

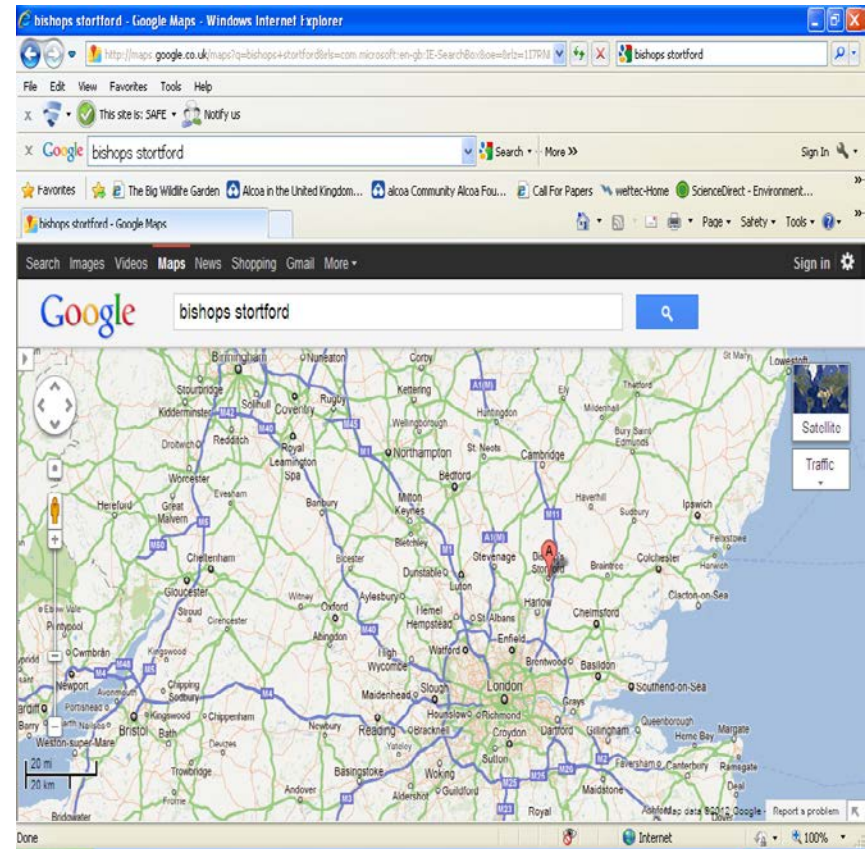


An exploration of customer attitudes toward water conservation measures in East Hertfordshire

**Dr James Jenkins
Dept. of Human and Environmental Sciences
University of Hertfordshire**

Introduction

- Affinity Water ran a seasonal tariff metering trial involving 1600 domestic properties in the area of Bishops Stortford, Hertfordshire.
- Trial was undertaken to evaluate the role of a variable pricing structure on consumption, in particular domestic water consumption during the traditional peak summer period (May-August).



Introduction...

Seasonal and standard tariff trial rates

	2008 Charge	Charges from 1 st April 2009	Charges from 1 st April 2010
May to August	£0.88	£1.4371	£1.4337
April, September to March	£0.88	£0.6129	£0.6115

price per cubic metre



Introduction...

- 2009-11 usage data showed average summer monthly consumption to have increased by approximately 3% in comparison to other metered customers in the area.

- Study sought to explore:
 - consumer attitudes to the seasonal tariff trial in an attempt to reveal why there has been an observed increase in water consumption.
 - consumer awareness of and attitudes toward water use and its monitoring.
 - attitudes toward current and alternative pricing approaches, as well as alternative conservation approaches



Methodology overview:

- Twenty consumers were selected for participation in the study.
- The study adopted a face-to-face semi-structured interview approach.
- Selected consumers were split into two equal sized groups depending on their usage (increase or decrease groups were created).



Main findings:

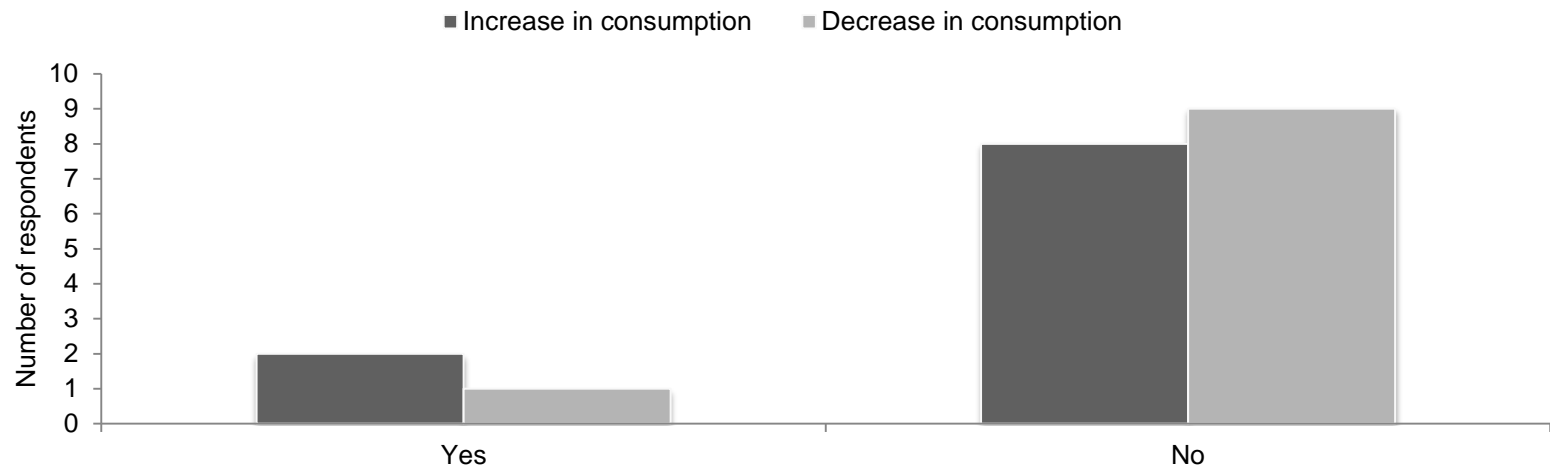
- All respondents were found to be aware of the need for water conservation saying they had role to play in conserving water.
- However, respondents were found to exhibit a low level of awareness and to be disengaged from measures designed to facilitate a reduction in water use:



Consumer engagement with the seasonal tariff trial and its impact on behaviour

Results:

- 85% of respondents reported that their usage had not changed since the seasonal tariff was introduced
 - 70% of those in the decrease usage group said they did not know if their water usage had changed



“No. For one particular reason - the kids don’t know about it! And basically our habits have stayed the same”. (Decrease)

“No, because we were not excessive users beforehand and so we did not think it was going to affect us [...] we assumed the cost was going up because of people using water to wash their cars and water their gardens [...] we don’t do that”. (Increase)

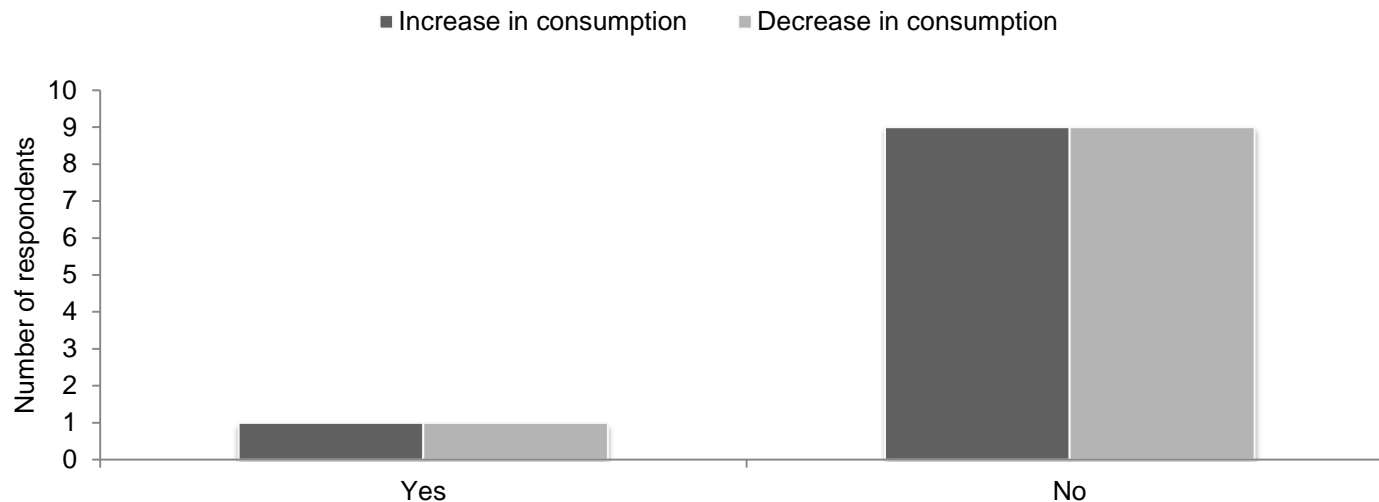
Decrease in water usage due to chance?

“It’s probably stayed the same [...] because we’re generally water conscious and we’ve made no lifestyle changes since being in the seasonal tariff. We all shower in the morning, people then like to have a bath as well in the evening. We’ve had a water butt since before the seasonal tariff started. I don’t see that the seasonal tariff has had any impact on our habits”.
(Decrease)

“No idea [...] maybe it has stayed the same”. (Decrease)

Results:

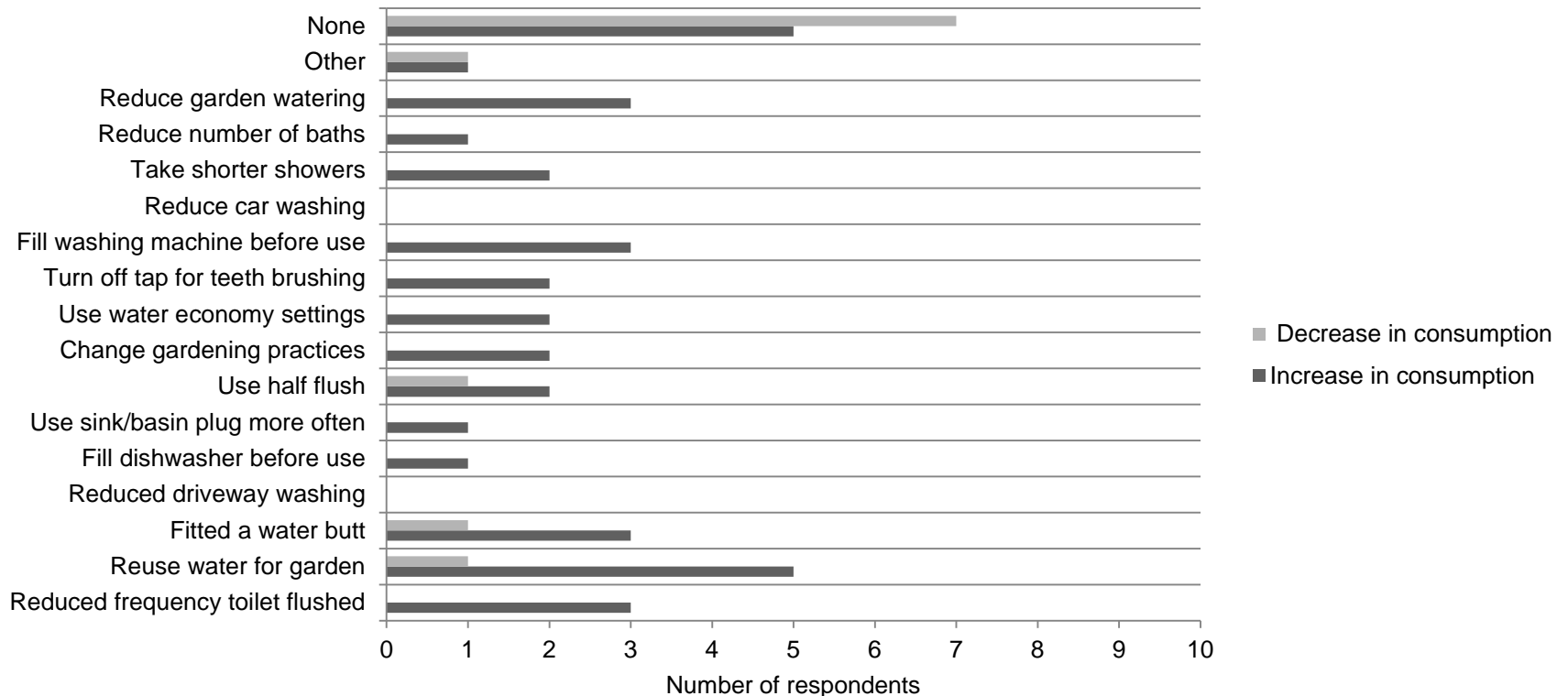
- 90% of respondents said that the seasonal tariff trial had not prompted them to fit water saving devices



- 60% of respondents said that they had not taken any actions to reduce their water usage during the trial
- 20% of respondents had forgotten they were participating in the trial

Customer actions taken to reduce water usage since the seasonal tariff trial has been operational


- Striking that the usage group claiming to have taken the most actions is the increase group (50%), with the decrease group demonstrating the greatest inaction (70%)





Planned actions:

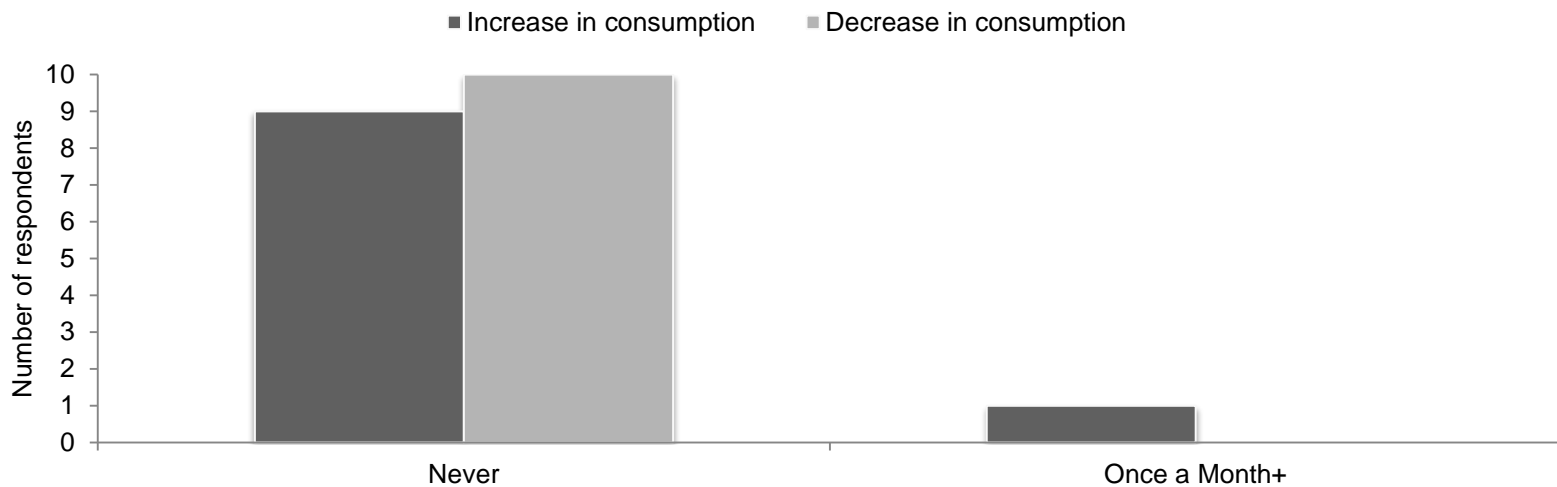
- When respondents were asked what actions they planned to take in their home to reduce water usage during the current seasonal tariff period:
 - 55% of respondents said nothing, with 60% of those in the decrease group saying they planned to do nothing versus 50% in the increase group



**Consumer awareness of water use, charges,
billing frequency, and the impact of metering
on behaviour**

- 95% of respondents were found never to check their water meter

Customer frequency of water meter inspection



Customer comments:

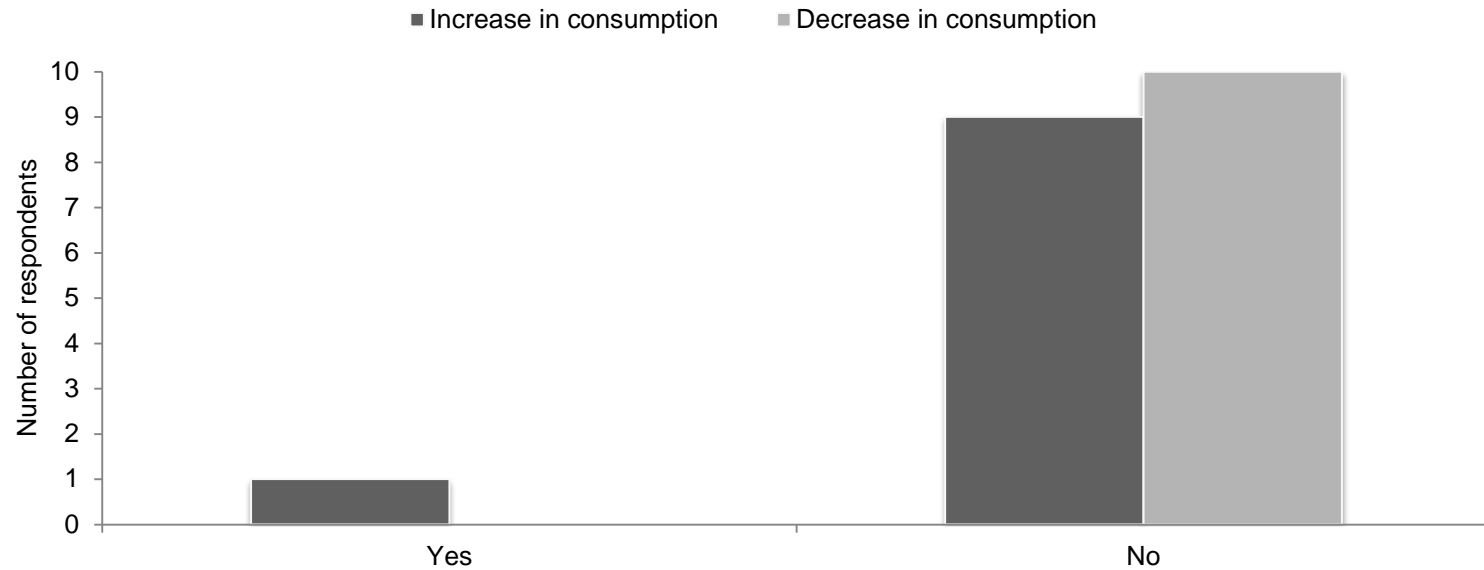
“Never, largely because it is 3 feet down a hole in the front garden!”. (Increase)

“Never [...] I have never given any thought to it, I don't even know where it is”. (Decrease)

- 60% of respondents stated that receiving a metered water bill did not make them reflect and take action to reduce water usage

- 95% did not know how much water they use


Customer awareness of domestic water consumption



Customer comments:

“Absolutely no idea [...] a cubic metre of water means nothing to me [...] it really is hard to understand how much water you are using and what that actually means, entails etc...”. (Increase)

“No, not a clue”. (Decrease)


- 
- 60% of respondents thought that extra charges should apply for higher than average water use
 - 80% of respondents thought that water prices should not in general be increased in order to encourage people to use less water / water conservation
 - respondents viewed water as an essential resource they cannot do without and usage as somehow fixed and unalterable

“No, because it would penalise everyday usage and that would not be fair [...] I can't do anything about my usage [...] (water) is not something that you think about when you use it”. (Decrease)

“If that is where the money goes, and I doubt it would [...] I think it is something to consider so long as you could clearly demonstrate that is where the money went and not on reducing leakage for instance”. (Increase)



Alternative approaches to water conservation

- 
- Consumers were found to be positive towards a range of alternative approaches designed to reduce water usage:
 - consumers were very positive towards the fitting of free water saving devices (70%)
 - the subsidisation of more water efficient household appliances (75%)
 - the offering of a rebate on their water bill, if they were to reduce their water usage (70%)

Conclusions

- Consumers appear not to view their usage of water as a problem - their actions do not matter.
- Poor consumer awareness and engagement is serving to undermine attempts to reduce water usage via methods that aim to change in behaviour.
- Decreases in water usage are more than likely due to chance rather than a series of deliberate actions by consumers.
- Water consumers in the Bishops Stortford trial area are not price sensitive to the costs involved in using water.
- Simply increasing water prices at seasonal peak usage times, in a cost-neutral framework, is unlikely to be an effective method of managing domestic water demand in the short to medium term
 - Consumers need to be targeted with a diverse range of policies and programmes at any one time, particularly if a sustained decrease in water usage is to be achieved.