LONDONASSEMBLY
Environment Committee

City Hall
The Queen's Walk
London SE1 2AA
Switchboard: 020 7983 4000
Minicom: 020 7983 4458
Web: www.london.gov.uk

Maya de Souza
Flood Management Division
Defra
Area 2C Ergon House
London
SW1P 2AL

Date: 23 July 2009

Dear Ms deSouza,

The London Assembly Environment Committee welcomes the opportunity to respond to Defra's consultation on the Draft Flood and Water Management Bill.

The London Assembly has published six reports on water related issues since May 2004[1] plus responses to various strategies. This Bill covers many of the areas the Assembly has previously addressed either through the Environment Committee or through its Health and Public Services Committee. Key areas covered by the draft Bill, alongside the Committee's previous findings, are examined below.

1. Flood risk in London

The Committee welcomes the step to make clear who is responsible for managing all sources of flood risk. The London Sustainable Development Commission's recent report London's Quality Of Life Indicators 2009[2] states that London is vulnerable to flooding from four main sources (the tidal Thames, fluvial tributaries to the Thames and the non-tidal Thames, surface water flooding from heavy rainstorms, and overflowing sewers).

Tidal and Fluvial Flooding

The London Mayor's draft Climate Change Adaptation Strategy states London is vulnerable to flooding with nearly 15 per cent of London at risk from tidal and fluvial flooding.[3] The Environment Agency states that over 400,000 properties are at risk of tidal flooding in London: although this is a low probability with the Thames Barrier in place, if it did happen there would be severe consequences. Over 150,000 properties are at risk of fluvial flooding in London.[4] In light of recent Met Office research for the Environment Agency Thames Estuary 2100 Project, a 40 per cent increase in peak fluvial flows on the Thames and its tributaries by 2080 has been forecast.[5] The Environment

[1] Sewage Review – Health and Public Services Committee, September 2004,
Under Pressure – Health and Public Services Committee, March 2005
Down the Drain – Water Usage & Supply – Environment Committee, March 2005
London under threat – flooding risk in the Thames Gateway – Environment Committee, October 2005
Crazy Paving – Front Gardens – Environment Committee, September 2005
Drought in London – Health and Public Service Committee, July 2006
[2] http://www.londonsdc.org/documents/qol_reports/QoL_indicators.pdf
[3] Page 11, draft Climate Change Adaptation Strategy
[4] Information from EA Officers, Environment Committee meeting July 2009
[5] http://www.metoffice.gov.uk/corporate/pressoffice/2008/pr20080923.html

Direct telephone: 020 7983 4363 Fax: 020 7983 4437 Email: murad.qureshi@london.gov.uk

Committee has investigated the issue of flood risk in the Thames Gateway and concluded that fragmented responsibility for maintaining flood defences and lack of clarity over planning are putting London at risk.[6]

Surface water flooding

The Environment Agency states that the main cause of flooding in England and Wales in 2007 was surface water flooding. London has seen recent examples of surface water flooding, which brought some parts of London to a standstill.[7] The Environment Agency says more research is needed to understand how surface water flooding will affect England and Wales in the future.

The Environment Committee has investigated one of the causes of surface water flooding. The Committee found that two thirds of London's front gardens have been paved over – an area equivalent to 22 Hyde Parks. Following this work, changes have been made to national planning guidance, which came into force on 1st October 2008. The new planning laws respond to calls in our report for legislation to control the number of concrete-covered gardens in London.[8]

The Committee welcomes the onus in this Bill for Local Authorities to make plans for surface water, which will be key to maintaining safety locally. It is important that London boroughs work together, where appropriate, across boundaries to meet the challenge of surface water flooding. **However, it is essential that Local Authorities have the knowledge and support to take on this responsibility**. In its response to the review of GLA powers,[9] the London Assembly stated that the Mayor should be required to produce an integrated water strategy for London, incorporating supply, demand, drainage and sewerage. This recognises the strategic role that the Mayor and the London Assembly have on this issue.

The Committee also supports giving Local Authorities powers to ensure water companies have a duty to cooperate in this aim. This will also increase accountability of water companies to their customers.

Sewer Flooding

Tackling ageing infrastructure including draining and sewerage systems will be a long-term problem, but vital for London's effective water management. A key issue for London is the management of sewers during heavy rains. The Environment Agency informed the Committee that recently three quarters of a million tonnes of raw sewage and drainage was let into the Thames following heavy thunderstorms.[10] The London Assembly has carried out investigations into management of sewer overflows in the past and would welcome concerted action to resolve this matter to avoid this damage to the environment. Following the heavy sewage outflows into the Thames in August 2004, the Health and Public Services Committee heard from Thames Water and from the Environment Agency. Following its investigation, the Committee believed the government should support the construction of an interceptor tunnel[11], which would link up all the problem Combined

[6] London under threat? Flooding risk in the Thames Gateway, Environment Committee, October 2005 http://www.london.gov.uk/assembly/reports/environment/flood_thamesg.rtf
[7] Information from EA Officers, Environment Committee meeting July 2009
[8] Crazy Paving: The environmental importance of London's front gardens, Environment Committee September 2005 http://www.london.gov.uk/assembly/reports/environment.jsp
[9] 21 February 2006, http://www.london.gov.uk/assembly/review_powers.jsp
[10] Information from EA Officers, Environment Committee meeting July 2009
[11] known as the Thames Tideway tunnel

Sewage Outflows and take the flow downstream to Crossness.[12] This is strongly supported by the Mayor of London[13] and the London Assembly.

The Committee welcomes the draft Bill's aim to encourage more sustainable forms of drainage in new developments by requiring an impact assessment plan before new developments are connected to the drainage system. Previous work by the Committee has found that water companies should invest in rainwater collection schemes on new developments, in the public realm, and should support their customers to install systems in their homes and businesses, in order to reduce the need for piped water and reduce surface water flooding.

2. Supply and demand imbalance in London

Londoners face an increasing risk of water shortages. London's demand for water will exceed the amount that can be supplied from current sources.[14] Thames Water states that London has a supply–demand deficit that could affect levels of service, including the ability to avoid water use restrictions in dry years. The Committee suggests that the following measures are made a priority:

Reducing water leakage rates to below the economic level

Our investigation into this subject in 2005 found that London's water loss was one of the highest in the country: nearly 1,000 million litres lost per day.[15] Thames Water has had the highest level of leakage of any water company in England and Wales for several years. However, a renewed focus on mains replacement is showing results. The Committee supports the proposed further increase in leakage reduction in London to eventually reach the industry best practice standard. Thames Water aims to reduce leakage by one third in six years to 2010 (to 685Ml/day) and renew 70 per cent of London's mains by 2030.[16]

Managing water supply

The Committee welcomes the aim to protect essential water supplies by enabling water companies to control more non-essential uses of water during droughts. The Committee has called on Thames Water to investigate further whether improved water savings may be achieved during drought. While this is likely to be a long-term measure, it may be one route to reducing the need for new water

[12] **Why does sewage end up in the Thames?** On 3 August 2004, after torrential downpours in London, up to one million tons of so-called combined sewer outflows (rain, street detritus and sewage) went into the river Thames. Oxygen levels in the river fell and thousands of fish were killed. At its hearing on 14 September 2004, the Health and Public Services Committee discussed with Thames Water and the Environment Agency the reasons why sewage can still end up in the Thames. The Committee heard that such sewage outflows were routine, happening some 50-60 times a year often after modest levels of rainfall. The main reason for these events is that the system of drains, most of which date back to Victorian times, cannot cope with the volume of material that flows through them when it rains over London. To avoid raw sewage backing up into the streets, it is directed to flow into the river.
A series of proposed solutions to this long-standing problem was set out in Thames Water's presentation to the Committee http://www.london.gov.uk/assembly/health_ps/2004/healthps14sep/minutes/healthps14sepappb.pdf. For a full record of the discussion between the Committee and Thames Water and the Environment Agency, please see the minutes of the Health and Public Services Committee www.london.gov.uk/assembly/health_ps/index.jsp.
In response to this session, the Committee wrote to Elliott Morley, Minister of State at the Department for Environment, Food and Rural Affairs www.london.gov.uk/assembly/reports/pubserv/ofwat_letter.pdf and Response letter from Elliot Morley http://www.london.gov.uk/assembly/reports/pubserv/letter_from_elliot_morley.pdf.

[13] The Mayor supports improved sewerage infrastructure, in particular the principle of the Thames Tideway Sewer, London Plan proposals, p57

[14] Down the drain, London's water usage and supply, London Assembly Environment Committee, March 2005

[15] Down the drain, London's water usage and supply, London Assembly Environment Committee, March 2005

[16] http://www.london.gov.uk/assembly/envmtgs/2008/envsep2/minutes/appendixc.pdf

supplies in the future. The Committee recognises that it may be necessary to secure new water supply in London. However, this should only be considered after all practicable measures to reduce demand and leakage have been taken.

Encouraging water recycling

The Committee would welcome best practice guidance on recycling grey water and harvesting rainwater. These are innovative and sustainable means of increasing water supply and reduce risk of flooding from heavy rainfall and are suitable for water usage that doesn't need purification, such as toilet flushing.

Managing demand

Demand can be managed through publicity and education, financial incentives, and water saving technologies in construction and appliances including rainwater harvesting and grey water schemes. People and businesses must be given incentives to become water efficient. **The Committee agrees that a domestic consumption target should be set out**. This currently stands at 130 litres per day, which has already been achieved in Germany and other European countries.[17] **However, the Committee is concerned that Thames Water will not be able to achieve this target by 2030**. **The Bill should set out how it will ensure that this will happen**.

Water metering

The Committee would welcome the inclusion of charging and metering in the Bill, with the use of social tariffs to take into account the social impact of metering. This should include findings from the Walker review, which states that metering is a fairer way to deal with water in high demand areas (London and the South East). The London Assembly agrees that greater use of water meters in London is desirable and a vital part of managing demand. The Committee's report, *Down the Drain,* recommended that 'the Mayor should work with the water companies, the industry regulator and local authorities to secure a target of 50 per cent of London homes fitted with a water meter by 2015. Thames Water forecast this will be achieved, rising to 77 per cent by 2020.[18]

The Assembly has previously expressed concern that meter tariffs need to be set in a way that protects low-income families who might need extra water.[19] Concerns that water metering could have a disproportionate impact on people who are on low incomes and who have certain medical conditions, or large households, and therefore need extra water should be central when structuring these tariffs. Thames Water expects that by 2014/15, 74,000 lower-income customers will be claiming discounts of 25 per cent or 50 per cent.[20]

[17] Uncorrected transcript Wednesday 17 June 2009, Huw Irranca-Davies MP, Mr Martin Hurst and Mr Simon Hewitt http://www.publications.parliament.uk/pa/cm200809/cmselect/cmenvfru/uc555-vii/uc55502.htm
[18] http://www.london.gov.uk/assembly/envmtgs/2008/envsep2/minutes/appendixc.pdf
[19] Drought in London – Health and Public Service Committee, July 2006
[20] Information provided by Thames Water to Environment Committee, http://www.london.gov.uk/assembly/envmtgs/2008/envoct15/item04a.pdf

3. Climate change and water policy

The Committee recognises that the current legislation needs to be updated to include new climate change scenarios and weather patterns and the impact from non-tidal and fluvial flooding. The London Sustainable Development Commission's recent report[21] states that Climate change and London's ageing flood defence infrastructure raises the probability of increased flooding, while London's growth will mean that there may be more people and assets located in the flood plains of London's rivers.

A detailed analysis of the carbon footprint that the collection, purification and distribution of water incurs would be useful. This would demonstrate the important role that water management can have in mitigating further climate change.

Yours sincerely,

Murad Qureshi AM
Chair of the Environment Committee

[21] http://www.londonsdc.org/documents/qol_reports/QoL_indicators.pdf