

Appendix 3

Overarching climate change risk assessment for the borough and possible adaptation options.

General impacts	Specific risks/opportunities	Adaptation options
<p>Biodiversity: Changes in plant and animal life cycle and growing patterns due to climate changes, competition from exotic species, increased summer drought stress for wetlands and beechwood</p>	<ul style="list-style-type: none"> • Loss of native species. • Habitat loss. • New and exotic species introduced. 	<ul style="list-style-type: none"> • Plant new non-native species which are drought resistant. • Encourage low-water gardens. • Monitor habitats.
<p>Flood management (including coastal issues): Vulnerable to inundation of floodplains by river water, local flooding when drainage network is overwhelmed, and from tidal surges in the Thames.</p>	<ul style="list-style-type: none"> • Damage to assets. • Death/ injury. • Disruption to services. • Economic cost. • Increased pressure on drainage. • Water storage and balance pond provide more amenity space. 	<ul style="list-style-type: none"> • Identify assets are high flood risk. • Inform residents and businesses living in high flood risk areas of the risk (e.g. through an advice leaflet). • Increase monitoring of drains. • Enforce policies from the LDF, regarding developing near flood risk areas. • Relocate strategically important council assets.
<p>Water resources management: Already one of the driest capitals in the world and facing increased demand for water in summer</p>	<ul style="list-style-type: none"> • Business disruption. • Affect residents. • Increased risk of forest fires. • Summer water shortages and low stream flows (reduced water quality of rivers). • Drier weather will improve tourism and outdoor leisure activities. 	<ul style="list-style-type: none"> • Implement measures to use water more efficiently. • Promote water efficiency amongst the borough's residents and businesses. • Make the most of opportunities such as increased potential for tourism and outdoor recreation.
<p>Buildings: Particularly sensitive to temperature increases because of urban heat island effect</p>	<ul style="list-style-type: none"> • Reduce staff and customer comfort. • Heat stress to staff and community. • Increased need for energy intensive cooling. • Increased subsidence risk in subsidence prone areas. • Reduced need for heating. 	<ul style="list-style-type: none"> • Identify buildings and parts of buildings that are overheating. • Retrofit buildings experiencing overheating with solar shading and other non-energy intensive techniques to promote cooling. • When building new council buildings ensure that the need for cooling and heating is included. • Encourage developers to consider the need for cooling. • Identify areas prone to subsidence. • Monitor and make heating

		arrangements for council buildings flexible, so that buildings are not unnecessarily heated.
Transport: Increased disruption to transport service and customer discomfort	<ul style="list-style-type: none"> • Passenger discomfort may lead to increase use of car. • Warmer, drier weather may increase use of bikes and walking. • Increased use of water transport along the boroughs rivers. • Less winter transport disruption (e.g. less ice and snow) 	<ul style="list-style-type: none"> • Work with TfL to promote ways of keeping cool on public transport. • Provide shading at bus stops. • Continue to improve cycling, walking and public transport facilities.
Spatial planning: New housing developments will need protection from flooding	<ul style="list-style-type: none"> • May restrict development. • May need to incorporate flood resilient design (could be expensive). 	<ul style="list-style-type: none"> • Continue to investigate and promote innovative ways to reduce the risk of flooding to new developments.
Industry: More construction days available, problems with safe use of construction equipment due to increased wind	<ul style="list-style-type: none"> • Increased danger to outdoor workers due to more extreme weather. • More construction days. • New growth sectors in economy (e.g. in the 'green' sector) 	<ul style="list-style-type: none"> • Inform local businesses of the risks of climate change. • Promote opportunities for economic growth in 'green' jobs.
Financial and insurance services:	<ul style="list-style-type: none"> • Increased insurance premium, or even refusal of insurance. 	<ul style="list-style-type: none"> • Work closely with insurance companies to ensure that assets will continue to be insured, and introduce measures required to keep insurance coverage.
Tourism, recreation, leisure and lifestyle: Out of town excursion destinations might benefit, heat in London could deter visitors, sport and recreational fishing suffer	<ul style="list-style-type: none"> • Improvement to local tourism and recreational demand. • A shift to more outdoor-oriented lifestyles 	<ul style="list-style-type: none"> • Make the most of new opportunities in tourism and recreational demand.
Emergency planning and security: Population displacement	<ul style="list-style-type: none"> • More demand on service. • Changes in work, dealing with extreme weather events. 	<ul style="list-style-type: none"> • Ensure these services have sufficient resources. • Ensure that emergency plans incorporate climate change.
Health and Healthcare: Reduced air quality; increase in flood related health problems	<ul style="list-style-type: none"> • More demand on health care facilities. • Health – heat stress and air quality issues. • Reduction in cold related deaths. 	<ul style="list-style-type: none"> • Ensure that these services have sufficient resources and are flexible in change in demand of service.