Campaign to Protect Rural England
KENT

Tomorrow's Kent

The impacts of climate change on Kent and its countryside

www.cprekent.org

Protect KENT
The Kent Branch of CPRE

Tomorrow's Kent

Key Messages

The four main impacts on Kent are:

- Sea level rise.
- More water stress.
- Greater flood risk and storm damage.
- Summer overheating.

Kent has particular vulnerabilities that mean we are likely to be hit earlier and harder than other areas of the UK.

Government and individuals at all levels need to be aware of these likely impacts and risks and plan for adapting to these changes.

The challenge is to find a way of planning for coping with climate change that is both rational and fair.

CPRE Kent will focus campaigning efforts on climate change adaptation in:

- Planning policy and building design.
- Water management.
- Coastal management.

SEAN FUREY

Contents

Who is this for?

Climate change is an issue that affects all of us. Elected members, from Parish to Parliament, and public officers need to think ahead to what public services and planning policies need to be put in place today to meet the needs of tomorrow.

The wider public needs to be aware of the problems and opportunities that may lie ahead. We need to challenge government, business and ourselves to reduce the impact of climate change and to allow us to adapt to a more uncertain future of flooding, droughts, hotter temperatures and higher sea levels.

Welcome

Introducing CPRE Kent

THANK YOU for taking the time to pick up this booklet. Here, we aim to show why climate change is not just a global issue, but a local one as well. We hope to show you our varied work and how, with your help, we can make a positive difference to the countryside.

At CPRE Kent, the Kent Branch of CPRE, we work on behalf of everyone who loves the beautiful Kentish countryside, and those who are worried about, or affected by, its destruction. We hope that this booklet inspires you to take action and to join the campaign.

Who we are

FORMED IN 1926, CPRE is one of the longest established and most respected environmental groups in England. CPRE is a registered charity with over 60,000 members and supporters living in our cities, towns, villages and the countryside.

CPRE Kent is one of the largest county branches with over 2,000 members, including more than 230 parish councils, civic societies and other Kent organisations and companies.

What we do

WE AIM to protect the beauty, tranquillity and diversity of rural England. We campaign nationally and locally for positive solutions for the long-term future of the countryside.

Grassroots campaigns are a big part of what we are about. We press central and local government to support the countryside by safeguarding precious Green Belt, promoting urban renewal, restricting development on green-field sites, protecting country lanes and hedgerows, and much more.

How we do it

WE PRODUCE in-depth research to support our active campaign work. Through sound argument and lobbying we seek to influence public opinion and decision makers at every level.

We are challenging when fighting for what is valued in the countryside, but realistic and constructive in our proposals. We listen to all sides of the debate, and are enthusiastic and welcoming to all who support our aims and activities.

SEAN FUREY

Weathering the storm

CLIMATE CHANGE is creating conflict over land use, whether it be for floodwater, crops, biofuels or our flora and fauna, and some of these tensions seem irreconcilable.

Meanwhile, to the Government the economy is the most serious issue of the moment. The world balance is changing and if countries like China and India start consuming three and half planets-worth of resources like us, then the logical conclusion is that as their consumption goes up and they take more natural resources then our economy will slip. This is already happening; the price of oil and wheat has risen dramatically, which makes everything more expensive.

This is creating a major conflict in Government because, as we are often reminded, if you're doing badly "it's the economy, stupid".

To Government, the immediate economy counts for more than the climate because it is, by necessity, short term. Thinking long term is not an asset of our political system. Thinking to the next election is the need, or seems to be the need, and that dissuades hard decision-making.

We have the Prime Minister tampering with the planning system because he sees it has an unnecessary constriction on economic growth.

Kent and the South East are being targeted for housing growth because it is supposedly the 'engine' of the UK economy, so we are back to economy again. Climate change is being pushed out because of this short-termism.

There are things we can do to improve energy, water and waste efficiency in buildings, so why aren't we doing them now? There seems to be no urgency: homes are being built now that aren't up to standard, and little is being done to improve existing buildings.

Government says that we need reduce our carbon footprints by 80% by 2050. It's very easy for a politicians to say that; they won't be there in 2050. We need to start now and we need to see very positive decisions coming down from Westminster.

The real problem is that the economy is at the forefront of everyone's mind. George W. Bush was very bullish about technology solving everything. I don't think technology can solve the climate change problem, because it is too imminent.

Technology may allow humanity, our children and grandchildren, to live with climate change, not to avoid it. Changes in lifestyle will be forced on us eventually and it is the resistance by the current generation that will make that worse in the end.

GARY THOMAS,
Chairman, CPRE Kent (2003-2008)

ADY KERRY

Starting the debate

ON THE 1 February 2008, CPRE Kent hosted the *Tomorrow's Kent* climate change conference at County Hall, Maidstone.

The capacity audience heard a wide range of views from:

- Shaun Spiers, CPRE Chief Executive.
- Sandra Nichols, National Farmers' Union.
- Richard Moyse, Kent Wildlife Trust.
- Andrew Pearce, Environment Agency.
- Richard Alderton, Ashford Borough Council.
- Alison Cambray, Kent County Council.
- Chris Blunkell, Faversham Road Residents Association.
- Sean Furey, CPRE Kent.
- Gary Thomas, CPRE Kent.

Following the presentations there were energetic question and answer sessions between the speakers and the audience.

The lunch-time workshops gave an opportunity for delegates to discuss four main themes of climate change in Kent:

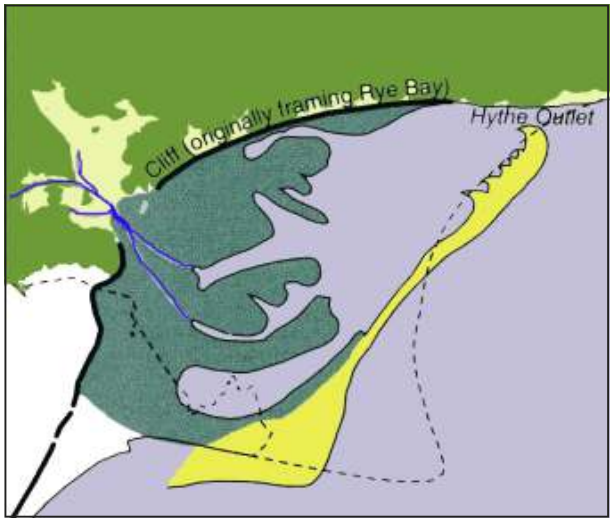
> *"If we rely on Government, change is not going to happen – we need to lead."*
>
> **RICHARD KNOX-JOHNSTON**, Chairman, CPRE Kent

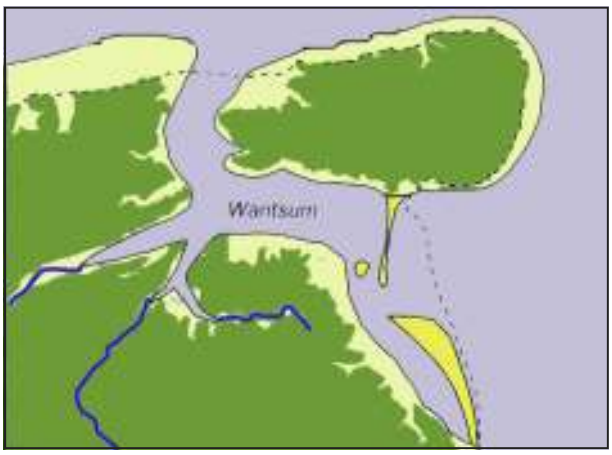
- Agriculture.
- Ecology.
- Coasts.
- Planning and buildings.

As well as discussing how climate change is likely to impact these aspects of Kent, delegates were also encouraged to put forward solutions.

As part of the feedback we also asked on what issues we should focus our campaign, and we got a strong response:

1. Building design and planning policy.
2. Water management (water supply, flood risk, wastewater management).
3. Coastal management.





Above and left: when Kent was the Roman province of 'Cantium', Thanet was separated from the mainland by the Wanstum Channel, and Romney Marsh was a treacherous estuary of marshes and sandbars. The dotted lines show the modern coastline (source: An Historical Atlas of Kent, Phillimore & Co. 2004)

Kent's turbulent past

KENT IS one of the most varied and distinctive English counties. Our landscape has been shaped by eons of natural processes and millennia of human activity.

Climate change is not a new phenomenon. The relative climatic stability of the last 10,000 years, often called the Holocene, is more of an anomaly compared to the dramatic ice age cycles that have happened over the last 2-4 million years.

Kent's environmental history has been dynamic. During the last glacial period, when sea levels were much lower, the River Medway was a highland tributary of the Thames, which in turn was a tributary of the Rhine.

Although the great ice sheets never reached as far south as Kent, the great thawing of snow and permafrost helped create dramatic landscape features, like the Devil's Kneading Trough, near Wye.

Major changes have even occurred within the last 2,000 years. Thanet was a true island during the Roman and Jutish (Anglo-Saxon) period and so too was the Isle of Oxney. Tenterden was effectively a coastal town with its docks at Small Hythe. The name 'Small Hythe' means 'small landing place or haven', probably to distinguish it from the larger port of Hythe to the east. Today both the Isle of Oxney and Tenterden lie many miles inland behind the Romney Marsh.

A storm in the 13th century changed the course of the River Rother, which divides Kent from Sussex. Until then it had flowed into the English Channel at Old Romney, but the storm pushed its mouth to the current position at Rye.

Climate stability has been important because it allowed farmers to plant crops and raise livestock in the knowledge that more often than not they would achieve a surplus. Agricultural surpluses allowed complex societies to develop, survive and withstand shocks from other disasters, such as disease and conflict.

Now it seems that our climate, and our environment, is on the move again. The problem is that our society, economy and transport have, in some ways, become more vulnerable to extreme weather, such as floods, storms, and prolonged events, such as drought and ecological change.

Evidence for climate change

WEATHER AND CLIMATE are two different things. Despite our mild climate, Kent has suffered extreme weather throughout its history.

Thus when looking for climate trends caution is the watchword. Single events, like the 1987 'hurricane' that wreaked havoc across south east England, or the extreme flooding of 2000 and 2001 cannot be taken as evidence of climate change in their own right.

However, these events, and many others fit together to build a broader a picture of change that can be seen not just across the UK, but also globally.

Evidence for climate change comes from two directions: first, the empirical evidence from around the world indicates an increasing rate of global warming. The data comes not just from historical weather records but from a whole range of proxy indicators, like tree rings, coral reefs, lake and ocean sediments, air trapped in ice cores and many more.

In recent decades this evidence has unlocked a whole new history of climate behaviour going back thousands, hundreds of thousands, even millions of years.

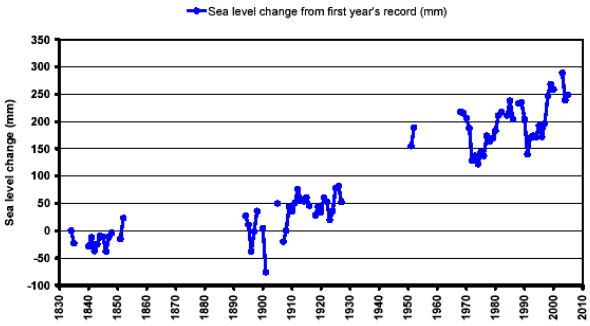
The second line of evidence from comes from our understanding of the physical, chemical and biological processes at work in the climate system.

Bringing the two together has enabled climate scientists to build ever more complex computer models of our atmosphere, oceans and land surfaces.

Climate models allow ideas to be tested, like how significant a volcanic eruption, such as Mount Pinatubo in 1991, is and how do its effects compare to human emissions?

Since the first report of the Intergovernmental Panel on Climate Change (IPCC) in 1990 the intense data gathering, analysis, modelling and argument has come to an increasingly strong conclusion:

Human behaviour is altering our global climate, making it warmer, less stable and more dangerous.



Recorded sea-level rise at Sheerness
(source: Environment Agency)

Changes felt in Kent and the South East

- The 1990s was the warmest decade in the UK since records began in the 1660s.
- The highest recorded temperature in the UK was 38.5˚C at Brogdale, near Faversham on 10 August 2003.
- Mean daily temperature has risen 0.9°C between 1914 and 2006 in the South East —the equivalent of moving from southern England to mid France today.
- Autumn temperatures have risen 1.3°C since the beginning of the 20th century.
- The growing season has lengthened by about a month in central England since 1900, with the Spring beginning around 2-3 weeks earlier than in the 1970s.
- Over the last decade there have been typically 23 fewer days with frost than in the 1960s.
- Rising sea levels have been recorded in most areas of the world. At Sheerness measurements show a rise of around 25 cm since the mid 1800s .
- Mean wave height in the English Channel has increased by about 50 cm since the 1960s, due to higher winds.
- Britain has become twice as stormy since the 1960s, with an increase in heavy rain showers.

SEAN FUREY

Changes in rainfall patterns are likely to affect Kent's rivers, such the Medway

Predicted changes

Temperature

- Warmer throughout the year, particularly summer and autumn.
- A slight increase in the diurnal temperature range in summer.
- Kent may benefit from cooling sea-breeze effects, relative to more inland areas of the South East.

Rain and snow

- Progressively more winter rainfall by 2080.
- Progressively less summer rainfall by 2080.
- A slight decrease in overall annual rainfall.
- Snowfall becoming very rare by 2050.
- More intense rainfall events.

Soil moisture

- A substantial decrease in soil moisture in summer and autumn.

Cloud cover

- Decreasing in summer and autumn.
- A slight increase in winter.

Wind speeds

- Increasing winter wind speeds.

Season creep

The warmer temperatures, earlier in the year and for longer into the autumn, are extending the growing season so that by 2080 it could be warm enough for 40—100 extra days of plant growth per year.

There is also evidence of changes in arrival and departure dates of migratory bird and marine species.

Climate scenarios

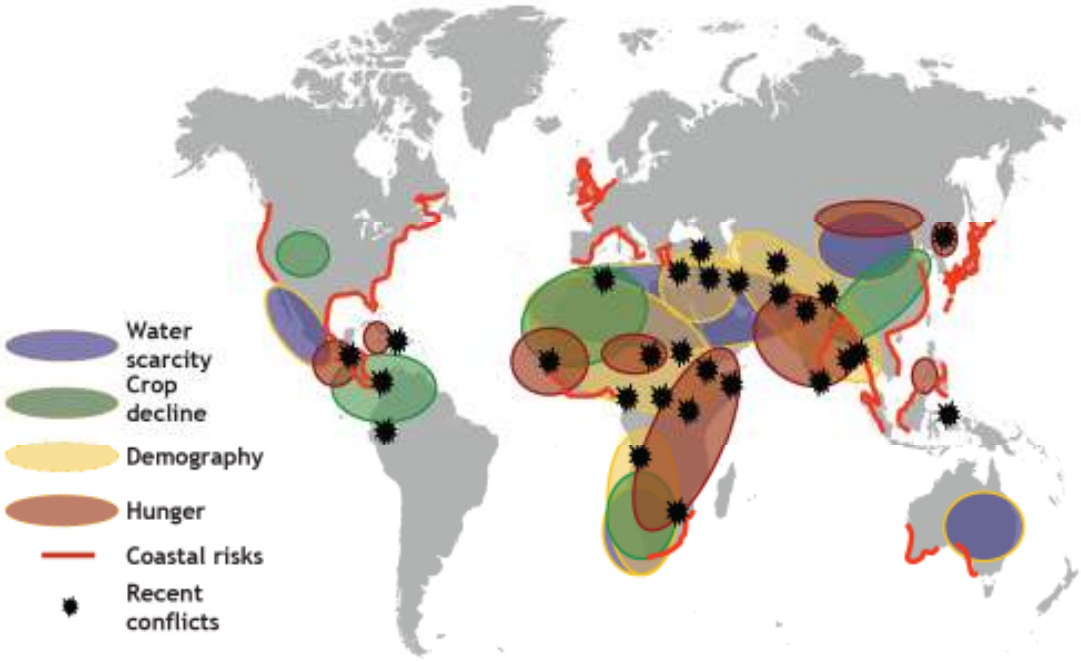
THE UK Climate Impact Programme (UKCIP) is one of the main organisations looking at how climate change is likely to affect the UK and what we can do about it. In 2002, they produced a series of scenarios for a coarse grid covering the country. From this it is possible to get some indication of the changes to come in Kent and the South East by the 2020s, 2050s and 2080s, under different greenhouse gas emission scenarios.

Updated and refined predictions are expected in early 2009 as part of the UK Climate Projections (UKCP09) science programme.

The projections we have now do come with uncertainties and limitations:

- Our lack of understanding and ability to model natural processes.
- Imperfect and limited data quality, coverage and record length.
- Uncertain future emissions of climate change gases.
- Natural variability (also described as the 'Butterfly Effect' or 'Chaos Theory').
- Scaling: applying large scale projections to a small, and topographically diverse, area like Kent.

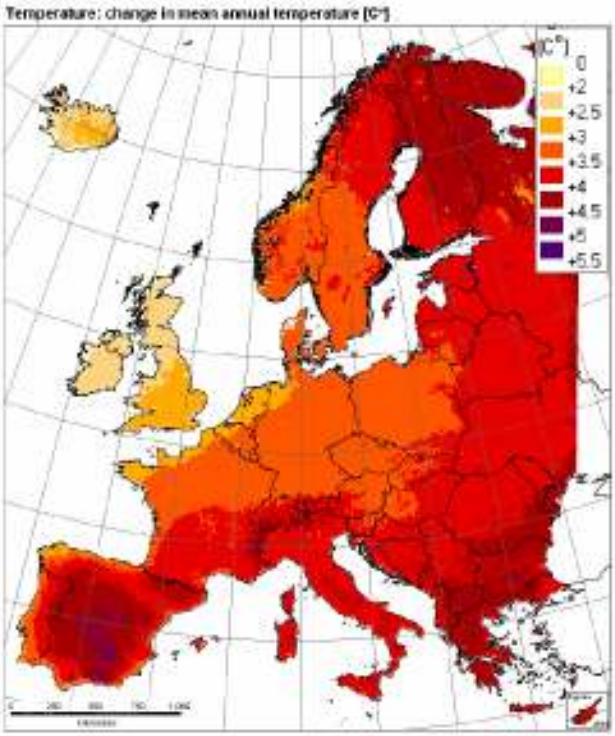
Climate science is evolving fast and it is important to base risk analysis and adaptation plans on the latest information from respected research bodies like the IPCC, UKCIP, the Hadley Centre and the Tyndall Centre.



CABINET OFFICE (2008)

Indirect impacts on Kent

"Climate change could act as a multiplier for instability, adding to the stresses on already fragile economic and political systems and increasing the risk of instability and conflict" CABINET OFFICE (2008)



Change in mean annual temperature by 2100
Source: Commission of European Communities (2007)

CLIMATE CHANGE is a global phenomenon and the effects are likely to be much more severe in other areas of the world.

While our focus is on Kent and the South East of England, it is still essential to appreciate the wider context in the UK and Europe. Models suggest that Kent may suffer from higher temperatures and more water shortages earlier and harder than elsewhere in the UK. Meanwhile, southern and eastern Europe are likely to face serious challenges to their already water-stressed conditions.

The impacts of these severe changes are likely to make other problems worse. This could become a particular problem for Kent because of its role as the gateway between Britain, continental Europe and beyond:

- Population growth, demographic change and international migration.
- Soil erosion and loss of agricultural productivity.
- Loss of biodiversity and habitats.
- Instability of the globalised economy.
- Lack of progress towards meeting UN Millennium Goals on poverty reduction.
- Social disorder, crime and bad government.
- Strained international relations.

Impacts on Kent's countryside

Threats

- Less comfortable and productive work environments, more heat-related health problems and more heat-related deaths.
- Increased dust levels in the air, causing nuisance and respiratory problems.
- Higher fire risk, particularly on Wealden heathland.
- Fewer frosts may affect some native species, like apples, and allow more pest species to survive through the winter.
- Increased risk of loss of life, damage to property and disruption to daily life and economic activity from flooding.
- More cliff activity and collapse.
- Reduced water resource availability in a county that is already water stressed.
- Shrinkage of Wealden and Gault clays leading to subsidence and damage to foundations of buildings and roads.
- Introduction of pests and diseases, like malaria and bluetongue, that may affect people, livestock, crops and wildlife.
- New, or more active, pests may also threaten the integrity of historic buildings, collections and designed landscapes.
- More storminess, which is likely to increase disruption to ferry and port services, increasing delays and Operation Stack frequency.

Opportunities

- More attractive weather boosts tourism.
- Fewer cold-related deaths and lower winter heating bills (though likely to be offset by escalating energy costs).
- Less disruption from snow and ice.
- More favourable conditions for new agriculture, such as vineyards.

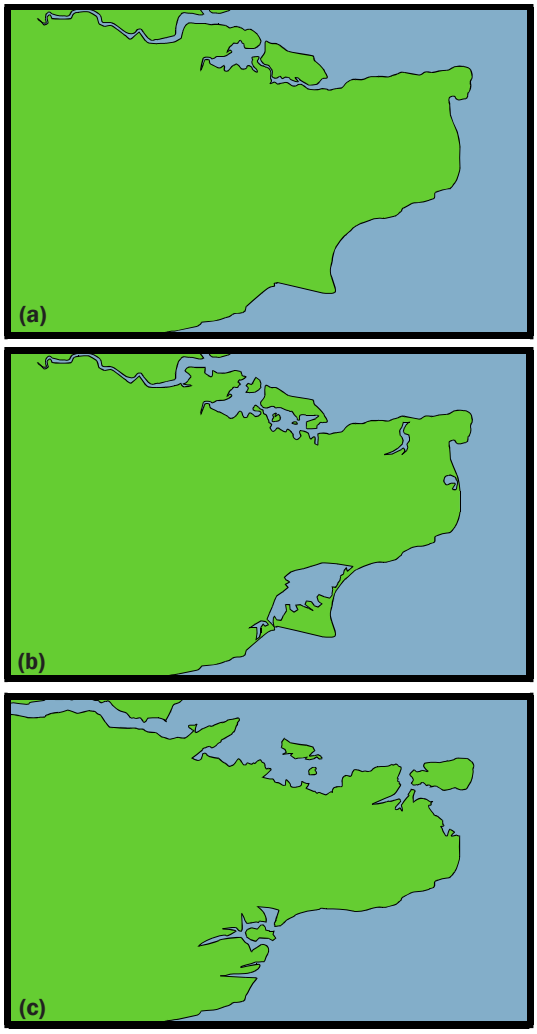
SEAN FUREY

Kent's vulnerabilities

MANY, IF not most areas of the UK will suffer from similar problems. However there are a number of features that make Kent particularly vulnerable:

- A long coastline with large areas of low-lying land, which include important habitats, farmland, infrastructure and many homes and businesses.
- A large and changing population, with a widely dispersed rural population.
- A diverse economy with areas of both affluence and poverty.
- A large amount of critical transport and energy infrastructure which is important not just for the county but for the UK as a whole.
- A large proportion of the UK's horticulture, which is reliant on reliable, high quality water supplies.
- Relatively small, ecologically sensitive river systems that support a wide range of uses, including water supply, wastewater disposal and drainage, angling, navigation and pleasure boating.
- Our position in the south east corner of the country makes it harder and more expensive to transfer water resources from elsewhere, once our local groundwater and reservoir resources are depleted.

Sea level rise



The changing face of Kent (a) today (b) +1 metre (c) +7 metres sea level rise (sketches based on OS contours)

IT IS not just weather patterns that are changing. There is strong evidence that sea levels have been rising and will continue to do so over the coming century. The main reason is that as the atmosphere and oceans warm up, seawater expands and hence sea level rises.

More well known is the melting of icecaps. However, because ice is less dense than water (which is why it floats) melting of the sea ice in the Arctic Ocean is unlikely to have a great effect. Of more concern are the major land based icecaps. If all 2.85 million square kilometres of ice on Greenland were to melt, it would lead to a global sea level rise of around 7.2 m (22 ft). For Antarctica, the figure is closer to 73 m (220 ft), but that prospect is far more remote.

There is a third factor which affects Kent and the southern England: the land is sinking. However, the effect is only 0.5 mm/year.

Sea level is expected to rise around a metre by 2100, but the rate it rises is set to increase. How quickly the major icecaps melt is also a big unknown.

As much as a quarter of Kent's land area is less than five metres above mean sea level. This includes some of our most valuable wildlife habitats, most productive agricultural land, four major power stations and dozens of rural communities.

144,000 homes in Kent are currently at risk from a major coastal flood, as happened in 1953. This number will increase as sea level rises and more development is built in low-lying areas, like the Thames Gateway.

"When Claire, Lewis & I made the decision to move to Faversham Road we knew there was a risk of flooding, which we accepted. What we were not prepared for were the proposals contained in the draft Shoreline Management Plan, a summary of which slipped through our letterbox on July 9th 2007.

"We were told that the South East Coastal Group, recommended a policy of 'managed realignment'. We were told that the authority expected that maintenance of existing defences would cease, and a new defence line would be constructed inland.

"The sea was rising, sea defences cost money, and the sums just didn't add up. And here's the bit that chilled my blood: we could expect our homes would be lost in the process, with no prospect of being compensated."

CHRIS BLUNKELL, Faversham Road Residents Association, Seasalter

SEAN FUREY

ENVIRONMENT AGENCY

Kent's countryside plays a vital floodplain role, which helps protect urban areas, like Ashford in 2000

Flood risk and storms

THOUSANDS OF homes in Kent are at risk of flooding from numerous sources. Even relatively minor flood events can disrupt other infrastructure, such as power and telephone lines and roads.

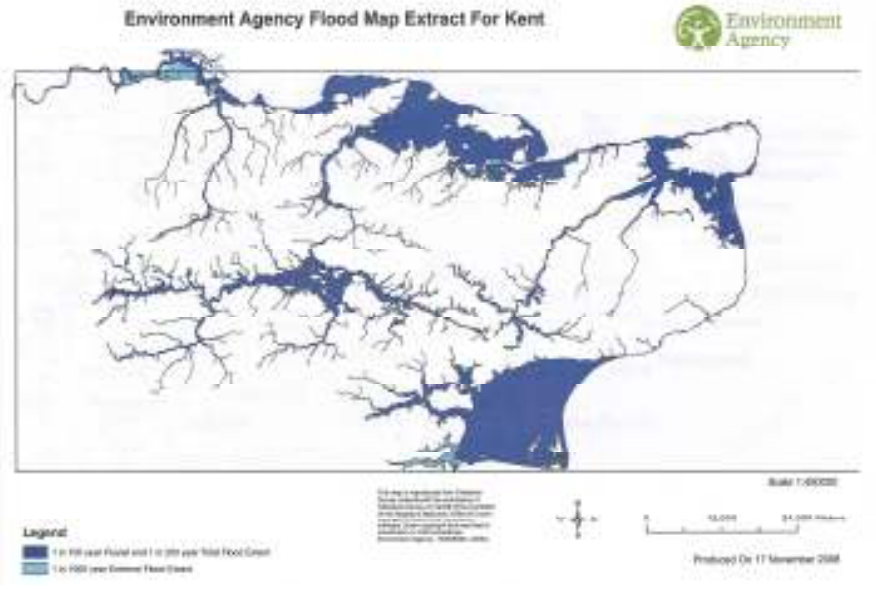
Major flooding has happened periodically in Kent, such as in 1968 and 2000. In some cases it has been possible to build flood defences to defend, primarily, urban areas. For example Tonbridge is protected by the Leigh Barrier upstream, and Ashford is protected by flood storage reservoirs at Aldington and Hothfield.

Countryside plays a central role in drainage and flood management, however low population densities mean that rural communities that are vulnerable to flood risk are unlikely to achieve a sufficiently high cost-benefit ratio to justify government investment. Residents in areas such as Yalding, may need to act to adapt their homes and businesses to be more resilient to flood damage.

Climate change is likely to increase the number of homes at risk from flooding and storm damage, and not just in winter. The floods of 2007 that hit the Midlands happened in summer and were largely a result of intense rainfall overwhelming drainage systems.

Dealing with this problem is hindered by the confused responsibilities for drainage that are split across many organisations. Hopefully this will be addressed by new legislation.

Higher wind speeds and waterlogged soils in winter are likely to increase the number of uprooted trees blocking rural roads and cutting off rural phone and electricity supplies, as well as damaging cars and properties.



Areas of Kent at risk from river and coastal flooding today

SEAN FUREY

Bewl Water, near Lamberhurst, is a central part of Kent and Sussex's water supply

Water scarcity

WATER MANAGEMENT has been a contentious issue in relation to the growth plans for Kent and climate change will exacerbate these policy conflicts.

Eighty percent of Kent's public water supply comes from groundwater, which is already stressed, and in the future it may be vulnerable to saline intrusion, changes to rainfall patterns and lack of regular snow melt, which might reduce aquifer recharge.

Kent's rivers are ecologically sensitive and vulnerable to pollution, treated sewage discharges and low flows.

The River Darent dried up in its middle reaches during the 1989-1991 drought. While bank-side augmentation wells installed in the mid 1990s provide some relief, the only real solution is to reduce groundwater abstraction. However, this puts more pressure on other water sources.

The reservoirs at Bewl and Bough Beech are kept full by pumping from the River Medway and its tributaries. Long, drier summers, and dry winters, make it harder for them to keep up with water demand without damaging the river.

The Little Stour and Dour are also vulnerable to low flows and have been the subject of water company and Environment Agency investigations and Alleviation of Low Flow (ALF) schemes.

The marshes and mudflats of the Swale owe some of their rich biodiversity to chalk-fed springs and streams coming from the lee slope of the North Downs.

Hose-pipe bans, and other restrictions, are likely to become more common, unless expensive and energy-intensive new water resources and wastewater treatment schemes are built in the next few years.

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Water stress in Kent will lead to more changes in Kent's agricultural landscape. New, more drought-tolerant crops will be planted and there will be greater demand to use unattractive poly-tunnels, such as these near Wingham.

Hotter summers will bring opportunities as well as threat's to Kent's countryside

SEAN FUREY

Summer over-heating

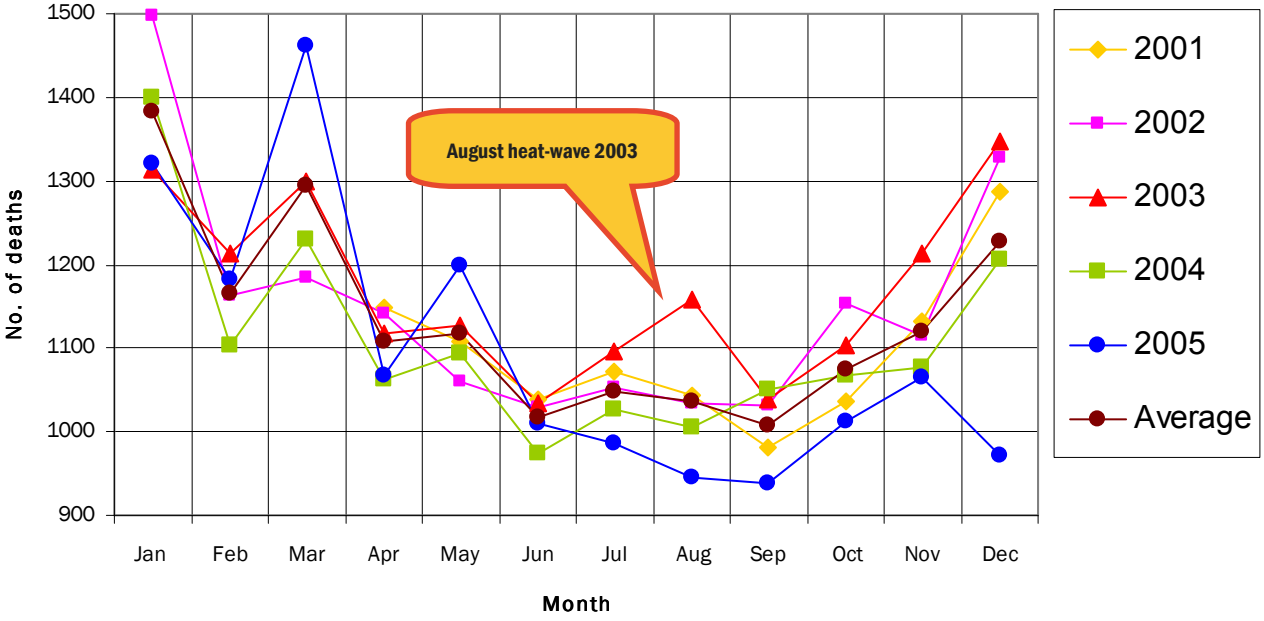
WARMER TEMPERATURES in the UK are a prospect that many would welcome. A more Mediterranean climate in Kent would undoubtedly bring a boost to the county's tourism industry, which is one of the biggest assets of the county's rural economy.

However, there are dangers with hotter summers, particularly for the elderly. From the August 2003 heat wave there were 121 (12%) more deaths among over 65-year-olds in Kent.

According to the New Scientist, the 2003 summer heat caused the deaths of 14,802 people in France, about 7,000 in Germany and 2,000 in the UK. The big concern is that a 2003 summer will become a typical summer by 2040, or earlier.

Adapting to higher temperatures will be a major challenge for homes, work places and public buildings. A common response is to install air-conditioning systems. However they are not only power-hungry, but in built-up areas they can make the situation worse by pumping out hot air, creating the urban heat-island effect.

While rural Kent residents will be less affected, the changes will probably make water shortages more acute. Wildlife, woodland and agriculture will also need to adapt.



65+ year olds death rates per month for Kent (source: NHS/KCC)

Mitigating climate change

THE FOURTH assessment by the Intergovernmental Panel on Climate Change (IPCC) concluded that there is now over 90% confidence that human activity is a major cause of recent climate change.

Nearly all our energy, heating, transport, food and most other aspects of our lives and our economy are based on the use of fossil fuels. These, and other activities, release vast quantities of 'climate-forcing' gases like carbon dioxide, methane and nitrous oxides.

We are already committed to some warming as a result of emissions that have already happened, but we face a stark choice about what we do every day from now on. We need to mitigate future changes by cutting emissions now.

The Stern Report on the economics of climate change warned that the cost of switching to a low carbon economy is dwarfed by the costs, and human tragedy, if carry on as we are.

SEAN FUREY

Offshore windpower, like at Whitstable, has a major part to play to meet our future energy needs

Adapting to climate change

THE STERN Report recognised the need for early action to adapt to climate change and, where practicable, reduce negative impacts. We should, at the same time, exploit any opportunities from the changes.

An adaptation strategy would therefore need to have the scope and resilience to:-

- Plan and prepare for events.
- Respond effectively in minimising the impact.
- Follow up with the necessary recovery and remedial measures.

In the long term, the strategy must also accommodate the effect of any future acceleration of the forecast changes; those which could, for example, bring more severe droughts or more frequent serious flood events.

In future work, we will look at options and opportunities for climate change adaptation in the three highlighted areas of planning and building design, water management and coastal management.

We will also review how government, business and communities are making progress on these challenges.

SEAN FUREY

Kent's wealth of historic buildings, such as at Aylesford, and landscapes need to be made resilient to more extreme weather.

What CPRE Kent is doing

We will monitor and report on progress by local authorities in Kent:

- Whether or not all councils have signed up to the Nottingham Declaration on Climate Change and demonstrably acted to meet its objectives.
- Whether or not all councils are meeting their commitment, through the Kent Partnership, to climate change adaptation, as set out in National Indicator 188: "Planning to Adapt to Climate Change".
- That councils are putting in strong climate change policies into their Local Development Frameworks (LDF) and other key documents.
- That planning applications are assessed for whether or not they have considered climate change mitigation and adaptation.

We will work closely with others to fight climate change:

- We will work with our national CPRE colleagues, and fellow county branches, on influencing key regional plans and national legislation to ensure that they address climate, environment and countryside issues, and are fair and democratic.
- We have established the **Kent Climate Change Forum** to explore the local issues, establish common goals and share best practice between non-governmental organisations (NGOs), schools, colleges and universities.
- We work with community environment and Transition Town groups to help them develop, share experiences and be inspired to make a difference to everyone's day to day lives.
- We support local campaign groups who are threatened by poor planning or coastal management decisions.
- We are working on plans to engage with students and schools in Kent.

SUST.

CPRE Kent staff and volunteers at the Kent Show

We will promote good schemes and campaign against bad proposals:

- We will promote best practice in climate change adaptation that fits the Kent context.
- We campaign for efficient use of land that respects the past and gives flexibility for the future.
- We promote energy efficiency, water efficiency and waste reduction in all sectors of the economy.
- We support and promote renewable energy systems where they are effective and sensitive to the character and community of an area.
- We will fight major schemes, like airport expansion, that go against greenhouse gas reduction targets and cause many other environmental impacts.

What you can do

Join us!

We need members to make our voice stronger. We also need active members to win this vital campaign. There are a number of ways in which you can help so get in touch and find out how you can get active in your local area, or join our wider county and national campaign teams.

Membership starts from only £28 a year (£2.33 a month) and includes a range of benefits, which you can find out about at www.cpre.org.uk/support/joinus or call 01303 815180.

Write to your MP, County Councillor, Borough Councillor and Parish Council

Find out what they are doing about climate change and challenge them to do more. Make it an election issue.

Make a donation or a legacy

We have a small, but committed staff dedicated to protecting Kent's wonderful countryside and the quality of life of everyone who enjoys it. We are a charity that is funded solely by its membership, we don't have any government or corporate support. This makes us a truly independent voice on your behalf. Please support us in your will, or by donation, made out to 'CPRE Kent'.

Further information

This report is a summary of a more detailed, fully referenced CPRE Kent report: *Tomorrow's Kent — Adapting to the challenge of climate change*, which will be available on request and downloadable from **www.cprekent.org.uk**, along with all our other campaign information.

Reports and papers

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Online resources

Campaign to Protect Rural England (www.cpre.org.uk)

Climate South East (www.climatesoutheast.org.uk)

Environment Agency flood map and Floodline (www.environment-agency.gov.uk)

Stop Climate Chaos Coalition (www.stopclimatechaos.org)

Tyndall Centre for Climate Change Research (www.tyndall.ac.uk)

UK Climate Impacts Programme (www.ukcip.org.uk)

SEAN FUREY

The Campaign to Protect Rural England: Kent Branch

The Campaign to Protect Rural England (CPRE) is a charity that campaigns for a sustainable future for the English countryside, a vital but undervalued environmental, economic and social asset to the nation.

We want a beautiful, tranquil and diverse countryside that everyone can value and enjoy. We promote positive solutions for the long term future of the countryside, ones which respect the character of England's natural and built landscapes.

Formed in 1926, CPRE is a powerful combination of effective local action and strong national campaigning.

Nationally, CPRE has over 60,000 members and supporters, a network of over 200 district groups and there's a branch of CPRE in every county, a group in every region, as well as a national office in London. The CPRE patron is Her Majesty the Queen; our national president is celebrated author Bill Bryson.

CPRE Kent is one of the largest county branches with over 2,000 members, including more than 230 parish councils, civic societies and other Kent organisations and companies. Our president is acclaimed local artist Graham Clarke. Membership is open to all.

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The Kent Branch of the Campaign to Protect Rural England is a company limited by guarantee, registered in England number 4335730, registered charity number 1092012

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