

Tradition versus dogma: water metering in England and Wales

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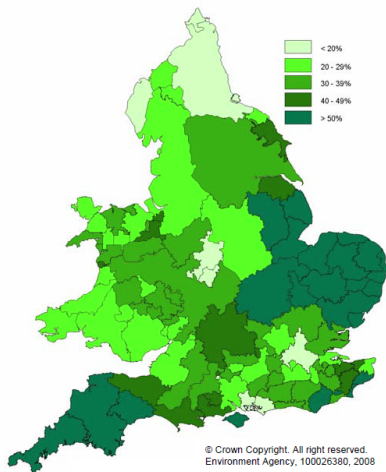
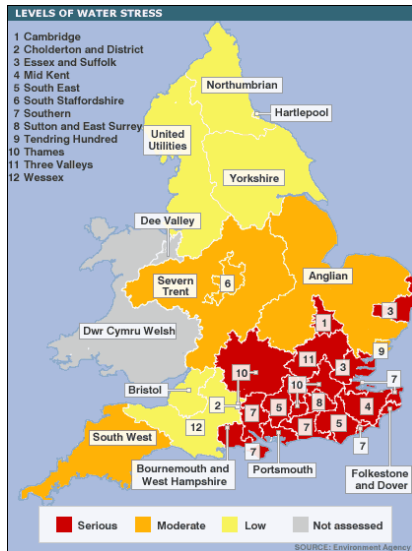
Economist, Aguanomics Solutions¹

AWRA (#38)

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¹I began this research while working on the EPI-Water project at Wageningen University in the Netherlands.

The End of Abundance surprises (unprepared) England?



Tradition versus dogma

Tradition: Free water to the poor, paid by the rich

Problem: Scarcity and the middle class

Dogma: Users (of water and carbon) pay

Problems: Inefficient (when water's adequate), unfair (price changes without compensation) and inaccurate (carbon cost-benefit)

Is water a social or economic good? Both?

Some for free, pay for more?

Water services in the UK and the move to meters

Northern Ireland: Populist subsidies for free (residential) water

Scotland: Scottish water, a public utility

England and Wales: Privatization in 1989. 20-30 investor-owned utilities (IOUs) now

Meters are useful for. . .

- ▶ Allocating charges in proportion to use (vs. “rates”)
- ▶ Incentivizing water conservation (vs. regulations)
- ▶ Increasing IOU profits (capital on rate of return)
- ▶ Meeting EU directives

How to get a meter

- ▶ All businesses, new homes and new residents are metered
- ▶ “Optants” can elect to get a meter (can later reject it)
- ▶ IOUs in water-stressed areas can ask for mandatory metering

Unwinding cross-subsidies

- ▶ Move from rates to meters shifts burden onto users
- ▶ *Unmetered* households pay more as optants leave
- ▶ Heavy users in cheap houses see biggest billing increase

BUT “WaterSure” program under-funded and under-utilized

Do meters help the local and/or global environment?

Meters...

- ▶ cut back on household water consumption and
- ▶ improve leak repair on customer lines
- ▶ ...but do not halt development or fix system leaks ($\approx 25\%$)
- ▶ may reduce carbon consumption (hot water)
- ▶ ...at a high price (dropped ETS prices)

Progress?

Percentage of customers on meters

Region	Households	Non-households
Water stressed	34	87
Not stressed	27	89
All	30	88

Ofwat (2011) recommends 90% penetration by 2030 (GBP -1 billion NPV) over over 38% (NPV 0)!

Note: That *includes* 900 million in benefits from lower carbon!

Suggestions and solutions

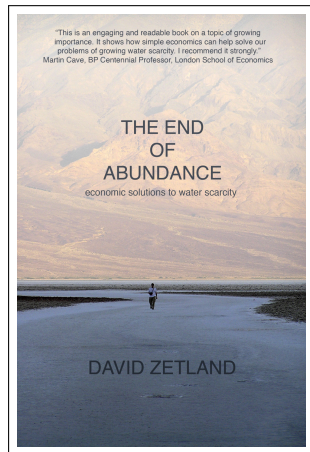
- ▶ Dramatically increase WaterSure (paid by heavy users)
- ▶ Stop meters in non-scarce areas
- ▶ Include bulk users and growth if you care about e-flows

Questions?

Blog: aguanomics.com

Book: endofabundance.com

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