Appendix 2
The Mayor's draft Climate Change Adaptation Strategy for London, for public consultation.

Brent Council comments:

General comments

The Council, in general, welcomes the mail direction of the strategy and supports, in principle, the roadmap and the actions overall.

All comments

Section	Summary	Comments
1.Executive Summary	-	Action 13 (p.10) is not separated from Action 12.
2.Introduction	Some climate change is now inevitable and there is increasing evidence that it is already happening. With early, sustained and concerted global action to reduce our greenhouse gas (GHG) emissions we can limit the changes both to our climate, and to the natural systems that maintain our climate. Failure to significantly reduce our emissions may fundamentally alter the Earth's climate system and commit future generations to more dangerous changes.	• Action 7 – consultation with TfL should include use of sustainable building materials to increase levels of permeable ground in addition to gully cleaning and maintenance • In addition to demand balance, leakage from water network should also be considered. Milder winters are discussed but no consideration of the extreme weather that will occur within this climate pattern such as extreme cold. The level of damage to water pipes is greatly increased in such extremes. • Action 21 – Cooling is not a key consideration in the climate change and energy strategy. An increase in focus here would help to tie the two documents together (As with Decentralised Energy). The need for further integration is increased as many of the adaptation measures identified are energy intensive • 'Cool roof technology' should be considered in association with microgeneration i.e, Photovoltaics (PV)

		• TfL asset assessment is included but not full consideration of roads and personal transport. The potential impact on agriculture will also further increase the levels of transport to and from the area. • A full risk assessment of buildings or areas would suggest the need for altered building standards (and minimum criteria) depending on the level of risk identified. This could potentially be implemented through the planning system and insurance replacements.
3. London's future climate	Temperatures are projected to rise all over the UK, but most of all in the south and more so in summer than in winter.	• Colour of baseline in figs 1.7 and 1.8 is not accurate. • Figure 1.8: the colour difference between 2050s and 2080s is too slight.
4. Mapping adaptation – who is responsible for what, and where are the gaps?	There is no steady state of being 'adapted' (because the climate, and hence the risk, will keep changing), therefore adaptation should be seen as a 'journey' rather than a 'destination'. This chapter, using the 'Prevent, Prepare, Respond, Recover' series of actions, 'maps' out who is responsible for enabling adaptation. It also highlights where there are critical gaps and signposts the relevant actions in the strategy.	
5. Flooding	London is prone to flooding from five sources of floodwater: • from the sea (tidal flooding) • from the Thames and tributaries to the Thames (fluvial flooding) • from heavy rainfall overcoming the drainage system (surface water flooding) • from the sewers (sewer flooding) • from rising groundwater (groundwater flooding).	• Sewer data from Thames Water is not shared very well - better partnership working between Utilities and LAs would assist. • Action 1 Brent Council welcomes the opportunity to work with the Mayor and the Environment Agency to map and predict flood risk. • Actions 2,3,4 Brent Council will contribute to the Drain London Forum with exchange of information. • Action 7 Brent Council will look to follow best practice with regard to gully and highway drain maintenance. • Background: Brent does not suffer the direct results of tidal flooding. It

		does have areas and properties which suffer fluvial, surface water and sewer flooding and combinations thereof. Fluvial flooding includes the significant risk of overflow of the River Brent and Wealdstone Brook. Surface water flooding (heavy rainfall overcoming the drainage system) manifests itself from surface water run-off from impervious and saturated ground, and insufficient capacity of the surface water drainage system. Foul sewer surcharge occurs due to ingress of storm water into the foul network, and the ability of foul and surface waters to mix in the older parts of the sewerage network. • People: At third paragraph, there appears to be a typo; "figure 3.5" should read "figure 3.1". • Page 44 It is likely to be the case that Brent's residents would value a 'bad weather' (i.e. heavy rainfall) alert rather than a flood warning. Brent property is unlikely to suffer tidal or fluvial flooding, but residents who have experienced actual or risk of surface water flooding may wish to take protective action. • Page 50, 51: Tributaries to the Thames: Brent welcomes the opportunity to discuss the TCFMP with the Environment Agency, and indeed has appreciated previous meetings with EA officers. The Council is shortly to report on year 2 of NI 189. A Strategic Flood Risk Assessment (SRFA) document was published in December 2007. • Storm Drainage and Surface Water Flooding: It is acknowledged that much maintenance work is required to ensure drains and gullies are free flowing. Brent supports the proposal to consider fluvial and surface water management together, and to maximise on site permeability and/or storage. Recent changes to Brent's policies will seek to control the hard paving of front gardens, and the provision of car parking spaces. • Page 52: Emergency Planning and Response: Brent's emergency

		Planning team has taken the lead in working with the Emergency Services and producing the Flood Recovery Plans. • The council welcomes the GLA's proposals to improve mapping of flood risk from all sources, this commitment should be matched by the relevant resources to achieve this objective. • Part II, Action 7 – Gully maintenance only is considered for review. No consideration is given to the capacity of the drainage network to cope with the dramatic increases in population and potential increases in rainfall. • Monitoring of insurance claims as a result of natural events may be a valuable indicator of the extent of climate change, and the impact on the economy and infrastructure in the UK. Currently flood risk are cited as included in standard insurance but this standard may change in light of increasing claims resulting in further exclusions and higher vulnerability in addition to those homes without such insurance that have already been identified • Table 3.3 – Suggest that measures should be implemented for emergency services as a priority to allow response to situation • It is not clear if 'maintain the existing defences' for flood will include provisions such as the prevention or limiting of building on flood plains
6. Drought	Droughts can be short and sharp, as experienced in the hot summer of 2003, or prolonged, such as the two dry winters experienced in 2004/05 and 2005/06. However, the way water is managed can affect the way a drought impacts upon us and on the environment. If demands for water are high, a lack of water supplies increases the likelihood and frequency of drought management measures, such as water	• Ground water recharge relies on porous surfaces - how much of London is permeable? • The Mayor's proposed water efficiency standard of 105 l/p/d in all new homes is welcomed; this is in line with Code for Sustainable Homes Level 3&4. As the strategy recognises, non-domestic water use accounts for almost one third of water consumption, water efficiency measures in these uses should also be promoted. • The Mayor's draft Water Strategy proposal that all new major development to make use of reclaimed water should recognise the space

	restrictions. The large population in southeast England, combined with the relatively low level of rainfall means that the amount of water available per person is strikingly low in comparison to many hotter, drier countries.	required to collect and store rainwater. Roof level collection and storage should be promoted where feasible, avoiding the need for additional pumping of reclaimed water supply.
7. Overheating	'Overheating' is a term used in this strategy to describe when temperatures rise to a point where they affect the health and comfort of Londoners. High temperatures also have an impact on London's infrastructure, buckling railway lines, melting road surfaces, making travel in the capital uncomfortable and increasing water usage and energy demand for cooling. London's summers are still mild enough for any significant health impacts due to high temperatures to be linked to uncommon, extremely hot weather events such as heatwaves. Summers are, however, already getting warmer in London. Nights are also getting hotter at a rate above the average rate of warming.	• No mention of air pollution? • No mention of Black tarmac use which may contribute to the heat • Trees provide shade but need to be managed and drought tolerant - are these exclusive? • There is a lot of information on the need for air conditioning on buses, trains and the tube, something Brent agrees with across the modes, if public transport is ever going to become as truly appealing/attractive to people as owning a private car is. Newer rolling stock operating on the Chiltern Trains operated route (Sudbury and Harrow Rd - Wembley Stadium - Marylebone, and London Overground Rail routes (e.g. the North Orbital Railway) does have rolling stock with air conditioning operating, which is welcome, and makes a notable difference to the experience of public transport, particularly from during the Summer. • The Mayor's focus on improving understanding of the risk of overheating and identifying priority areas is welcome. • Opportunities to increase green space coverage are likely to be limited and additional measures useful in reducing the risk of overheating, such as green roofs should be promoted. The target of 100,000m2 of new green roofs by 2012 will aid in this, however, a bolder requirement such as all new public buildings to include green roofs would contribute towards the vision of London as one of the greenest cities in the world. • The addition of a 'cooling hierarchy' to draft replacement London Plan is welcomed and provides a practical framework for assessing approaches to reduce overheating in new development. Further design guidance

		specific to London on reducing overheating will be welcome. • Retrofitting measures to reduce overheating in existing buildings needs to be investigated and promoted. The current strategy provides insufficient detail on what measures should be taken. • Emphasis should be put on protecting existing trees and green spaces to reduce the risk of overheating.
8. Health	The impact of climate change on the health of Londoners is a complex issue, and the benefits for, or threats to health may be direct, or indirect. Managing these impacts is therefore the responsibility of a wide range of agencies, both within the health sector, and beyond. Climate change will affect the quality of life of all Londoners, but there are dramatic inequalities in the health of Londoners and climate change is likely to increase these inequalities.	• Increasing numbers of pests are likely to put increased pressure on health service
9. Environment	London's green spaces (private gardens, public parks, wild spaces, urban forest, river and transport corridors) perform a range of functions known as 'ecosystem services' that improve the quality of life in London. These ecosystem services are essential to the wellbeing of Londoners and London's resilience to climate change. Improving the quality, quantity, connectivity and diversity of London's green spaces will increase their resilience and therefore increase the capacity of London and London's biodiversity to adapt to a changing climate.	

10. Economy	London's position as one of the world's foremost cities exposes it to the impact of climate change beyond its boundaries – both nationally and internationally.	
11. Infrastructure	This chapter looks at the impact of climate change on London's infrastructure – transport, energy and waste.	• Whilst Brent lobbies and campaigns for improvements to surface level railways/underground and bus services, the type of vehicles used by the operators are beyond the control of the Council which - unlike County Councils - does not tender contracts or enter into negotiations/agreements on aspects such as types of vehicles/service levels with bus or train operators. • Increases in soil drying as a result of temp increase and rainfall decrease will create potential weakening and damage to infrastructure including roads and buidings.