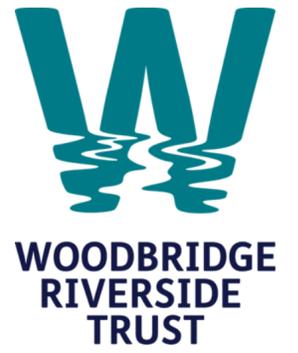




Do you know? Global sea levels are rising again. WHY?



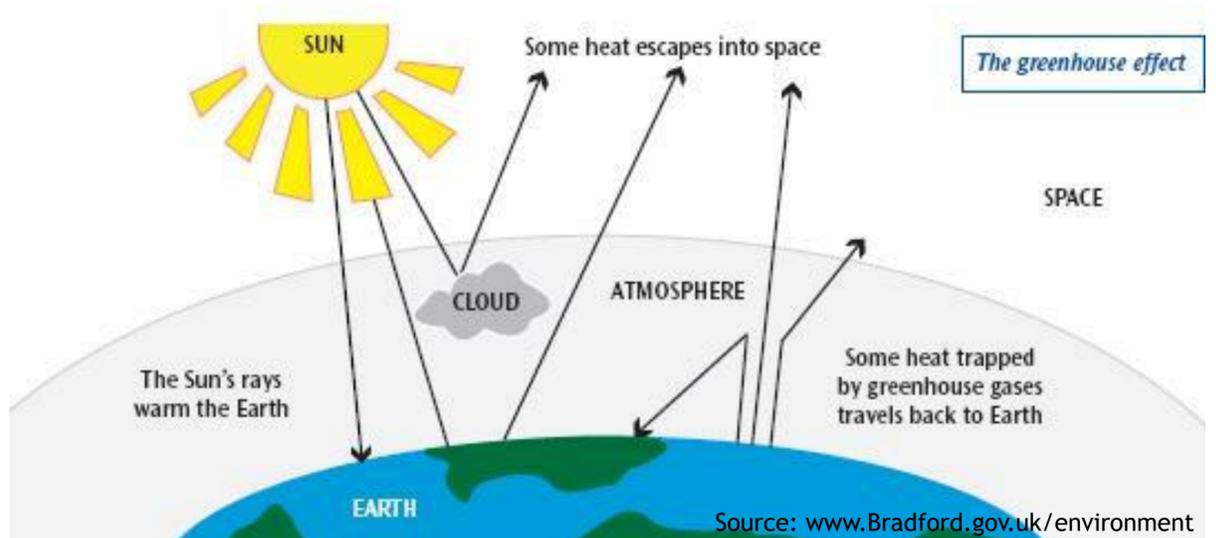
Sea level is the level of the surface of the sea relative to the land. Over millions of years sea levels have been affected by climate change caused by natural events including the variation in the earth's orbit around the Sun.

ISOSTATIC Sea levels can change by the land moving against a static sea height.

EUSTATIC Sea levels can change against a static land mass due to an increased volume of water.

THE GREENHOUSE EFFECT & GLOBAL WARMING

Since the start of the Industrial revolution in the 19th Century, human actions, such as burning fossil fuels, including coal and oil, have added greenhouse gases to the atmosphere. These gases include carbon dioxide CO₂.

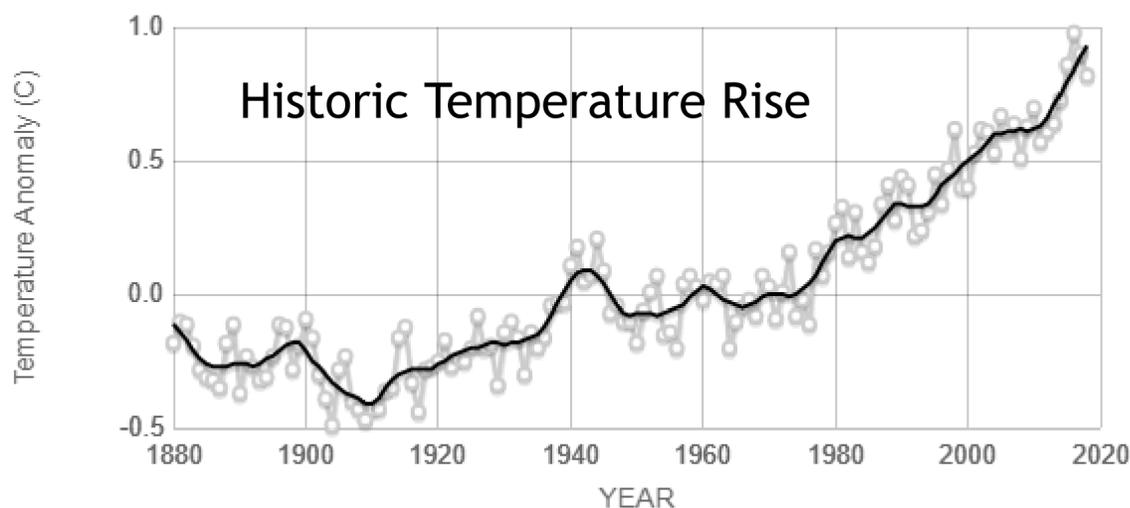


Increased greenhouse gases trap heat that would have been reflected back into space. Since then, the global average temperature has risen by about 1°C and the global sea level has risen by about 20cm.

ISOSTATIC REBOUND

In the last ice-age heavy glaciers weighed down the north of Britain but not the south. Northern land, released from the weight of the ice, is now rising and southern land is slowly tilting down.

These gradual land movements contribute to the vulnerability of the coastal area around East Anglia to sea level rise, even without the impacts of global warming.



Source: climate.nasa.gov

SOME EFFECTS OF GLOBAL WARMING

SEA LEVEL RISE

Melting glaciers and ice-sheets.

Thermal expansion water is less dense and increases in volume.

MORE EXTREME WEATHER

Warmer water drives energy into the weather system. This results in greater extremes such as high winds, heavy rain, storm surges and flooding.

Compiled by D McLeavy
With thanks to Suffolk Coast & Heaths Area of Outstanding Natural Beauty (AONB) for support with content
www.suffolkcoastandheaths.org
For further information :
The Committee on Climate Change www.theccc.org.uk/
Intergovernmental Panel on Climate Change www.ipcc.ch/