

Pressures on Water Resources in England and Wales

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Workshop on “Drought and Water
Deficiency : from research to policy
making ”

Palermo, 8-9 October 2004



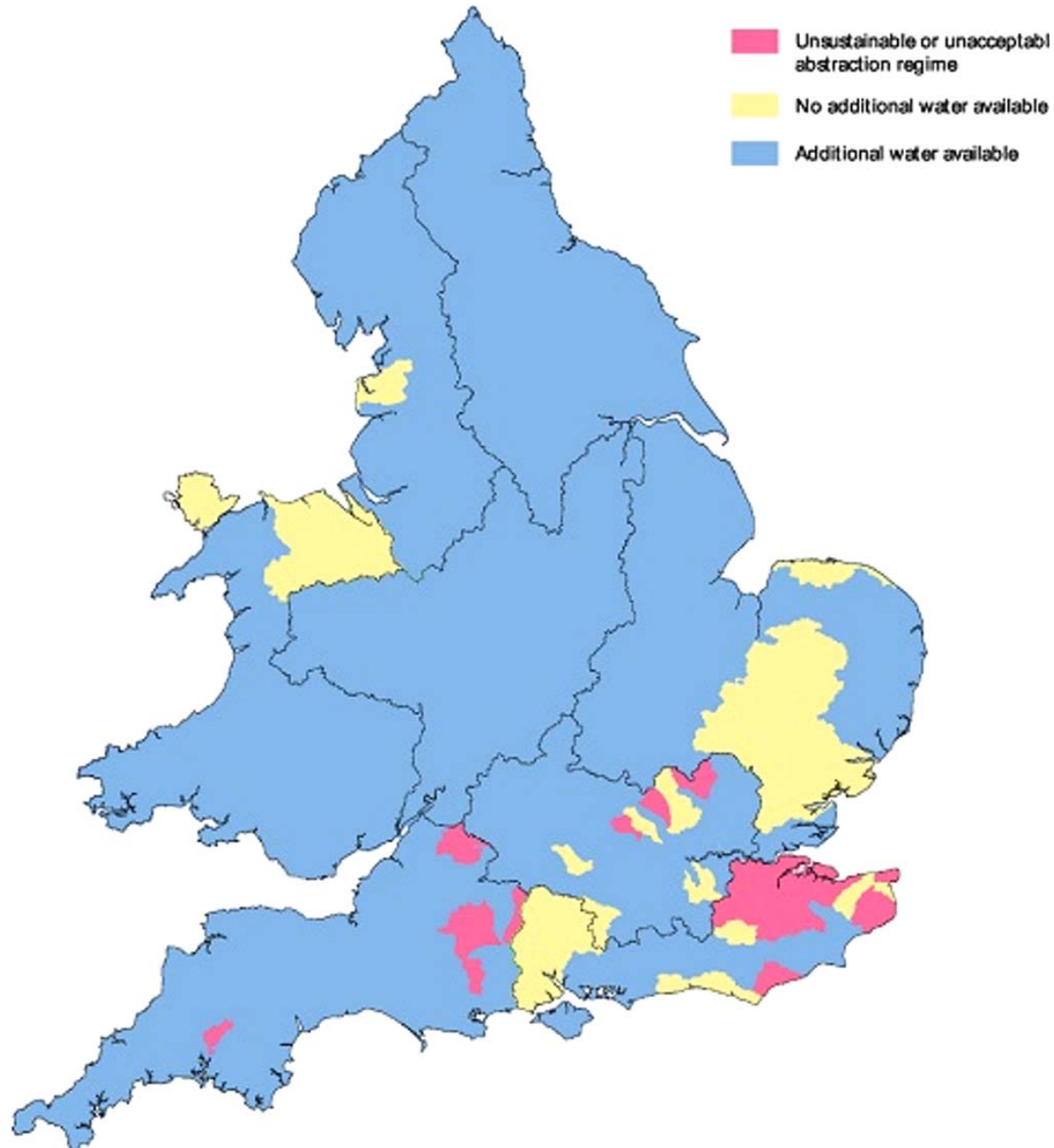
Content

- Abstraction licensing
- Pressures on water resources in England and Wales
 - New building
 - Nature Conservation sites
- Restoring Sustainable Abstraction
 - Implications and costs

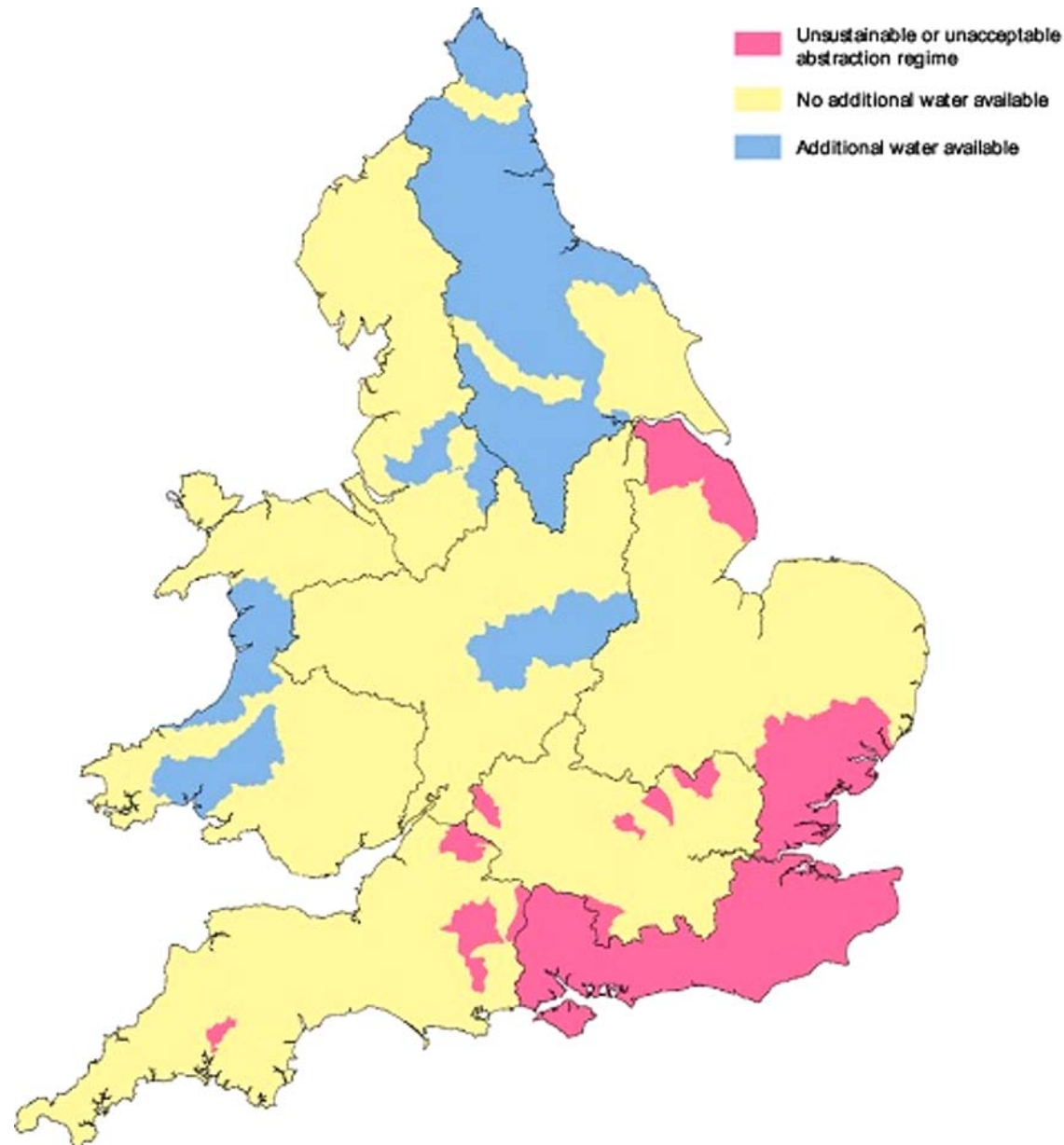
Abstraction Licensing

- Generally abstractions must be licensed by Environment Agency
 - Most uses already, all from 2006
- 48,000 licences in England and Wales
- 23,000 for small quantities being deregulated
- Criminal offence not to have one where one is needed
- Many issued as a right (1965) without consideration of impacts
- Many wouldn't be granted now
 - Because of environmental problems

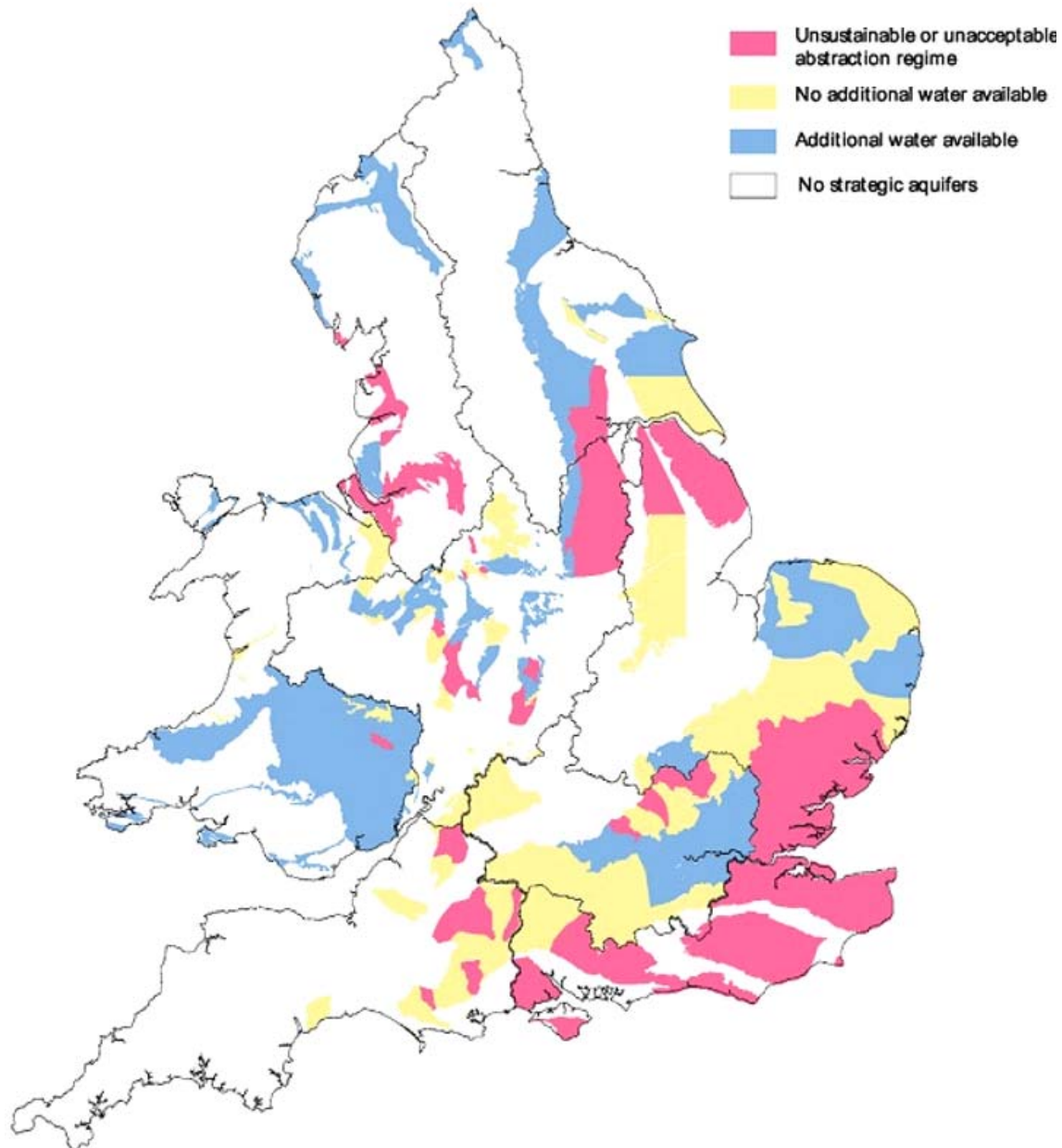
Winter Surface water



Summer surface water



Groundwater



CAMS will add detail....

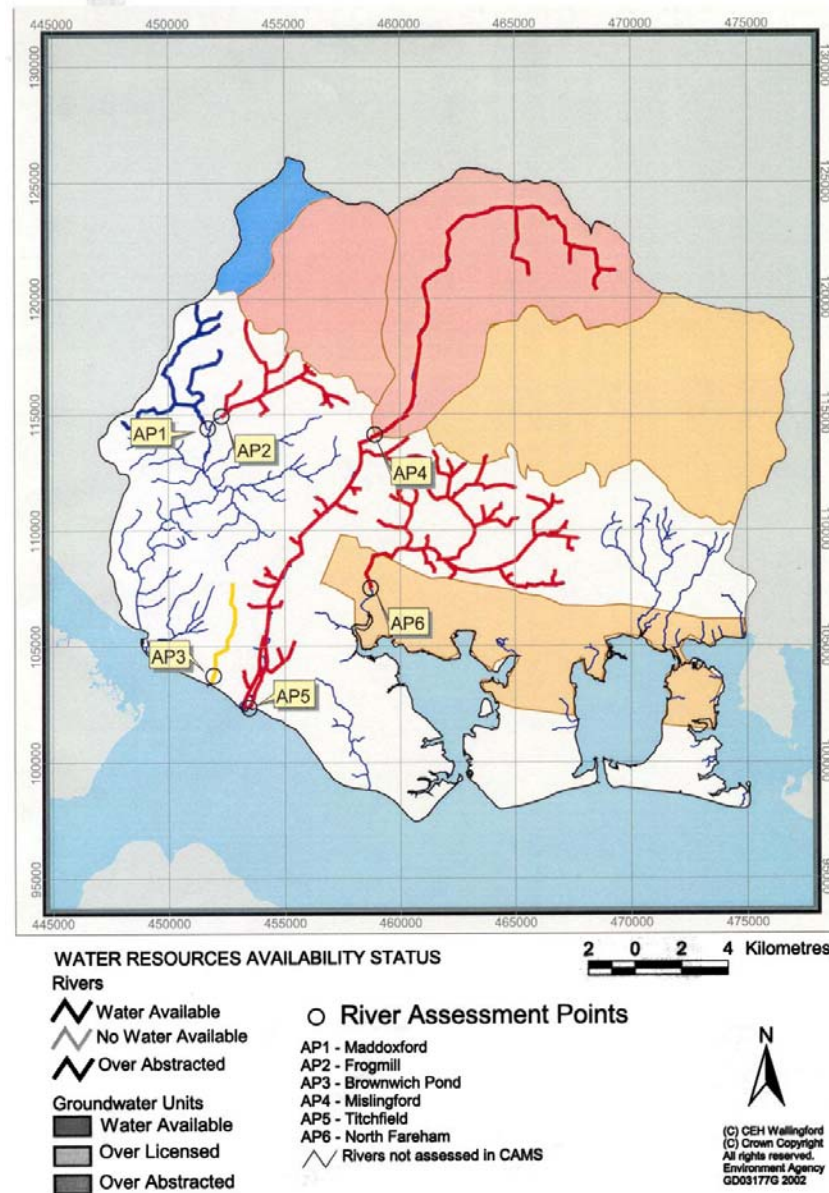


Figure 10 Water Resource Availability Status

Pressures

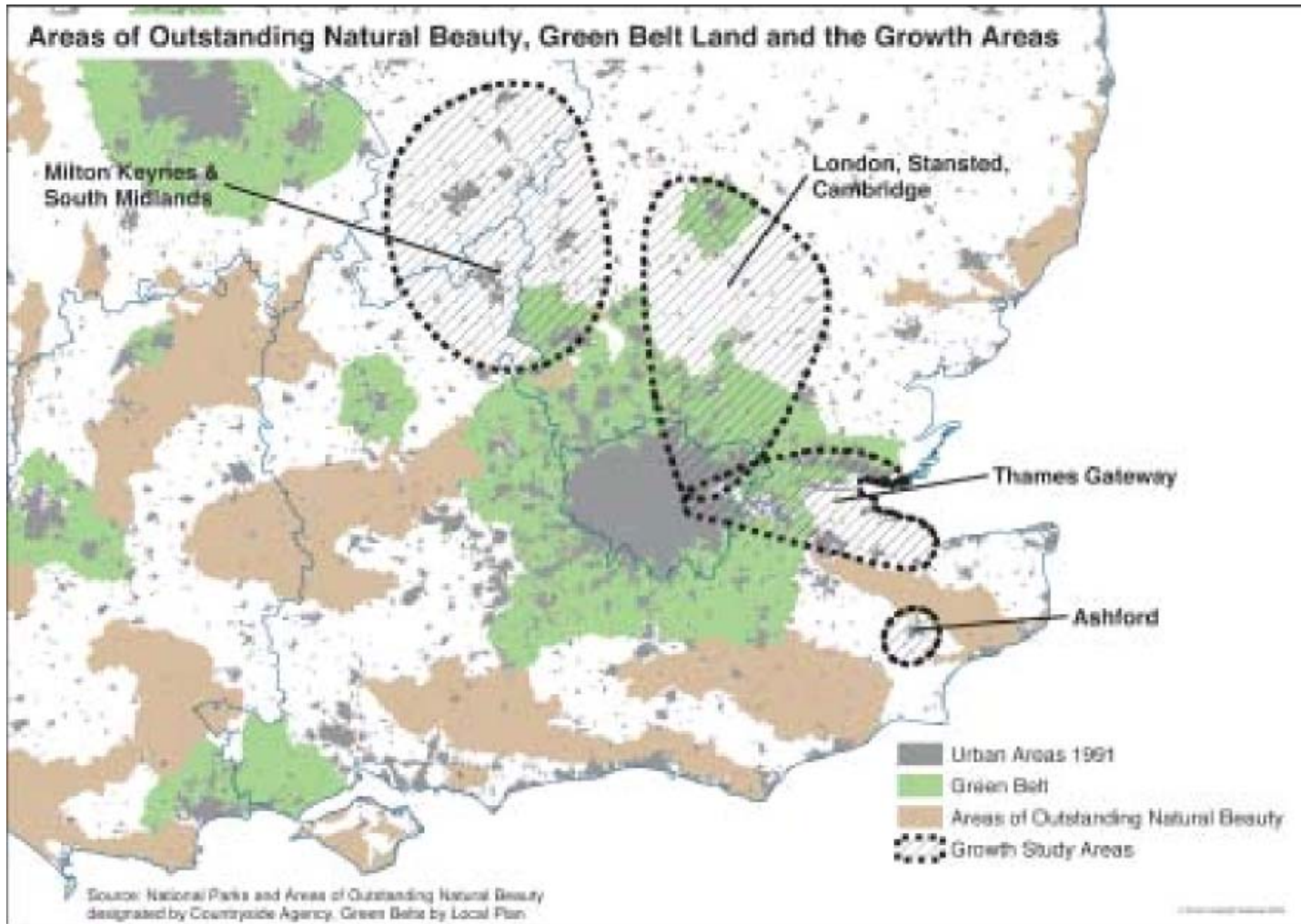
Now

- Demographic changes
 - More people + more houses
 - = greater demand for water (?)
- Protection of nature conservation sites versus abstraction

Future

- Climate change – changing rainfall patterns

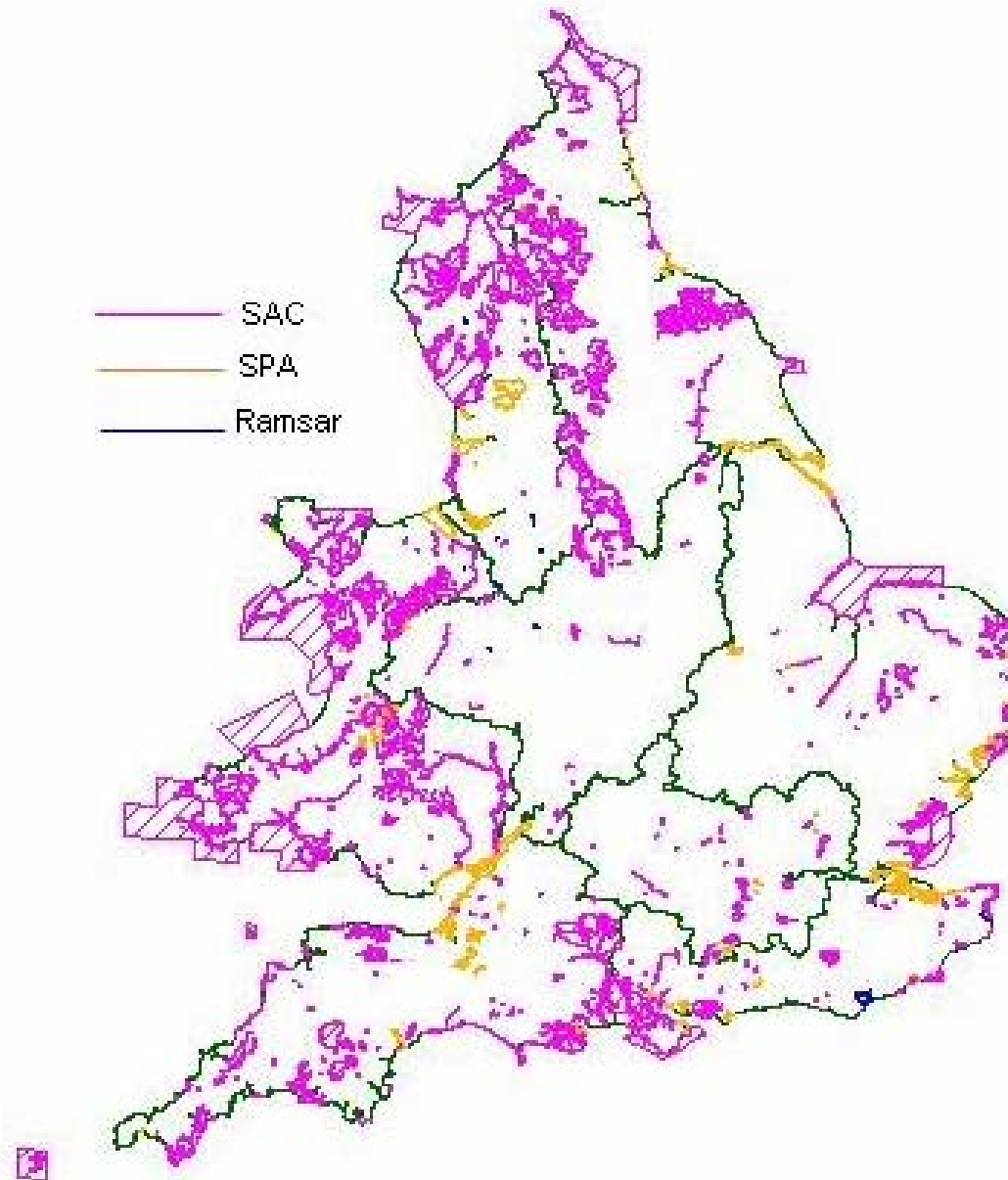
Growth Areas



defra

Department for Environment
Food and Rural Affairs

Ramsar, SPA, SAC Sites in England & Wales



Restoring Sustainable Abstraction (1)

- Environment Agency RSA programme
 - Identify problems eg low river flows, impacts on habitats
 - Catalogue of 490 sites
 - Natura 2000
 - Sites of Special Scientific Interest
 - Biodiversity Action Plan
 - (Convention on Biological Diversity, WSSD targets)
 - ‘Local’ sites

Restoring Sustainable Abstraction (2)

- Particular focus on Natura 2000 sites
 - Requirement to review, modify (as needed) or revoke permits affecting these
 - Test is of 'no adverse impact'; alone or in combination
 - 283 sites

Compensation (1)

- English law
 - Right to compensation for loss or damage where a licence is revoked or modified by Agency
 - Even if the abstraction causes serious environmental damage
 - But removing *this* right from 2012

Compensation (2)

- Costs of RSA programme
 - Estimated €1.1billion (£740 million)
 - 90% is related to Natura 2000 sites
 - 60% for water supply companies
- Costs of compensation will be recovered from abstractors over time

Implications

- New development is in water stressed areas
- Abstractions for water supply may be reduced at conservation sites; many of these in areas of development
- Water companies must consider options to maintain supply-demand balance

Options for water resources

SUPPLY SIDE

- New abstractions
- New/bigger reservoirs
- Bulk supplies
- Intercatchment transfers
- Desalination

DEMAND SIDE

- Leakage control
- Water efficient homes
- Water efficient appliances
- Rainwater & greywater use
- Metering

Most feature in one or more water company plans

Conclusions

- England has significant issues of unsustainable abstraction now
- Pressures will increase in time
- Need to deal with current problems – particularly at European conservation sites
- BUT THIS WILL BE EXPENSIVE