

What I need to Know...

EQ What are the causes and consequences of drought? Where is water stored within the global water cycle? What are the pressures on water supplies? What are water stress and water scarcity? Causes and impacts of Drought in the Sahel

EQ What are the consequences of human activities on water quality? What are the key human causes of water pollution? What is Eutrophication?

EG How do human activities disrupt the water cycle?? What are reservoirs? How do urbanisation and deforestation impact the water cycle? What is a multi-purpose reservoir? What are large scale water management schemes? What are small scale water management schemes?

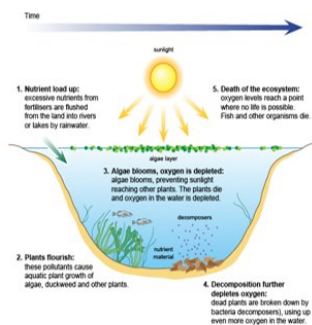
Key vocabulary

Global water cycle/ water store/ aquifer/ water stress/ water scarcity/ drought/ Sahel/ Water quality/ Desertification/ Pollution/ Eutrophication/intensive agriculture/ LIC/ MIC/ HIC/ industrial/ sewage/ sewerage/ reservoir/ urbanisation/ deforestation/ sustainable/ appropriate technology

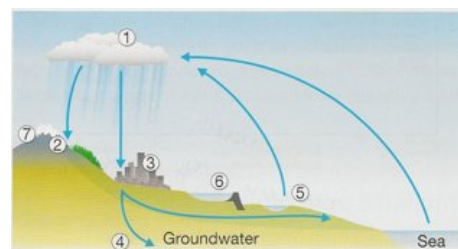
Student reference points:

Eutrophication

A major problem with the use of fertilisers occurs when they're washed off the land by rainwater into rivers and lakes. The resulting increase of nitrate or phosphate in the water encourages algae growth, which forms a bloom over the water surface. This prevents sunlight reaching other water plants, which then die. Bacteria break down the dead plants and use up the oxygen in the water so the lake may be left completely lifeless.

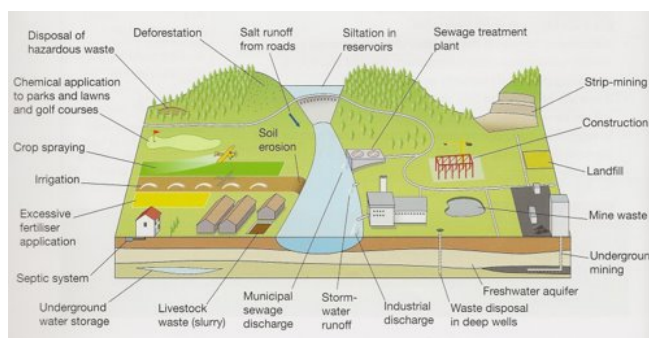


The increase of nitrate or phosphate from fertilisers into water causes eutrophication



Interventions

- ① Cloud seeding to make rain
- ② Deforestation and changes in land use, leads to loss of interception capability and possible flooding (Himalayas)
- ③ Widespread urbanisation (cuts evapotranspiration)
- ④ Overabstraction of groundwater leads to falling water table
- ⑤ Overabstraction from rivers and lakes leads to conflict between users and loss of evaporation
- ⑥ Building of dams and larger reservoirs
- ⑦ Impacts of global warming melts glaciers



Write 3 enquiry questions below that you would use to investigate this topic further.

- 1.
- 2.
- 3.