

# Mainstreaming Water Efficiency

## Is the tide turning?

Rob Lawson

**Entec**

Entec is an AMEC company

**amec**

# Presentation Outline

- A brief history of water efficiency
- Where are we now?
- What will the effects of the big society be?

**1998-2000**

# **Southern Water & Environment Agency Dual Flush Trials**



- **Good basic research**
- **Proved dual flush WCs used less water**
- **But small-ish sample, therefore conclusions limited**
- **Characteristic of many studies – then and now.**

**2000-2003**

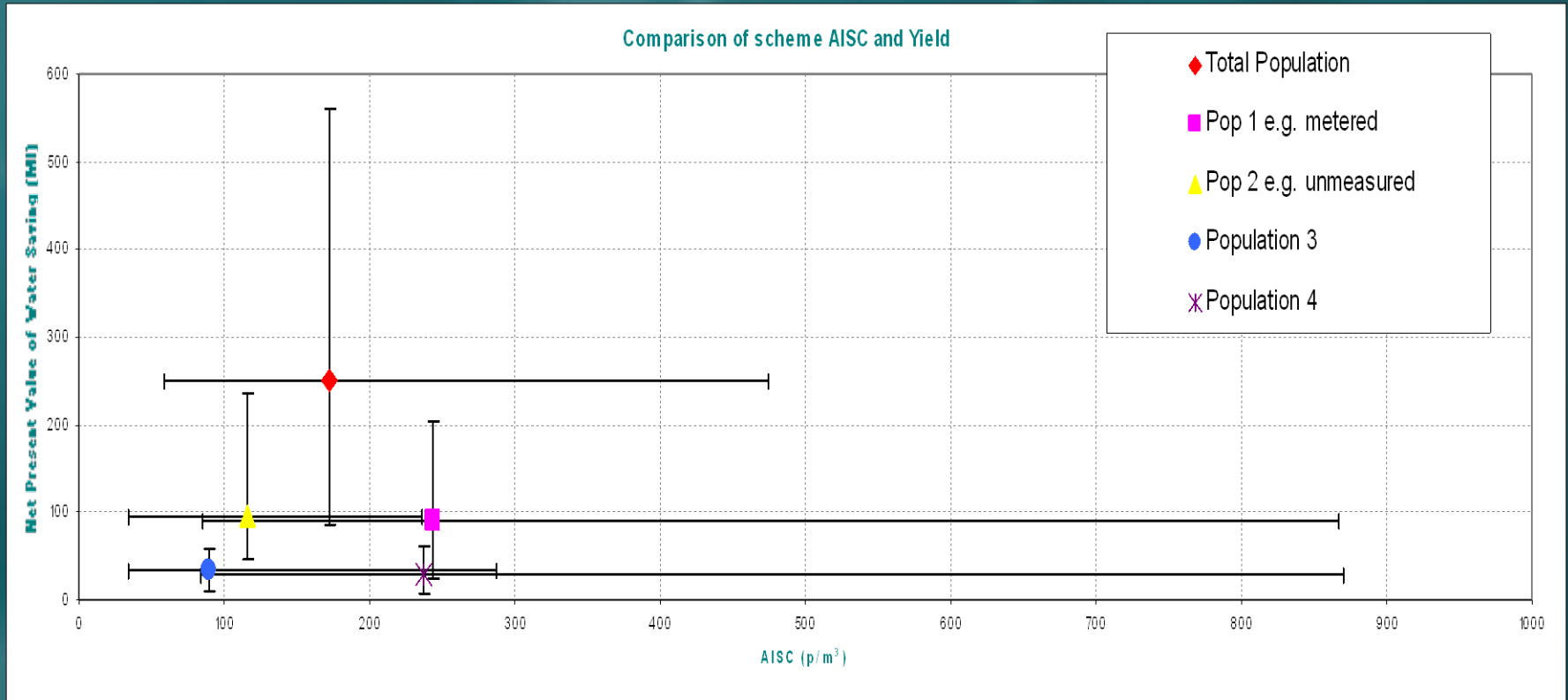
# **UKWIR: Quantification of the Savings Costs and Benefits of Water Efficiency**

<b>Sample size</b>	<b>Std Error of Mean</b>	<b>UCL</b>	<b>LCL</b>	<b>Confidence Interval</b>	<b>Regional Savings (MI/d)*</b>
<b>30</b>	<b>0.27</b>	<b>2.54</b>	<b>1.46</b>	<b>1.07</b>	<b>7.3 - 12.7</b>
<b>60</b>	<b>0.19</b>	<b>2.38</b>	<b>1.62</b>	<b>0.76</b>	<b>8.1 - 11.9</b>
<b>120</b>	<b>0.14</b>	<b>2.27</b>	<b>1.73</b>	<b>0.54</b>	<b>8.7 - 11.3</b>
<b>240</b>	<b>0.1</b>	<b>2.19</b>	<b>1.81</b>	<b>0.38</b>	<b>9.1 - 10.9</b>
<b>480</b>	<b>0.07</b>	<b>2.13</b>	<b>1.87</b>	<b>0.27</b>	<b>9.3 - 10.7</b>

**\*Based on 10 flushes/property/day and a 'regional' population of 500,000**

2006/07

# UKWIR: A Framework for Managing the Options for Managing Water Demand



2008-2010

Entering the mainstream...?

**Entec**

*Creating the environment for business*

**Managing Water Resources – Reducing Water Demand**  
London Development Agency

*Delivering  
efficient develop  
in L*

The London Development Agency produced a Sustainable Development Guide that set out minimum and maximum standards for water performance in developments, equivalent to Level 5/6 water performance standards: Code for Sustainable Homes (CSH) respectively.

**Entec**

*Creating the environment for business*

**Dover Water Cycle Strategy**  
Dover District Council

*Identifying potential  
water related issues  
in the Dover  
district area*



**Entec**

*Creating the environment for business*

**Water and Physical Developments (Environmental Infrastructure)**  
East Midlands Development Agency



*Supporting sustainable  
development and  
economic growth in the  
East Midlands*

**Entec**

Entec is an AMEC company

**Entec**

# 2010

## Entering the mainstream...

### Entec

*Creating the environment for business*

**Implementing Water Efficient  
Procurement Policy Across Government**  
Defra

*Defining Government  
Buying Standards for  
water using products*

In 2006 the Government introduced environmental targets for sustainable operations on the Government Estate. These included targets to reduce water consumption across the Estate. Using the procurement of more 'sustainable products' as an effective means to ensure these reduction targets are met.

Defra owns the 'Government Buying Standards', formerly known as Buy Sustainable Quick Wins. These are sustainable procurement standards which cover a range of priority products and services. A set of procurement specifications were needed for water using products that are relevant to the public sector:

- WCs
- Urinals



wrap

Material change for  
a better environment

Consultation paper

## Model procurement requirements for water efficiency – stakeholder review



# Entec

Entec is an AMEC company

amec

## And a less Rob-centric view...

- Water Saving Group
- Waterwise
- Market Transformation Programme
- Ofwat water efficiency targets
- Southern Water's PR09 metering programme
- Lots and lots of studies and water efficiency programmes by water companies, local authorities and other groups
- Water and energy, combining with Green Deal and other refurbishment programmes

# So has the tide turned...?

- **Yes, a bit...**
  - No just a geeky water industry thing
  - Beginning to be regarded equally with energy, carbon, waste, etc...
  - Cave and Walker reviews, Water White Paper and many government policy reports are relevant
- **BUT...to date a lot of progress has been due to BIG GOVERNMENT**
  - Water Cycle Studies driven by RSS and Growth Points
  - Code for Sustainable Homes
  - Regional development agencies

# So can water efficiency flourish in the Big Society?

- **YES, if:**
- **We can understand it better**
  - We still don't really understand water use
  - We need to, in order to target water efficiency correctly
  - Consider the benefits of behavioural theory
- **We can effectively incentivise water efficiency**
  - For customers, water companies and other players
  - Metering, more effective regulation to promote sustainable outcome
- **We can foster partnerships**
  - 'Responsibility deals' between stakeholders
  - Get people to understand we really are 'in it together'

# So can water efficiency flourish in the Big Society?

- **AND**, all this needs to be part of a coherent strategy with:
- A clear national target (130 l/p/d anyone?)
- A clear and well co-ordinated plan involving key stakeholders
- The right market instruments in place for water suppliers
- The right price incentives for customers (metering)
- Appropriate use of behavioural theory – e.g. personalised bills
- Local policy to reflect local situations

**Thanks for listening**

**Entec**

Entec is an AMEC company

**amec**<sup>®</sup>