

Oxfordshire Environment Partnership 28 June 2013

Bicester Eco town:
Sharing Best Practice
Andrew Bowe, Implementation Officer
Eco Bicester Project Team

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Introduction:

- Background to Eco towns
- The Vision and Eco Bicester Concept
- Examples of Best Practice
- Innovation
- Retrofitting
- Community engagement

• The Future



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Bicester: Best Practice



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The Eco Town story

- Zero Carbon definition for eco towns
- Government objectives: building more homes and tackling the threat of climate change
- Reduce CO2 emissions by 80% of 1990 levels by 2050



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Eco Bicester One Shared Vision

*To create a vibrant
Bicester where people
choose to live, work and
spend leisure time in
sustainable ways*



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Working with partners



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North West Bicester eco town



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North West Bicester eco town

- Zero carbon
- Code for Sustainable Homes level 6
- School
- Local centre
- Energy Centre - District Heating Scheme
- Eco Business Centre



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Retrofitting

- Demonstration Projects
- Insulation scheme
- Local Energy Assessment Fund
- Funding
- Green Deal
 - Bicester Green Deal Pioneer Places Fund
 - Green Deal Together



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Community Engagement



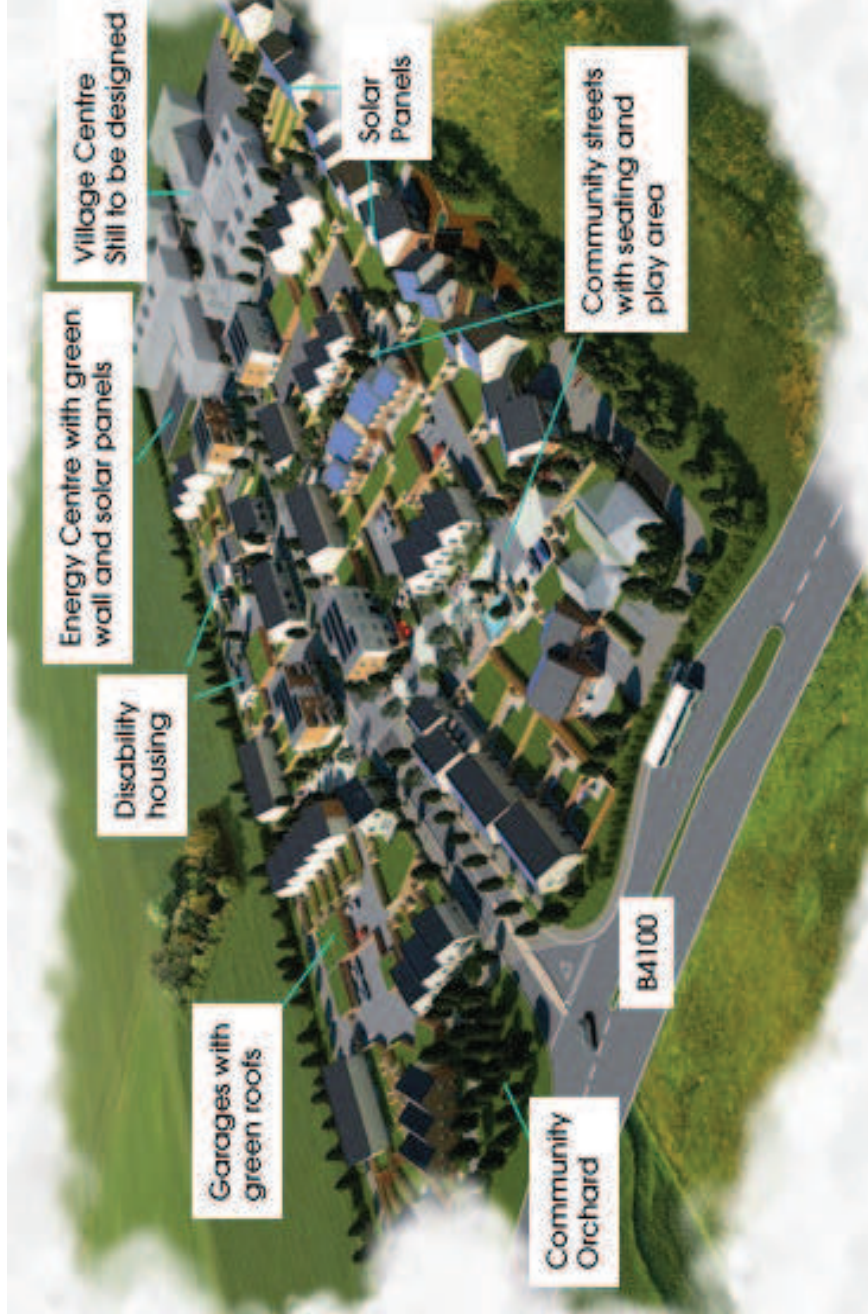
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Masterplanning



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The Future



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Oxfordshire Local Climate Impact Profiles

- 1996 - 2009
- 350 reported incidents
- cost c £21 million



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OCC Adaptation action plan

- Adaptation action plan – focus on resilience
- Contract requirements
- Risk based approach



Resilience review

- Emergency response
- Key risks

Next steps

- Focus on monitoring - SWIMS system
- Community resilience – EPU - CAGs



Severe Weather Monitoring System



SWIMS
Severe Weather Impacts Monitoring System

You are here: SWIMS > Search Event > Maintain Event > Maintain Impact > Maintain Basic Impact Details

Navigation

- Home
- Log Event
- Search Event
- Reports
- Logout

Admin

- User
- Organisation
- Admin Centre
- Locality
- Media Source
- Impact Category
- Lookup
- Contact Details
- Switch Administration Centre

Languages Listen to page Resize text

1. Basic Details **2. Cost Details** **3. Reputation Details** **4. Locality Details** **5. Response Details**

Maintain Basic Impact Details

* This symbol means that you must enter this information

Please provide Basic Impact Details

Duration Duration Units Has flooding occurred?

Please enter the type of flooding, if flooding has occurred

Flooding Type

To add a new impact category to the list below, click the 'Add' button. Please ensure that the record does not already exist before adding.

Use the 'Category Description' link in the results grid to display further impact response details.

3 impact categories found

Category Description ▲
Crime
Property/Land
Schools

Contacts

SWIMS (Kent)
 Climate Change Team
 Invicta House
 County Hall
 Maidstone
 Kent
 ME14 1XX
 ☎ 01622 694236
 ✉ SWIMS@kent.gov.uk

UK and SE Risk Assessment 2012 (Defra)



- Flooding - up to 25% of properties in SE at risk of flooding
- Milder winters mean fewer cold related deaths
- Overheating – urban heat island effect in Oxford



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UK Climate Projections (UKCP09)

- **More heavy rainfall**
There could be more days with heavy rainfall of 25mm or more - particularly in winter
- **Winters are likely to be milder and wetter**
- **Summers are likely to be hotter and drier**
 - higher maximum temperatures up to 26 °C in 2080
 - more frequent heat waves

Heavy rainfall



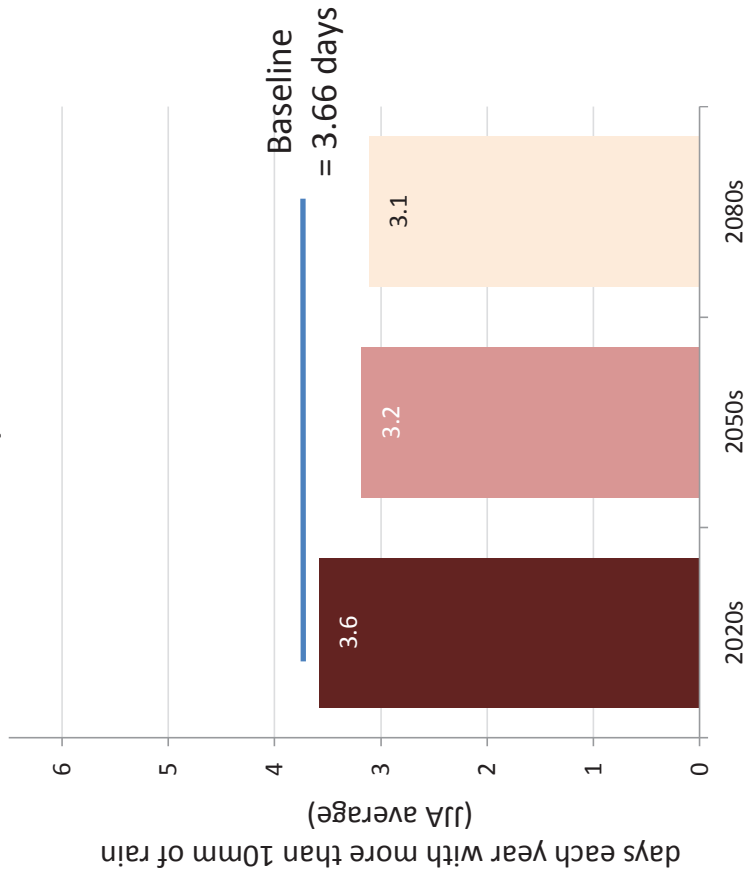


Oxfordshire in a changing climate

Rainfall patterns are likely to change

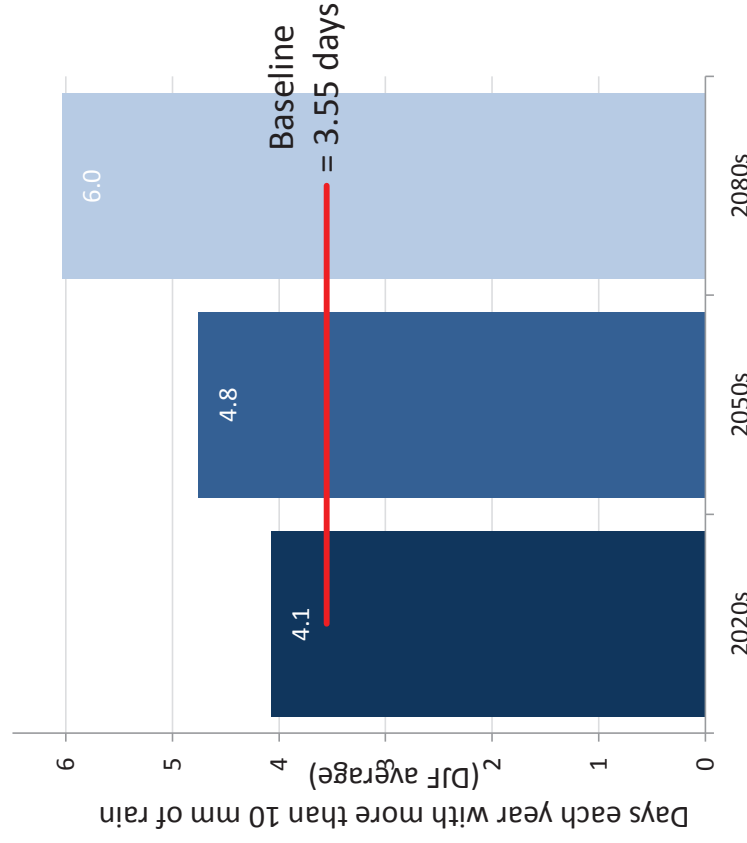
Drier summers

We could see **fewer wet summer days** - down from 3.6 days each summer during the baseline to 3.1 days in the 2080s

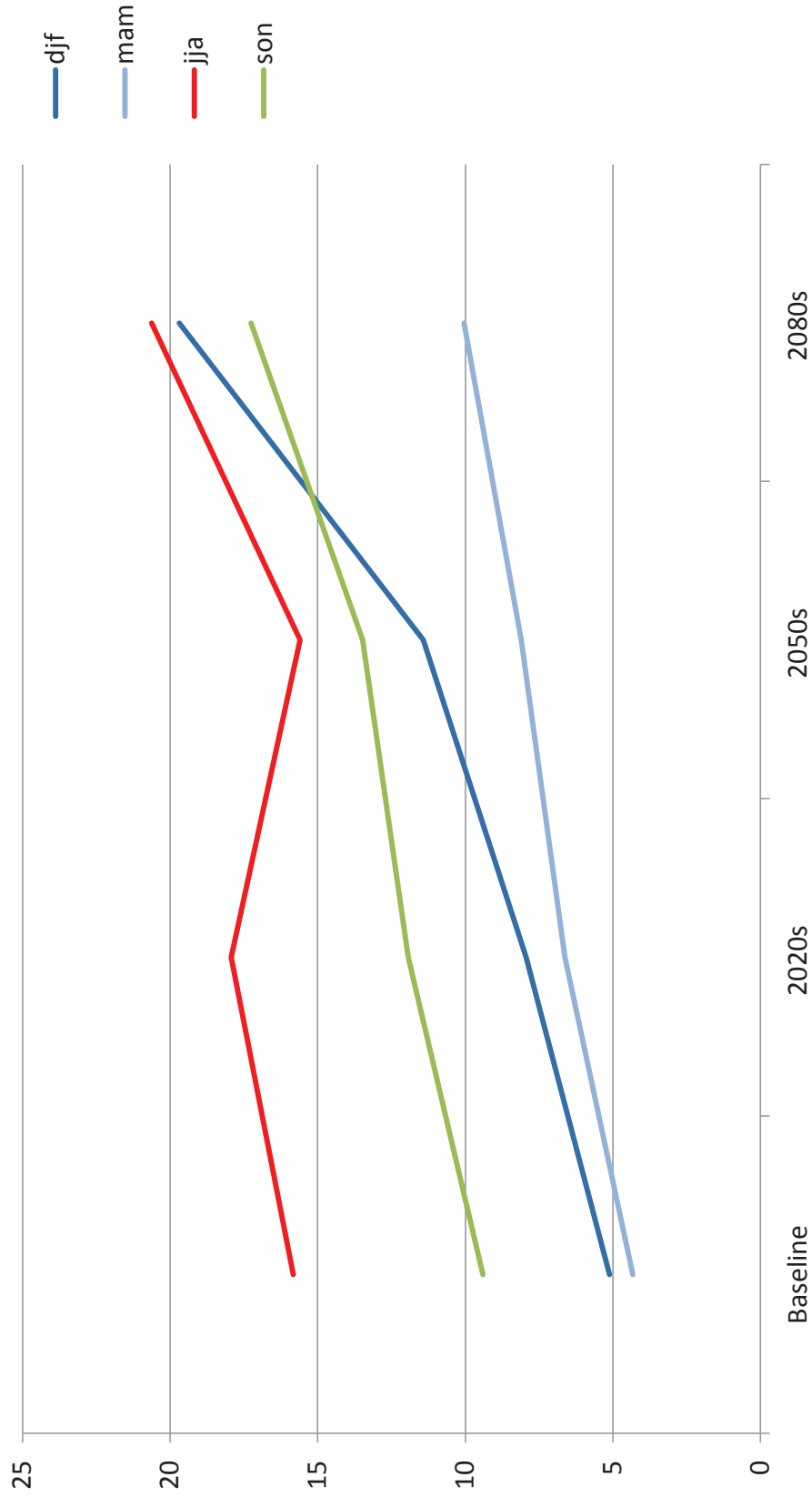


Wetter winters

There could be **more wet winter days** - up from 3.5 days each winter to 6.0 days in the 2080s



More days with heavy rainfall (more than 25mm)





Oxfordshire in a changing climate

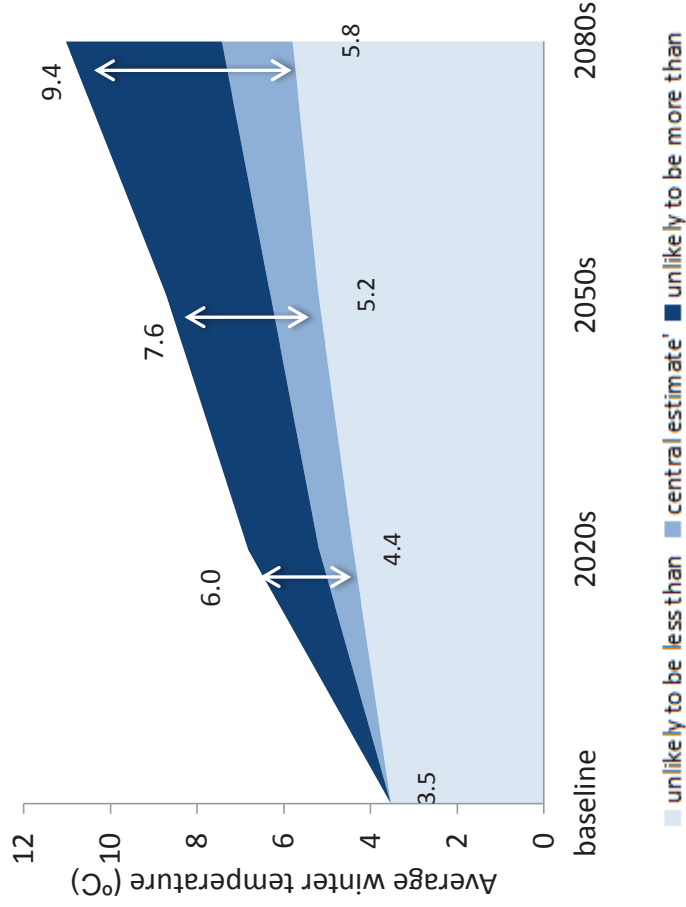
Milder winters

Average winter temperatures could increase by up to six degrees

During the thirty year period from 1961 to 1990 the average winter temperature was **3.5 °C** . This is the baseline figure against which future change is compared.

By the 2020s the average temperature will be between **4.4 and 6.0 °C**

By the 2080s this increases to between **5.8 to 9.4 °C**



*





Oxfordshire in a changing climate

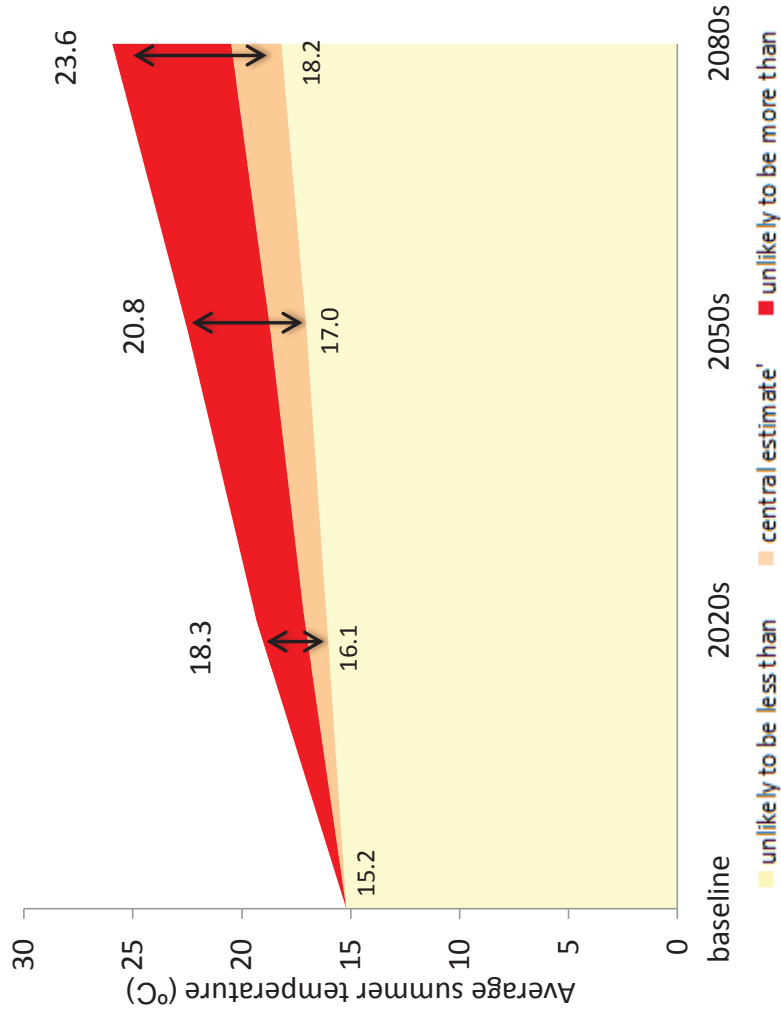
Hotter summers

Average temperatures up to eight degrees higher by 2080

During the thirty year period from 1961 to 1990 the average summer temperature was **15.2 degrees**. This is the baseline figure against which future change is compared.

By the 2050s, the average temperature will be between **17.0 and 20.8 degrees***

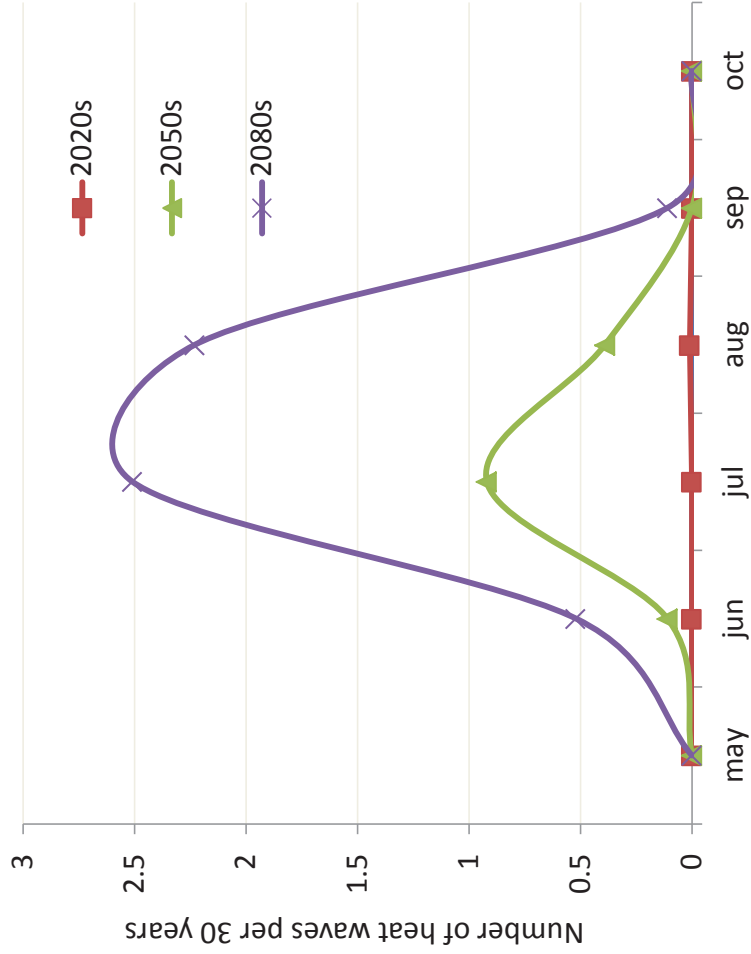
By the 2080s this increases to between **18.2 and 23.6 degrees***



Oxfordshire in a changing climate

Hotter summers

Heat waves could be more frequent



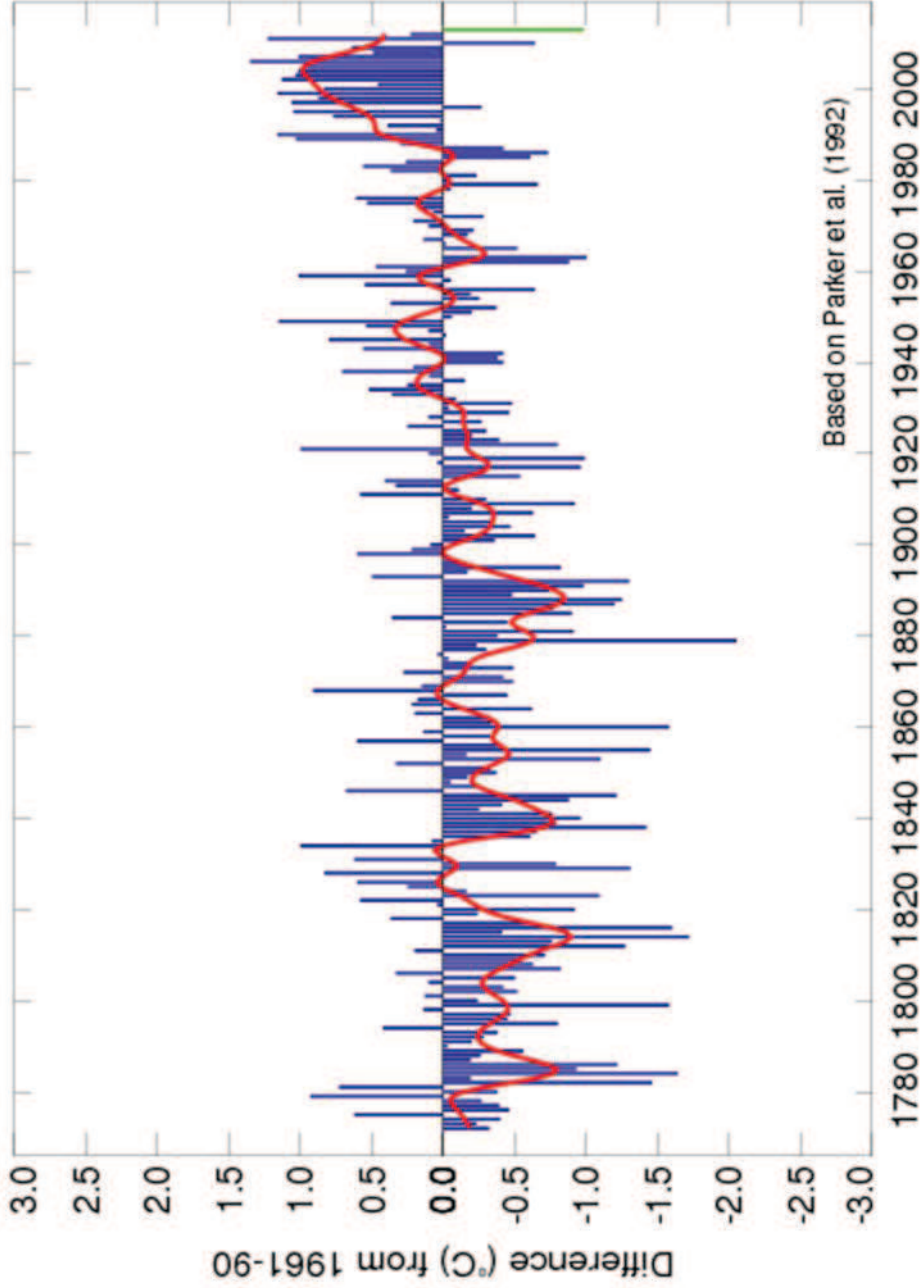
In the **2020s**, heat waves will happen around **once in every 15 years** (2.2 heat waves in every 30 years)

By the **2050s** there could be **more than one heat wave in every three years** (12.7 heat waves in every 30 years)

By the **2080s** there could be **more than two heat waves in every three years** (23.8 heat waves in every 30 years)

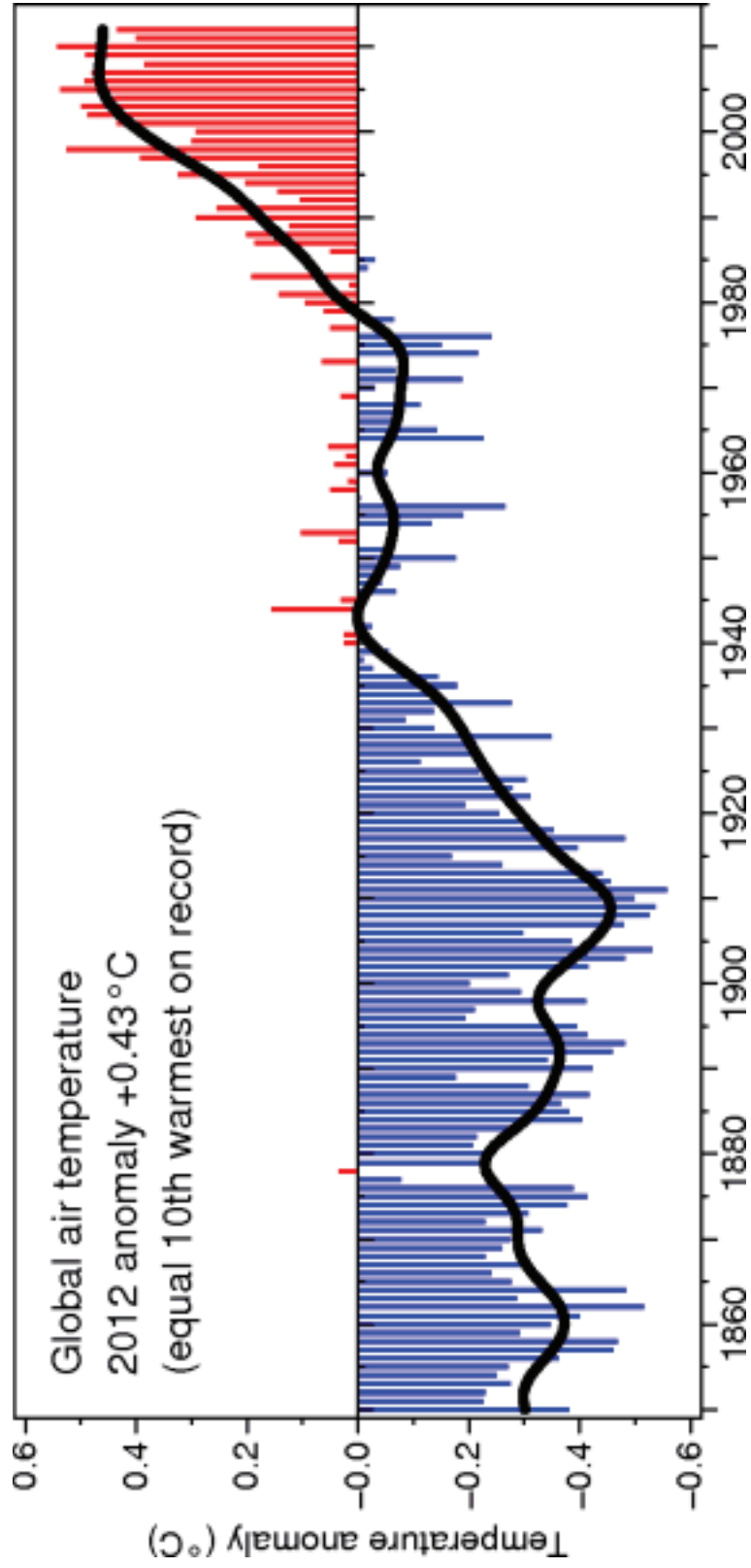


Mean Central England Temperature Annual anomalies, 1772 to 9th Jun 2013



Global temperature record

Phil Jones



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Find out more at

<http://ukclimateprojections.defra.gov.uk/>

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Oxfordshire County Council*

