

# CIWEM: WATER & ENVIRONMENT 2011



## WATER RESOURCES and the BIG SOCIETY

SESSION 1

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Chair, CIWEM Water Resources Panel

& *CFonstream*

# CIWEM's

## Sustainable Water Workstream (2009-11)

**Aim:** Promote greater resource efficiency; influence the Water White Paper

**Outputs:**

Water section in Aldersgate Group report on Resource Efficiency (Feb 2010)



CIWEM-ENDS Workshop, Feb 25 2010:  
Regulation for a Sustainable Water Industry

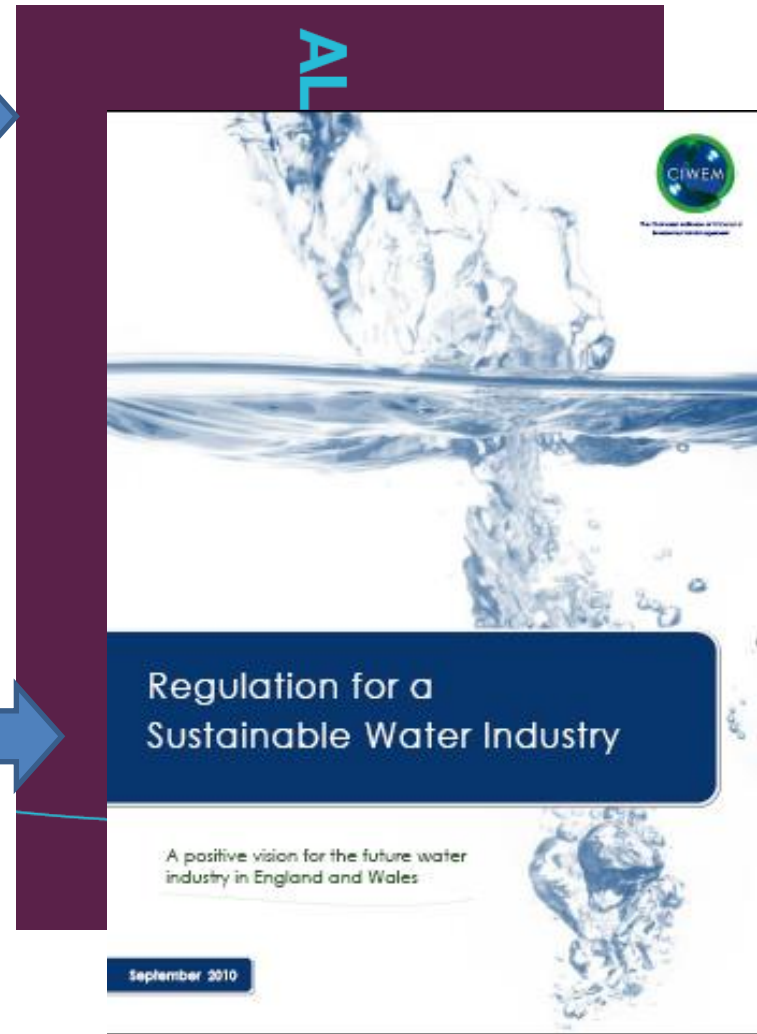


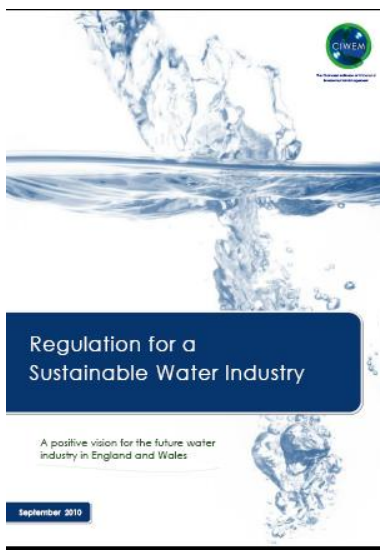
Regulation for a Sustainable Water Industry,  
Sept 2010:

<http://www.ciwem.org/policy-and-international/current-topics/water-management/regulation-for-a-sustainable-water-industry.aspx>



CIWEM Conference, Dec 9, 2010:  
Regulation for a Sustainable Water Industry:  
Seizing the Opportunity for Effective Reform





# Regulation for a Sustainable Water Industry (Sept 2010): what's in it?

## Executive Summary - recommendations:

- Review/revise structure, regulation, management to meet challenges of population growth, climate change, environmental management.
- More carbon, water and resource efficiency
- More innovation (uptake cf. invention)
- More re-use of water
- Sustainable management of catchments
- More partnership working
- Focus on delivery of water services
- Longer planning and investment cycles
- Establishing and communicating the true value & price of water
- Near-universal metering of households

## Foreword:

- Current governance model fit for the challenges of the past, but not those of the present & future
- Current challenges: scarcity, economic pinch, uncertainty
- Requires flexibility, & an adaptive approach
- Attention to affordability issues - for customers, society & the environment, too
- Recognise that structure, rules, incentives, biases etc influence behaviour & outcomes

“Blend of legislative, policy, regulatory and market mechanisms to set the platform for the **delivery of effective and efficient water, sewerage and environmental services** with sufficient freedom and incentives to encourage the development and uptake of new ways of working”

# THE BIG ISSUE ... in my opinion ... IS:

Given pressures from:

- population growth;
- climate change;
- the need for effective protection of the environment
- (economic 'austerity')

We can't continue to consume water  
in our homes at 150 l/h/d;  
or even at 130 l/h/d.

# ... noting that ...

## **Water is not generally scarce; only when and where we need it most**

- Now, in most years, and in most areas of England and Wales, water resources are not scarce;
- But in dry and drought years, source yields are low and demand is high, and rivers and aquifers are already subject to or at risk of over-abstraction under historically licensed permits
- As population grows, demand will grow
- As climate varies/changes, droughts will be different – more often, deeper, longer ?

## **To meet the needs of people & the environment under these increasing pressures, we need to reduce per capita demand (especially when/where water is scarce)**

## **Water Companies have duties & obligations:**

- to promote the efficient use of water
- to protect the environment, and make a contribution to sustainable development ; but also
- to make water supplies available to those who demand them (s37, PtIII, WIA 1991)
- to ensure security of supply for essential needs, whatever, without resort to rationing

## **It is people who use water - & they need to be persuaded to care more**

## **Water Efficiency needs a helping hand up, not just a nudge**

- Systemic biases against demand side options, & uncertainties in savings from them need attention
- Water Companies cannot be expected to deliver alone, esp. under least cost rules & cost pressure
- Responsibility rests with each and all – but need, case, means & benefits need to be tailored to suit
- SDC (rip), 2011, Making sustainable lives easier – range of interventions needed, both hard & soft
- Green Alliance, 2011, Bringing it Home - raise awareness; tailor; make action easy and worthwhile

## **Cue the Big Society?**

# .... and also noting that ...

- **At present,**

- The marginal cost of abstraction from the environment is zero (because licences are charged on a licensed quantity basis, irrespective of take)
- The marginal cost of consumption is zero for the majority of household water customers (because most remain un-metered)
- In both cases, there is **no financial incentive to take less**, even when resources are short; and there is **no penalty for taking more, and wasting more.**

- **To resolve the problem, we need:**

- Abstraction Licensing reform (availability-related permitting / charging)
- Smart Metering & Availability-related Tariffing (with protection for the vulnerable ....)

# the SOLUTION .....in my opinion ... IS:

- Abstractors
- Consumers

Varies t,s, with hydrology, supply-demand balance, occurrence of dry/drought spells

to face users with the true marginal cost of water taken

All-in, long-term, including environmental externalities

By:

- Smart Metering (HH)
- Flexible abstraction permitting
- Flexible tariffs (HH, NH)

- pay more for water when it is scarce, less when it is not
- with provisions to protect vulnerable users

To:

- Reveal information, raise awareness of shortages / consequences
- Provide a cost incentive to everyone to cherish water
- Promote efficient use of increasingly scarce resources
- Provide a rational basis for water allocation, sharing, trading

# Water Resources & the Big Society

## Day 1, Session 1

- 5 papers
- Wide range of topics:
  - PPP to deliver water services to the urban poor;
  - Smarter allocation of water for UK agriculture;
  - Getting them young - water education in schools;
  - Smarter water management for people, rivers & wildlife;
  - Customer participation in the delivery of water services.
- 20 minutes per paper, 15 minutes delivery + 5 minutes questions from the floor.
- Questions paper by paper, no block time at the end.