London under water

Challenge Overview Sheet

Flood, drought and heat wave: these are the three major natural threats that threaten London, the UK’s capital and a World City. In this 21st Century Challenge, we take a look at:

- The nature of London’s flood risk and reasons why it is now widely accepted to be increasing.
- Take the ageing defence infrastructure and factor in the decreasing permeability of the urban environment (a green area 22 size of Hyde Park has been lost to concrete in recent years).
- Account for the increasing value of assets on the flood plain.
- Finally, think about climate change and its impact on the frequency of hydro-meteorological hazards for London. Clearly, this is a very big, multi-causal issue.

Moreover, flooding is an issue that impacts on everyone living in the UK and not just on Londoners. London makes an enormous contribution to Britain’s GDP and houses many of its key functions. If London were to experience wide-spread flooding, it could bring economic and political paralysis to the nation as a whole and not just the southeast region.

In the video clips that accompany this scheme of work, Dave Wardle from the Environment Agency (Thames Estuary Programme Executive) and Alex Nickson (Greater London Authority) provide a wealth of information about the enhanced threat of flooding for London, including up-to-date information on:

- Fluvial flooding
- Coastal (estuarine) flooding
- Pluvial (surface water) flooding
- Groundwater flooding

This information is relevant to AS-level students for all of the major exam boards, whether their course emphasis is on hydrological systems and river flooding, or on climate change threats. The video clips and accompanying resources also look to London’s future, documenting:

- What and who is at risk
- The varied projections for increasing risk
- The management options for London

For gifted and talented geographers aiming for an A* qualification, there is plenty of opportunity for critical thinking and evaluation. Our experts can be watched debating where responsibility for building resilience to flooding lies - solely with the state, or increasingly with each individual citizen living in London? As Rowan Douglas-Willis, another speaker who talks on behalf of insurers, puts it, does the state still have a responsibility to “spend a lot of money to ensure we’re kept permanently dry?”