COMMUNITY RISK MANAGEMENT PLAN 2014-2020

> Mid-Point Review 2017-18 (Updated September 2018)

STATION RISK PROFILE 2018 BEWDLEY



Station Risk Profile 2018

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The Station Risk Profiles provide local detail about fire and other risks in each of the Service's 27 fire stations areas. They include information about each fire station and the types of incidents they attend, and highlight the main areas at risk of Accidental dwelling fire and other life risk incidents. Each Profile provides background information and supporting evidence for the Mid-Point Review of the Community Risk Management Plan (CRMP) 2014-2020. Where appropriate, figures used in the Profiles are rounded to the nearest 100.

The Station Risk Profiles should be read in conjunction with two other supporting documents: the CRMP Risk Review, which provides a spatial analysis of life risk data across the two counties, and a Demographic Profile, which provides information about the characteristics of the local population. All documents can be found on the Service website.

2018 Station Risk Profile: Bewdley Fire Station

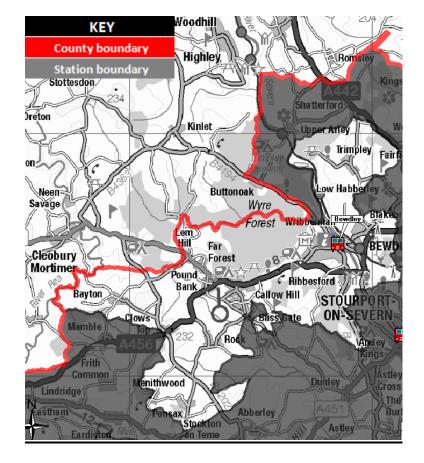
1. Introduction

- 1.1. Station Risk Profiles are reviews of potential life risks in each of the Fire and Rescue Service's 27 fire station areas. They form part of the CRMP Risk Review, which looks at the major life risk incidents across the two counties Fires and Road Traffic Collisions. Together with a Demographic Profile of the Herefordshire and Worcestershire population, they provide support in the preparation of the Community Risk Management Plan (CRMP) Mid-Point Review 2018.
- 1.2. The Station Risk Profiles use the information provided by the CRMP Risk Review to provide a focused overview of the risks within each station area. They include a review of the types of incidents attended, and provide maps highlighting areas likely to be at greater risk of Accidental Dwelling Fires (ADFs) and Road Traffic Collisions (RTCs). Other potential risks such as outdoor fires and water incidents are also included where appropriate. Finally, there is an overview of the range of prevention and protection activity to be carried out within the station area, including a list of relevant heritage sites (Appendix 1).
- 1.3. Station Commanders, crews and the Community Risk Department will use the information, in conjunction with the National Fire Chiefs Council Community Risk Calendar (Appendix 2) to inform their planning for prevention and protection work within the station area over a 12 month period.
- 1.4. There are a number of development plans for housing across the two counties up to 2030. Around 40,000 new homes are planned to be built between 2017 and 2030, a rate of about 3,000 per year. Most of the housing development is planned for sites within and around the larger urban areas, particularly the two cities of Worcester and Hereford and the main towns. It will be important to monitor the potential impact of this growth on our services, as population and vehicle numbers will continue to increase in these areas over this period. For example, there may be an increased need for more community safety and road safety activities in these areas, and with more traffic on the roads, there may be an impact on how quickly fire engines can reach incidents. Over the next few years, incident numbers and the types of incidents occurring in newly built areas will be monitored to help to assess any potential impact.
- 1.5. This current version of this Station Risk Profile (dated September 2018) has been compared to the previous one (dated April 2018), and has been extended to include additional incident data (2017-18), shown in Appendix 3. Incidents such as ADFs, RTCs and Water Rescues (when relevant) were mapped and cross-examined with the heat maps that were produced based on Mosaic data¹ in the previous version. The heat maps will be revised when the Office for National Statistics (ONS) release revised demographic data from the 2020 Census, and updated Mosaic data becomes available.

¹ Mosaic data provides a detailed and accurate understanding of each citizen's location, their demographics, lifestyles and behaviours.

2. Bewdley Fire Station Overview

- 2.1. Bewdley Fire Station is located at Dog Lane just outside Bewdley Town centre. The Fire Station covers a large area of around 27 square miles, which houses 13,029 residents living in 6,139 homes. The latest demographic data for the Wyre Forest shows that 24 per cent of residents are aged over 65. This is predicted to increase to 27 per cent by 2026. There is also a small Black and Minority Ethnic (BaME) population of 2,702 about 3 per cent of the total. Within this, the largest group is Asian British Bangladeshi.
- 2.2. The Station has one fire engine which is used to respond to all types of incidents as well as a Land Rover and Argo Cat both of which are used for off road incidents.
- 2.3. During 2017/18 there were 129 incidents within the Fire Station area, approximately 2 per cent of the Service's total activity. The Station also receives and provides operational support to and from neighbouring Fire Stations as well as locations further afield if needed.
- 2.4. Map 1 shows a general overview of the Fire Station ground. The shape of the Station ground is based on areas nearest to the Station and is determined by the Service's Fire Control.



Map 1: Overview of Bewdley Fire Station ground

Station Crewing Systems

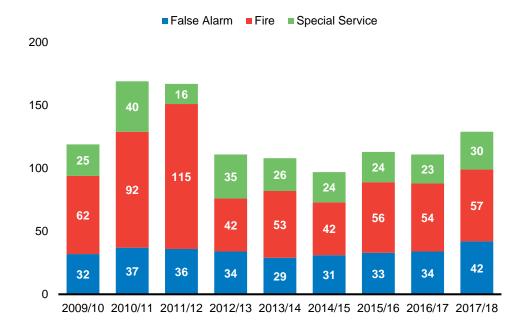
- 2.5. Within Hereford & Worcester Fire and Rescue Service, there are many different ways of crewing the Fire Stations. This is determined by the level of risk associated with a Station area and the needs of the local community. The busiest Fire Stations are permanently crewed 24 hours a day (known as the Wholetime Duty System). The less busy Fire Stations are crewed by On-Call firefighters, who live or work locally and can respond to emergency calls quickly when they are needed (known as the Retained Duty System or RDS). Other duty systems are Day Crewing, where Fire Stations are permanently crewed during the day and by On-Call firefighters at night, and Day Crewing Plus, where Fire Stations are permanently crewed during the day by firefighters, who remain available at night at the Fire Station on an On-Call basis so that they are immediately available if needed.
- 2.6. The fire engine at Bewdley Fire Station is crewed by a Retained Duty System crew who can usually respond within six minutes of being alerted.

3. Incident Overview

3.1. The Service attends a range of incidents that can be divided into three broad categories; Fires, Special Services and False Alarms. Each category has a range of incidents that pose different types and levels of risk to communities and to the firefighters who tackle them. The categories are shown below:

Fires	these include dwelling fires, other building fires, outdoor fires and car fires	
Special Services	these incidents are those such as Road Traffic Collisions, flooding, person rescues, spills, leaks and animal rescues	
False Alarms	these are when the Service respond to fire Alarms or phone calls where there is no actual incident	

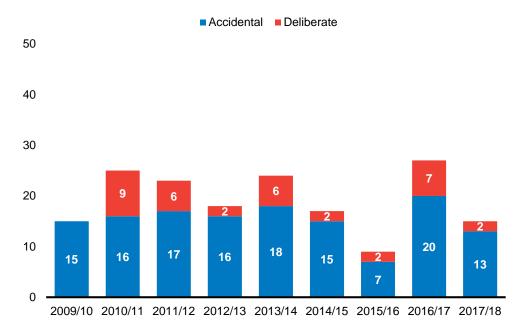
- 3.2. Over the last nine years (1 April 2009 to 31 March 2018), crews at Bewdley Fire Station attended 1,124 incidents. Vast majority of these were Fires (44 per cent), approximately one in four was Special Service and one in three was False Alarm. Over the nine years, there has been an increase in the number of incidents attended in, with an overall increase of about 8 per cent.
- 3.3. Graph 1 below provides further details.



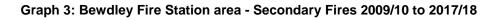
Graph 1: Bewdley Fire Station area – Incidents attended 1 April 2009 – 31 March 2018

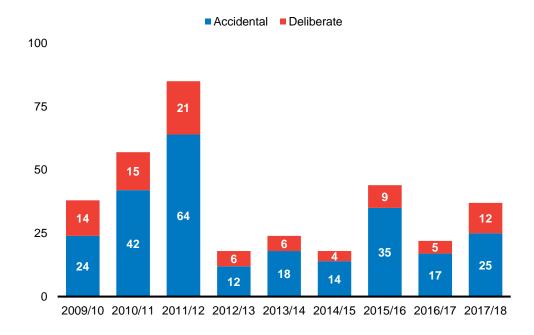
Fires

3.4. The Fires category is generally broken down into two main types; Primary Fires, which are mainly building fires and vehicle fires, and Secondary Fires, which are outdoor fires affecting areas such as grassland, woodland, crop fields and gardens. It can be seen that in Graph 2 that nearly all of the Primary Fires within the last nine years have been caused accidentally. The figures have shown an upward trend spiking in 2016/17 where the majority of Primary Fires involved road vehicles.



Graph 2: Bewdley Fire Station area - Primary Fires 2009/10 to 2017/18

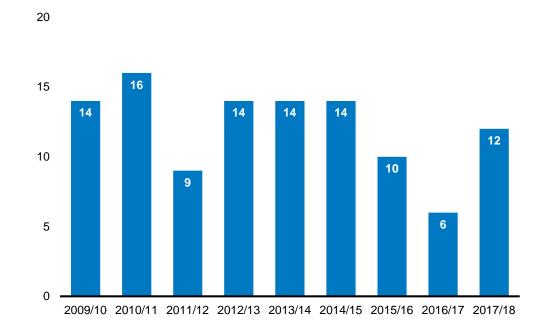




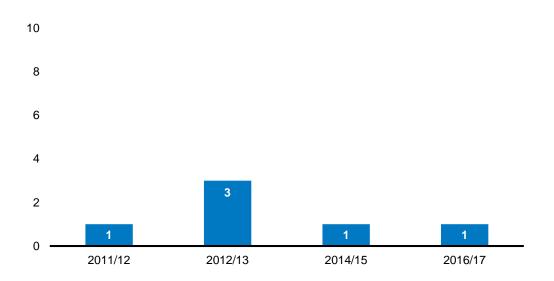
- 3.5. Graph 3 shows a breakdown of Secondary Fires for the Bewdley Fire Station area over the last nine years. Secondary Fires mainly involve loose refuse (typically a bin fire) and grassland fires during warm summer months. The graph shows that the numbers of accidental and deliberate Secondary Fires are both very low and have decreased by 3 per cent. The spike in 2011/12 was caused by a large number of incidents on the Severn Valley Railway line.
- 3.6. Accidental Dwelling Fires are a particular risk to life for both householders and firefighters. These are discussed further in Section 5 later in this report.

Special Service Incidents

3.7. In terms of Special Service incidents, the major category for the Bewdley Fire Station area involving potential risk to life is Road Traffic Collisions (RTCs). Over the last nine years, the number of RTCs attended has fallen by 14 per cent as shown in Graph 4 below. Over the same period, the number of incidents involving rescues from water has fluctuated with a spike in 2012/13 because of adverse weather conditions. Since then the number of water rescue incidents has remained very low. This is shown in Graph 5 below.



Graph 4: Bewdley Fire Station area – Road Traffic Collisions attended 2009/10 to 2017/18

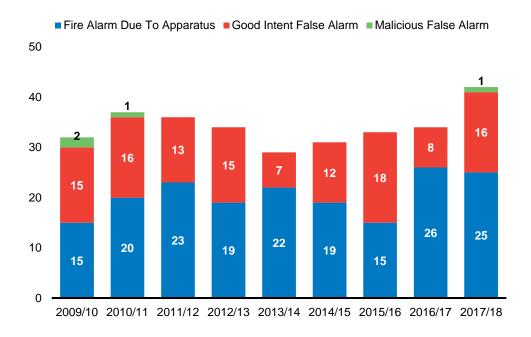


Graph 5: Bewdley Fire Station area – Water Rescues 2009/10 to 2017/18

3.8. RTCs and Water Rescues are discussed further in sections 6 and 7 respectively later in this report.

False Alarm Incidents

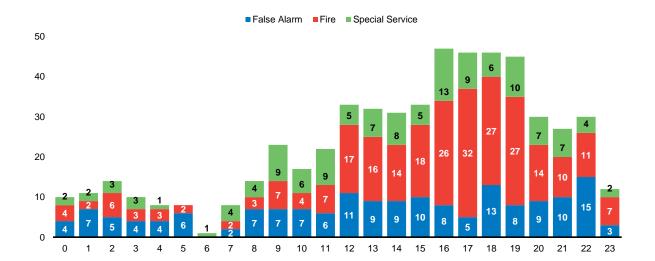
3.9. False Alarm incidents are categorised into False Alarm Malicious, False Alarm Good Intent and False Alarm due to Apparatus. Over the last nine years, the total number of False Alarms attended has been varied due to increases and decreases in both Good Intent False Alarms and False Alarms Due To Apparatus.



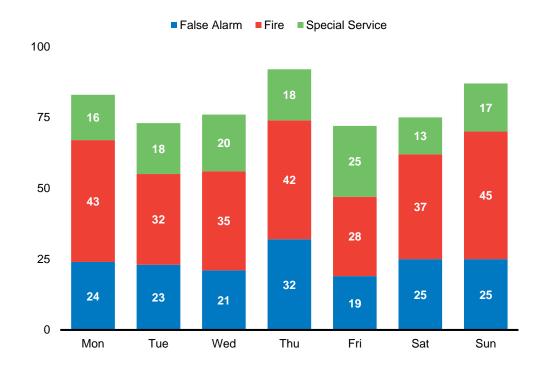
Graph 6: Bewdley Fire Station – False Alarms 2009/10 to 2017/18

4. Bewdley Fire Station Area Activity

- 4.1. It is important for Station Commanders at the Service's Fire Stations to understand when incidents are more likely to happen, so that the right resource can be made available at the right time.
- 4.2. Using the last five years' worth of activity data (2013/14 to 2017/18) for Bewdley Fire Station's area, incidents can be analysed in detail by time, day and month. This can help to identify particular trends, such as most incidents occurring during daylight hours which helps Station Commanders in ensuring enough resources are in place.
- 4.3. The following graphs show the specific hours, days of the week and months when incidents occurred in the Bewdley Fire Station area. Station Commanders will be able to examine the information closely to help identify any trends in activity types or occurrences, so that they can plan to address them with appropriate actions.

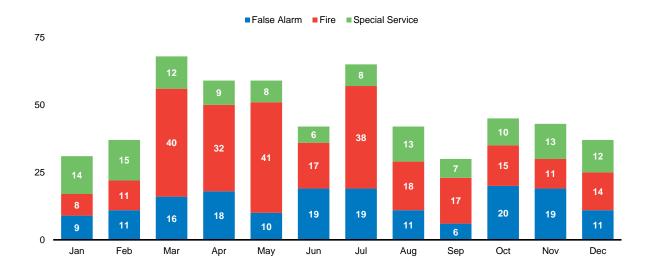


Graph 7 Bewdley Fire Station area - Hour of the Day Incidents Occurred 2013/14 to 2017/18



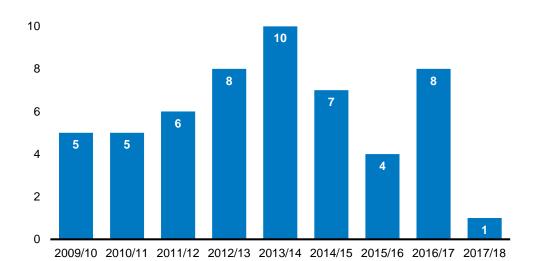
Graph 8 Bewdley Fire Station area – Day of the Week Incidents Occurred 2013/14 to 2017/18

Graph 9: Bewdley Fire Station area – Month of Year Incidents Occurred 2013/14 to 2017/18



5. High Risk Area In Relation To Accidental Dwelling Fires

5.1. This section looks specifically at Accidental Dwelling Fires and the potential risks within the Bewdley Fire Station area. While the number of Accidental Dwelling Fires fluctuates over the nine years from 2009/10 to 2017/18, as shown in Graph 10 below, the latest annual figures show that there was 1 in a 12 month period in the Bewdley Fire Station area. This equates to 0.2 incident per every 1,000 households. Accidental Dwelling Fires have the potential to pose the risk of serious injury or death for the occupants and also for the firefighters attending the incident.



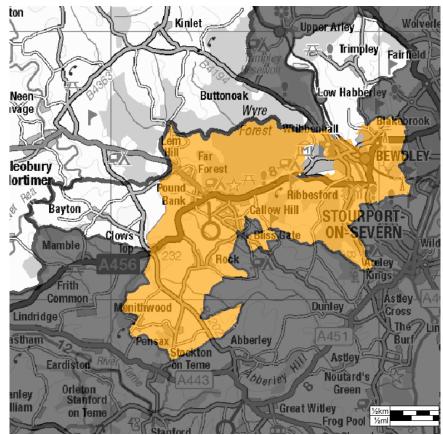
Graph 10: Bewdley Fire Station – Accidental Dwelling Fires 2009/10 to 2017/18

- 5.2. The CRMP Risk Review 2018 has mapped the incidence of Accidental Dwelling Fires across the two counties and has assigned risk ratings to highlight those areas that are at high, medium and low risk. This is worked out using a sophisticated Fire Risk Model, which is also used by Cumbria and Lancashire Fire and Rescue Services among others. Details of the calculations involved can be found in the CRMP Risk Review document.
- 5.3. The analysis for the Bewdley Fire Station area shows that most areas are at low risk of Accidental Dwelling Fire. However, it also shows that a small number of areas are considered to be at medium and high risk. This does not mean that living in a high risk area will lead to someone having an Accidental Dwelling Fire, but it does mean that high risk areas tend to have more Fires than would normally be expected.
- 5.4. Table 1 below provides a list of those areas within the Bewdley Fire Station ground that have been considered to be at Medium and High risk at some point during the last eight years. It can be seen that on two occasions the Blackstone and Catchems End area has been classified as High risk.

5.5. Table 1: Areas most at risk of fire 2009/10 – 2016/17

Local Authority	Ward	LSOA name	Risk 2009/10 - 2011/12	Risk 2010/11 - 2012/13	Risk 2011/12 - 2013/14	Risk 2012/13 - 2014/15	Risk 2013/14 - 2015/16	Risk 2014/15 - 2016/17	Overall Score
Wyre Forest	Wribbenhall & Arley	Blackstone & Catchems End	М	Μ	н	н	М	М	2

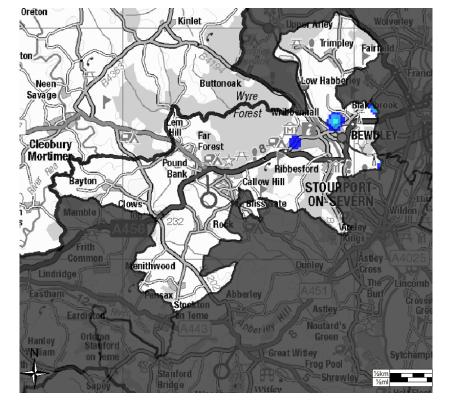
5.6. The Medium risk areas for 2014/15 to 2016/17 are shown on Map 2 below.

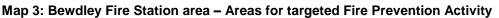


Map 2: Bewdley Fire Station area – Medium Risk areas 2014/15 to 2016/17

5.7. In addition to mapping areas at risk, the CRMP Risk Review also examined the characteristics of households that tend to have more Accidental Dwelling Fires than others. Among these characteristics are families living on low incomes striving to make ends meet, elderly people with varying levels of social need and dependence, and families and single people renting low value homes and flats with a high level of need. The fire risk model includes various levels of deprivation and is able to map the areas where such households tend to live across the two counties.

Map 3 below provides hotspots of locations where such households live in the Bewdley Fire Station area. There is some correlation with the Medium risk areas identified in Map 2.



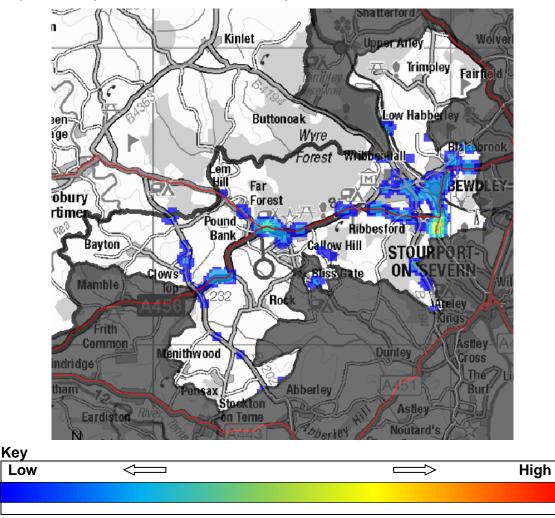




- 5.8. The map above shows where hotspots of areas with households that share some of the characteristics of those households which tend to have more Accidental Dwelling Fires than others. The hotspots show how concentrated the data is, graduating from **high** (i.e. where such households occur most frequently) to **low** (i.e. where such households occur least frequently). Where no colour is shown, this indicates that the area does not have households who share the at risk characteristics, though experience shows that fire can affect any household anywhere.
- 5.9. Mapping Accidental Dwelling Fires and those households that tend to have more Accidental Fires than others provides Station Commanders and Community Risk officers with valuable information that will help to prioritise how they target their prevention and protection activities. When examining the local areas at potential risk, the maps can be expanded to show street level information about households and risks. Additional information about how to best contact those households at potential risk will also be available through the Community Risk department.

6. Road Traffic Collision Incidents

6.1. The CRMP Risk Review 2018 identified the Bewdley Fire Station area as a Low risk area for Road Traffic Collisions (RTCs) in 2014/15 – 2016/17. This was determined using a risk model based on the number of RTC incidents attended and the severity of those incidents in terms of injury to persons. Map 4 below shows the location of all RTCs that occurred within the Bewdley Fire Station area over the last eight years (2009/10 to 2016/17). The hotspots tend to be concentrated around the town centre and the main roads within the Bewdley Fire Station Area.



Map 4: Bewdley Fire Station area – RTC Hotspots 2009/10 to 2016/17

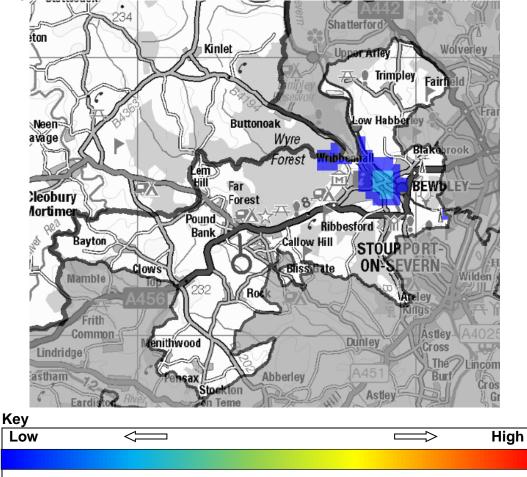
- 6.2. The map shows hotspots ranging from **high** (i.e. where RTCs occurred most frequently) graduating to **low** (i.e. where RTCs occurred least frequently). Where no colour is shown, this indicates that the area did not have RTCs incidents in the last eight years.
- 6.3. The maps can be expanded to show individual roads and the location and type of each RTC incident attended. This will provide Station Commanders and Community Risk officers with important data when working with local authority and road safety partners.

7. Other Potential Life Risk Incidents

- 7.1. In addition to Accidental Dwelling Fires and Road Traffic Collisions, the Service attends a number of other incidents which have the potential to harm life and property. Among such incidents are water rescues and weather-related issues such as wide area flooding, wildfire and heritage buildings.
- 7.2. Due to the geographical makeup of the Bewdley Station Area there is an inherent wildfire risk in the Wyre Forest. Work is done locally to assist with mitigating contributing factors and tactical plans are in place should any wild fires occur. These plans are listed on the Mobile Data Terminals carried by every fire engine.
- 7.3. Heritage issues are less likely to be a risk to life, but safeguarding the heritage environment (both built and natural) is an important part of the Service's role in helping to improve the safety of the community. Heritage issues are discussed further in section 8 below.

Water Incidents

7.4. Map 5 below shows the location of all water incidents involving life risk that have occurred within the Bewdley Fire Station area over the last eight years.



Map 5: Bewdley Fire Station area – Water-related life risk incidents 2009/10 to 2016/17

- 7.5. The major water source within this area is the River Severn and the majority of water rescues have been in and around the area where the river passes through Bewdley town centre. As with the maps of Accidental Fires and RTCs, the maps of water rescues can be expanded to show incidents in more detail, which will assist Station Commanders in familiarising crews with areas of concern and in working with the Community Risk department and partner agencies to carry out preparatory and preventative work and raise awareness within the local community.
- 7.6. Other water-related incidents include rescues of people from flooded properties, fords, lakes and quarries as well as animal rescues from water. These can also be mapped to assist Station Commanders and Community Risk officers in their partnership work with water safety agencies and landowners.

Flooding Areas

- 7.7. Maps prepared by the Environment Agency show areas that are likely to flood in the event of adverse weather conditions. Fire Station crews also have access to more detailed maps through their Mobile Data Terminals carried by every fire engine, as well as via the Environment Agency website.
- 7.8. Map 6 below shows the area most likely to flood, which is primarily along the course of the River Severn.



Map 6: Bewdley Fire Station area – Flooding areas identified by the Environment Agency

7.9. Information about areas likely to flood is used during flood planning with water safety partners and can be used as part of the Home Fire Safety Checks (Safe and Well Checks) carried out with residents in these areas. This would include information on flood risk and advice on early evacuation in the event of flooding. Fire Station crews will also find more specific information about flood planning on the Service intranet.

8. Prevention and Protection Activities

8.1. All Fire Station crews and Community Risk officers have a key role to play in preventing incidents from happening and in protecting life and property in the event of emergency incidents. In helping to deliver the Community Risk Management Plan over the next few years, Bewdley Fire Station crews and the Community Risk department will be involved in a range of activities including the following:

a) NFCC Community Risk Calendar 2018

Each year the National Fire Chiefs Council prepares a calendar of events and campaigns to help promote community safety across the country. The Service uses this to help plan local events and campaigns throughout the year, in addition to more local community safety activities, and Fire Stations are fully involved in delivering this in their local areas. The 2018 Calendar can be found in Appendix 2 of this report.

b) Home Fire Safety Checks (Safe and Well Checks)

These checks involve a visit to people's home to deliver fire safety advice and to install smoke Alarms where needed. They help to identify other potential areas of concern, which may require additional input from partner agencies, in order to help people remain safe and well in their own homes.

Having identified households and areas likely to be more vulnerable to Accidental Dwelling Fires as set out in section 5 of this report, Station Commanders will be able to cross-reference the most at risk areas when working with the Community Risk department and community safety partners to introduce more targeted prevention activities.

c) Intel Process

Every Fire Station has identified a number of specific risks in their area, which are scheduled to be visited and reviewed on a regular basis. The specific risks for Bewdley Fire Station are listed on the Mobile Data Terminals and on the Service intranet at the following link: <u>Bewdley Fire Station Risk Premises</u>. The Intel Process also enables crews to identify potential new risk properties and sites.

In addition, each Fire Station presents their Top 5 Risks based on the specific risks to firefighters, the public, the environment, the local economy and heritage. These are reviewed by all firefighters at the Fire Station as part of their competency training.

d) <u>Technical Fire Safety Inspections</u>

These involve Technical Fire Safety officers conducting risk based audit programmes looking at the potential risks in commercial premises including occupancy and management procedures. This helps to ensure the premises meet fire safety regulations²

² The <u>Regulatory Reform (Fire Safety) Order 2005</u>

e) Business Fire Safety Checks

Commercial properties regarded as low risk are visited by the Wholetime crews at Fire Stations, which involves crews checking for basic fire safety requirements. Any areas of concern are highlighted to Technical Fire Safety officers for further investigation.

Additional work is being undertaken by the Community Risk department to map commercial premises and their associated risks and once complete this will be made available to support Fire Stations in their work with local businesses.

f) <u>Heritage sites</u>

At December 2017, there were over 12,000 'listed' buildings and sites across Herefordshire and Worcestershire. 'Listing' is a process used to grade heritage importance and interest. Grade I and II* buildings and sites are of particular importance, of which there are currently 896 in the two counties.

The Bewdley Fire Station area contains 6 Grade I and 21 Grade II* buildings and sites. Appendix 1 provides a map and list of all such buildings and sites in the Bewdley Fire Station area. This will support Station Commanders in familiarising their crews with their locations, nature and value, and will help in planning emergency cover and preventative arrangements.

Appendix 1

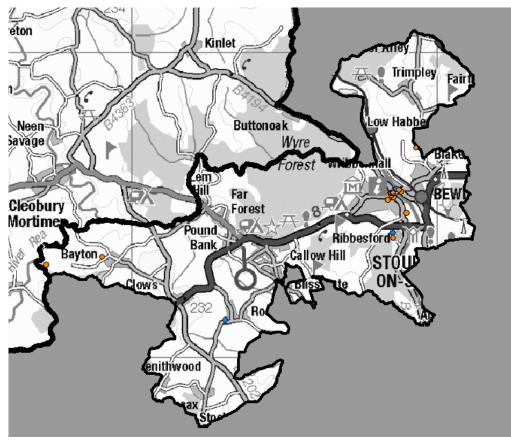
Grade I and Grade II* Listed Buildings in the Bewdley Fire Station area

Grade I buildings are considered to be of exceptional interest.

Grade II* buildings are considered to be of particular importance of more than Special interest.

The location of Grade I and II* listed buildings are shown on Map 7 below.

Map 7: Bewdley Fire Station – Location of Grade I and Grade II* Listed Buildings



Key

Grade I	•	3 buildings
Grade II*	0	14 buildings

The tables on the following pages list each building by the Station area. The buildings and structures are drawn from English Heritage's Listed Buildings database³, updated to August 2018. More information can be gained from this website by entering the list entry number into the search facility.

³ Listed Buildings Database

Bewdley – Grade I Listed Buildings

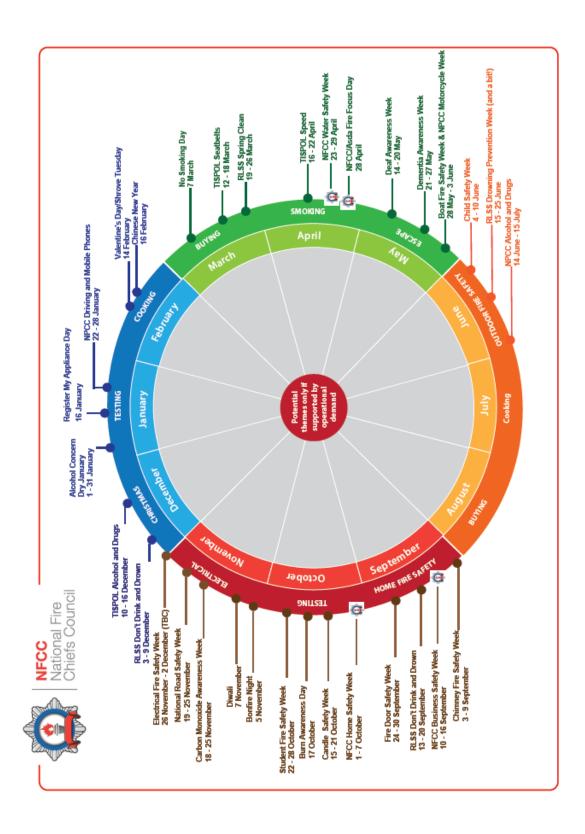
List Entry Number	Grade	Building Name	Eastings	Northings
1100696	I	Church of Saint Peter and Saint Paul	373058	271234
1115135	I	Church of St Leonard	378536	274094
1100000	I	Severn Bridge including Flanking Arches and Balustrade	378642	275519

Bewdley – Grade II* Listed Buildings

List Entry Number	Grade	Building Name	Eastings	Northings
1081469	*	Shakenhurst	367186	273045
1081471	*	Church of St Bartholomew	369027	273298
1329928	*	Ribbesford House	378546	273915
1348266	*	Winterdyne	378995	274736
1348265	*	Tickenhill	378376	275169
1099983	*	Roman Catholic Church of The Holy Family	378515	275254
1348654	*	Number 62 (The Manor House) and attached railings	378563	275256
1348653	*	Bailiff's House	378495	275328
1099966	*	Church of St Anne	378482	275385
1301049	*	13 and 14 Load Street	378537	275392
1100788	*	The Town Hall	378546	275405
1167365	*	5, 7 and 9 Stourport Road	378807	275431
1099956	*	Beales Corner	378741	275493
1167685	*	Hoarstone Farmhouse	379290	276874

Appendix 2

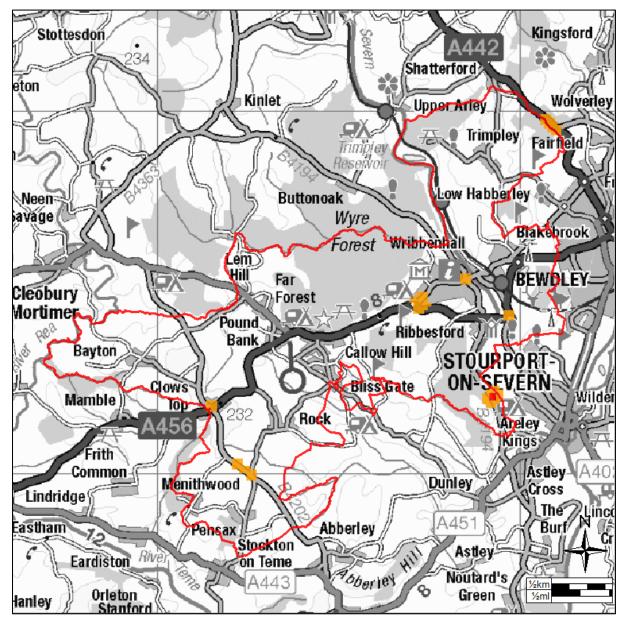
2018 NFCC Community Risk Calendar



Appendix 3

Incident data (2017-18) using geographical coordinates

The heat map represents the distribution of Road Traffic Collisions. This was produced when the total number of these incidents was equal to or greater than 5.



Road Traffic Collisions

The incident data, collected between 1 April 2017 and 31 March 2018, confirmed all the hot spots for Road Traffic Collisions which have been previously identified. Last year's data showed, however, a new area of concern, *i.e.*, A442 near Fairfield.