
Brief:

About Climate Change

The climate is always changing – it's time to get ready. The weather is changing. Temperatures and sea levels are rising. Summers are getting hotter, winters wetter. What does this mean to the North West? What will it be like to live here? Should you care? What can we – the Environment Agency – and you do about it?

Climate change is the biggest threat to our future. Already in the first years of this century, floods, storms and droughts have shown how vulnerable we are to the weather and the devastation that recent weather events have caused.

In the past our climate has altered as a result of natural causes. It is now clear that climate change has been triggered by increases in greenhouse gases. The 'greenhouse effect' is very important when we talk about climate change as it relates to the gases which keep the Earth warm. It is the extra greenhouse gases which humans have released which are thought to pose the strongest threat.

Statistics show that:

- ▶ The North West region has warmed by nearly 0.5oC in the last century. By 2080 the average annual temperature across in the North West may rise by between 1 and 2.8oC.
- ▶ Heavy winter rainfall events that occur every two years are expected to increase in intensity by 5 and 20 per cent.
- ▶ Summer rainfall has decreased by up to 20 per cent in the North West over the last century and may decrease by a further 7 per cent by the 2080's.
- ▶ Sea levels have risen - for example by 1 cm per decade at Liverpool in the last century. Sea-levels around the North West could rise by as much as 69 cm by 2080 and extreme high seas levels will occur more frequently.

One of the most significant impacts of climate change is that it adds uncertainty surrounding future levels of water supply and demand. Water shortages could result from extended periods of drought and more variability in the pattern and extent of rainfall in the North West. Changing rainfall patterns are of particular concern to the water industry. More severe and prolonged droughts would impact on water availability, even in the North West which is traditionally seen as having high rainfall. The 1995/6 drought was one of the most severe on record and, with higher temperatures leading to record customer demand, was the most critical period for water resources in the North West in modern times. Reservoir stocks declined to record low levels - less than 10% at Haweswater and Thirlmere in the Lake District. Some Pennine reservoirs were actually emptied. Hosepipe bans and other restrictions were brought in, and drought orders obtained to enable additional abstraction for supply. The additional pumping cost amounted to several million pounds. Additional winter rain in the future will add pressure to the existing waste water and sewage treatment facilities, increasing the risk of overflowing.

We have to manage the use of water to maintain supplies and protect the environment, while encouraging sustainable development.

The Brief



You too can play an important role in the education of water efficiency measures and installation of water efficiency products.

Your short film needs to deliver the following messages:

- ▶ We urgently need to reduce the amount of water we all waste every day.
- ▶ Reducing water wastage means more than just saving water, it protects the environment and saves energy too, reducing carbon emissions and helping to fight climate change.
- ▶ The key to water efficiency is reducing waste, not restricting use. Each person in the UK currently uses 150 litres of water per day. This figure has been rising by the equivalent of 1% every year since 1930 and of this we waste around one third. It is not sustainable to continue wasting water. It is only by using water more carefully and cutting down on waste that we can ensure a safe reliable supply of water for the future. Government proposals seek to help reduce per capita consumption from 150 litres to 130 litres.
- ▶ This is achievable by making some small changes in behaviour and installing water efficient products, for example:
 - ▶ Cutting one minute off your shower time, or limit your shower time to four minutes.
 - ▶ Use water from your water butt for garden watering or car cleaning - all year round.
 - ▶ Place a cistern displacement device in your toilet - they are free and easy to install.
 - ▶ In addition:
 - ▶ Turning the tap off when you brush your teeth can save 6 litres of water a minute and if everyone in the UK who currently leaves their tap running stopped, we would save enough water to supply 2.97 million people with enough water for one day.
 - ▶ Fix dripping taps straight away.
 - ▶ When you are replacing kitchens or bathrooms, choose water-efficient products.

Prepare a short film (movie/storyboard/script) about saving this valuable resource of water, at home and at work.

For more information visit:

http://www.environment-agency.gov.uk/subjects/waterres/?lang=_e

<http://www.direct.gov.uk/en/Environmentandgreenerliving/Thewiderenvironment/Climatechange/index.htm>

http://www.ukcip.org.uk/index.php?option=com_content&task=view&id=188&Itemid=312
