

Oxford and Flooding

Managing climate risk

An increasingly important role for
councils



Councillor Van Coulter
Oxford City Council

Chair,
Association for Public Service Excellence,
Environment and Sustainability Forum



My brief

- How did Oxford minimise economic losses during this winter's floods?
- How do we tackle housing need in a flood-prone area?
- Challenges, opportunities and next steps

About Oxford

- A city since 1962 – but still a really small city
- Population 151,900 (2011 census)
- Includes about 42,000 HE students
- 4,000 employers, providing 109,000 jobs
- One third of all jobs in Oxfordshire
- 49% of all jobs in the public sector
- 9.5 million visitors each year
- City provides £4.7 billion GVA to the UK economy

Oxford – a recent history of flooding



July, 2007

“Unprecedented floods create mayhem in Oxford”



November 2012,

“Colleges submerged as flooding hits Oxford”

January 2014 – “Economic damage caused by floods in Oxford reaches £50m per week”



Frequency of flooding

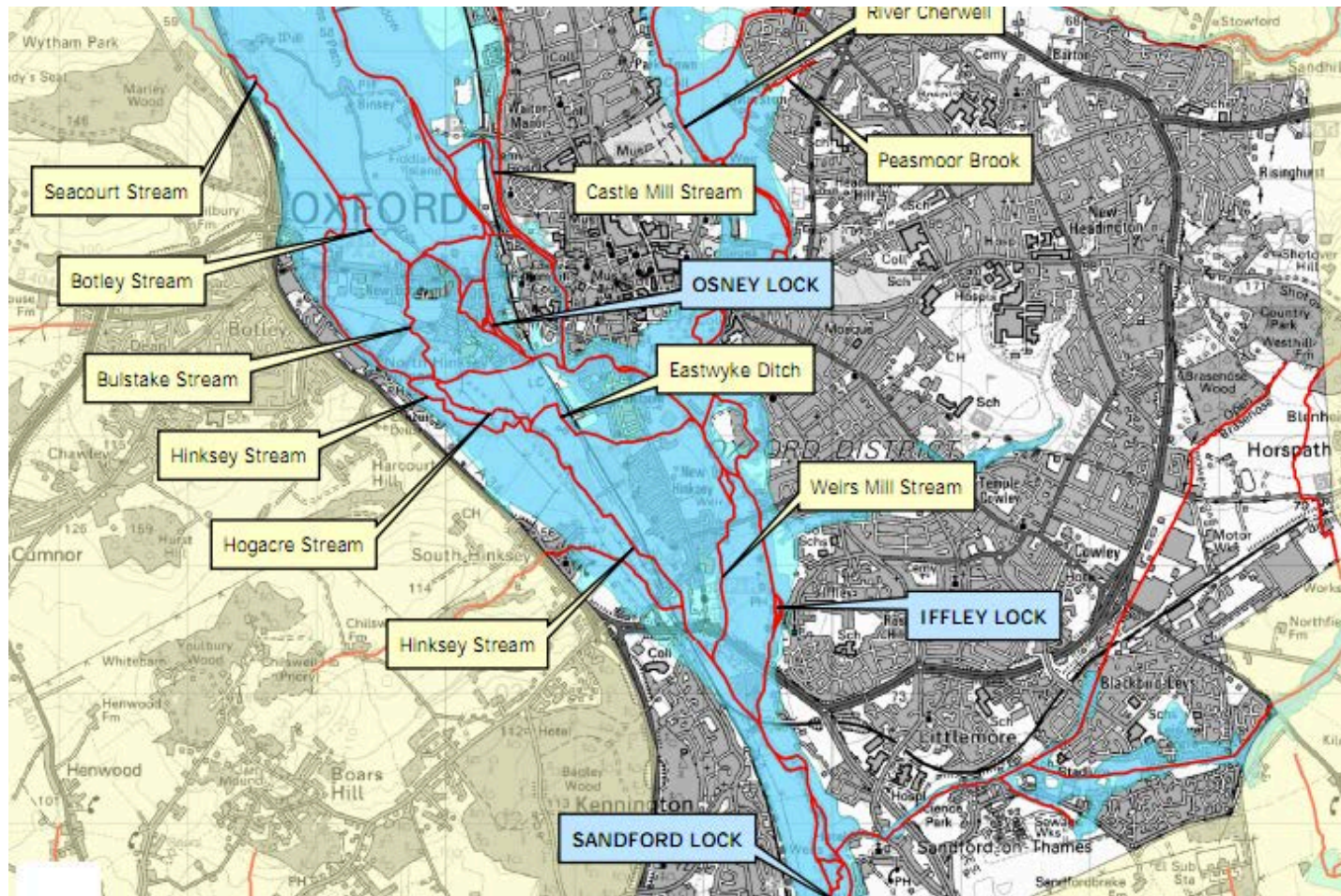
“In my 28 years service I’ve experienced nine wide scale floods in Oxford – but five of those have been since 2007”

David Etheridge, Chief Fire Officer

Seven rivers head for a geologic gap of
320 metres



Relief Channel funded



Importance of collaboration

Flood strategy should cover the entire river basin area and promote coordinated development and management of actions regarding water, land and related resources.

There must shift from defensive action against hazards – towards management of the risk and living with floods.

Flood prevention should not be limited to flood events which occur often.



New rainfall record for Oxford

- 11 January 2014 was the only rain-free day in Oxford during the whole of that month.
- 1 cm of rain falling in the Upper Thames catchment results in 250 billion litres of water, much of which flows through or round Oxford – heading for a river valley only 320 metres wide.
- Weather observers at Oxford University confirmed that the rain which fell on the afternoon of 31 January 2014 made the month the wettest since their records began almost 250 years ago.
- The downpour meant that the total recorded at the University's Radcliffe Meteorological Station overtook the previous high of 138.7mm, a record which has stood since January 1852.

Oxfordshire Flood Forum

- As lead authority, Oxfordshire County Council convened an Elected Members' Forum for councillors throughout Oxfordshire.
- 150 Councillors attended.
- The focus was for taking forward proposals for a relief channel.

- <https://www.oxfordshire.gov.uk/cms/news/2014/mar/oxfordshire-flooding-summit-commits-taking-flood-channel-project-forward>

UK cost of recent flooding

From 23 December to 28 February, a series of storms and a period of wet weather caused damage within many communities in Britain.

As at 31 March, the Association for British Insurers outlined the costs of claims made for this period as:

- £451 million for the 18,700 flood claims, and
- £640 million for the 448,300 storm claims

Average cost per claim:

- £22,193 for each flood claim
- £1,428 for each storm claim



Economic Impact for Oxford

- Six out of ten of Oxford's businesses reported that they faced an impact from flooding in 2014.
- 80% of those businesses reported that travel disruption impacted on either deliveries, lack of customers or ability to open.
- One in three reported lost of sales.
- One in ten reported premises damage.

Further costs

Following the summer floods of 2007, like other flood prone towns and cities, Oxford invested in temporary flood management measures.

A big effort, with staff from Oxford's Direct Works supplemented by the Environment Agency, Fire Authorities and others.

The cost of implementing such operations is not reflected in government compensation.

Perversely, if properties are left to flood, financial help is provided – if properties are proactively safeguarded, the local council and other agencies pick up significant costs.



Estimated economic losses

- It was initially estimated that flooding in Oxford during January would cost £40m to the local economy.
- Two of the four main routes to the city centre, Botley Road and Abingdon Road, were closed for a number of days.
- February's flooding would have less economic impact than January's crisis because of lessons learnt.
- Botley Road remained open but estimates put the cost at between £5m and £7m.



Collaborating to make a case

**Cross-party and cross district agreement
for a flood relief channel**



**“Flooding costs Oxfordshire’s economy
around £50million a week each time it
happens, and we want to ensure that
everyone with an interest in the county
works together to tackle this problem.”**

**Rodney Rose
Deputy Leader, Oxfordshire County
Council**



Relief channel funded



▲ Tongue twister

BANGING THE DRUM: Members of Uniao Da Mocidade London Samba pose for the camera during the parade for yesterday's Cowley Road Carnival. This year tens of thousands of people enjoyed the festivities in the sunshine, with hundreds joining in the parade, including primary school children, brass band players, religious and political groups **FULL STORY: SEE PAGES 4-5** Picture: OX69413 Jon Lewis

£26M: New funding means work could start next year

FLOOD RELIEF DEAL IS DONE

£26M funding boost means new relief channel will now be built to prevent devastating floods in Oxford. The new channel will be built between the A40 and Botley roads were flooded in January following flooding in the city millpounds.

Andy French & Damian Famtato

affrench@oxfordmail.co.uk

Now Oxfordshire's Local Enterprise Partnership has been awarded

£26m for the £123m flood channel, as part of a £108.6m package of Growth Deal measures for the county, announced today.

County council deputy leader Rodney Rose said: "I am pleased the Government has committed £26m towards the development of the flood

management project. I am confident this will enable us to move forward with the first phase."

Civic leaders say the investment could lead to Oxfordshire becoming a "global leader" in science and technology and will create thousands of

▲ Continued on Page 2

What could have been better



Sandbags distributed to usual collection points and to known hotspots



Transport was severely disrupted



Few homes were flooded with river water, but certainly some had sewage inside the houses due to the sewerage system being overwhelmed.

Foul water in gardens



Keeping businesses going

Hinksey section of the Didcot to Oxford line lies in the flood plain on the southern border of Oxford.

The bridge over the rail track was elevated in 2011 to allow the track to be raised over the flood plain.

However, this was never done.

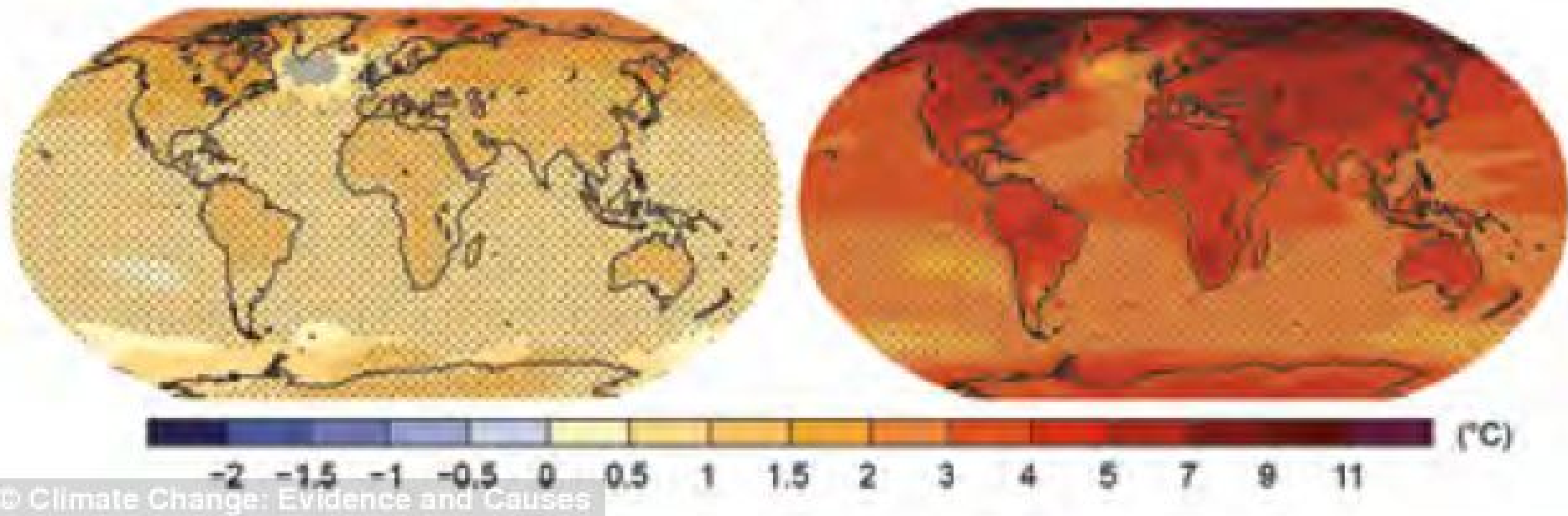
It is now promised.

It is also a freight route for containers travelling by train from Southampton to the north, and for BMW Mini, which operates out of Cowley in Oxford.



Dealing with symptoms?

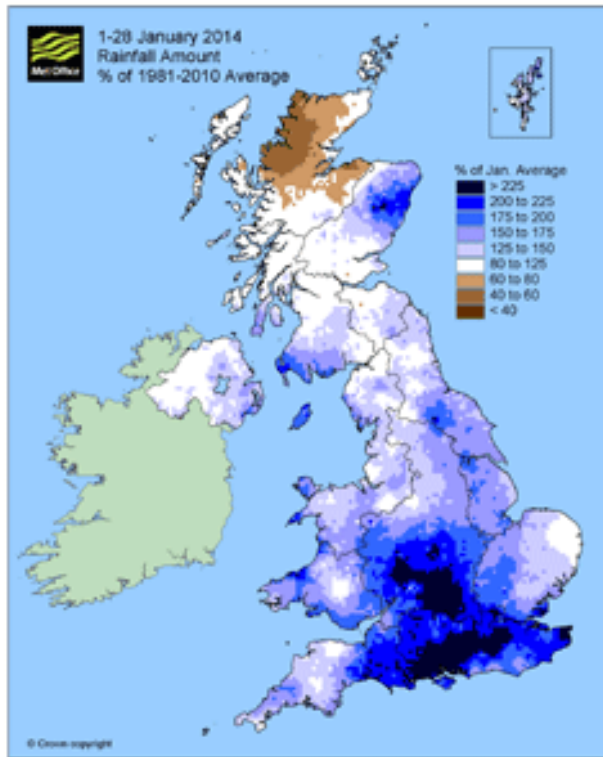
Change in average surface temperature (1986–2005 to 2081–2100)



Climate change is man-made and is worsening

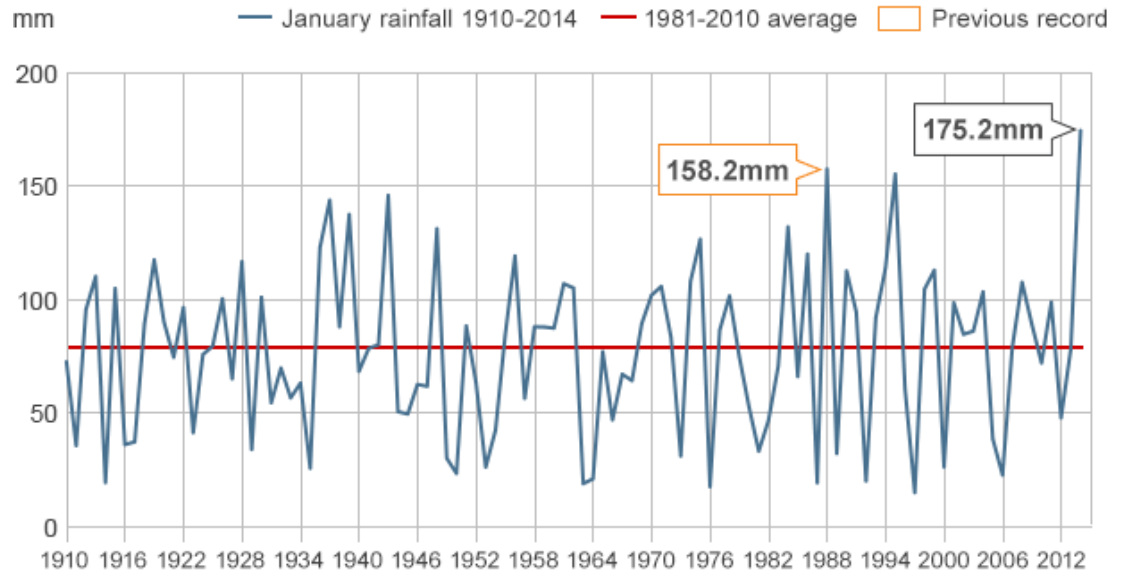
December 2013 – January 2014

Warmer air holds more moisture:



South's wettest January since records began

Rainfall in southeast and central southern England, 1910-2014*



Source: Met Office * Data from 1-28 January 2014

Looking forward

Catastrophic climate change can be averted without sacrificing living standards according to a UN report, which concludes that the transformation required to a world of clean energy is eminently affordable.

Delaying real decisions

“Once again, our leaders downgraded climate and energy discussions to the bottom of the agenda. It seems they are incapable of addressing both immediate and longer term issues . . . This approach may lead us to find soon that “we’ll do it later” has become “we are too late”.

Tony Long, Director of WWF European Policy

21 March 2014

BBC News – 3 January 2014

The Environment Agency has confirmed that jobs in flood protection in England will be cut as part of a major restructuring of the organisation.

The Environment Agency is to reduce staff numbers from 11,250 to 9,700 by October 2014. Of the jobs to be cut, 550 relate to flood prevention.

Do we need to act?

Flood damage cost to rise fivefold across Europe

“Increasingly intense downpours driven by climate change will see flood damages rise from €4.5bn to €23bn a year by 2050”

Nature Climate Change 4,264–268 (2014)

Can we talk about Climate Change now?



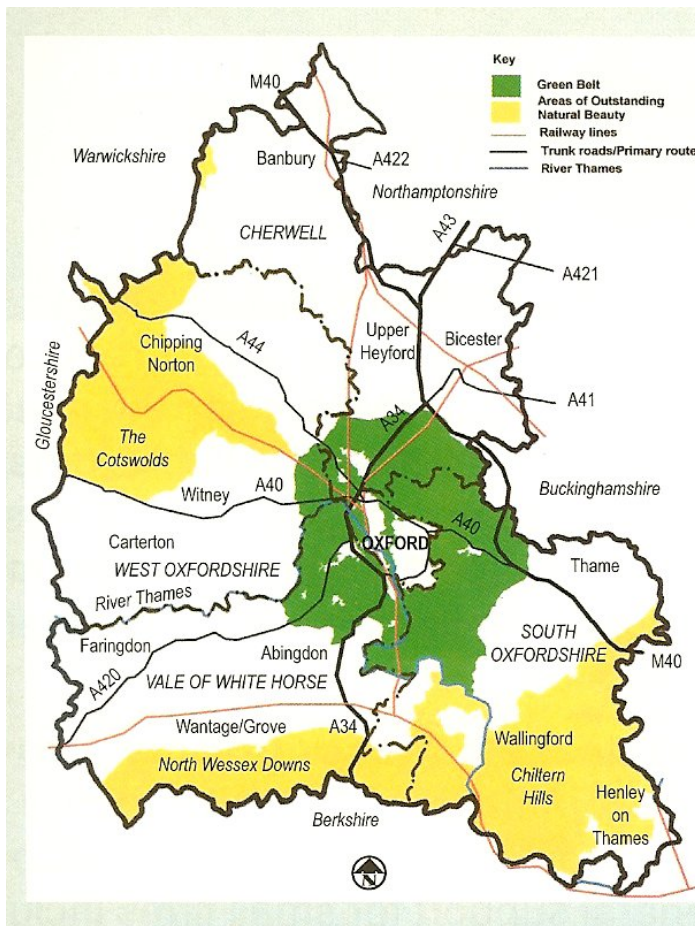
Oxford and Housing Need

Oxford and its Housing need

- Currently, Oxford has 55,400 homes.
- Housing costs mean more people rent than buy.
- The strategic housing assessment suggests Oxford needs between 1,400 and 1,600 new homes each year – a headline of 28,000 new homes by 2030.

Between a flood plain and a green belt

**Oxford is constrained by a flood plain:
about 48% of Oxford is undeveloped.**



Confined by a green belt, the majority of which is also covered by intrinsic constraints such as flood plain and nature conservation designations, means – Oxford is in a hard place.

Housing market

- The city only has space for 9,000 more homes.
- They are all due to be completed by the end of this decade.
- This includes 1,000 social tenancies to be added to the City Council's housing stock.

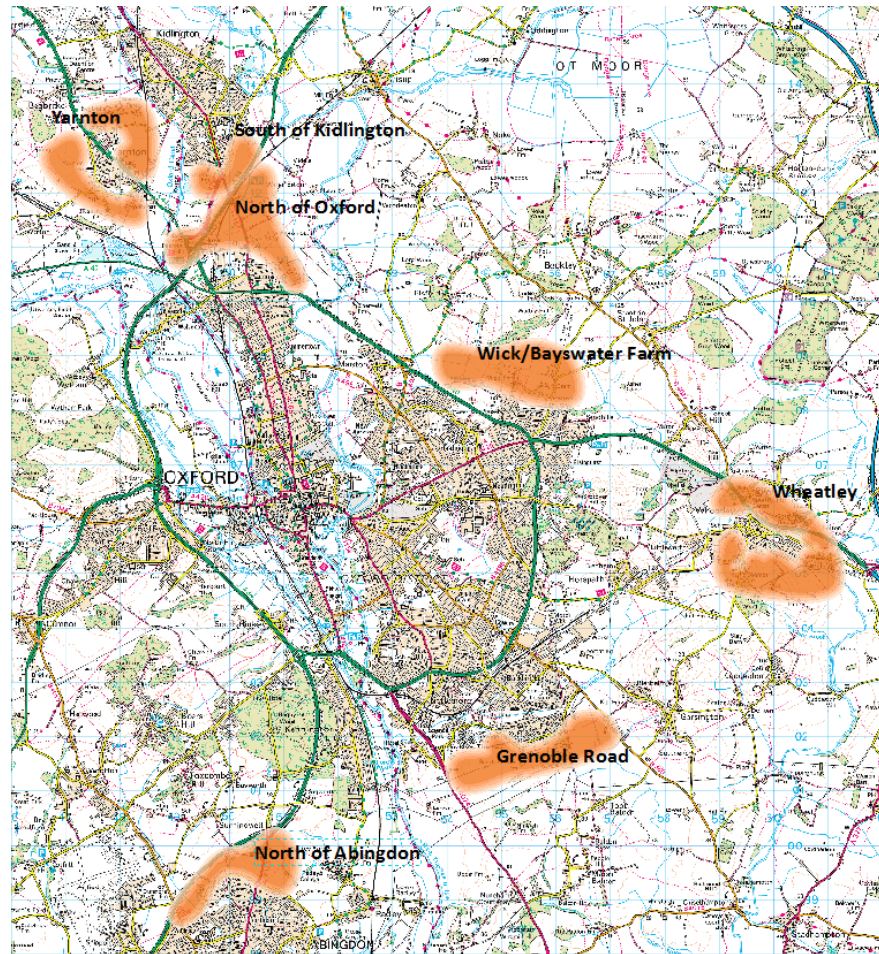
Dichotomy

- PWC and Demos say Oxford is the best place for economic growth in England.
- Centre for Cities say Oxford is the least affordable district in the UK for housing.
- Average mortgage requires borrowing of 11.25 times average annual salary.
- Average private sector rent requires 48% of gross average wage.

Conflicting policy

- Oxford has an approved “Local Plan” in compliance with the National Planning Policy Framework.
- Other Oxfordshire districts lack a plan that complies with the NPPF.
- Oxford argues for developments contiguous with the urban area.
- Other districts seek to extend market towns.

Informal assessment for meeting housing need



2015?

- Duty to co-operate does not mean a duty to agree . . .

Any questions?

Thank you

