



Economic instruments for water allocation in England and Wales

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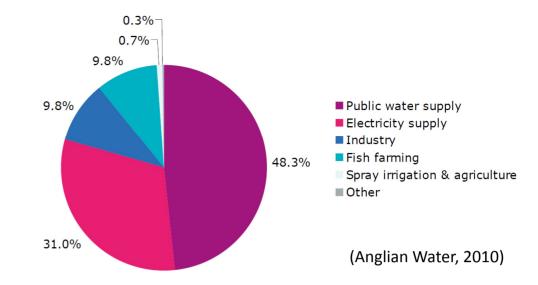
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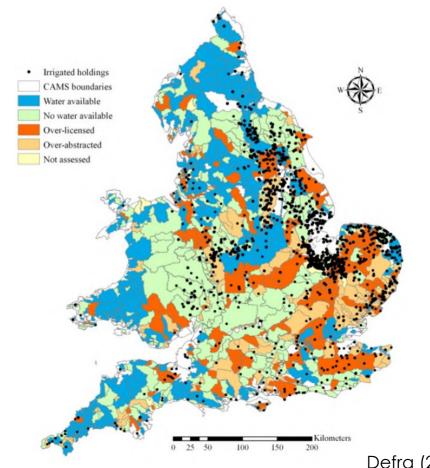
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Current water licensing system

- Allocation system in place since
 1960s, with some updates to
 better protect the environment
- Everyone using more than 20 m3/day requires an abstraction licence
- Most licences do not include any conditions to reduce or stop abstraction when water availability decreases.
- Abstraction charges to recover EA water management costs (not linked to volume abstracted)







Defra Water for Life (2011)

- Water resources are already under pressure
- Give clear signals and regulatory certainty on the availability of water
- Better reflect the value of water, its relative scarcity, and the value of ecosystems services
- Drive efficiency in water use, using market forces and smart regulation
- Meet the water needs for people and the environment at least cost
- Be flexible and responsive to changes in supply and demand,



Abstraction reform in England

Summary of reform

Improving flexibility to address short-term water availability issues

- · Remove seasonality from licences
- Additional water at high flows
- · Hands-off flows that switch on and off more gradually
- · New controls on abstraction at low flows
- · Enable quicker and easier trading

Improving long-term sustainable management supporting growth and investment

- · Management rules for each catchment
- · Risk based reviews
- Reducing permitted volumes at transition where there is a risk of environmental deterioration
- Implementing the water shares accounting framework
- Integrating water discharge volumes into catchment management
- Reviewing the abstraction charging system



Source: Defra (2016)



Enhanced catchments

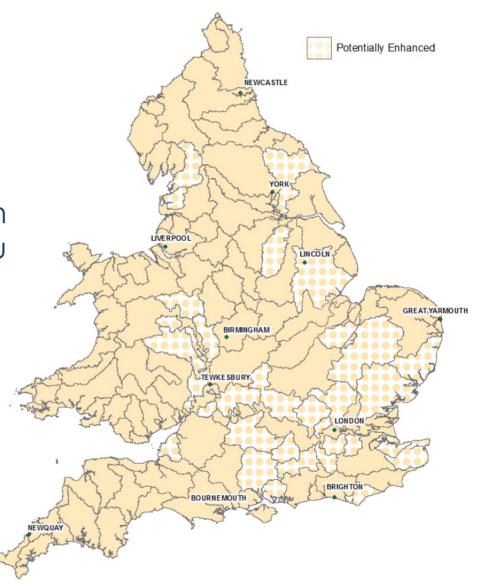
'Bonus' water during high flows

 Hands off flows that switch gradually on and off to help you respond

Water shares

Pre-approved trading rules

Smart meters





Current water trading in England

Barriers

- Lack of a visible market
- High and uncertain transaction costs and approval processes
- Disincentives within the regulatory regime
- Restrictions on trades taking place outside of the same catchment
- General uncertainty about the future

Limitations

- Unlikely to resemble the scale of trading outcomes seen in other countries
- Scarcity major driver of trade
- Overseas water markets have been dominated by agricultural users
- Small catchments
- Active trading markets in England and Wales may be relatively small and discrete



Changes after the reform

Water trading

- Enhanced catchments
- Pre-approval rules for each catchment
- EA online system with information about potential buyers and sellers
- Brokers to facilitate trading

Water charges

- Charges still based on cost recovery of EA's water management
- Charges adjusted by reliability level instead of seasonality
- Closer relationship between charges and actual water use



- Water resources already under pressure and availability risks will be greater in the future
- Reform of allocation system to provide more flexibility and sustainability
- New abstraction permits with low flows control system and subject to periodical risk based reviews
- Economic instruments playing a key role







Thank you!

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