

Video summary	Before watching the video	During the video
<p><b>Paul Whitehouse visits the River Test in Hampshire which has one of the most well-known chalk streams.</b></p> <p>Chalk Streams are sometimes called England’s equivalent of the Rainforests or Great Barrier Reef, as they are a rare habitat, and important for biodiversity.</p> <p>England, particularly the south and east, has 85% of the world’s chalk streams; these are mostly found in Yorkshire, East Anglia, the Chilterns, Kent, Hampshire and Dorset.</p> <p>Chalk Streams are produced after rainwater has percolated through chalk beds, re-emerging as clear water through many springs, after a period that can be as long as six to 12 months. Water reserves in porous rocks are called aquifers.</p> <p>The River Test is one of the most well-known chalk streams. It rises west of Basingstoke, near the village of Ashe and flows for just over 40 miles (65 kilometres) to its mouth at Southampton Water.</p> <p>Pollutants like phosphates from agriculture and sewage, encourage the growth of blanket weed, which blocks sunlight and prevents photosynthesis of useful vegetation that support biodiversity.</p> <p>In addition, water extraction causes water levels to drop and streams to dry up. This problem is made worse by increased demand and population growth; lack of investment in additional storage facilities such as reservoirs, and climate change.</p>	<ul style="list-style-type: none"> <li>• Ask students if they have heard of chalk streams and what they think they are. Look at a map that shows the geology of the UK, such as that provided by the British Geological Society and ask students to identify where they might be found.</li> <li>• Using digital mapping software such as Digimaps, Arc GIS, or Google Maps, ask students to locate source of the River Test, which rises near the village of Ashe, and to map its mouth.</li> <li>• Discuss the nature of chalk stream processes and how water is stored in aquifers. Students could provide a definition of the following terms:             <ul style="list-style-type: none"> <li>○ Aquifer</li> <li>○ Chalk stream</li> <li>○ Permeable</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• You may wish to stop at relevant points during this short film to pose questions and check understanding or wait until the end. Useful questions might include:</li> <li>• Why do you think the water of the Test emerges looking sparkling and clean? (months of filter and percolation through chalk).</li> <li>• What is the main threat of pollution? (Nutrients, such as phosphates, from agriculture and sewage causes the growth of blanket weed which kills off natural vegetation, making the river unfit for its natural wildlife).</li> <li>• What other threats are there? (Water extraction, increased drought due to extraction and climate change).</li> <li>• What solutions might there be? (Investment in infrastructure, such as new reservoirs, and better management to penalise and prevent pollution).</li> <li>• How valuable are chalk streams to the UK? (England has 85% of the global total, a rare habitat.)</li> </ul>

**After watching**

- Ask students to research and write their own set of recommendations for protecting the Test, with suitable explanations.

Curriculum notes	Where next?	Links
<p>All these short clips build on students' understanding of human and environmental interactions and provide opportunities to practice geographical skills such as enquiry, mapping and fieldwork.</p> <p>At KS3, students can learn more about how human and physical processes interact to influence, and change landscapes, environments and the climate. At KS4, the film supports understanding about fluvial environments, flooding hazards and climate change, environmental management and fieldwork investigation.</p> <p>This video develops understanding of economic activity and natural resources (KS3), and supports students in researching and debating ethical issues in geography (KS4).</p>	<ul style="list-style-type: none"> <li>• Plan for fieldwork at a water course near you, especially if you are near a chalk stream, to investigate the signs of a healthy river such as the wildlife in and near the river and the amount of blanket weed.</li> <li>• Design an assessment sheet to record findings that will help assess the river or stream you are visiting.</li> </ul>	<p><a href="#">KS3: Rivers and Water</a>  <a href="#">GCSE: River landscapes in the UK</a>  <a href="#">GCSE: River environments</a>  <a href="#">GCSE: Rivers</a>  <a href="#">GCSE: Managing the impacts of climate change</a>  <a href="#">GCSE Geography - exam practice</a>  <a href="#">National 4: Rivers</a>  <a href="#">National 5: Rivers and valleys</a>  <a href="#">Bitesize Careers: Jobs that use Geography</a></p>