

Supply pipe leakage, a barrier to intelligent metering?

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Change in supply pipe leakage

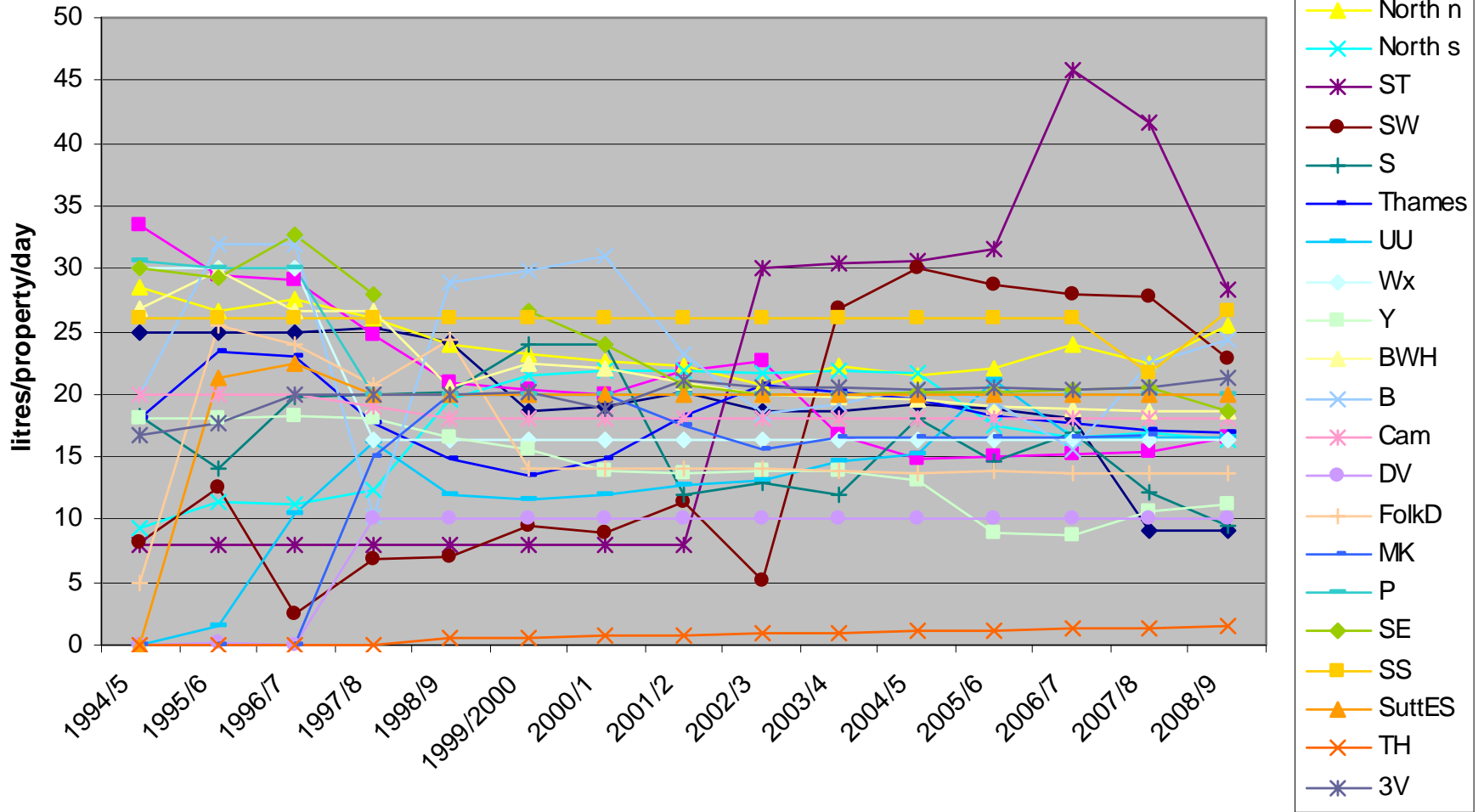
Year	Total no. of homes in England and Wales	% externally metered	Total reported volume of household supply pipe leakage Ml/d
1997/8	20,356	9.3	899.3
2008/9	22,232	27.4	729.8
Average savings/household			12/litres/prop/day

If metering 18% externally saves 12 l/property/day, would metering the remaining 73% save a further 48 l/property/day?

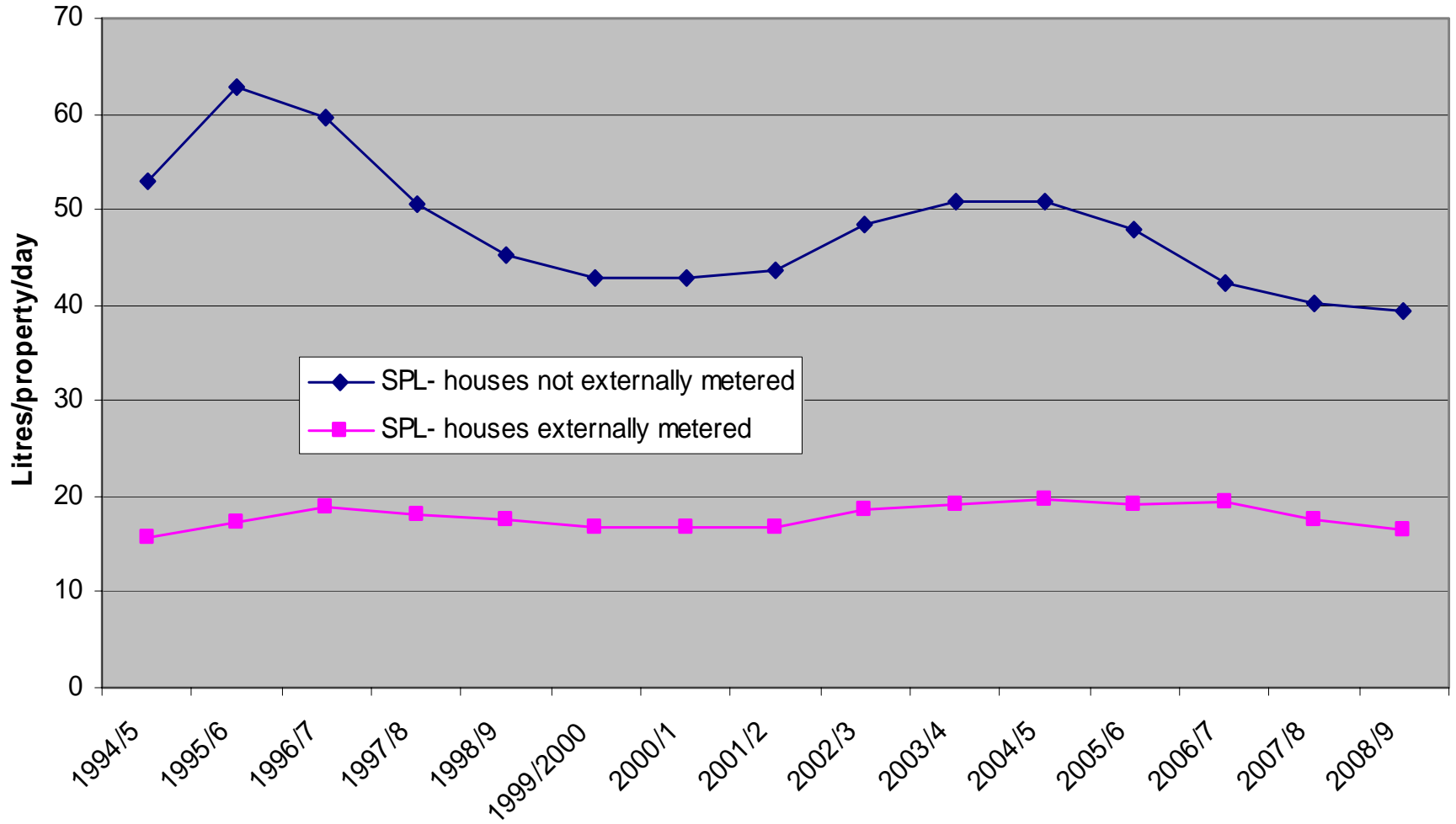
Expectation

- External metering instantly reduces supply pipe leakage
- External metering ensures natural growth in supply pipe leakage is better controlled than in non-externally metered properties

Externally metered supply pipe leakage - changes in company estimates



Changes in reported Supply Pipe Leakage



Questions about SPL

- Average savings reported by companies from external metering has reduced. Why?
 - 38 litres/property/day in 1994/5
 - 23 litres/property/day in 2008/9
- Average reported SPL in externally metered properties has not reduced. Why?
 - 16 litres/property/day
- Can SPL be managed without permanent external metering?

Intelligent Metering

- All homes to have smart energy meters by 2020
- Communications platform could be shared by water industry
 - Cost reflective tariffing
 - Better demand control?
 - Drought management?
 - Competition enabler?

BUT

- External metering could be limiting factor

Summary

- Does the reported data reflect continuous careful study or convenient assumption?
- Supply pipe leakage appears to be the major demand reduction element – but how robust is the data
- Intelligent metering functionality favoured by stakeholders but economics are difficult
- Metering strategy needs better evidence base – multi-utility intelligent metering may be restricted by water industry's choice of meter location