## Wildfires and Climate Change Update Report

## Purpose of Report

For direction.

Is this report confidential? No

## Summary

LGA Plan Theme: Championing climate change and local environments

## Recommendation(s)

1. Members are asked to consider the range of options for response to the increasing risk of wildfires in the UK.
2. Members are also asked to share views on the idea of a climate change evidence session and the suggested content for this.
3. Members agree the next steps outlined in paragraph 56.

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**Wildfires and Climate Change update**

## Background

1. Record breaking temperatures and extremely dry conditions bought devastating wildfires affecting almost every Fire and Rescue Service over the summer of 2022. Wildfires affected urban as well as rural areas across the UK, on the hottest day in July London Fire Brigade recorded their busiest day since the Second World War, fifteen services declared major incidents and many more struggled to cope.
2. In December Paul Hedley, National Fire Chiefs Council (NFCC) Wildfires Lead, delivered a presentation to FSMC updating on the unprecedented extent and impact of the wildfires during the 2022 season and the measures being taken by NFCC to try to mitigate risk. Members also considered [recommendations set out in a report](https://lga.moderngov.co.uk/documents/s41308/Wildfires%20paper.pdf) around how FSMC could support the NFCC work on wildfires.
3. It was agreed that officers would undertake further research around wildfire causation to enable FSMC to develop a position on the sale of disposable barbeques and other high-risk items such as sky lanterns and fireworks. This work was to include considering whether to hold a workshop with stakeholders to discuss the issues.
4. This paper is intended to update Members on the progress of this work and present options for next steps.

## Wildfire trends

1. An increase in wildfire activity is understood to be related to climate change – with hotter, drier temperatures creating conditions which make wildfires more likely both because of the increase in fuel availability (dry vegetation available to burn) and the lengthening of the fire season (where conditions are conducive to fire).
2. The effects of this can be seen in many regions across the world with devastating wildfires across Southern Europe and the USA and bushfires in Australia causing extensive damage. There has also been some loss of life in the last few years.
3. Wildfires are been seen as an increasing risk at the national level in the UK and this has been bought into sharp focus following the unprecedented number of wildfires last summer.
4. Data on wildfires is limited by the fact there is no specific category capturing data on wildfires in the national Incident Recording System (IRS), which is the national data collection system administered by the Home Office. Wildfire incidents are currently recorded under ‘secondary fires’ or ‘outdoor primary fires’.
5. Latest [statistics published by the Home Office](https://lgadigital.sharepoint.com/sites/SaferCommunities/Fire%20and%20resilience/Admin/Board%20and%20other%20papers/FSMC/2022-23/May%202023/Fire%20and%20rescue%20incident%20statistics:%20England,%20year%20ending%20September%202022%20-%20GOV.UK%20(www.gov.uk)) show that in the year ending September 2022 there was a 44 per cent increase in secondary fires and 63 per cent increase in outdoor primary fires which the narrative in the dataset attributes to the hot, dry summer.
6. We understand that the Home Office is currently working on updates to the IRS to capture more nuanced data about wildfires and their impacts, which are expected to be introduced in 2024.
7. [An Expert Led Report](https://www.ukclimaterisk.org/wp-content/uploads/2021/06/UK-Wildfires-and-their-Climate-Challenges.pdf) prepared for the Third UK Climate Change Risk Assessment (CCRA3) on UK wildfires and their climate challenges, published in 2021, provides a useful overview of the risks of wildfires and their impact as well as exploring options for a policy response.
8. Traditionally in the UK wildfires have occurred predominantly in spring/late summer and have affected heathlands, moorlands and grasslands. However, an important factor for consideration for future planning both in terms of the risk to human health and assets is the growing number of wildfires affecting areas in close proximity to built-up areas (the rural-urban interface or ‘RUI’). This was seen over the summer with wildfires destroying more than 40 houses and shops on the hottest day in July, including sixteen homes in the large fire in Wennington, east London.
9. Whilst climate change impacts the conditions which make wildfires more likely and influence their behaviour, ultimately, in the UK at least, the cause of wildfire ignitions is nearly always human. Analysis of global wildfire data in [A Review of the Main Driving Factors of Forest Fire Ignition Over Europe](https://link.springer.com/article/10.1007/s00267-012-9961-z), indicates that 97% of all wildfires are related to some form of human action (deliberate and accidental).
10. A recent Wildfire investigation project report, commissioned by the Forestry Commission, published in April 2023 outlines that the precise causes of ignition are difficult to pinpoint, and data is limited. The UK does not routinely investigate the cause of wildfire ignitions and has no Fire Investigators qualified in this specialist skill.  More research is required in this area to understand causation in more detail.
11. However, reasons for wildfire ignition can include:
    * Agricultural practices e.g. escaped management burns, something which occurs in upland and moorland regions of the UK.
    * Campfires and BBQs, which either accidentally or deliberately result in the spread of fire from its original purpose
    * Military training exercises
    * Arson
12. Cigarettes are often anecdotally associated with wildfire ignitions, but there is very little evidence of cigarettes forming a viable ignition source. Evidence also suggests that, when used and disposed of appropriately disposable BBQs do not pose a significant wildfire risk.
13. Without detailed knowledge or clear evidence of causes of ignition, targeting prevention work is made more difficult and is therefore likely that interventions need to have a wider focus.
14. The NFCC launched a survey of all Fire and Rescue Services (FRSs) at the end of 2022 looking specifically at the impact of the 2022 wildfires, and on resilience in the sector to deal with wildfires more broadly. Whilst the report has yet to be published there are a range of recommendations and improvements that NFCC will be putting forward. The main themes of these are around:
    * National Policy and Strategy
    * Wildfire Training
    * Wildfire Prevention
    * Information and Data
    * Guidance and Policy
    * Partnership Working
    * Health, Safety and Welfare
    * Equipment and Innovation

## Options for response

1. In terms of policy options to reduce the risk of wildfires, there are a number of existing tools that are available and already utilised as well as options that could be considered in the future, once further evidence is available. These are explored below.

**Legislative and non-legislative options**

1. Looking specifically at controlling the use of disposable BBQs which was explored at FSMC in December overall, evidence suggests that when used and disposed of appropriately, disposable BBQs do not pose a significant wildfire risk. However, there is some limited evidence that disposable BBQs have caused wildfires and whilst the risk may be small, the impact finically, environmentally, and ecologically can be huge, as seen in Dorset.
2. In terms of supporting an outright ban on disposable BBQs there is no additional evidence to support this since the Committee’s last discussion.
3. The Department for Environment, Food and Rural Affairs (Defra) commissioned research to look at the impact of disposable barbecues and sky lanterns (as well as helium balloons) at the end of last year. The research looked at the risks and impacts - including fire - arising from the use of these items, analysed the existing controls on the use and sale of these items and made recommendations for government intervention which would further mitigate against any significant risks.
4. Defra is currently considering the report but have indicated that there was no clear case within the evidence for control of these products, beyond what is already available. They have suggested that more research is needed in this area.
5. There is also some concern about what alternatives to disposable BBQs might be used, for example open fires, which could present even more of a risk.
6. Local authorities do have existing tools available to restrict of prohibit the use of disposable BBQs.
7. Under section 15 of the Open Spaces Act 1906 byelaws have been used by some local authorities to restrict and enforce the use of disposable barbecues in council owned or managed parks and open spaces. This approach is used by some London boroughs, including [Islington](https://www.islington.gov.uk/~/media/sharepoint-lists/public-records/communications/information/adviceandinformation/20182019/2019020120190114draftbbqbyelawfinal.pdf). Fines can be issued where byelaws are breached.
8. Officials have indicated that the Department for Levelling Up, Housing and Communities are interested in how widely used byelaws are in this area, how effective they are as a tool and issues around policing them.
9. Public Space Protection Orders (PSPOs) are also used to prohibit the use of BBQs in specific parts of a local authority area with fines issued for breaches. PSPOs can be used to tackle the anti-social behaviour element of the use of disposable BBQs (and open fires). PSPOs are time limited and can last for up to three years at which point they will have to be reviewed. An example of this is the Ban of Open fires and BBQs by [Derbyshire Dales District council](https://www.derbyshiredales.gov.uk/community/community-safety/public-space-protection-orders).
10. Both tools require adequate local consultation and engagement with communities. The main challenge of introducing both policies is the issue of enforcement and the resources required to do this effectively. However, in practice, if clearly communicated they are likely to act as a deterrent and therefore help to reduce the number of potential incidents.
11. As outlined in the FSMC report in December, there has been recognition amongst retailers about the role they can play and some success in retailers voluntarily stopping the sale of BBQs either completely, in certain areas for example close to national parks, or during extreme heat events in response to public pressure.
12. The British Retail Consortium (BRC) have developed [voluntary guidelines](https://protect-eu.mimecast.com/s/L6oECr07VuD0rlVS7B4_w/) for sale of disposable BBQs in partnership with retailers, the NFCC and others, including feedback from Defra. The guidelines are designed to support responsible retailing, encourage retailers to educate consumers on safe use and disposal of BBQs and prevent the spread of wildfires caused by BBQs.

**Public awareness**

1. Raising public awareness about how wildfires start and steps that can be taken to reduce risk are an important given the significant role of human behaviour in causing wildfires,
2. Our view is that public awareness campaigns should be led at a national level by government, with messages amplified and tailored at the local level. We are aware that a wider Wildfire Working Group, which includes NFCC, Home Office, Defra and the Environment Agency, is in the process of drafting comms lines to promote safe behaviour in the event of a [RED Heatwave](https://www.metoffice.gov.uk/weather/warnings-and-advice/seasonal-advice/heat-health-alert-service#:~:text=Red%20(emergency%20response)%20%2D%20A,with%20a%20coordinated%20response%20essential.) or RED Wildfire alert.
3. We will work with LGA colleagues to ensure any central comms messages are shared via our own networks.
4. Local authorities and park authorities are already running awareness campaigns at local level. These include campaigns which encourage retailers to stop selling disposable BBQs and messages about safely putting out campfires and cigarettes.
5. There is also a community led [Firewise programme](https://www.dorsetheaths.org.uk/firewise/) which has been piloted in Dorset and Wiltshire.
6. Firewise-UK has been developed from the USA programme which was created by the National Fire Protection Association in cooperation with the USDA Forest Service. It is a community risk reduction programme which focuses on building an understanding of risks of wildfires among communities and emphasises the role that residents can play in reducing risks. The programme encourages communities to work together to reduce risks by taking practical steps in the area around the home and garden for example mowing the grass, picking up litter, not leaving piles of combustibles in garden.
7. The intention is for this to be lead and delivered by the community, with facilitation support from the FRS. The Firewise UK community wildfire resilience programmes are potentially something that the LGA could promote.

**Adaptation and mitigation**

1. At a local level local wildfire, alongside other risks of climate change like flooding, should be a part of local risk planning considerations and inform the Community Risk Management Plan (CRMP). FRAs will already be looking at how the service can adapt to meet future risks, for example through tactical training and equipment and as discussed at the December FSMC, NFCC are supporting FRSs to do this.
2. However, wildfire risk also needs to be considered and understood as part of wider agendas, such as land management. Fires cannot exist without fuel and therefore, the type, load and moisture of fuels and the potential of any changes in these to impact wildfire risk will need to be considered and understood.
3. Defra has a programme of work to support farmers and land managers whose land may be particularly at risk to plan and prepare for wildfires to help reduce their incidents and impacts. Part of this promoting the use of wildfire management plans. These plans are used to assess risks, identify how these will be managed as well as outlining wildfire management techniques. Defra also provides training for land managers on this, as well as on wildfire response and how support FRS.
4. Defra are keen to understand from councils and FRAs whether there is more that they could offer around landscape mitigation, for example additional training and would be happy to share further information on this if it would be useful.
5. As part of government plans to mitigate climate change there has been a focus on conservation. This has included increasing biodiversity and protecting and restoring natural habitats many of which are open habitats such as lowland, upland heath, grasslands and moorlands which are also amongst the UK’s most fire prone ecosystems.
6. One example are schemes like rewilding which have been supported by a number of councils over the past few years. Rewilding, which is generally defined as the return or restoration of the environment to its natural uncultivated state, can range from reintroducing a particular species of [wild](https://dictionary.cambridge.org/dictionary/english/wild) [animals](https://dictionary.cambridge.org/dictionary/english/animal) to a particular area, to small scale interventions such as leaving parts of parks and private gardens over to nature (e.g. ‘no mow May’). Practices which councils use such as leaving verges uncut whilst having clear benefits for biodiversity could have an impact on the type and amount of fuel available to burn and therefore have implications for wildfire risk.
7. Whilst the focus is currently on protection of these landscapes, there is a tension between fire and ecosystem management challenges and conservation and maintenance of existing habitats which may enhance wildfire risk. This was highlighted by Marc Castellnou, a fire analyst with the Catalonian fire services, during a presentation at the LGA Fire Conference in March.

## Wider climate change activity

1. Wildfires are not the only risks related to climate change that will impact FRSs. As climate change continues and extreme weather such as storms and floods, as well as heat and drought expected to become more frequent the impact on the fire and rescue service (FRS) is expected to become more pronounced.
2. We would like to run a one-day evidence session for a small, cross-party group of FSMC Members with an interest in this area to hear from a range of experts and explore these impacts in more detail to inform a policy position.
3. Ideas for sessions and speakers include:

* Overview of climate change impacts:
  + Professor Rowena Hill – research with Exeter & Notts Trent around climate change and sustainability and Ben Brook, NFCC Lead
  + Met office - lead on natural hazards partnership
* Flooding – Environment Agency
* Wildfires
  + Paul Headley, NFCC lead
  + Academic/ Wildfires tactical adviser
  + Extreme fire behaviour
* Land management and land adaptation – building wildfire resilience into the natural landscape - Defra
* Wider council picture – examples of work around mitigation & adaptation what they are doing
* Future picture
  + rewilding / electric vehicles & risks / unintended consequences

1. We would be grateful for Members views on the idea of an evidence session and the suggested content for this.
2. Councils play a key role in tackling climate change as place-shapers, convenors of communities and partners, delivery agents, commissioners, and owners of assets. The LGA has a wide range of resources for Council around this on the [Climate change hub.](https://www.local.gov.uk/our-support/climate-change-hub#:~:text=The%20CAG%20is%20a%20network,new%20policies%2C%20programmes%20and%20practices.)
3. FRAs also have a role to play in responding to climate change at a local level, alongside local councils. We are in the process of updating the [Climate Emergency](https://www.local.gov.uk/publications/climate-emergency-fire-and-rescue-services) handbook for Fire and Rescue Authority Members, exploring current risks, and the leadership role FRA members have in driving this agenda forward. We plan to publish the updated handbook in the summer.
4. The NFCC are currently working on their own toolkit for FRS around climate change which is due to be published shortly and we will share with Members.

## Implications for Wales

1. None

## Financial Implications

1. None

## Equalities implications

1. The impacts of climate change, including extreme weather events are felt unequally and can exacerbate inequalities that already exist. The [LGA has pulled together resources](https://www.local.gov.uk/our-support/climate-change-hub/climate-action-climate-justice-health-and-social-care) and cases studies to support councils to identify those who are most at risk from the impacts of climate change and look at what is being done to assist the most vulnerable.

## Next steps

1. The following next steps by officers are proposed:
2. Officers work with comms colleagues in the LGA around amplifying any national comms messages
3. Offices draft a climate emergency handbook to be published by FSMC
4. Officers take forward the plan for a climate change evidence session