

Bottled water

April 2017

Key findings

- Plastic waste is a growing problem in London. Waste created by plastic packaging creates a number of challenges for the environment, polluting London's rivers and subsequently impacting on river and marine life.
- Providing tap water as an alternative is essential if the growing consumption of plastic bottled water is to be controlled or reduced. We have heard about a number of options which deserve further investigation. However, we do not want consumption of bottled water to fall if it means people drink more sugary drinks. This means that any policy interventions must be carefully designed.
- More plastic water bottles have to be recycled. Too many currently end up in landfill or in the natural environment. Improving London's poor recycling rates is an ongoing challenge for the Mayor and boroughs. Deposit Return Schemes have been successfully introduced elsewhere and may offer one way to increase plastic bottle recycling. Government should look at implementing a national scheme.
- Given the scale of the problem, the Mayor should address plastic bottle waste in the forthcoming Environment Strategy and develop policies to reduce it.



Volunteers removing plastic waste from the Thames (Port of London Authority, 2016)

We welcome your thoughts and comments on how to reduce the impact of bottled water consumption in London. You can get in touch with us at EnvironmentCommittee@london.gov.uk

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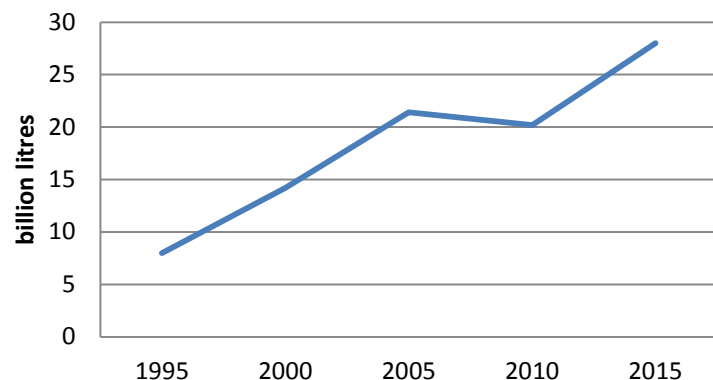
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Plastic Pollution in London

Consuming water in plastic bottles affects our environment. Despite the necessity of water as part of a healthy lifestyle, our growing consumption of bottled water negatively affects the environment in a number of ways. For the purposes of this investigation we will be focussing on the use and impact of plastic water bottles.

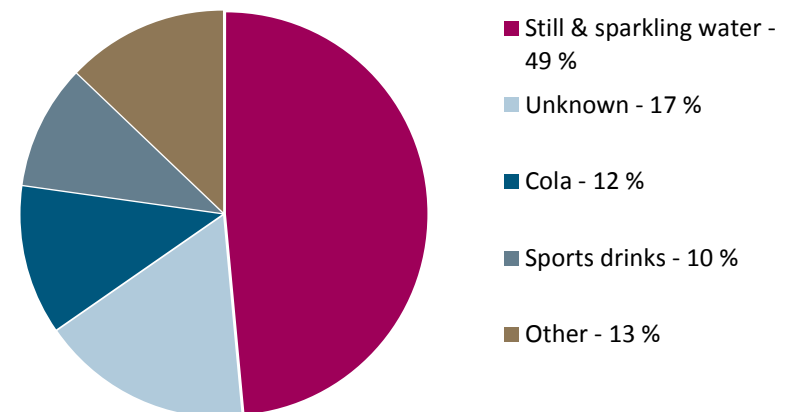
Plastic waste is a growing problem in London. London consumes the greatest amount of plastic bottled water per capita compared to any other English region.¹ London also has the worst recycling rates in the UK.² This combination of factors leads to significant environmental harm. During one month in 2016, for instance, over 4,000 bottles were removed from the Thames; 2,500 of which were recorded in a single day in the first ever co-ordinated attempt to measure the problem and remove all the bottles from the river.³

Figure 1: Sales of plastic bottled water have more than quadrupled in the last two decades⁴



Plastic waste causes problems to our environment by damaging oceans and affecting river and marine life. Huge efforts to clean up the Thames mean the river is now much cleaner. But plastic waste is jeopardising this work. Plastic bottles make up 10 per cent of all litter found in the Thames. Specifically, single use plastic water bottles now make up nearly half of all the plastic bottle waste collected in the Thames.⁵ As well as being a blemish on London's environment this affects river and marine life. Research found that three quarters of Thames Flounder, a bottom-feeding fish, had consumed plastic.⁶

Figure 2: Bottled water makes up half of all plastic litter found in the Thames (as % of total)⁷



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Increasing access to tap water for on-the-go Londoners

Unless other sources of water are made more easily available, people in London will keep drinking water sold in plastic bottles. At our meeting in February, we heard about a number of ways tap water can be made more accessible. This is a crucial part of the solution. We do not want people switching from bottled water to sugary soft drinks or other bottled products, due to the negative health consequences.

The Mayor could help local boroughs improve access to tap water through community water refill schemes. We heard that previous programmes have failed to make drinking water available, because they focussed on drinking fountains, which are very expensive to install.⁸ A community water refill scheme could offer a more localised and financially viable approach, by encouraging Londoners to fill up their water bottles for free at participating venues.

The Mayor could investigate the feasibility of installing more water refilling stations on the London transport network. HydraChill Water Refilling Stations have been trialled at Hammersmith Bus Station and a number of piers along the Thames, and are reportedly popular with commuters and staff.⁹ While TfL has stated that it would be too

“If you put the alternative to people, they will use it”

Nick Davis, Founding Director, HydraChill

expensive to install water refilling stations across its Tube network, it may, as a start, be possible to provide more machines at piers and bus stations.

Organisations such as the Greater London Authority have a role to play in reducing plastic waste. The Mayor wants the GLA to be an exemplar employer. The GLA Group should set an example to other organisations by removing the sale of plastic bottled water. Selfridges and ZSL London Zoo have already taken this step, and sell water in aluminium cans, glass bottles and Tetra Pak instead.

Business Improvement Districts could trial potential solutions to plastic bottled water. Businesses that work together can also do so to reduce their local environmental impact. The Canary Wharf Estate became a ‘clean coffee zone’ in February 2017. Coffee cups, lids and coffee grounds generated by over 300 outlets are recycled through designated bins.¹⁰ The Mayor should engage with Business Improvement Districts to help trial a range of initiatives that could be rolled out pan-London.

Apps help consumers locate businesses willing to provide water refills. Patrick Feehily, Assistant Director, GLA Environment suggested a promising way for the GLA to encourage tap water and reduce the need for plastic bottles was through apps and technology. Similar to other mapping services, an app could tell users where they can re-fill for free.

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Improving recycling rates through a Deposit Return Scheme

A larger proportion of used plastic bottles have to be recycled in London. Plastic water bottles are not going to disappear from London, regardless of the alternatives on offer. It is crucial that all used bottles are recycled, and do not end up in general waste or in the natural environment. London boroughs have some of the lowest household recycling rates in the UK.¹¹ The Mayor has to work with boroughs to increase these, and explore ways to increase recycling outside the home.

The Mayor must bring key stakeholders together to drive up recycling rates of plastic bottles.

A wide range of organisations have roles to play in tackling this issue – plastics manufacturers, drinks producers, retailers, local authorities, waste collectors and recyclers. The GLA needs to engage with all these groups. The Plastics Industry Recycling Action Plan (PIRAP), coordinated by the Waste & Resources Action Programme, already brings these organisations together. Convening London's stakeholders through PIRAP would be one way for the Mayor to provide leadership in this area.

“People (need) systems that can capture this plastic in the economy rather than let it escape into the environment”

Hugo Tagholm, Surfers against Sewage

Deposit Return Schemes (DRS) have successfully increased recycling.

DRS offer an incentive for returning plastic bottles by adding a reclaimable amount to the price of bottled drinks. In Germany, where DRS machines are located in places such as supermarkets, 99 per cent of plastic bottles are recycled.¹² Following the success of the plastic bag tax in England, DRS advocates are calling on the Government to take a similar proactive approach to plastic bottles.



Customer using a deposit return machine in Germany – TOMRA via Surfers against Sewage (2017)

We think the Mayor should commission a feasibility study of a DRS scheme in London. If this concludes the approach would be successful, the Mayor should offer London as a pilot site for a Government-backed DRS.¹³

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Recommendations

- The Mayor must address plastic water bottle waste specifically in his upcoming Environment Strategy.
- The Mayor should explore the feasibility of a Deposit Return Scheme in London, with a view to approaching Government for London to be a trial site for a nation-wide scheme.¹³
- The Mayor should explore a number of options to reduce plastic water bottle waste, including:
 - encouraging community water refill schemes
 - improving access to tap water across the TfL network
 - ending the sale of plastic bottled water on GLA premises
 - engaging with Business Improvement Districts to trial measures in specific areas of London
 - promoting apps to help consumers locate free tap water
 - convening stakeholders through the Plastics Industry Recycling Action Plan

Endnotes

¹ [LONDON CONTRIBUTES TO SHAMEFUL UK POLLUTION PROBLEM AS BRITONS ADMIT TO USING 7.7 BILLION PLASTIC BOTTLES OF WATER A YEAR, Brita filter press release](#)

² Department for Environment, Food and Rural Affairs (1998–2015), *Household Waste Recycling Rates*. Maintained by Opinion Research and General Statistics (GLA), at <https://data.london.gov.uk/dataset/household-waste-recycling-rates-borough> [Created by 8 November 2013, modified by 8 February 2017] [Accessed on 21/03/2017]

³ Thames 21 (2017) *Thames River Watch Reporting January 2017 – Litter monitoring results* [PDF]

⁴ Zenith Global (2016) *Zenith 2016 UK Plain Bottled Water Report*, https://www.zenithglobal.com/reports_data/233/UK%20Plain%20Bottled%20Water%20Report%202016

⁵ Thames 21 (2017) *Thames River Watch Reporting January 2017 – Litter monitoring results* [PDF]

⁶ McGoran, A.R., Clark P.F., and Morritt (2016) *Presence of microplastic in the digestive tracts of European flounder, Platichthys flesus, and European smelt, Osmerus eperlanus, from the River Thames*, Environmental Pollution, <http://dx.doi.org/10.1016/j.envpol.2016.09.078>

⁷ Thames 21 (2017) *Thames River Watch Reporting January 2017 – Litter monitoring results* [PDF]

⁸ Patrick Feehily, meeting of the Environment Committee, 22 February 2017

⁹ Hydrachill, *HydraChill landmark achievement at Hammersmith Station*, <http://www.hydrachill.com/news.html#tflmachine> [Accessed on 21/03/2017]

¹⁰ Canary Wharf Group PLC (2017) *Canary Wharf Estate Becomes ‘Clean Coffee Zone’ – 21.02.17*, <http://group.canarywharf.com/media/press-releases/canary-wharf-estate-becomes-clean-coffee-zone-210217/> [Accessed on 21/03/2017]

¹¹ LetsRecycle.com (2014/15) *2015/16 Overall Performance*, Available online <http://www.letsrecycle.com/councils/league-tables/201516-overall-performance/> [Accessed on 21/03/2017]

¹² ZeroWaste Europe, *Beverage packaging and Zero Waste*, Available online at <https://www.zerowasteurope.eu/tag/germany-deposit-refund-system/> [Accessed on 21/03/2017].

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¹³ *GLA Conservatives take the view that, to support a trial or a full Deposit Return, a feasibility study should be carried out. This study should cover deposit handling, delivery infrastructure and the ability of DRS to successfully change recycling behaviour.*