SCORCHED: FIREFIGHTERS AND RESILIENCE TO WILDFIRE

FIRE BRIGADES UNION

CONTENTS

INTRODUCTION

Firefighters in the UK – and across the world – are already working on the frontline of the climate crisis. Climate scientists report that we have just experienced the hottest June on record in the UK. July 2023 was the world's hottest month on record. 2022 was its hottest year. This should be a wakeup call for politicians and the fire and rescue service: the climate crisis is here now.

Matt Wrack,
FBU general secretary

Wildfires are on the rise year on year and we have recently seen the risk of the spread of wildfire into urban areas, with the consequential risk to homes and businesses. Firefighters have done a tremendous job tackling wildfires, but the current situation is not sustainable. For the last decade, fire and rescue services have been strained to breaking point because of under-resourcing.

Neither the problems nor the solutions are difficult to understand. Heatwaves have been on the government's National Risk Register since 2008. Wildfire as a national risk was added to the register in 2013. But instead of improving fire and rescue services, we've had austerity, fragmentation and the absence of a joined-up strategy.

For years, the FBU has been raising the alarm. We have lost nearly 12,000 firefighters – more than one in five jobs in our industry – since 2010. Governments and fire ministers across the UK have been warned that there has to be proper plans in place with the necessary resources to support them. Politicians simply have not done enough.

We need urgent climate action. If we are to properly protect life and property from wildfires, the fire and rescue service needs significant investment. This means more firefighters, better equipped and trained, along with better planning, research and coordination.

Chief fire officers need to stop the pretence. Instead of fighting for proper investment for our service, they have presided over – and in some cases recommended – unprecedented cuts to frontline resources. Their umbrella body, the NFCC, should all be ashamed of themselves for their failure.

Understaffing has been so bad that throughout the last period of wildfires nearly all fire and rescue services in the most severely affected areas had to call up off-duty firefighters and ask them to perform extra shifts. Fire engines sat in stations because there were not enough people to crew them. In such circumstances, FBU members have worked to exhaustion.

These issues are international. Along with firefighting unions across Europe, the FBU is affiliated to the European Public Service Unions (EPSU). When we speak to our sister unions, there is a common message: fire and rescue services throughout the continent are under strain. Unless major improvements are introduced, firefighters won't be able to meet the challenges ahead.

In this report, we survey the recent history of wildfires in the UK and what is driving their increasing occurrence. We detail the under-investment, the cuts and the lack of coherent planning that have left us so woefully under-prepared. And we set out what is needed to meet this threat.

The FBU demands urgent action to get a grip on wildfire risks and to ensure our communities are resilient. We urge ministers and chief fire officers to meet with us to discuss these matters.

SECTION 1
WHAT IS THE RECENT EXPERIENCE OF WILDFIRES IN THE UK?

Wildfire is often defined globally as fires occurring in wildlands. However in the UK, the term "wildfire" is defined in the Cabinet Office's National Risk Register as "an uncontrolled fire that burns vegetation, such as grass, heather, woodland, crops and scrubland". Scottish Government guidance defines wildfire as "any uncontrolled vegetation fire which requires a decision, or action, regarding suppression".[1]

In recent years, the UK has experienced significant wildfire incidents, breaking previous records and suggesting an increased risk to homes, infrastructure and agriculture. As Rob Gazzard and others (2016) argued, fires often occur at the "rural-urban interface", where the countryside meets settlements.[2]

2023 – WILDFIRE ACROSS THE UK

In late May/early June 2023, firefighters battled a wildfire near Cannich, south of Inverness in the Scottish Highlands. Some 15 square kilometres burned in one of the largest blazes the UK has seen, with the plume of smoke visible from space. Nine fire appliances and a helicopter were deployed. Two firefighters were injured and treated in hospital.[3]

Just a month earlier, firefighters tackled another record-breaking wildfire in Glenuig, Lochaber on the west coast of Scotland. Firefighters spent three days tackling the blaze, estimated to have covered more than 3,000 hectares.[4]

In June 2023, Northern Ireland Fire and Rescue Service (NIFRS) declared a major incident, after tackling around a hundred wildfire incidents in the space of two days. Between April and June 2023, firefighters in South Wales responded to almost 400 grass and wildfires. The Met Office's fire severity index was raised to 'very high' over much of England and parts of Wales, as a heatwave and lack of rain combined to create tinder-dry conditions.[5]

2022 – 15 MAJOR INCIDENTS DECLARED

On 19 July 2022, fifteen fire and rescue services declared major incidents due to wildfire, including: Bedfordshire, Buckinghamshire, Cambridgeshire, Cheshire, Hertfordshire, Humberside, Leicestershire, Lincolnshire, London, Norfolk, North Yorkshire, Nottinghamshire, South Yorkshire and Suffolk.

Other fire and rescue services were mobilised. Avon took more than 1,300 calls in a single week in August. West Sussex, Tyne and Wear and Hereford and Worcester fire and rescue services all reported significant deployments.[6]

LONDON, 19 JULY 2022

On 19 July 2022, the London Fire Brigade (LFB) took nearly 3,000 calls and mobilised to more than a thousand incidents – probably its busiest day since World War II. They declared a major incident after 740 calls relating to grass alight and attending 59 separate grass fires in a single day. Approximately 500 people had to be evacuated with the assistance of firefighters, as well as dozens of rescues.

The LFB had no high volume pump available on the day. Its control room declared a control emergency due to lack of personnel, resulting in off-duty staff coming in to provide cover. LFB also lacked any wildfire tactical advisors, officers trained to provide expert command and control in wildfire situations.

On 19 July, the LFB had 39 appliances off the run because of insufficient staff and PPE shortages. The latter disproportionately impacted on women firefighters, who were twice as likely to be off the run because of a lack of PPE. LFB were unable to increase the number of fire appliances – known as 'make-ups' – sent to some of the worst fires. It was unable to send a Command Unit, a BA Unit, a Damage Control Unit and a Fire Investigation Unit to Wembley. There were no Fire Rescue Units or Command Units available for Control to send to Dagenham.

During the emergency intervention, 16 firefighters were injured and two hospitalised. At Hillingdon, the incident commander recorded a safety event because the situation was "placing crews in danger of heat exhaustion or worse".[7]

2018 – SADDLEWORTH MOOR AND WINTER HILL

In 2018, fire and rescue services dealt with a number of significant wildfires, including the Saddleworth Moor and Winter Hill fires.

The Saddleworth Moor wildfire was among England's largest wildfires in recorded history. The fire ignited on 24 June, was declared a major incident on 26 June and burned for more than three weeks. It affected over 18 square kilometres of upland terrain. The fire produced a thick smoke plume that was blown west over Greater Manchester, extending as far as the west coast of England and the north coast of Wales. It affected air quality, soil, water quality and emitted thousands of tonnes of carbon into the atmosphere.[8]

Control staff took almost 3,000 calls on 2 July alone and more than a thousand a day throughout the three weeks. Greater Manchester deployed more than 100 firefighters at one point to tackle the fire. Four high volume pumps and over two kilometres of hose were laid.[9] The Winter Hill moorland fire began on 28 June 2018 and ended six weeks later on 8 August. At the height of the incident, Lancashire Fire and Rescue Service deployed more than 30 fire engines and 150 firefighters, supported by specialists and other assistance.[10]

Crews from Cheshire, Derbyshire, Merseyside, South Yorkshire, West Yorkshire, Nottinghamshire, Northumberland, South Wales, Gloucestershire, Kent, Cumbria, West Midlands and the London Fire Brigade provided cross border mutual aid to help tackle the fires.

2011 – SWINLEY FOREST AND CROWTHORNE WOOD

In April and May 2011 numerous wildfires broke out across the UK, after unusually hot and dry weather, notably in West Yorkshire, Lancashire, Dorset, Berkshire, the Brecon Beacons, County Down, Tyrone, Armagh, and the north-west highlands of Scotland.

Berkshire had the largest and most resource-intensive wildfire in its history. The fire started in Swinley Forest and spread to Crowthorne Wood. The Swinley fire affected 300 hectares and required 300 firefighters from seven brigades to contain it. The fire threatened national infrastructure, including Broadmoor High Security Hospital, the Transport Research Laboratory, a trunk fuel pipeline, Crowthorne Village and Sandhurst Royal Military Academy. Seven houses were evacuated, three schools were closed and local businesses incurred substantial losses. The firefighting costs were estimated at £543,000, while the total social cost of the incident was estimated at more than £1m.[11]

FIREFIGHTERS' SAFETY AND HEALTH AT WILDFIRES

FBU members on the frontline at wildfires report a host of challenges they face at these incidents:

- Understaffing
- Lack of suitable PPE
- Long working hours
- Health concerns from prolonged exposure to the sun
- Lack of water and provisions
- Lack of welfare facilities
- Fatigue
- Lack of suitable equipment
- Lack of training.

WILDFIRES IN EUROPE

The heatwave in summer 2022 killed more than 61,000 people in Europe, research has found. This included more than 3,000 people across the UK. The summer of 2022 was the hottest on record in Europe – fuelled by the climate crisis.[12]

The year 2022 was the second-worst wildfire season in Europe since 2000 when the Copernicus Programme's European Forest Fire Information System (EFFIS) records began. Damages in 2022 exceeded those of 2021 and are only surpassed by those of 2017, according to data from the EFFIS *Advance Report on Forest Fires in Europe, Middle East and North Africa* 2022, which offered a preliminary assessment of recent wildfires.

EFFIS observed fires in 45 countries in 2022. These countries suffered almost 17,000 fires that burnt 1.6 million hectares, which is about the size of Montenegro. Spain was the most affected by wildfires, followed by Romania, Portugal, Bosnia and Herzegovina and France.[13]

The FBU is part of the European Firefighters' Network coordinated by the European Public Service Union (EPSU). The network regularly discusses climate-related matters such as wildfires and flooding. Learning from other firefighters and making solidarity when they tackle incidents is central to the FBU's approach.

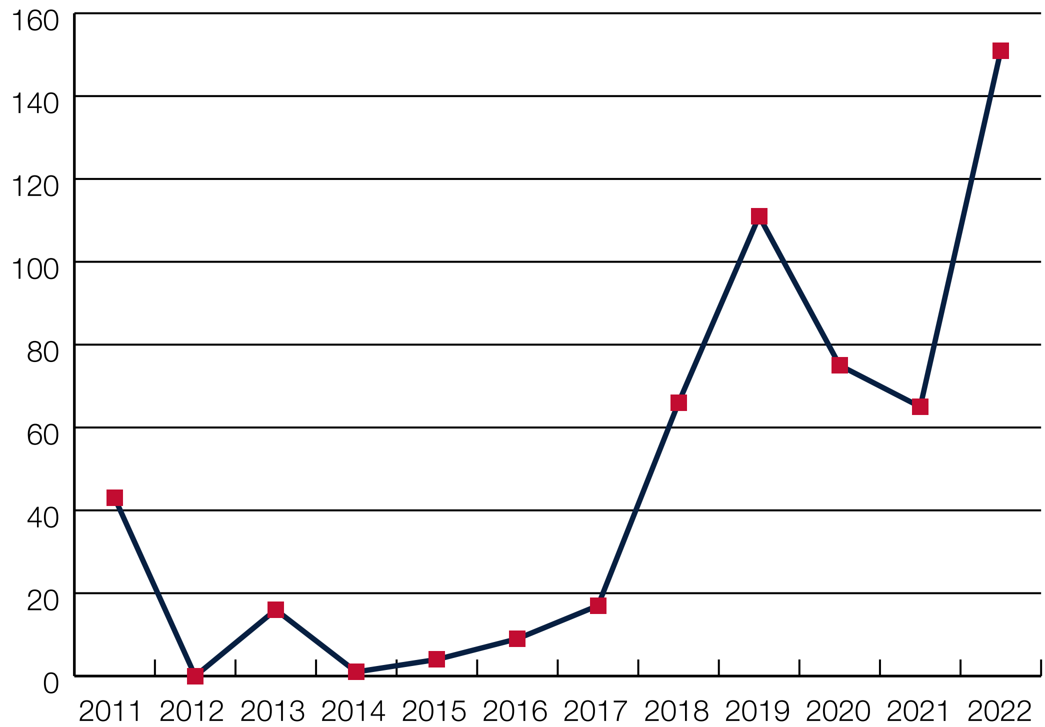
SECTION 2
WHAT ARE THE TRENDS FOR WILDFIRES?

The Westminster government and the devolved administrations across the UK has not published consistent data over recent decades, which makes it difficult to place the recent spike in wildfires in a broader context. Climate science works with 30-year trends, but governments at best provide only a decade or so of statistics.

RECENT DATA ON WILDFIRES

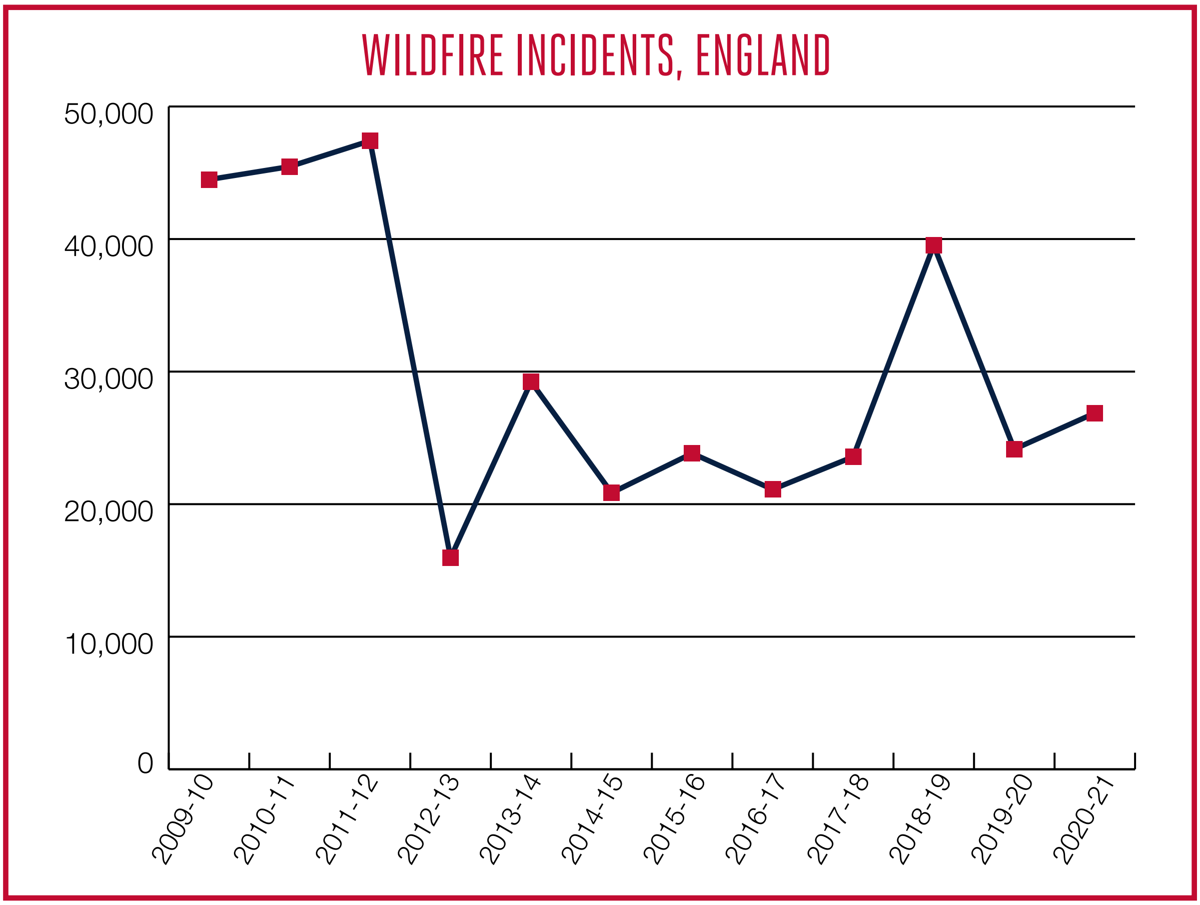
The European Forest Fire Information System (EFFIS), established the European Union, has one of the longest consistent and continuous records of wildfire activity for the UK. The data for EFFIS comes from satellite mapping of burnt areas. Only fires larger than 30 hectares are reliably mapped. This is a problem for the UK, where many wildfires are small.[14]

UK FIRES OVER 30 HECTARES

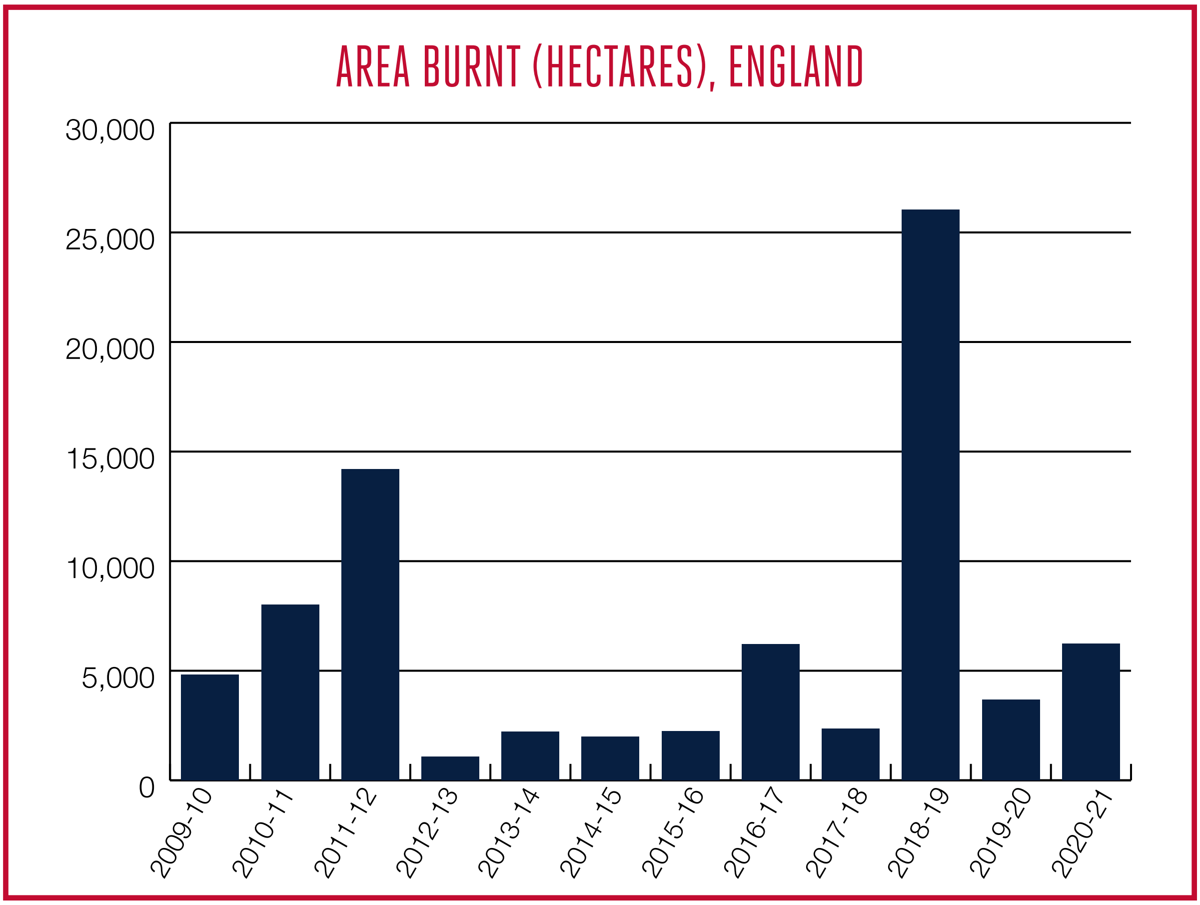


ENGLAND

Wildfire incidents in England have only been recorded in the fire and rescue Incident Recording System (IRS) since 2009. The Forestry Commission in England publishes this data. Its most recent report, published in February 2023, estimated that there were over 360,000 wildfires in England in the 12 years from 2009-10 to 2020-21, an average of over 30,000 every year.



The Forestry Commission also estimated that the area of land burnt in England by the wildfires amounted to over 79,000 hectares, an average of about 6,600 hectares per year.[15]



The Home Office publishes statistics for grassland, woodland and crop fires in England. Over the last decade, it estimates an average of two thousand primary grassland, woodland and crop fires, along with an average of 27,000 secondary grassland, woodland and crop fires. (Outdoor primary fires are those involving casualties or rescues, or five or more pumping appliances attending. Secondary fires are generally small outdoor fires, not involving people or property.)[16]

SCOTLAND

The Scottish Fire and Rescue Service (SFRS) estimated that during March and April 2022, 95 incidents of wildfire were recorded across Scotland – more than one wildfire a day during the spring.[17]

The SFRS publishes figures on grassland and woodland fires. Over the last decade, the SFRS has responded annually to more than 400 primary and 5,000 secondary grassland and woodland fires.[18]

WALES

The Welsh government publishes figures on grassland, woodland and crop fires. Over the last decade, firefighters in Wales have responded annually to on average 133 primary and 2,700 secondary grassland, woodland and crop fires.[19]

NORTHERN IRELAND

Northern Ireland Fire and Rescue Service publishes annual figures on responses to secondary gorse fires. Over the last decade, firefighters have attended more than 1,800 incidents annually, with almost 6,000 in 2010-11 and more than 3,000 in 2018-19.[20]

FUTURE PROJECTIONS

Wildfire is regarded as an "emergent risk" in the UK, so the past is not a guide to future trends. Global pyrogeography studies have found a progressive increase in wildfire probability for the whole of the UK through the 21st century.[21]

Research by Nigel Arnell and others (2021) also projected a very large increase in fire danger across the UK, particularly in the south, east and central regions of England, over the next half century. In southern England, the number of days with a "very high" fire weather index is expected to rise from the current 20 days per year on average, up to 70 days per year by the 2050s and 111 by the 2080s. An increase is also seen in the north of England and in Scotland, but the increase in the number of days experiencing very high fire weather index days is delayed, beginning later from 2040 onwards. The risk of wildfires in the south becomes greater still from the 2050s onwards, where there will be days that reach "exceptional" fire weather category.[22]

Research by Matthew Perry and others (2022) modelled levels of fire danger in spring and summer for England, Northern Ireland, Scotland and Wales, in a world with 2°C and 4°C of warming. In spring, they found a slight increase in moderate and high levels of modelled fire danger is projected for each of the UK countries. The change is most marked in England.

In summer, modelled fire danger increases markedly between the reference period and the 2°C global warming level, with large increases projected for the 4°C level.

> *"In England and Wales, the percentage of days with at least 5% of the country at the very high or extreme danger levels is projected to double between the reference period and the 2°C global warming level and to increase by five times the reference frequency at the 4°C level, when the frequency reaches 46% of summer days for England. In Scotland and Northern Ireland, there is a large projected increase in the frequency of high fire danger. Very high danger levels remain rare but are projected to start to occur more frequently over at least 5% of the country by the 4°C level."*[23]

In 2022, a new report by the United Nations Environment Programme (UNEP) predicted that even if greenhouse gases are reduced, there could be a substantial increase in wildfires around the world. Scientists at the Met Office and the UK Centre for Ecology & Hydrology carried out modelling to predict future increases in wildfires for the report, *Spreading like Wildfire: The Rising Threat of Extraordinary Landscape Fires*. They projected a global increase of extreme fires of up to 14% by 2030, 30% by 2050 and 50% by the end of the century.[24]

SECTION 3
WHAT IS DRIVING WILDFIRES?

The occurrence and spread of wildfires is influenced by human factors such as ignitions, land management and fire suppression. Several studies have established links between climate change and wildfire internationally.

Perry and others (2022) argue that climate trends can increase the likelihood of severe fire weather through increases in average temperature and in the frequency, intensity, duration and/or extent of heatwaves and droughts. Fire weather seasons have significantly lengthened across 25% of the earth's vegetated surface. The impact of anthropogenic climate change on fire weather has emerged above natural variability for Amazonia, southern Europe/ Mediterranean, Scandinavia, the western USA and Canada. These impacts will intensify with further warming, and future increases in fire weather risk are projected for many areas.[25]

The Met Office has underlined the importance of climate change in driving wildfires in the UK. In its latest UK Climate Projections (August 2022) the Met Office stated:

> *"The climate is changing, and the UK needs to act. Part of this involves playing a leading role in global efforts to mitigate climate change by reducing emissions including implementing and delivering our own net zero target. Even given strenuous efforts to limit the cause of global warming, further climatic changes are inevitable in the future and the UK will need to manage the growing risks from climate change. To adapt and build resilience, up-to-date, credible and robust information on climate change and variability is needed to inform decision-making."*[26]

CLIMATE CHANGE RISK ASSESSMENT

The Westminster government's first Climate Change Risk Assessment (CCRA) in 2012 identified "More frequent wildfires due to warmer and drier conditions". It added:

> *"There would be added burdens on our emergency services in responding to more frequent flooding, heatwaves and wildfires."*[27]

The latest Climate Change Risk Assessment from 2022 labels a number of risks with "more action needed" at a UK-wide level. A number of these include wildfires:

- N1: Risks to terrestrial species and habitats from changing climatic conditions and extreme events
- N6a: Risks to and opportunities for forestry productivity from extreme events and changing climatic conditions
- N6b: Risks to and opportunities for agricultural productivity from extreme events and changing climatic conditions.[28]

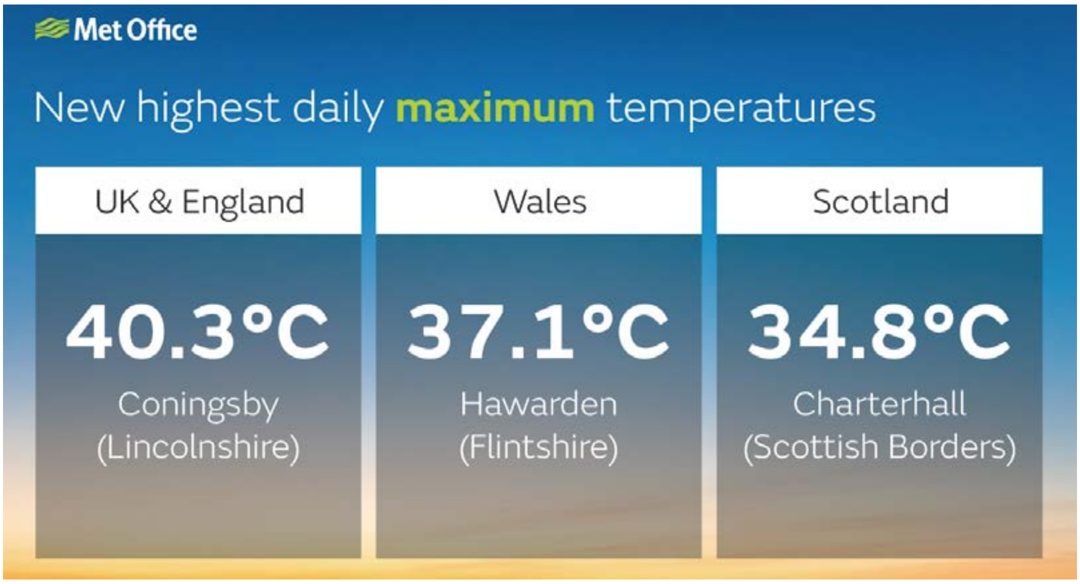
The Westminster government's first National Adaptation Programme (2013) connected climate change with the increased risk of wildfires in the UK:

> *151. The CCRA identified an increase in the incidence of wildfires as an emerging risk associated with climate change. Severe wildfire has recently been included in the National Risk Assessment (NRA12). It is anticipated that Local Resilience Forums*

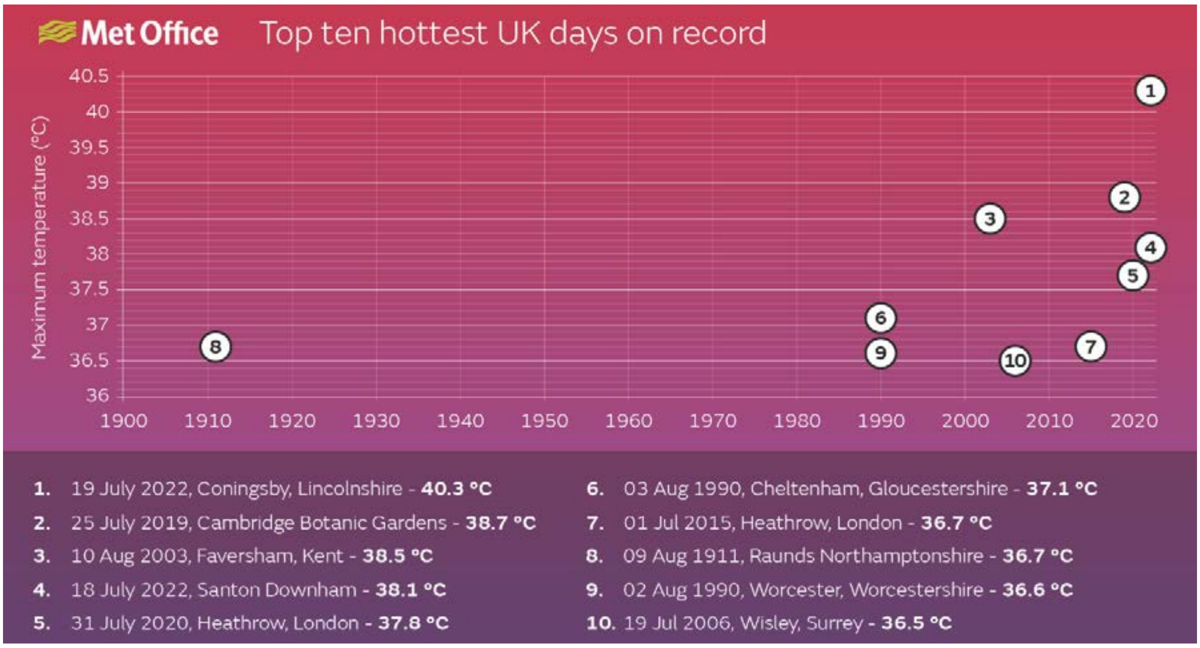
(LRFs) will review and consider the severe wildfire risk, as will the Fire and Rescue Service through their Integrated Risk Management Plan process. The Forestry Commission is publishing guidance for land managers to increase the resilience of woodland to wildfire through forest design planning (including forest structure and species). The United Kingdom Forestry Standard includes the requirement for contingency planning as part of good forestry practice.[29]

HIGHEST DAILY UK TEMPERATURES

The UK's current highest temperature is 40.3°C, recorded at Coningsby, Lincolnshire on 19 July 2022, according to the Met Office. This was the first time 40°C was exceeded in the UK. The record high temperature in Wales is 37.1°C, recorded at Hawarden Airport, Flintshire, on 18 July 2022. The record high temperature in Scotland is 34.8°C, recorded at Charterhall, Scottish Borders, on 19 July 2022.



Of the top ten hottest UK days on record (since the nineteenth century), the top five have all been since the turn of the 21st century. Seven out of ten have been in the last 20 years.[30]



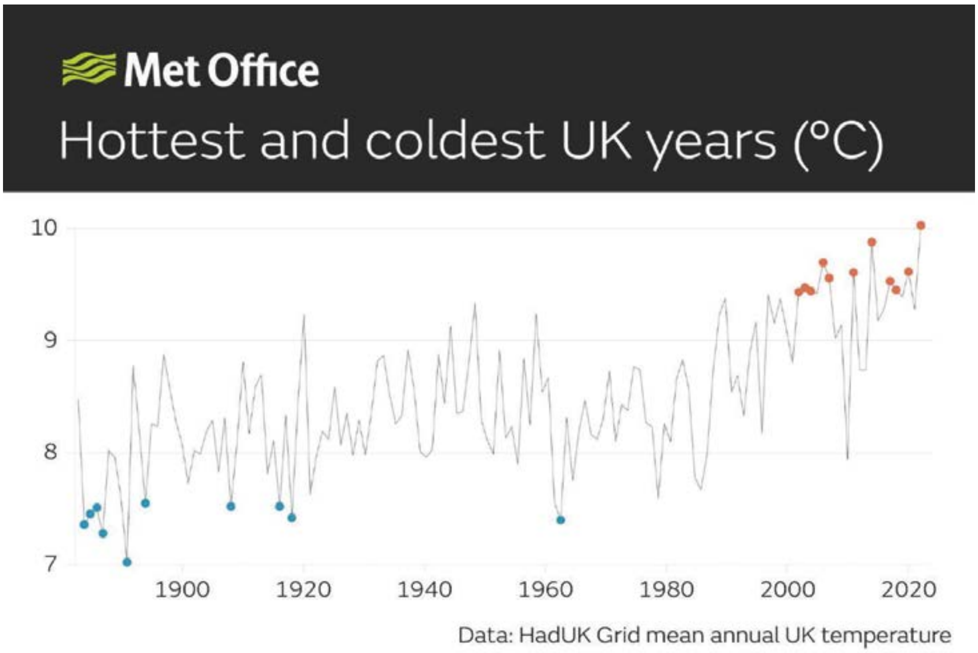
HIGHEST ANNUAL UK TEMPERATURES

The Met Office has confirmed that 2022 was the UK's hottest year on record, with an average temperature of over 10°C recorded for the first time. The full annual UK mean temperature data for 2022 resulted in a provisional figure of 10.03°C, the highest on record (records go back to 1884).

In addition, 2022 was also the warmest year on record in the Central England Temperature (CET) series. The CET began in 1659 and is the world's longest instrumental record of temperature. The annual average for 2022 was 11.1°C. This is only the second time it has recorded 11°C or higher in its history (the other was 2014, which recorded 11.0°C).

Area	2022 annual mean temperature (°C)	Previous annual mean temperature record (°C)	1991-2020 average (°C)
UK	10.03	9.88 (2014)	9.14
England	10.94	10.75 (2014)	9.96
Wales	10.23	10.09 (2014)	9.41
Northern Ireland	9.85	9.77 (2007)	9.13
Scotland	8.5	8.43 (2014)	7.69
CET	11.1	11.00 (2014)	10.2

Every one of the top ten 'hottest years' on record have been recorded since 2003. By contrast, there has not been a top ten 'coldest year' for sixty years.[31]



10 COLDEST UK YEARS		10 HOTTEST UK YEARS	
1 1892 - 7.02 °C	6 1886 - 7.45 °C	1 2022 - 10.03 °C	6 2007 - 9.56 °C
2 1888 - 7.28 °C	7 1887 - 7.51 °C	2 2014 - 9.88 °C	7 2017 - 9.53 °C
3 1885 - 7.36 °C	8 1917 - 7.52 °C	3 2006 - 9.70 °C	8 2003 - 9.47 °C
4 1963 - 7.40 °C	9 1909 - 7.52 °C	4 2020 - 9.62 °C	9 2018 - 9.45 °C
5 1919 - 7.42 °C	10 1895 - 7.55 °C	5 2011 - 9.61 °C	10 2002/4 - 9.44 °C

UK CLIMATE IN THE LONG RUN

The Met Office provides the Westminster government with UK climate projections, based on the most recent scientific evidence on projected climate change, in order to plan for the future. The last major assessment, UKCP18, was updated last year by the Met Office.

The average temperature over the most recent decade (2009-2018) has been on average 0.9°C warmer than the 1961-1990 average. The longest running instrumental record of temperature in the world, the Central England Temperature dataset, shows that the most recent decade (2009-2018) was around 1°C warmer than the pre-industrial period (1850-1900). This temperature rise in the UK is consistent with warming that has been observed at a global scale, of around 1°C since the pre-industrial era.

Winters in the UK for the most recent decade (2009-2018) have been on average 5% wetter than 1981-2010 and 12% wetter than 1961-1990. Summers in the UK have also been wetter, by 11% and 13% respectively.

Mean sea level around the UK has risen by about 17cm since the start of the 20th century (when corrected for land movement).[32]

FUTURE TEMPERATURE CHANGE

The Met Office also made projections for the coming years. By the end of the 21st century, all areas of the UK are projected to be warmer. By 2070, in the high emission scenario, the range of average warming amounts to 1.3°C to 5.1°C in summer, and 0.6°C to 3.8°C in winter.

With future warming, hot summers like 2022 could become even more common by mid-century, with chances increasing further to around 50-60%. By the 2070s, the temperature of hot summer days shows increases of 3.8°C to 6.8°C under a high emissions scenario, along with an increase in the frequency of hot spells.

Hot spells, typically defined as maximum daytime temperatures exceeding 30°C for two or more consecutive days, are largely confined to south-east UK in the present-day. In the future (by 2070s) under a high emissions scenario, the frequency of hot spells increases. Despite overall summer drying trends, new data suggests future increases in the intensity of heavy summer rainfall events.[33]

SECTION 4
IS THE FIRE AND RESCUE SERVICE READY TO TACKLE WILDFIRES?

Firefighters have done a tremendous job tackling wildfires across the UK in recent years. However, the overarching governance and management framework for wildfires in the UK is weak. With the prospect of more wildfires in the future, which will be more intense and last longer, the FBU highlights the resilience weaknesses in the system.

Fire and rescue services across the UK have the responsibility to respond to wildfires and determine the means of suppression. Fire and rescue is a devolved matter in the UK, with different legislative and administrative arrangements for England, Wales, Scotland and Northern Ireland. An informative report by Claire Belcher and others (2021) rightly points out:

> *"There is no single point of governance, legislation or training standards across the different administrations".*

NATIONAL RISK REGISTER

The Civil Contingencies Act 2004 provides the framework for emergency preparedness in the UK. Under the legislation, the Cabinet Office of the Westminster government drafts a classified National Security Risk Assessment, with headline risks made public through the National Risk Register. The first National Risk Register was published in 2008 and is revised biennially. Wildfire was added to the register in 2013. It stated:

> *3.71 Risks are reviewed annually and the risk posed by wildfires, as detailed below, is a new inclusion to the National Risk Assessment and National Risk Register.*
>
> *3.72 Wildfires are predominantly started as a result of human activity. This could be accidental, through carelessness (for example as a result of barbeques or camp fires), or deliberate. Sparks from power lines and transport, or ordnance in military training areas have also been known to start wildfires. Natural phenomena (for example, lightning) also account for a proportion of wildfires.*
>
> *3.73 Some weather conditions (for example, hot, dry and/or windy) provide good conditions for wildfires to start and/or spread. These weather conditions tend to be relatively short-lived and not spread evenly across the year. The UK nominally has two fire seasons: spring (March to May); and summer (July to September). In years where there has been a significant drought, the number of wildfires usually rises significantly. Climate change is likely to lead to longer drier summers, thus increasing the risk of more frequent, larger fires.*[34]

In the 2013 National Risk Register, wildfire was considered to have the lowest overall relative impact score (1), with the relative likelihood of occurring in the next five years estimated at between 1 in 200 and 1 in 20. However, the Register recognised that "Wildfires present a challenge for the emergency services in dealing with the incident while maintaining 'business as usual' to manage other emergency response events".

In the latest National Risk Register (2023), wildfire was scored Level 2 for the impact of the reasonable worst case scenario, with the likelihood of 0.2% to 1%. It states:

"The reasonable worst-case scenario is based on a sustained and widespread extreme wildfire requiring protracted multi-agency attendance over 4 to 7 days, with a significant impact on responder resilience and business as usual activities. Evacuations would be necessary, with a high risk of casualties and/or adverse health impacts. The wildfire would cause significant disruption or damage to critical infrastructure, transport networks, utilities and the environment."[35]

LOCAL RESILIENCE FORUMS

The Civil Contingencies Act also requires Local Resilience Forums to undertake contingency planning. Local Resilience Forums are multi-agency bodies, consisting of Category 1 responders (fire, ambulance and police), Category 2 responders (including local authorities, the Health and Safety Executive, Environment Agency) as well as invited groups. Each Local Resilience Forum produces a public-facing Community Risk Register, which rates the relative likelihood, impact and risk of locally relevant hazards and threats over the next five years, and makes contingency plans to control them.

Of the 41 Community Risk Registers in England and Wales for which data was publicly available online in 2010, 31 included wildfire. The modal rating of wildfire was 'medium risk' (score 2 out of 5). The Scottish Wildfire Forum was set up in 2004 after severe wildfires in the hot, dry spring of 2003. The model was copied by the English Wildfire Forum in 2007, which later became the England and Wales Wildfire Forum.[36]

NATIONAL FRAMEWORKS

However, recognition of the risks of wildfire is weaker further down the chain of risk management. Since devolution, administrations have produced a Fire and Rescue National Framework document. This is meant to be a strategic plan outlining how government objectives for fire and rescue can be delivered.

In England, there have been four National Framework documents, published in 2006, 2008, 2012 and 2018. None refer explicitly to the risk of wildfires. Similarly, the Wales Fire and Rescue National Framework 2016 does not refer to wildfires. The Knight Review (2013) also failed to address the risks of climate and wildfire.[37]

In 2017, the Westminster government announced that HM Inspectorate of Constabulary would expand its remit to inspect fire and rescue services in England. To date, HMICFRS has produced four annual *State of Fire and Rescue* reports. Only the last two even mention wildfire and the only mention of climate is the (harsh) *financial* climate facing fire and rescue services. HMICFRS devotes vast amounts of time and space attacking the FBU, but very little addressing the growing risk from wildfire.[38]

The Scottish government also publishes its Fire and Rescue Framework for Scotland. Although earlier versions did not directly mention wildfire, the 2022 Fire and Rescue Framework for Scotland does contain a section on it. This followed from Scotland's First Minister declaring a global climate emergency in April 2019, and for the SFRS "to address and prepare for new challenges as Scotland faces more extremes of weather". [39]

IRMPs

Fire and rescue services across the UK determine their priorities based on a risk assessment process. These are called Integrated Risk Management Plans (IRMPs), although many now have different titles, such as Public Safety Plans. The IRMP should set out a fire and rescue authority's strategy to meet its statutory and other obligations, determining the allocation of resources, equipment and training required. IRMPs are usually revised after three years.

A survey was undertaken in 2015 by a group comprising representatives from academia, the Chief Fire Officers Association (CFOA) and the Forestry Commission into the extent to which wildfire was included in fire and rescue service IRMPs across the UK. The survey indicated that around 60% of fire and rescue services had considered wildfire in their IRMP, around 50% had included wildfire in their IRMP and 55% had wildfire included in their area and local service plans. Some 70% of fire and rescue services described wildfire as a specific risk on their Community Risk Register. Regional variations were found regarding the inclusion of wildfire in IRMPs, with some lacking reference to wildfire.[40]

A more recent study by Andy Moffat and Rob Gazzard (2019) focussed on wildfire adaptation and contingency planning in the South East of England. It showed that of the eight fire authorities assessed, two of them made no reference to wildfire. Of those that did include wildfire, the risk was not seen as a priority and only two (Buckinghamshire and Surrey) mentioned the link between climate change and wildfire.

The researchers found little correlation between the occurrences of wildfires per brigade with the occurrence of wildfire risk mentioned in IRMPs. Some brigades that had experienced a considerable number of wildfires may not have included wildfire in their IRMP. This suggests a lack of recognition of the risk of wildfires.[41]

Belcher (2021) rightly points out a flaw with the system of emergency planning that now dominates the fire and rescue service, as found in the national frameworks and IRMPs:

> *"Short policy durations (e.g. three years) are too short to capture the long-term planning and foresight required to adapt to the changing fire risk over the next 50 years."*[42]

NFCC

For the last two decades, fire and rescue service policy and preparedness for wildfire has been overseen by chief fire officers. The Chief Fire Officers Association (CFOA), renamed the National Fire Chiefs Council (NFCC) in 2017, is a membership association for fire service principal managers, with the status of a charity and a company. It receives millions of pounds from central government and from local fire and rescue services, despite having a small membership and no statutory advisory responsibilities.

In May 2011, CFOA produced a position statement on wildfire. It promised to "raise awareness" of the risks of wildfire and to "seek to develop national standards for wildfire training". In January 2020, the NFCC produced a position statement on wildfire. The text is almost identical to the 2011 position, with additions mostly boosting the NFCC's role. The statement made no recognition of the growing risk from wildfire. Twelve years after the initial position statement, no national standards had been produced.[43]

In 2016, CFOA/NFCC produced National Operational Guidance on wildfires. The guidance states that a wildfire will meet one or more of the following criteria:

- Involves a geographical area of at least one hectare (10,000 square metres)
- Has a sustained flame length of more than 1.5 metres
- Requires a committed resource of at least four fire and rescue service appliances/ resources
- Requires resources to be committed for at least six hours
- Presents a serious threat to life, environment, property and infrastructure.[44]

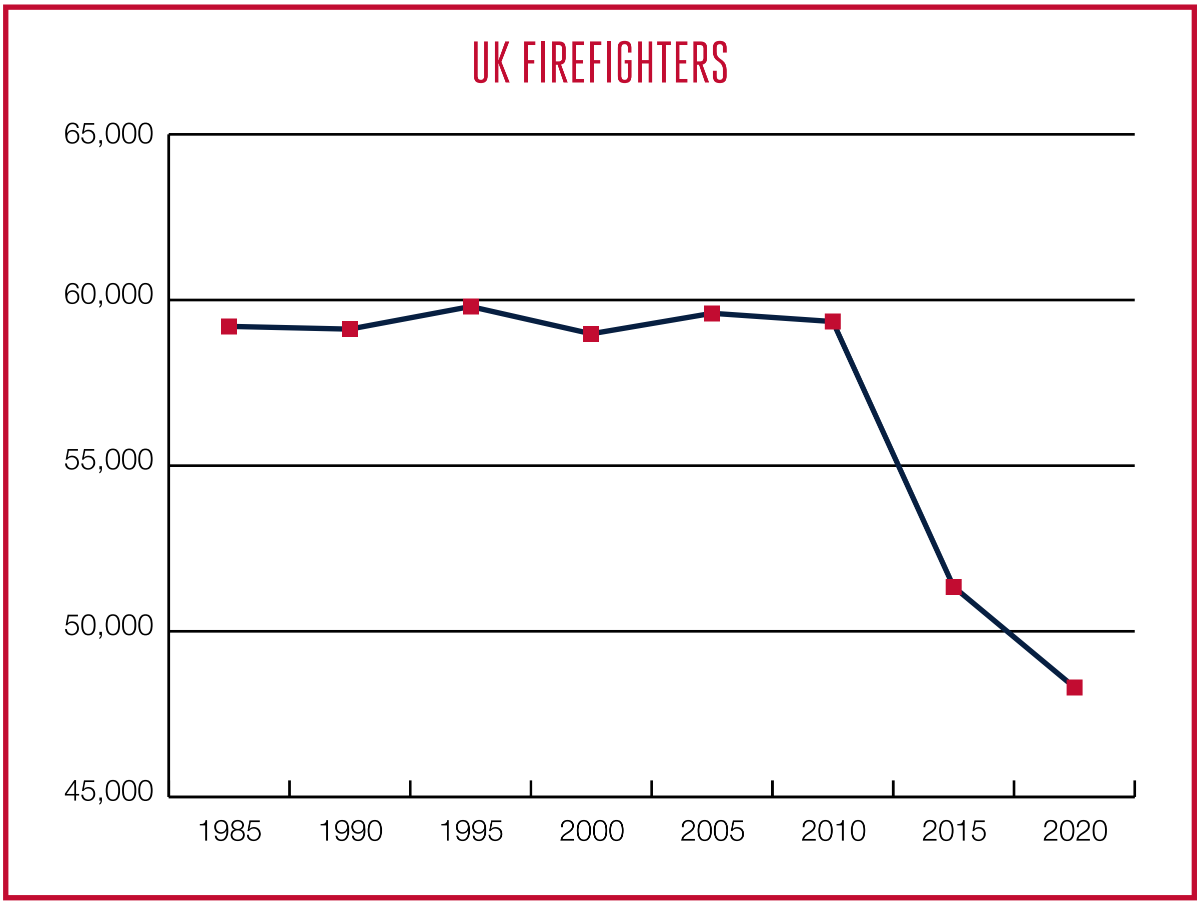
The NFCC's National Operational Learning (NOL) Action Note states that "All fire and rescue services have a foreseeable wildfire risk".[45]

Year	2018	2019	2020	2021
Incidents	65	96	149	178

The NFCC's National Reporting Tool quantified the number of wildfire incidents:[46]
The NFCC works entirely within the narrow parameters set by the Westminster government. It does not consult with the FBU on climate change, flooding or wildfires, despite the work FBU members do tackling these incidents and the FBU's prominent role in UK-wide campaigning on these matters. The NFCC has not fought for more resources to tackle wildfires. In fact, chief fire officers have presided over the worst cuts in fire and rescue service history, leading to huge job losses just when the risks of wildfires are increasing.

JOBS

During the last decade or so, when the risk of wildfires has increased, the number of firefighters employed across the UK has plummeted, Almost 12,000 firefighter jobs have been cut, a fifth (20%) of the workforce.



Change 2010-2022	Wholetime	Retained	Control	Firefighters
England	-7,099	-2,248	-434	-9,781
Scotland	-822	-314	-60	-1,196
Wales	-184	-321	-29	-534
Northern Ireland	-121	-104	2	-223
UK	-8,226	-2,987	-521	-11,734

All roles and duty systems have been cut. All parts of the UK have been affected. These job cuts make the UK less resilient in the face of wildfire and other climate-related risks.

SECTION 5
HOW TO MAKE THE UK RESILIENT TO WILDFIRES

The increased risks of wildfires in the UK is now well established by scientists. However, ministers and their advisors have not prepared the fire and rescue service sufficiently to meet those risks. Firefighters want to make the UK resilient to wildfire. The FBU is therefore calling for:

1. A UK-wide wildfire strategy for fire and rescue, taking in lessons from international experience as well as UK best practice, so that wildfire risks are fully managed. This should include:
   - Ensuring the UK has a properly funded, trained and equipped emergency fire response model
   - Community engagement and wildfire protection plans to create healthy landscapes
   - Forest and wildland management strategies that address the growing risks from wildfire.

2. UK-wide standards covering all aspect of preparedness, planning, policy, research, statistics, training and equipment.

3. A statutory UK-wide fire and rescue advisory body, including the FBU and other key stakeholders, to produce the necessary standards and guidance, as well as strategies for implementation.

4. A statutory duty on governments and ministers to include wildfire in their strategy, framework and guidance documents.

5. A statutory duty on fire and rescue authorities to specifically manage the risks of wildfires, including through their risk assessment, IRMP and other relevant documents.

6. Building safety and fire safety, including Approved Document B, should be revised to reflect the risks of wildfire, particularly in the design of new developments at the rural-urban interface.

7. Central government investment in the fire and rescue service, to ensure sufficient firefighters and emergency control staff are maintained and expanded to meet wildfire risk. This should include:
   - An increase in the number of operational firefighters, fire inspectors and community fire safety officer roles across the UK
   - Working through the National Joint Council to improve recruitment and retention of retained firefighters in rural areas, supported by an adequate package of funding.

8. Central government funding for the necessary appliances and equipment for fire and rescue services. Funding needs to increase to end the postcode lottery of wildfire response, including over-reliance on cross border assistance agreements.

9. UK-wide standards and funding for training to tackle wildfires, including command and control training for officers. This should include:
   - Rural-urban interface firefighting training
   - Fuel removal/fire break tactics (such as prescribed fire) as part of emergency response
   - Heat, illness preparation and awareness training
   - DECON training to mitigate exposure to fire contaminants.

10. Investment in personal protective equipment and welfare facilities for firefighters tackling wildfires. This should include:
    - Research into the health, safety and wellbeing of firefighters fighting wildfires
    - Adequate procedures and facilities for DECON
    - Body-worn physiological monitors for firefighters engaged in wildfire firefighting
    - Specialist PPE and respiratory protection suitable for the conditions of wildfire firefighting.

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