



Rainwater Harvesting at Museum of London

March 2015

Strategic context

Creating sustainable cities is a major issue and we are committed to playing our part to improve London's environment. We set out our environmental challenges in our Strategic Plan (2013-2018) and we will challenge ourselves to work more sustainably across all that we do.

What is rainwater harvesting?

- It is the accumulation and storing of rainwater for re-use.

What are the benefits of rainwater harvesting?

- Once rainwater has been captured or harvested it becomes a resource and can be used within a building or for irrigation and it reduces pressure on the mains water supply. This is particularly important in areas such as the South East and London that can experience severe water shortages.
- Rainwater harvesting forms part of a Sustainable Urban Drainage System (SUDS) which reduces the pressure on the existing sewage infrastructure. Rainfall creates what is called stormwater run-off which is directed to drains and ends up in the sewerage system for treatment. With rainwater harvesting this is separated and used to offset mains water.
- The pressure on stormwater drains is reduced which in turn decreases the risk of surface water flooding and raw sewage being pumped into the Thames, which occurs when the volume of rainwater overwhelms the drainage system. Flooding from surface water (which is a mix of foul water and rainwater from the drainage system) is a serious challenge that faces London and can lead to flooding of stations and contamination of the Thames. This flooding is projected to increase in the near future as rainstorms become heavier due to climate change.

What happens at Museum of London?

- In June 2011, our industrial rainwater harvesting system was launched. The system collects rainwater from an area of over 850m² of the Museum's flat roof and high walkway which is filtered and stored in a 25,000 litre storage tank in the basement. Monitoring of the system and the volume of rainwater used takes place through the Museum's Building Management System.

Where does the system supply?

- The system supplies toilet blocks in newly refurbished corporate hire facilities as well as toilets in the Museum's bar and restaurant and Schools Lunch Space. Irrigation is also supplied by the system to the Rotunda area of green roof and Rotunda gardens.

Water conservation

- Rainwater harvesting is one element of a broader approach to water conservation at the Museum. Other measures include sensors on hand basins in all public toilets, working controls on all urinals and the installation of water efficient WCs, urinals and taps each time a new part of the Museum is refurbished.

Sources of more information:

- www.environment-agency.gov.uk
- www.london.gov.uk/drain-london