

London under water

Lesson Plan

Lesson2: Managing London's changing flood risk (approx. 40 minutes)

Learning outcomes	<p>Students:</p> <ul style="list-style-type: none"> • identify how effective flood management requires us to model several different dimensions of risk, covering both human and physical events and issues • learn about the scale of the possible flood hazard faced by London over the coming century, and consider the range of appropriate management responses that are potentially available to us • think critically about where the balance lies between individual responsibility and the power of the state if we want to ensure that London and other places can become more resilient to flooding
<p><i>NB Guidance notes for each section of the lesson can be found in the fact sheet</i></p>	
Starter (6-8 mins)	<p><i>What is meant by risk?</i></p> <p>Risk has several elements. They are shown using the RISK EQUATION or by these three components: probability, consequence and vulnerability. The concept of RESIDUAL RISK is also important in the context of an analysis of London's flood defences.</p>
Main activity (25mins)	<p><i>Using the Lesson 2 Article: managing London's changing flood risk, video clip of Alex Nickson, video clip of Dave Wardle, Discussion Activity Sheet, Extra reading: Thames Flood Barrier reading and What is at risk if London floods reading.</i></p> <p><i>(1) What is an acceptable level of risk for the Thames flood basin and who should be held responsible for managing this risk?</i></p> <p>If flooding did occur, Westminster would be under two metres of water and 75 underground and Docklands railway stations would be flooded, as would 16 hospitals and 400 schools. 343,000 London properties face tidal flooding and 133,000 have a fluvial risk. A total of 100,000 of these are at medium to high risk. Where does responsibility lie for making sure these assets and homes stay safe and protected? Does it lie solely with the state or should individuals do more to help themselves in the future?</p> <p><i>(2) What flood management options exist for Twenty-First Century London?</i></p> <p>A range of adaptation and mitigation strategies exist, looking towards possible scenarios that include a 4.2 metre high-tide sea level rise by 2100. What will these strategies cost? What should the government do?</p>
Plenary (8-10mins)	<p><i>Adaptation or mitigation?</i></p> <p>This final activity gets students debating a big issue. What is the best way to tackle the threat of increased fluvial and coastal flooding in London in the future? Should we focus on building better defences – or on cutting our carbon emissions?</p> <p>Use the Discussion Activity Sheet with the class working in groups of four</p>
Resources	<p><i>This lesson is fully supported with the following resources:</i></p> <ul style="list-style-type: none"> • Article: Managing London's changing flood risk

- Discussion Activity Sheet
- [Video clip of Alex Nickson](#) (London Strategy Manager for Climate Change Adaptation and Water)
- [Video clip of Dave Wardle](#), Environment Agency & head of The Thames Estuary 2100 project (TE2100)
- [60 second guide on ways to prepare for a flood](#)

Extra reading:

- [Thames Flood Barrier](#) reading on the 21CC website
- [BBC Thames Barrier Interactive](#)
- [What is at risk if London floods](#) reading on the 21CC website