



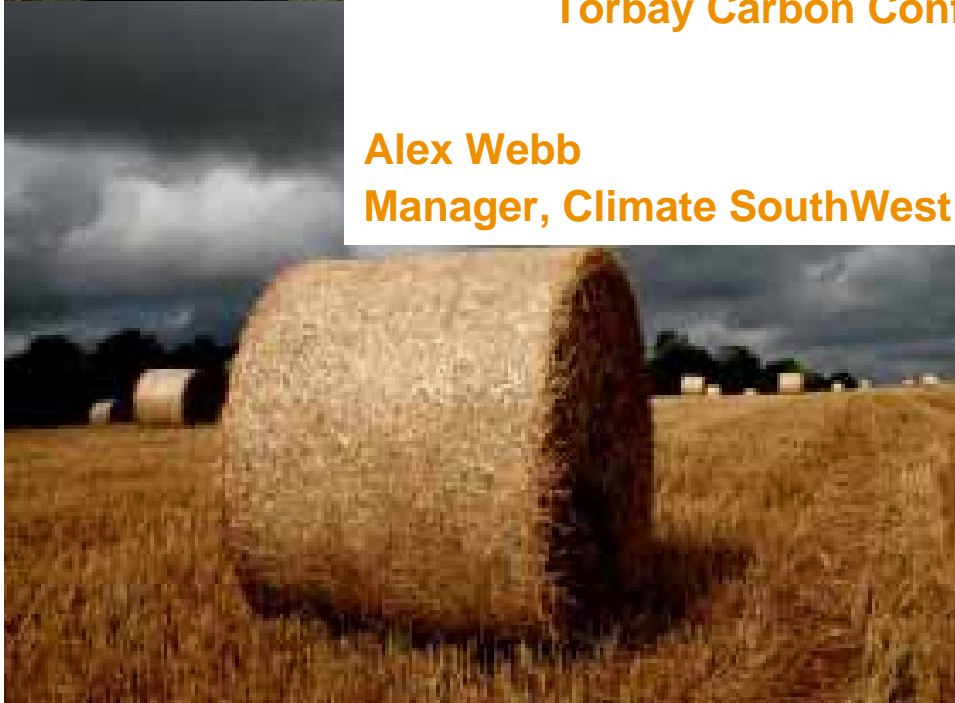
ClimateSouthWest



Changing Climate, Changing Business

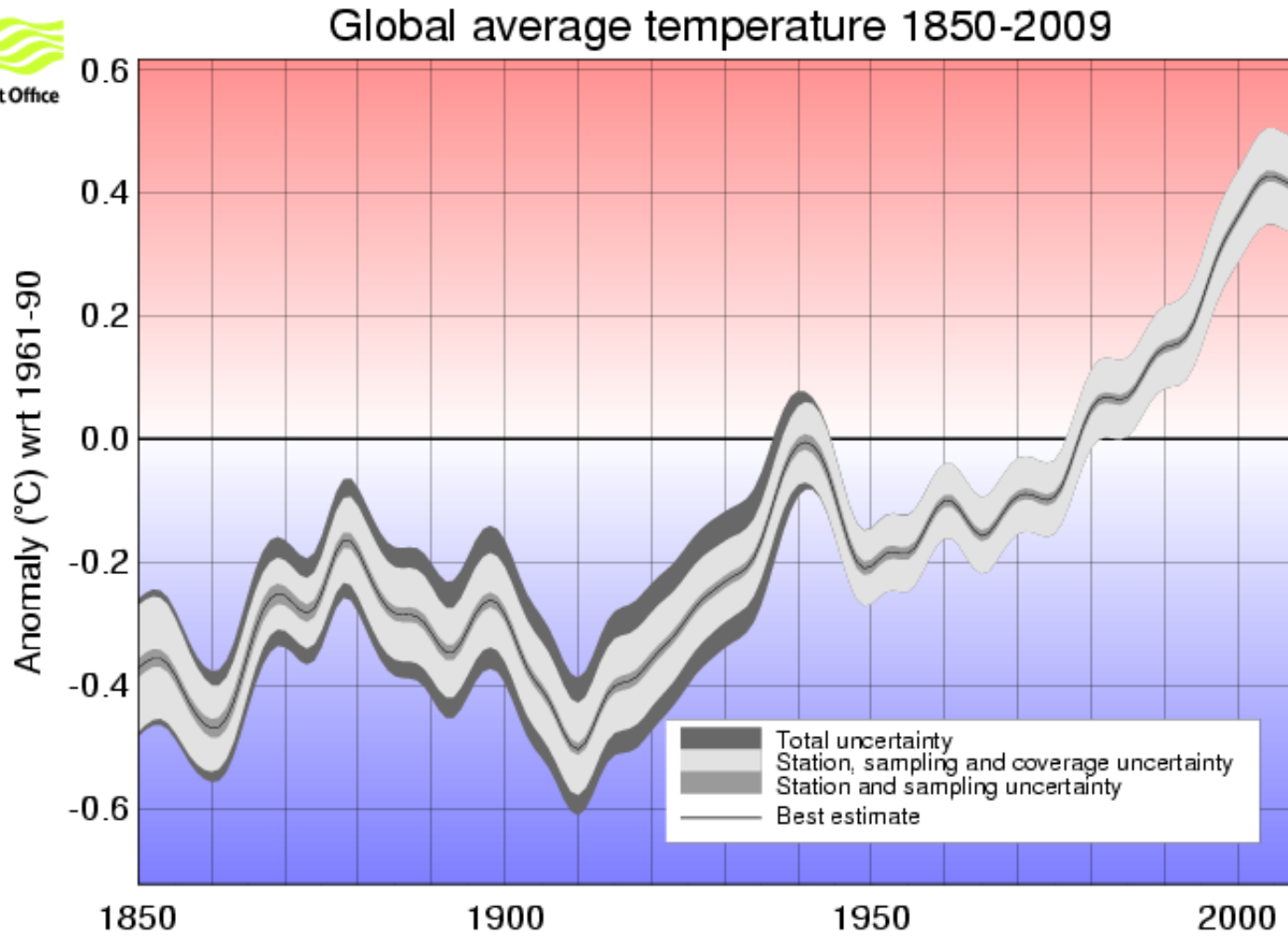
Torbay Carbon Conference 19th May 2010

Alex Webb
Manager, Climate SouthWest



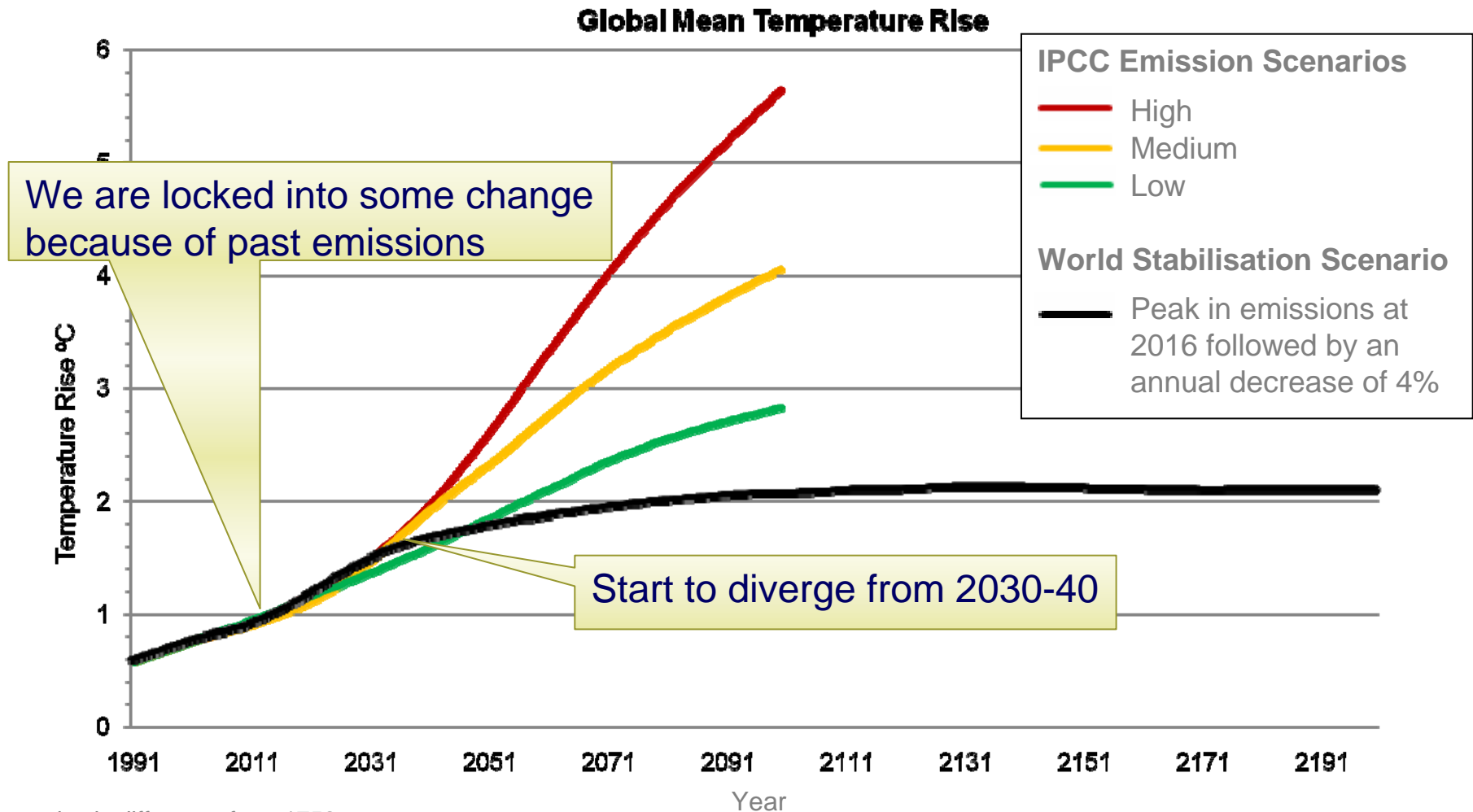


Global temperature increase





Some change is inevitable



Temp rise is difference from 1750

Regional Adaptation Response

Climate SouthWest focuses on climate change impacts and adaptation. Our mission is:

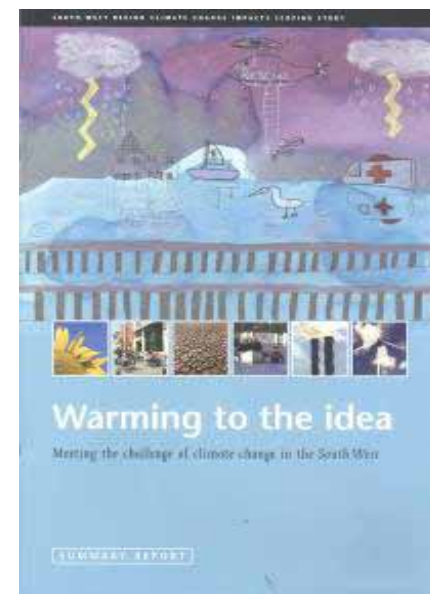
To help the South West Region of England to adapt sustainably to the impacts of climate change

Warming to the Idea – Scoping Report:

Describes climate change scenarios for the South West

Identifies likely impacts

Suggests actions needed to respond



Climate SouthWest Funders



National
Trust



SOUTH WEST
Regional Assembly



supports Climate SouthWest's Tourism Sector Group

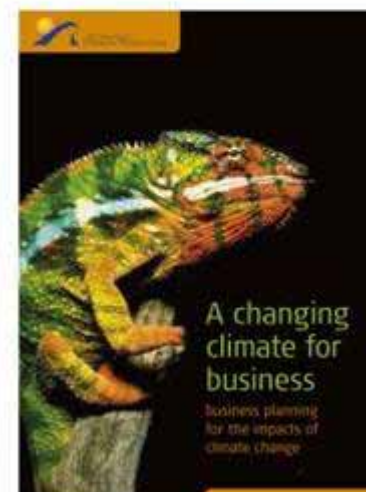
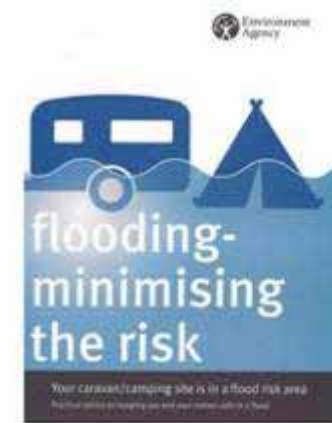
Climate South West has 2 South West Regional Improvement and Efficiency Programme funded projects



SOUTH WEST
REGIONAL IMPROVEMENT
& EFFICIENCY PARTNERSHIP

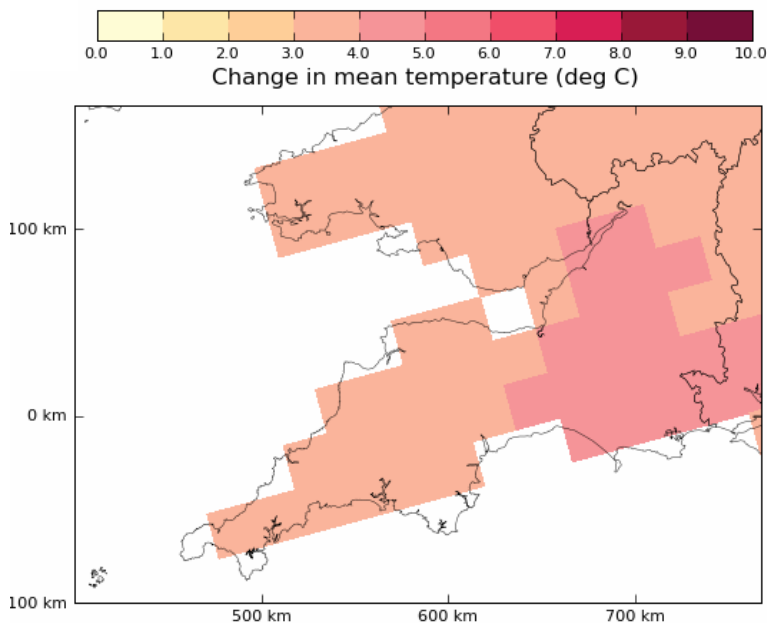
Tools to support adaptation

- Caravan and campsite flood risk management pack
- Business Areas Climate Impacts Assessment Tool
- 'Changing Climate Changing Business' DVD
- Online toolkit for tourism businesses
www.climateprepared.com
- Case Studies
www.oursouthwest.com/climate/casestudies





Increased summer temperatures



Map showing average summer temperature change, medium emissions scenario, 2080s

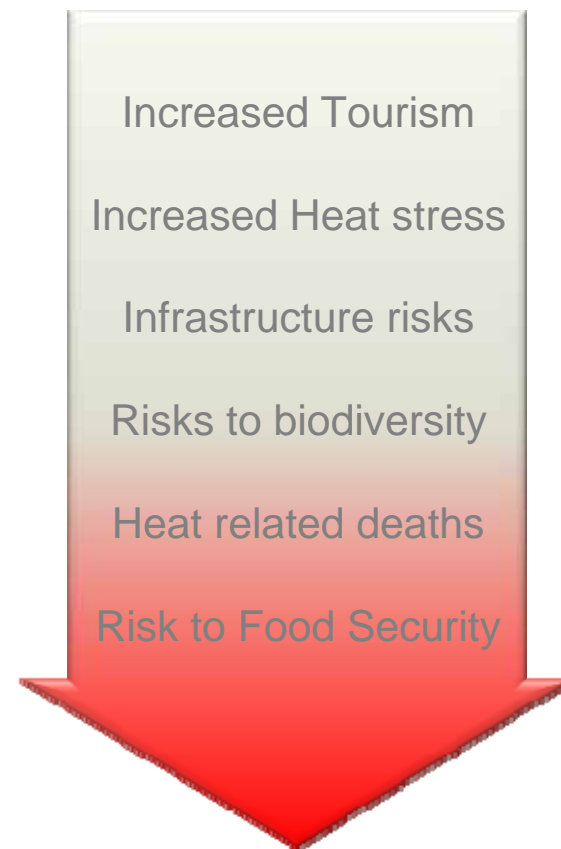
But the temperature on the hottest day of the year could increase by up to **10°C**

2020s
+ 1.6°C

2050s
+ 2.7°C

2080s
+ 3.9°C

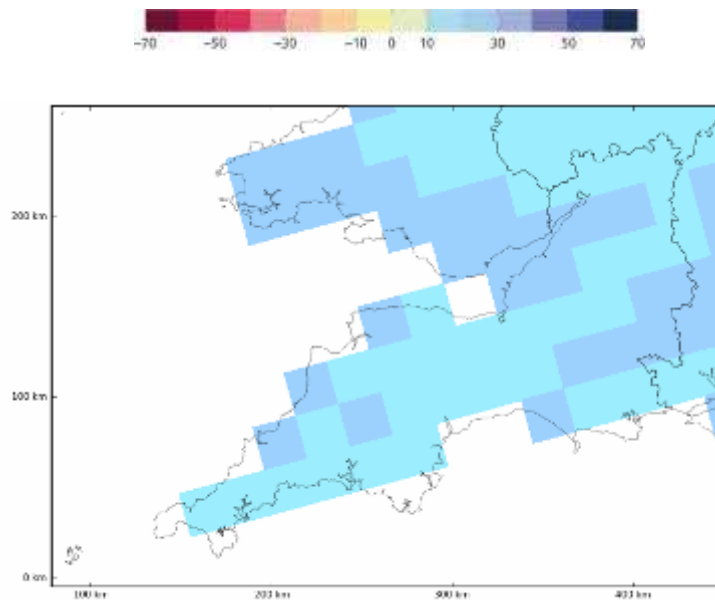
South-West England
central estimate
Medium emissions



The change for the 2080s is very unlikely to be less than 2.1°C or more than 6.4°C

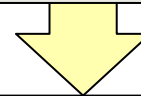


Increased winter precipitation

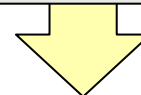


Map showing average winter precipitation change, medium emissions scenario, 2080s

2020s
+ 7%

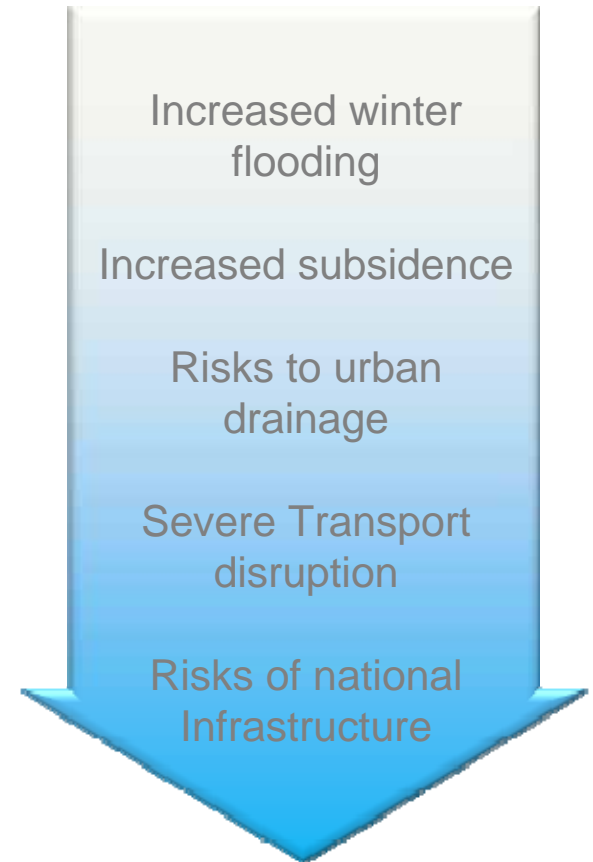


2050s
+ 17%



2080s
+23%

South West
central estimate
Medium Emissions



For the 2080s the change is very unlikely to be lower than +6% or higher than +54%

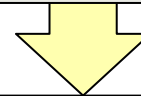


Decreased summer precipitation

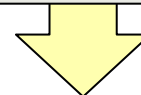


Map showing average summer precipitation change, medium emissions scenario, 2080s

2020s
- 8%

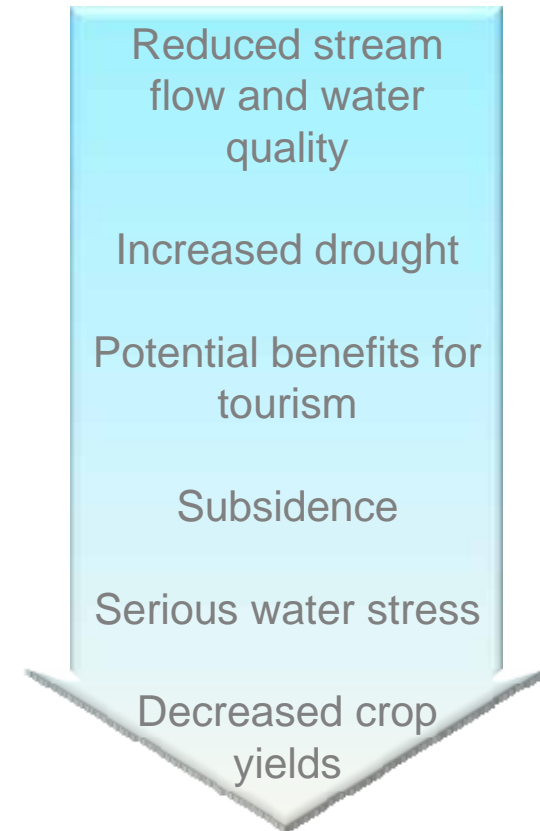


2050s
- 20%



2080s
- 24%

South West England
central estimate
Medium emissions

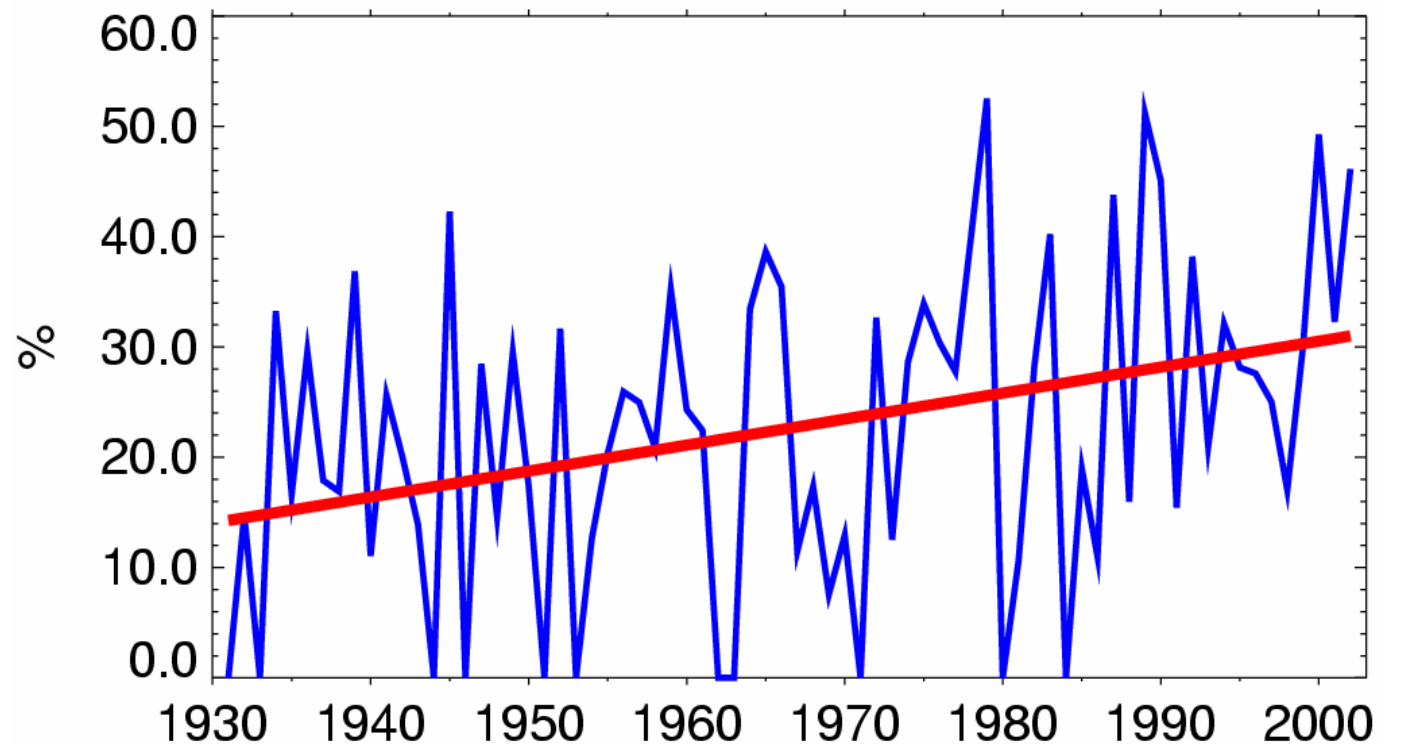


For the 2080s the change is very unlikely to be lower than -49% or higher than +6%



More frequent and intense severe weather events

Contribution to England & Wales winter precipitation from extreme 3-day events





Relative sea level rise

2050	
Western-super-Mare:	22cm
Newlyn:	25cm
Poole:	21cm

↓

2080	
Western-super-Mare:	37cm
Newlyn:	40cm
Poole:	37cm



central estimate
Medium emissions

Note. Global average sea level rise:
1961-2003 = 1.8mm/year;
1993-2003 = 3.1mm/year (IPCC, 2007)



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Fierce Storms Flood Homes and Business

27th October 2004

Weather detail:

- 4.9m High Tide with 1 metre surge.
- Force 7-8 winds
- Torrential rain

Consequences:

- Property flooded
- Paignton-Newton Abbott Railway line closed
- Bus services cancelled

Costs:

- Costs to Torbay estimated: £450,000
- Cost to Torbay Council: £25,241





Torrential Rain and Widespread Flooding

20th August 2007

Weather detail:

- 50mm rain in 5 hours

Consequences:

- 17 shops, 16 properties and Torquay Town Hall flooded
- Roads and paved ways lifted
- All Torbay beaches closed

Costs:

- £1million loss estimated
- Torbay Council: £20,000 clean up







Mini Tornado Leaves Trail of Damage

15th October 2002

Weather detail:

- 55-70mph winds
- 26mm rain

Consequences:

- Roof torn off church, shop windows smashed
- Road closures with debris
- Street lamps uprooted
- Several trees felled

Costs:

- £5,963.28 cost to Torbay Council



The weather caused damage in Torquay
Picture courtesy of John Maltby



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Opportunities for Torbay

Leading by example

Partnership working

Opportunities to enhance reputation

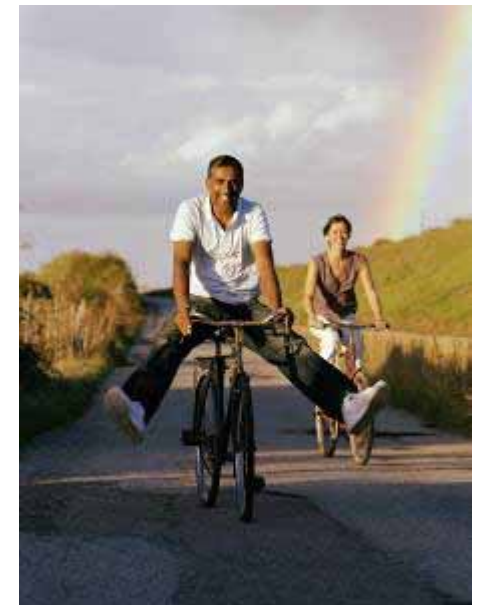


Business opportunities

Recreational and leisure opportunities

Tourism in 'off peak' periods

Improved health – outdoor lifestyles

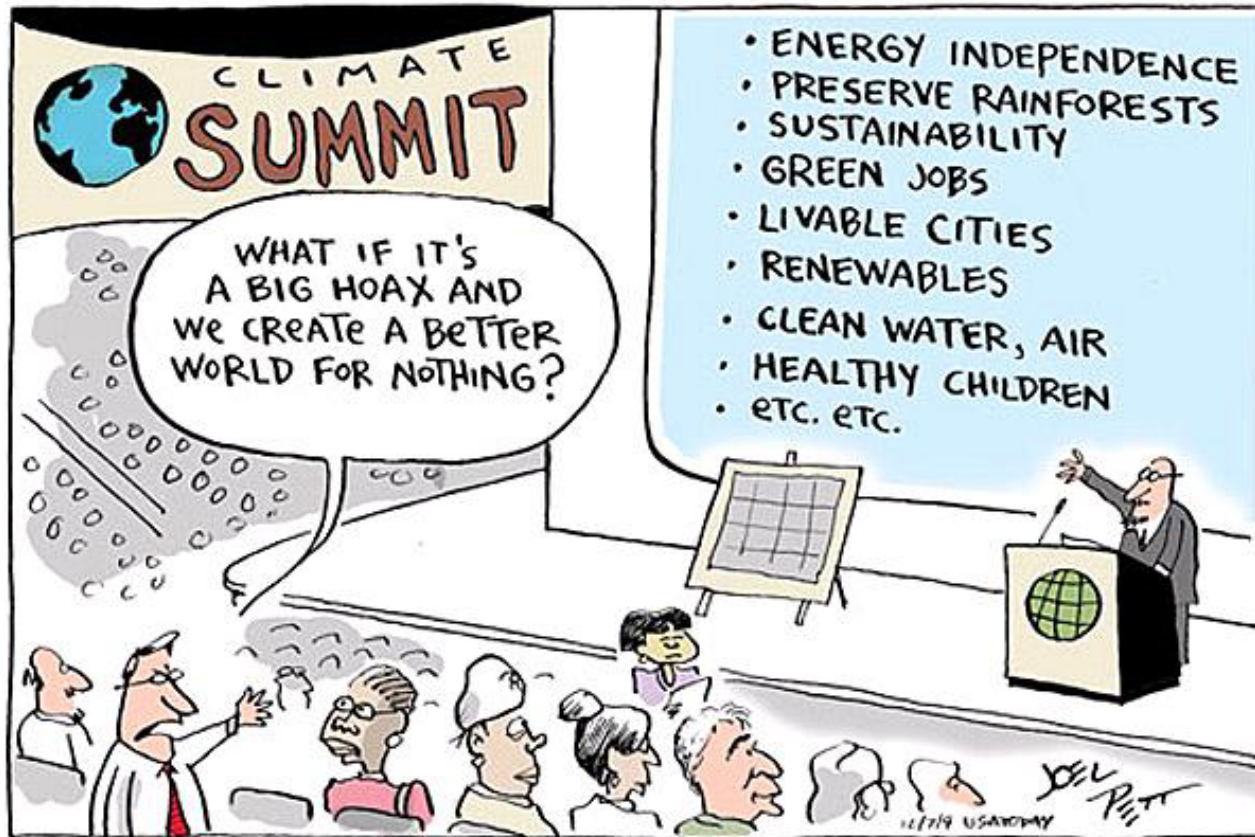




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Action in Torbay

- Climate Change Strategy for Torbay
- Adaptation and Mitigation
- Local Climate Impacts Profile
- Engaging with you - the Torbay Strategic Partnership!



Thank you

www.oursouthwest.com/climate