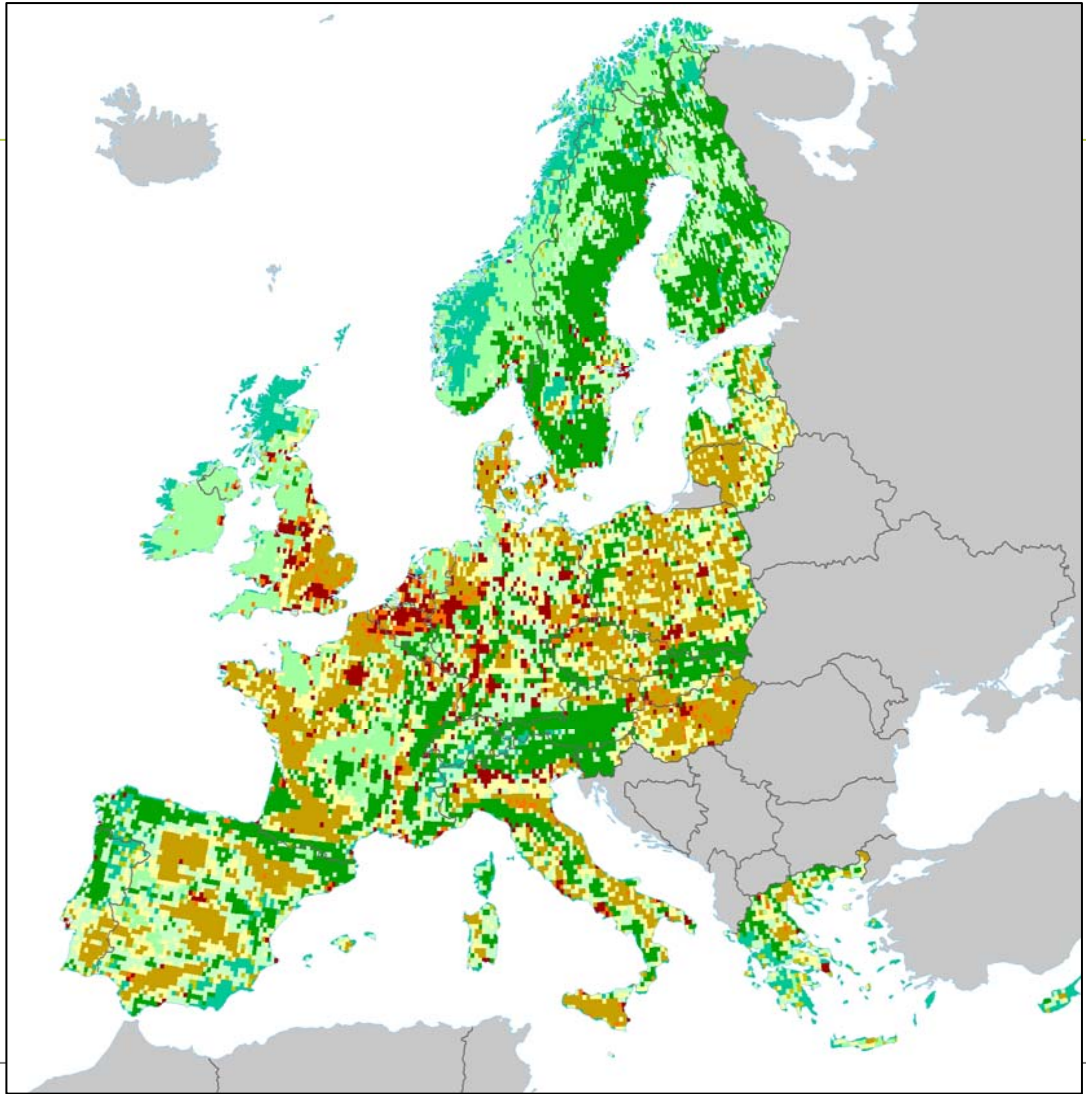
CLUSTERED NETWORKS:
Europe of Structure



Lettuce surprise U
Europe of Innovation



DIG CRISIS
Europe of Cohesion



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