



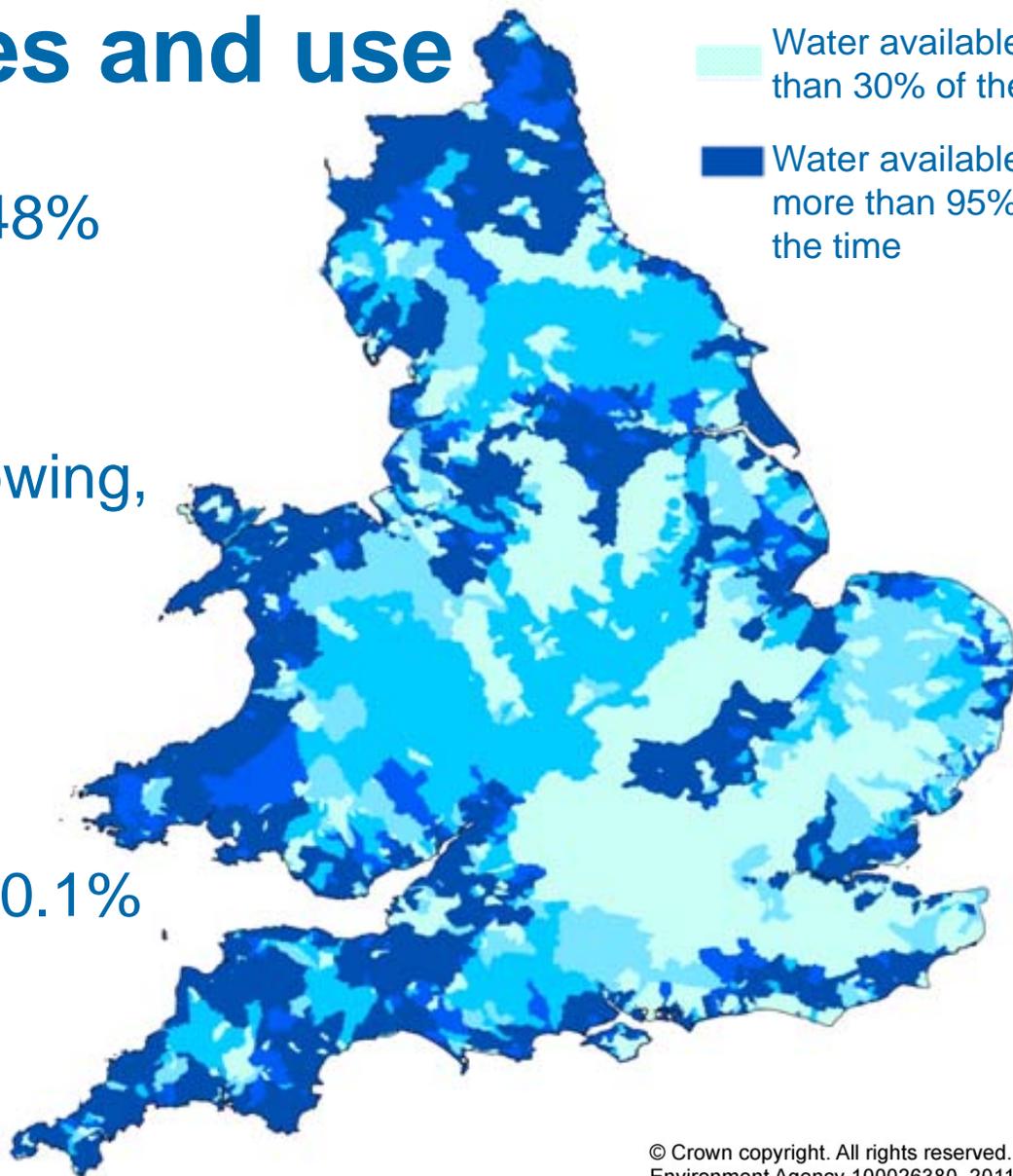
**Ian Barker**

**Head of Water, Land & Biodiversity  
Environment Agency  
England and Wales**

**October 2012**

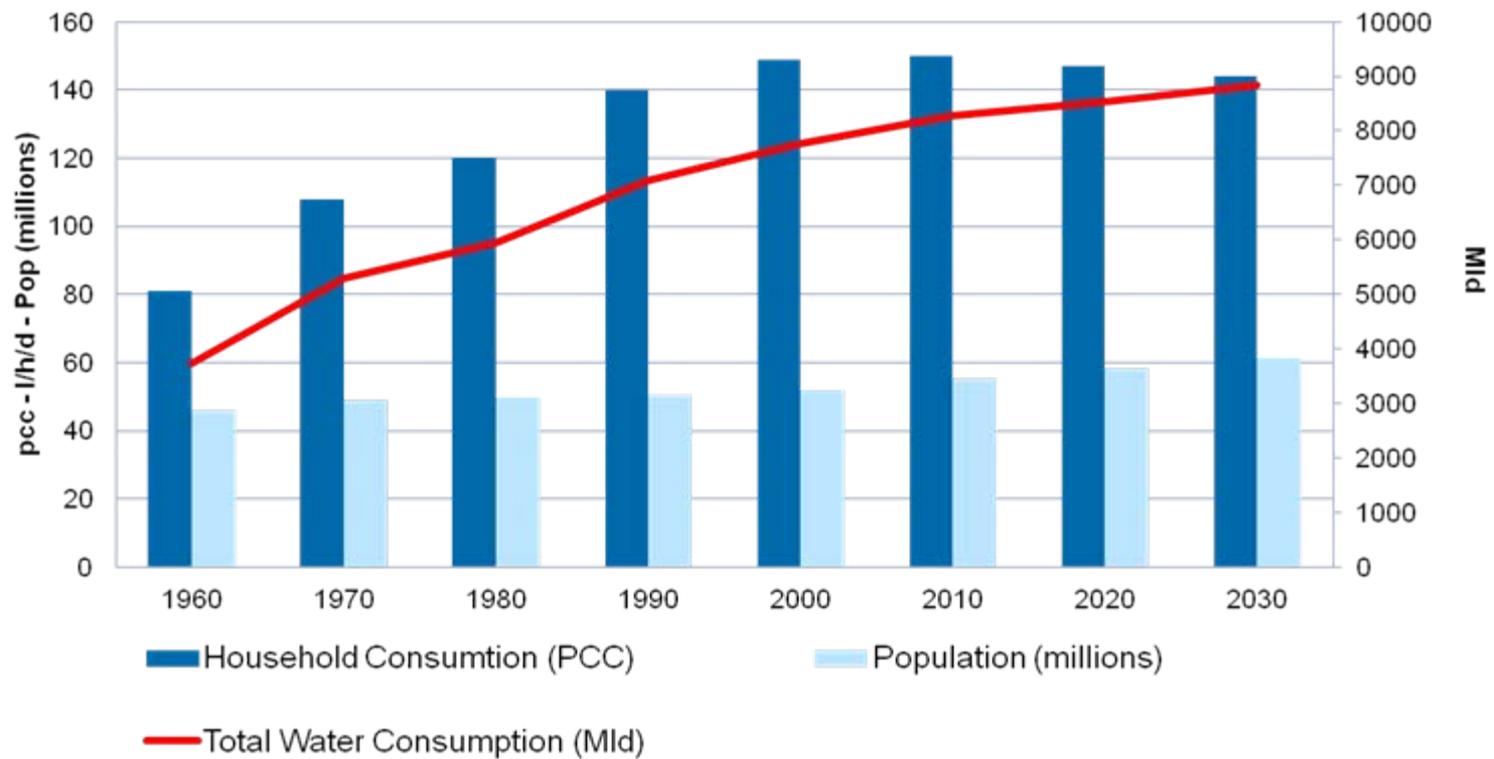
# Water resources and use

- ⇒ Public water supply – 48%
- ⇒ Electricity – 28%
- ⇒ Other industry – 12%
- ⇒ Fish farming, cress growing, amenity ponds – 12%
- ⇒ Spray irrigation – 0.6%
- ⇒ Agriculture – 0.2%
- ⇒ Other – 0.2%
- ⇒ Private water supply – 0.1%

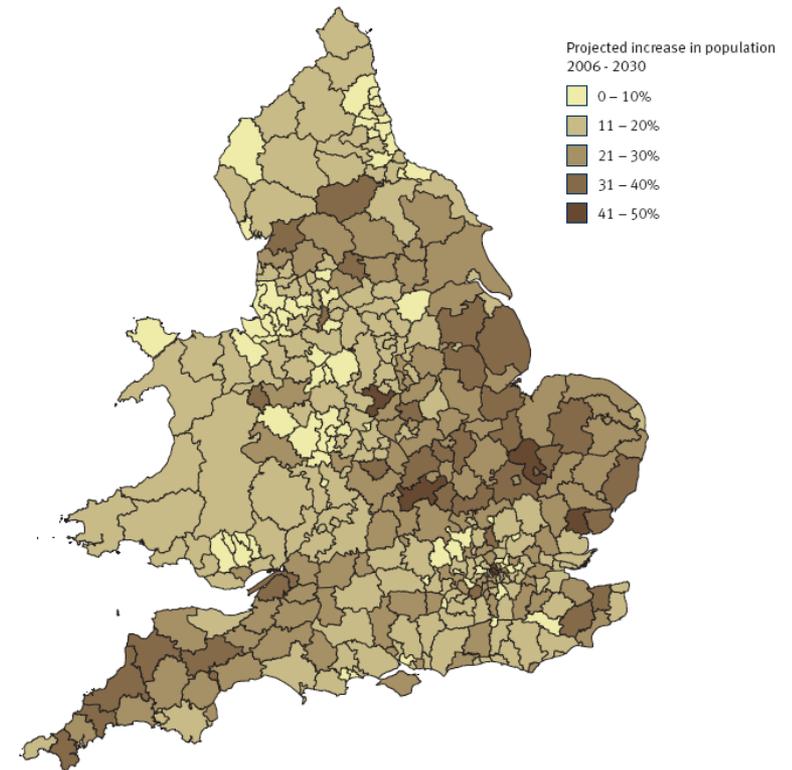


Light blue: Water available less than 30% of the time  
Dark blue: Water available more than 95% of the time

# Population and per capita consumption 1960-2030

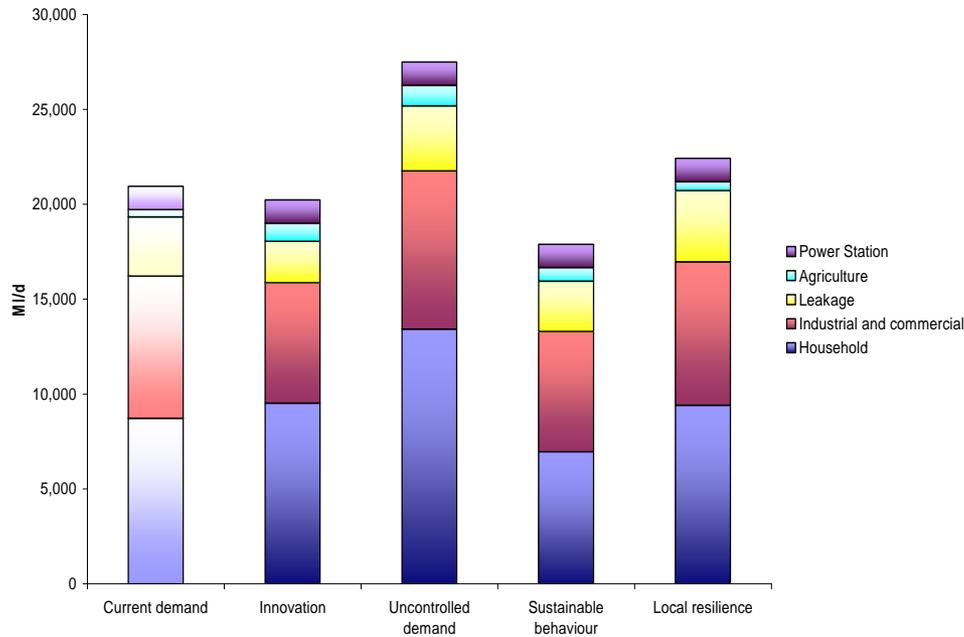


## Population Forecasts

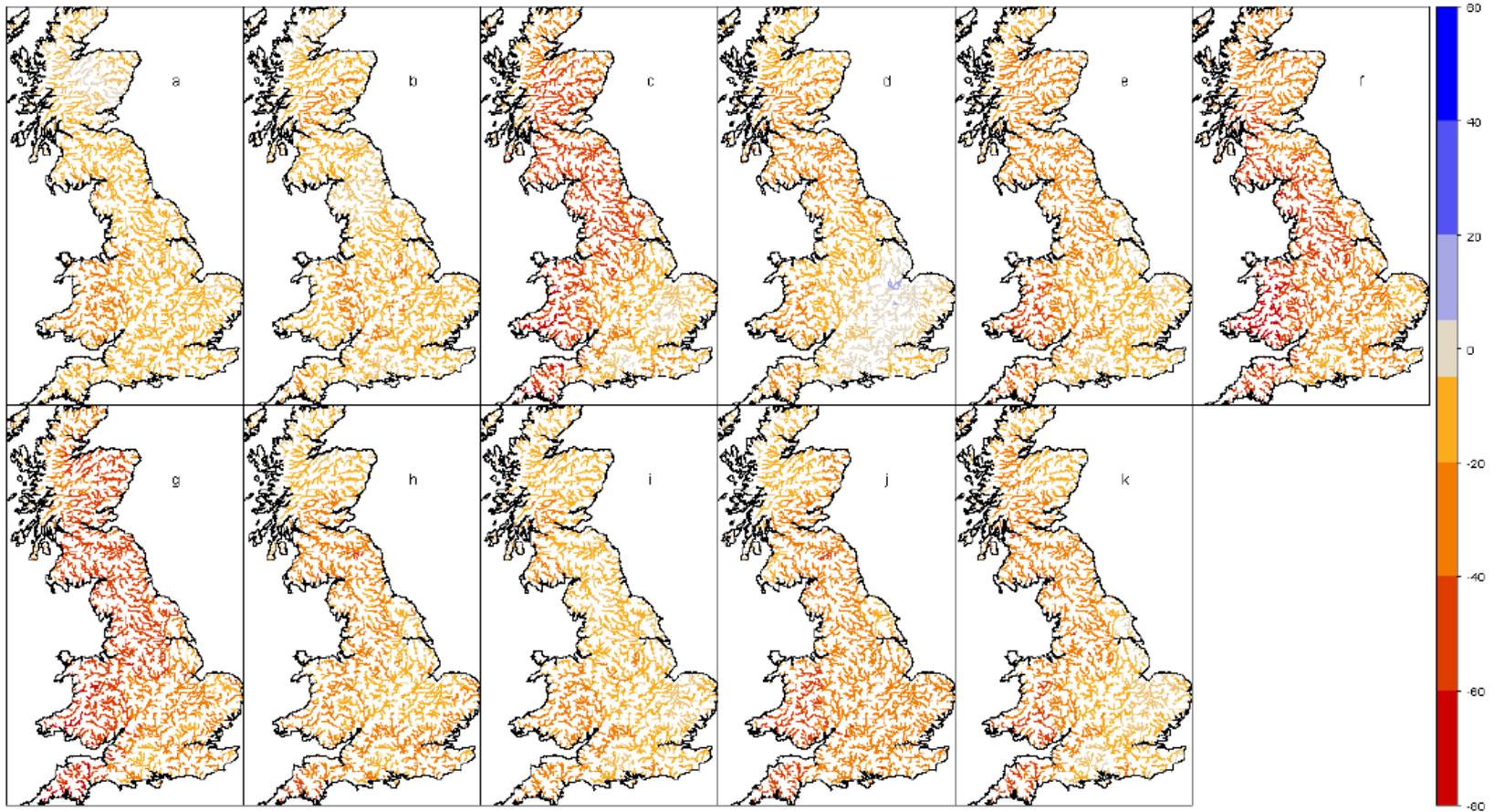


## Changing Demands for Water

- public supply
- energy
- agriculture



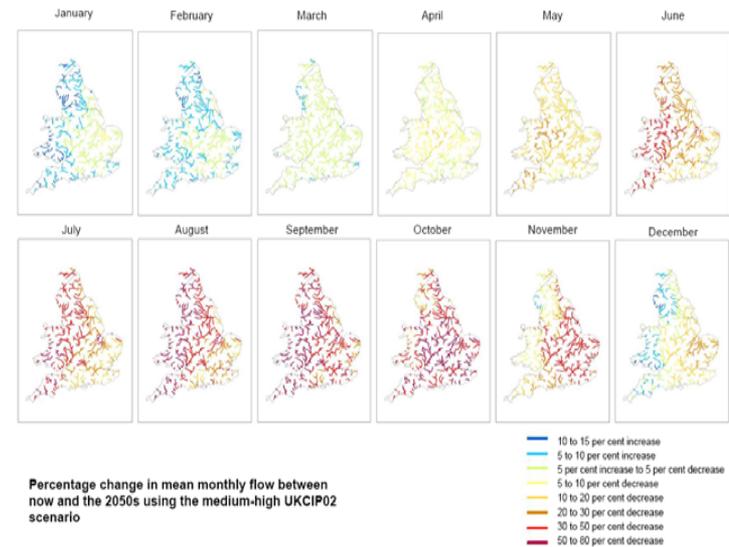
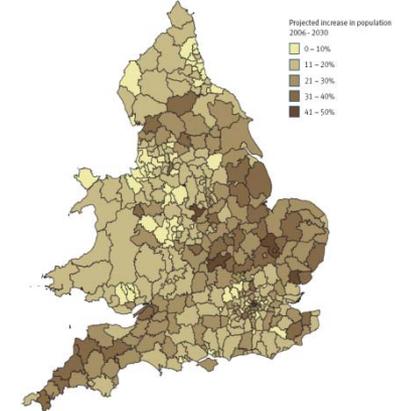
## Change in river flows for the 2050's



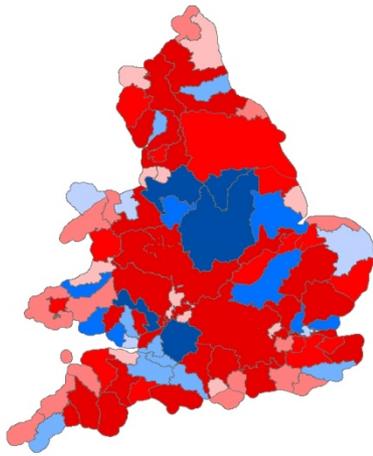
summer (JJA)

# Adaptation to Future Pressures

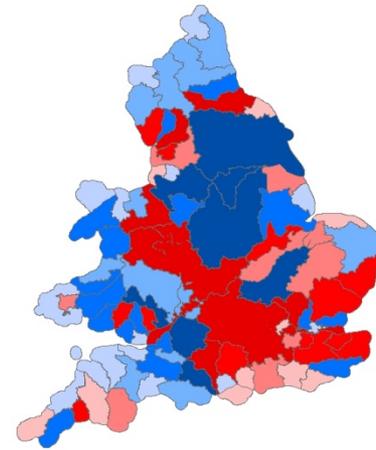
- Water Demand Management
- Local/Regional Balancing of Supply and Demand
- New Resources/Recycling
- Storage
- Large Scale Transfers



# Catchment Scale

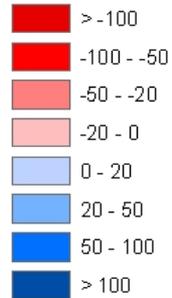


**Demand:** Uncontrolled Demand  
**Supply:** Q95 -25%  
**EFI:** Fixed

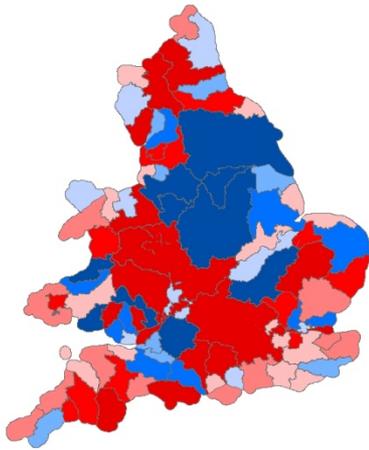


**Demand:** Uncontrolled Demand  
**Supply:** Q95 -25%  
**EFI:** Proportionate

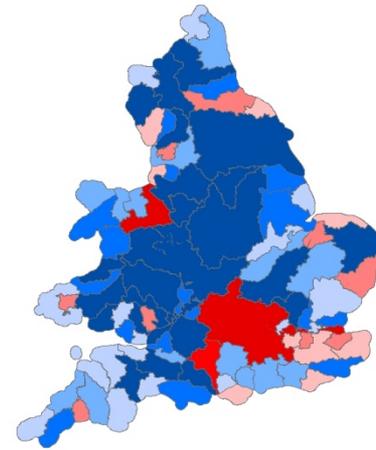
**Supply / Demand Gap  
M/d**



**Red = Deficit  
Blue = Surplus**



**Demand:** Innovation  
**Supply:** Q95 -25%  
**EFI:** Fixed



**Demand:** Innovation  
**Supply:** Q95 -25%  
**EFI:** Proportionate

