Environment Agency

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Impact of household water metering in South East England

Science Summary SC070016/SS

At present only about 32% of households in England & Wales pay metered charges for water. The need to measure water use in order to manage and help conserve resources is a strong argument in favour of universal water metering. Based on the water companies' draft water resource management plans, household meter penetration is projected to increase significantly as part of the companies' efforts to meet future water demands with minimal environmental impact.

A number of reports have commented that increased metering would lead to some customers facing higher bills. There are a number of issues for widespread metering regarding affordability of water bills, particularly for low-income groups.

Information on the magnitude of the issue and how it compares to the current system of paying for water is scarce. This study, jointly funded by the Environment Agency and Greater London Authority, aims to improve understanding of how increased metering and different approaches to metered tariffs would impact on the affordability of water charges, particularly for, lower income and/or socially vulnerable groups.

The modelling was based on the water supply areas classified to be at the 'serious' level of water stress as defined by the Environment Agency. At present this covers approximately 10 million households in London, South East and Eastern England. The report also includes a more focused analysis of the impacts in the London area. As the FRS sample size was too small to allow reliable analysis at the individual London Borough level, London is analysed as five regions – Inner London East, Inner London West, Outer London West & North West, Outer London East & North East, and Outer London South.

In regard to types of household and representation of lower income and/or socially vulnerable groups, this study focuses on pensioner households, single parent families and households with 3 or more children.

Findings and key messages

It should be noted that even without any changes to the current metering policies, affordability issues are still likely to arise in the future, as water companies have indicated (in the business plans now submitted to Ofwat), that above-inflation increases to water charges are necessary to fund future investment programmes.

Key messages from the report include:

- With more widespread metering some households will have lower water bills and some higher bills. In general, there will be more households with lower bills than higher bills.
- However, the average increase in costs for the smaller number of households experiencing higher bills would be notably higher than the average reduction in costs for those with lower bills. For example - under the 90% metering scenario the average increase of water bills for those households paying more is higher (i.e. more than £60 per year) than the average water tariff decrease for those who pay less.
- For the lowest income households there is evidence of an improvement in water charge affordability under the 50% and 60% metering scenarios, with these improvements concentrated in smaller size households like pensioners.
- Only under the 90% metering scenario is there evidence that water charge affordability will worsen overall and this is concentrated in categories such as single parent households and households with 3 or more children. This could be explained by the fact that under the 90% scenario a significant proportion of the larger households in the lower income groups would become metered, whereas under the 50% and 60% scenarios these households may not be included.

- Single pensioner households are most likely to experience lower bills as a result of more widespread metering, particularly within the London area.
- Within London, Inner London East experiences the smallest proportion (51%) of lower bills but the largest monetary reduction in average bill under the 90% scenario. On the other hand, Inner London West and Outer London West & North West – generally the more affluent parts of London – would experience the highest proportion of households with lower bills but will smaller monetary savings. The less affluent areas of Inner London East and Outer London East & North East experience the highest proportion of households with higher bills.

- The analysis of the alternative metered tariffs provides no strong evidence that any of the alternatives would significantly soften the effects of moving to higher levels of household water metering. The overall impact for low income households is small and water charge burdens would remain high for this group. However, lower income households appear to benefit most from property band option (although low water users like single pensioner households would benefit from rising block options).

This suggests that to address affordability concerns through changes in metering and tariff policies an explicit relationship between the metered tariff and 'ability to pay' would be required. Such an approach would mean different households with different financial circumstances could end up paying different amounts for the same water service. An alternative approach could be to direct financial support to the most vulnerable households. For example, through some akin to the current WaterSure scheme. This scheme caps the level of metered charges paid by households with 3 or more children and who are in receipt of qualifying benefits. One clear implication of the findings in this study would be the need to consider expanding and extending the WaterSure scheme as a way of protecting this category of household.

Another way of protecting vulnerable households is to help them become more water efficient. Whilst this report is concerned with tariffs rather than demand management, the main reason we are discussing metering is the need to improve future demand management. Targeted water efficiency measures could become a key component of effective metering programmes.

This summary relates to information from Science Project SC070016 reported in detail in the following output(s):

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