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National Fire
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NFCC Climate Change Portfolio: What do services need to do?

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The challenges:

What is it that we're facing?

What is it that we're trying to do?
Mitigation = reducing the magnitude by reducing emissions (net zero)
Adaptation =

How do the above activities relate to the core fire and rescue activities?

What is the 'swim lane' for fire and rescue services in the wider context of public service responsibilities of a changing climate?
Mission creep

The NFCC and services' role in climate change needs to be defined



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The reality...





What are the common projections?

**Higher max temperatures
(heatwave)**

**Longer warmer spells
(drought)**

**Milder winter
temperatures (increase in
disease harbouring)**

**More rainfall on wettest
days (flooding)**

**More complex wind
events
(clusters/stronger/longer
storms)**

**Sea levels rising (more in
South than North)**

- Belfast circa 40 cms, Cardiff circa 60 cms, Edinburgh circa 40 cms, London circa 60 cms



What does that look like in the UK?

7x more likely of extreme rainfall for 10 consecutive days in Jan w/Westerlys (Westerly brings an increase in precipitation)

30x more likely to have heatwaves

100x more likely to see weather as hot as recently seen in the Netherlands and France

30x less likely of extreme cold in spring

50% less likely to see December temps of -0.7°C

All this is baked in

Climate Modelling Variation

Differences = modelling techniques and, also how much we managed to prevent (on top of the baked in changes) through net zero actions.

We are currently at a juncture point, we will soon split, and the projections will start to coalesce on a specific pathway.

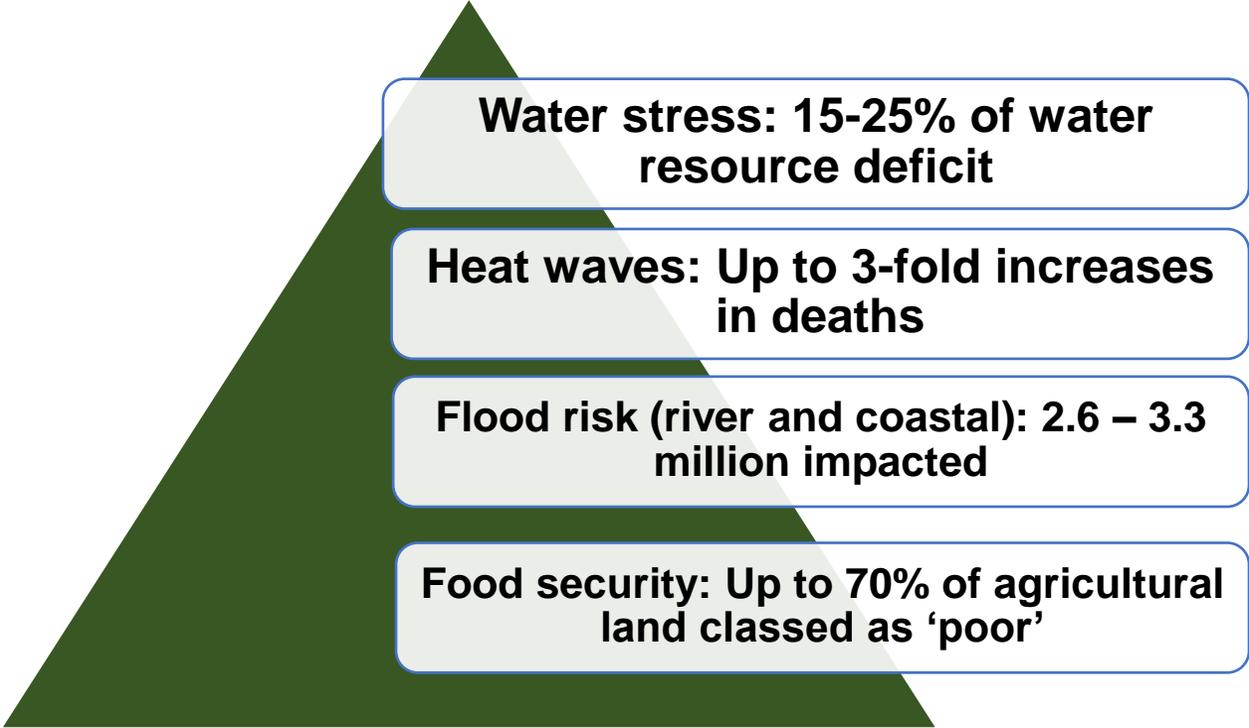
IPCC broadly suggests five pathways:

- 1.9 degree warming
- 2.6 degree warming
- 4.5 degree warming
- 7.0 degree warming
- 8.5 degree warming

These are scaled on:

- Near term 2021 – 2040
- Mid-term 2041 – 2060
- Long-term 2081 - 2100

So, what do we plan for in the UK?



Water stress: 15-25% of water resource deficit

Heat waves: Up to 3-fold increases in deaths

Flood risk (river and coastal): 2.6 – 3.3 million impacted

Food security: Up to 70% of agricultural land classed as 'poor'

N.B.

It is not just about general hotter drier summers and wetter warmer winters – the key challenge is that within the context above, the intensity and uncertainty of weather events in the UK will increase.

E.g., more rain in the winter, but summer rain will be more intense in longer drier spells = flash flooding.

So, what does this mean for our public services?

- Long-term planning to reduce effects by reducing vulnerability
- To reduce the impacts on our communities, fire and rescue services should ensure adaptation plans
- include mitigating impacts on the social, psychological, and physical health of communities, and include resulting societal changes and strain on resilience structures in planning.

Impacts cluster into areas for consideration:

- Community harm
- Impacts on psychological health
- Impacts on physical health
- Need for communication
- Need for a whole of society approach
- Potential to exacerbate the structural inequality/inequity
- Strain on resilience structures

Local Services

The frequency of the climate changes impact on extreme weather is not uniform across the UK, high fire danger levels in spring and summer are most frequent over the eastern, central and southern parts of England. High winds are elevated in Scotland, Wales and coastal areas in north an England.

Community risk planning is the current model that the FRS utilise in identifying and responding to risk in the local area, some small local services depend on aid from neighbouring areas with excess resources. Extreme weather such as flooding impacts the FRS ability to cross geographical borders and thus impacts the collaboration and allocation of aid among the local areas.

Specific fire and rescue impacts

- Inequality/Inequity
- Health impacts
- Climate change in cities
- Wildfire
- Drought

Mitigation

Future Plans



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Actions for fire services:

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Longer-term planning (for the scale and complexity of the future)



Civil contingencies Met Office resilience training provides an understanding of the projections, the fallibility tolerances of this area, can advise on their own geographical area



Three tools can help with the local impacts and adaptation measures (tools available)

Psychological distance – became a little closer!





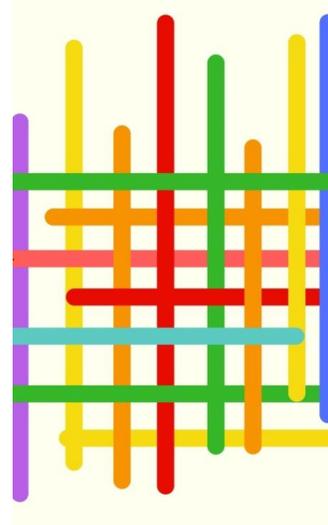
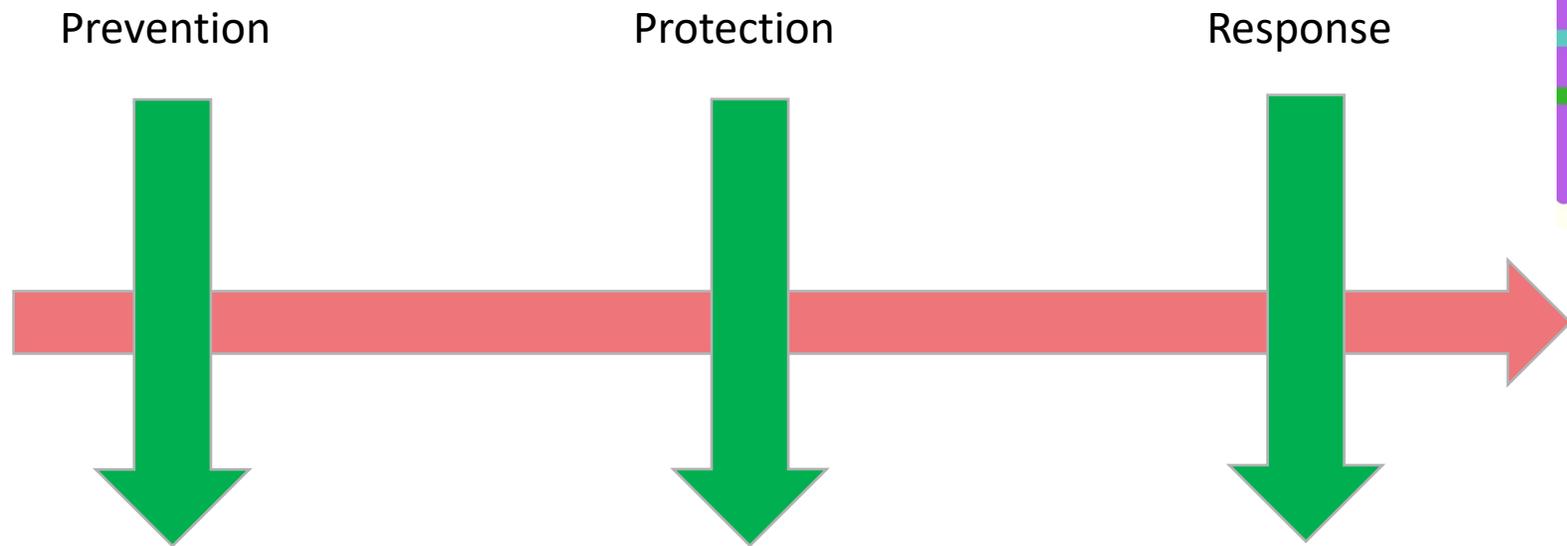
Community Risk Management Plan (CRMP)

- Climate, Sustainability, and Environment is an emerging and growing risk
- Reasonably foreseeable risk
- Needs to be considered by every single FRS in the CRMP process
- Aligns with the Fire Standards Board work (LGA and NFCC)
- Aligns with Fit for the Future (LGA, Employers England and NFCC).



Cross cutting activity across the NFCC

Sustainability,
Climate and
the Environment



Timeframes

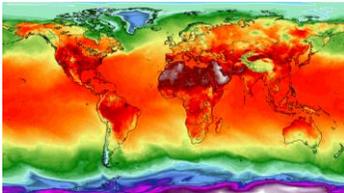
How are we reflecting a reasonably foreseeable risk in our Community Risk Management Programme?



CRMP usually 3 -5 years



Climate change usually 20 – 100 year



**There is
hope...**





**Any
questions?**