

# Waterwise response to the Mayor of London's Draft Water Strategy

April 2007

The overall tone and content of this document is exactly what Waterwise would like to see – tight targets and standards, supported by information, and with the stated aim (in the Mayor's foreword) of the standards avoiding the unnecessary use of water without meaning less comfort or convenience for people. We are also pleased that the strategy highlights the link between water policy and climate change.

## Proposal 1

We agree with hierarchy 2 (fittings, then conservation behaviour in households, then rainwater and greywater) with one point of clarification: rainwater and greywater systems are at different stages of development in the UK, with differing potentials. (We would place rainwater above greywater in this hierarchy, because there is less potential for contamination.) We believe that there needs to be a government (or at the very least, a London-wide standard to support this strategy) standard for both rainwater and greywater as soon as possible, in particular to set health and safety limits.

## Proposal 2

We agree that the water companies should compile more data on water use within London in order to improve understanding of the social factors that influence water use – Waterwise is already working with London water companies to take this forward, and Thames Water is carrying out a “visit-and-fix” project in 500 London homes (offering and then installing water-efficient household fittings, and measuring the resulting water savings).

We also believe that it would be valuable to update the figures in table 5.3, which were produced in 2001: this would help inform the taking forward of the Draft Strategy, in particular how it ties in with the Code for Sustainable Homes. In Table 5.18, “Best practice efficient water use”, we believe the assumption of water use for washing machines to be too high – certainly higher than currently available best practice on the UK market. We attach our own analysis of UK water company data on the use of individual domestic fittings to illustrate this point – and suggest that maximum consumption figures for dishwashers should also feature.

We assume that the reference to social factors covers the links between religion and culture and water use, as well as income.

## Proposal 3

The strategy suggests that the water use in new residential developments in London should never exceed 40 metres cubed per bedspace per year – the approximate equivalent of 110 litres per person per year. Waterwise believes that

the maximum for new residential developments should be 105 litres per person per day – the equivalent of Level 3 of the Code for Sustainable Homes, which all homes receiving public funding will be required to meet. The technologies to meet this level are already on the market, and we understand that the required volumes could be manufactured at relatively low lead times.

We agree that the Mayor should set a tighter Preferred Standard than this – however we believe that 25 metres cubed (the approximate equivalent of 68 litres per person per day) would be quite hard to achieve with existing technologies, and would require using rainwater for washing machines and outdoor use as well as toilet flushing, which is as yet unproven on a large scale in the UK, including for example whether enough water for these purposes can be both gathered from the roof and stored. An alternative to meet the 25 metres cubed figure would be a domestic greywater system for toilet flushing and a separate rainwater system for outdoor and washing machine use. But Waterwise would suggest a Preferred Standard of around 80 litres per person per day (approx 29 metres cubed), which would still be challenging, and, combined with the tighter minimum standard we propose above, would bring real results.

Innovative solutions such as using the same rainwater tanks for fire sprinkler systems (which are compulsory and require their own tank) could bring the price of domestic rainwater systems down – this approach has worked in Germany. Rainwater tanks also reduce storm surges by delaying some of the run-off – therefore offsetting the need for costly engineering solutions such as the Thames interceptor tunnel, if on a large enough scale. We make these points simply to prove that innovative and holistic approaches can reveal greater cost-benefit savings in this area, in economic, environmental and social terms.

#### Paragraph 5.26

We agree that point-of-sale product information is essential to steer water-efficient behaviour. In 2006, Waterwise launched the UK's first water efficiency marque for manufacturers, and this year we awarded the first 15 Marques - across a broad spectrum of products including dishwashers, an aerated showerhead, water storing gels for the garden, a waterless urinal, a new dual flush toilet, drought resistant turf, a device to recycle bathwater, a garden drip irrigation system, a waterless carwash, tap flow restrictors and devices to reduce the amount of water used when flushing the toilet. The Marques will be used by the winning manufacturers in their marketing. In addition, the Bathroom Manufacturers Association has recently launched the world's first bathroom industry-led Water Efficiency Labelling Scheme <http://www.bathroom-association.org/news.asp?ID=111>

#### Proposal 4

Waterwise welcomes the proposal that the Mayor will, and the Boroughs should, require major developments to supply a significant proportion of their water requirement from the site's own resources. We also welcome the Mayor's

expectation that major developments over 30,000 m<sup>2</sup> will supply a minimum of 50 per cent of their water requirement through on site reclamation, and that developments over 15,000 m<sup>2</sup> or 500 dwellings will meet 25 per cent of their water requirement in this way.

#### Proposals 5 and 6

Waterwise supports the Mayor's proposal for all London homes to be metered within 10 years, and all blocks of flats within 20 years, with all new London flats having an individually metered water supply. This is a stringent target, but we believe it is achievable – and important, because metering saves around 10% of water, and also helps companies better manage peak demand. Waterwise would like to see full metering across the UK as soon as possible - as well as saving water by itself, metering is also a useful tool in further promoting and enabling water saving.

Although the majority of metered households would save money, Waterwise is concerned about the impact a move to full metering could have on large low-income families: we believe this can be addressed through the prudent use of tariffs, and support the Mayor's proposal to research the optimum tariff structure to this end.

#### Paragraph 9.15

Reducing water use directly reduces energy use and so cuts carbon emissions. Each mega litre of water treated and supplied is associated with about 1326 kwh of energy used which is equivalent to about 1 tonne of emitted greenhouse gases (CO<sub>2</sub> equivalent). Furthermore, about 1/3 of the energy used in homes is to heat water, and this figure rises to about 2/3 in small flats. If the energy associated with kettles and other water using appliances is included, about a half of all energy used in the home is associated with water use. Therefore, to say that the benefits of cutting carbon emissions far outweigh those of reducing water use is misleading. The two are not mutually exclusive: water-saving devices are energy-saving devices.

#### Other comments

We believe the Roles and Responsibilities section in Chapter 2 should contain a section on the Water Saving Group, which is mentioned in 5.24. We propose the current text from 5.24 on the Water Saving Group be copied into Chapter 2, with the first sentence amended to say "Defra set up the Water Saving Group (WSG) in autumn 2005, chaired by the Minister, and including Water UK, Ofwat, Waterwise, the Environment Agency, the Consumer Council for Water, and Communities and Local Government."

*Waterwise is an independent, not for profit, non-governmental organisation focused on decreasing water consumption in the UK by 2010 and building the evidence base for*

*large scale water efficiency. In England, we sit on the UK Environment Minister's Water Saving Group alongside the water industry and regulators.*

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