

Strengthening OUR Fire & Rescue Service



An Environmental Impact Assessment of the Three Scenarios

Introduction

An assessment has been undertaken of the potential environmental impacts that might arise from the three scenarios in the consultation exercise. The methodology that has been used was firstly to ascertain whether an assessment on major organisational change had been conducted by another Fire and Rescue Service. Professional expertise and sector knowledge were then used to develop the assessments. This followed a request for information from the Chief Fire Officers' Association (CFOA) Environment and Sustainability Community. There was also consideration and cross referencing with source documents that are referred to in this report.

Each scenario has been assessed against the likely changes to service delivery that would be required to ensure a balanced budget can be set by 2017/18. The environmental impact has focused on three key areas:

Fires, Road Traffic Collisions and Related Incidents.

Statutory functions are set out within the Fire and Rescue Services Act 2004. These functions include responding to fires, road traffic collisions and related incidents and wherever possible, working to prevent these incidents from occurring or mitigating their effects.

The principle environmental impacts of fire are contained in the Government's report, '*Impact of fire on the Environment and Building Sustainability: BD 2709*' (DCLG, 2010). These are:

- The discharge of the gaseous and particulate products of combustion into the atmosphere.
- The use of water in manual firefighting and water-based suppression systems.
- The potential contamination of groundwater and land from fire-fighting run-off.
- The re-instatement of the building and the disposal of fire damaged structure.
- The potential contamination of land from fire residues.

A reduction in front-line staff or downgrading of fire stations would result in an increase in response times to fires and other incidents. This would mean that each

incident would potentially be more developed before the Fire and Rescue Service was able to bring it under control. The negative environmental effects would mainly result from greater carbon emission due to the longer burn period and this would also mean that more water would be required to extinguish these larger fires. This could also mean that more resources would be required to put them out and that there would be more demolition and reconstruction work needed post-fire. There would also be a greater possibility of groundwater contamination and contamination of land due to fire water residues.

The DCLG report explains the benefits to the environment of the fitting of fire suppression systems such as sprinklers to contain fires and to reduce their impacts. Wiltshire and Dorset Fire & Rescue Services have actively promoted the fitting of these systems. However, in most circumstances, the fitting of these systems is not mandatory. The report also promotes the use of passive fire protection to limit the spread of fires. Both fire and rescue services promote the use and maintenance of passive fire protection through their enforcement fire safety and community fire safety work. This work also seeks to reduce the number of fires that occur. Any reduction in service delivery capacity has the potential to reduce the amount of fire safety and fire prevention work that could be undertaken. This would potentially lead to more significant incidents with increased loss of life, increased property damage and more detrimental impacts on the environment.

Climate Change

For some time, fire and rescue services have used their capabilities and resources to manage the effects of climate change both at local level and in support of national resilience. Fire and rescue authorities are Category 1 Responders under the Civil Contingencies Act 2004.

We work with other partners and our local communities to prepare for and to build resilience to extreme weather events such as flooding. When severe weather or flooding occurs, we respond to the scene to protect life and property. In addition to our normal front line resources, we also currently have specially trained and equipped staff to manage water incidents, to assess flood threat levels and to manage flood risks. We also play a key role in the coordination of the emergency response phase and we are able to bring in national assets to manage local threats..

Any reduction in resources will potentially affect the capability of each respective fire and rescue service to manage the effects of severe weather and flooding either before the event through working with our communities and partners in planning and preparing contingency arrangements and during the event itself in the response phase.

Management of Resources

Both Fire Authorities currently maintain certain levels of resources to deliver their services effectively against their respective Integrated Risk Management Plans (IRMP).

Each scenario has been assessed to establish how the most likely changes in resource disposition, capacity and capability that would be a required to maintain a balanced budget would impact on the environment.

Scenario 1

Table Error! No text of specified style in document.-6 Principal environmental impact of establishing a balanced budget in 2017/18		
Impacts	Impact	
	<i>BEST Case*</i>	<i>WORST case</i>
<ul style="list-style-type: none"> • More fires as capacity for prevention activities reduces. • Longer response times mean that fires will burn for longer with greater carbon emissions, more water required to extinguish them, more resources required to put them out, more demolition and reconstruction work required post-fire and greater possibility of groundwater contamination and contamination of land due to fire residues. • More road traffic collisions due to reduced capacity for prevention activities. Waste arising from RTCs may increase. • Reduced ability to strategically consider and manage environmental policies and procedures as management capacity reduces. • Reduced ability to respond to the effects of climate change such as flooding and severe weather both locally and in support of national resilience. • Reduced ability to carry out community work to reduce the effects of climate change such as flooding and severe weather. • Duplication of resources. 	H	H

Scenario 2

Under this scenario, there will still be a large funding gap and that will mean significant reductions in front line service delivery. There are opportunities to put in place strategic environmental policies, but not to the extent that would be the case with scenario 3.

Table Error! No text of specified style in document.-1 Principal environmental impacts of establishing a balanced budget in 2017/18			
		Impact	
		<i>BEST Case*</i>	<i>WORST case</i>
	<ul style="list-style-type: none"> ◆ More fires as capacity for prevention activities reduces. Under best case, there could be some economies of scale due to sharing of prevention teams, policies and procedures. ◆ Longer response times mean that fires will burn for longer with greater carbon emissions, more water required to extinguish them, more resources required to put them out, more demolition and reconstruction work required post-fire and greater possibility of groundwater contamination and contamination of land due to fire residues. ◆ More road traffic collisions due to reduced capacity for prevention activities. Waste arising from RTCs may increase. ◆ Reduced ability to strategically consider and manage environmental policies and procedures as management capacity reduces, although joint working and sharing of approaches may offset reductions in strategic capacity. ◆ Reduced ability to respond to the effects of climate change such as flooding and severe weather both locally and in support of national resilience. ◆ Reduced ability to carry out community work to reduce the effects of climate change such as flooding and severe weather. ◆ Some duplication of resources, but not to the extent of Scenario 1. 	M	M

Scenario 3

This scenario presents the best opportunity to secure existing levels of from-line service provision. There may be increased travelling due to a larger service area, but this can be partially offset by new ways of working and the use of new technology. The new fire and rescue service authority would have less single points of failure and would be more able to implement strategic environmental policies. Under the best case scenario, there is the potential for increased levels of prevention and protection activities to take place such as carrying out of more home fire safety checks and through the provision of a new safety education centre.

Table Error! No text of specified style in document.-2 Principal environmental impacts of establishing a balanced budget in 2017/18

	Main issues	Impact rating	
		<i>BEST</i> Case*	<i>WORST</i> case
<i>BEST</i> case	<ul style="list-style-type: none"> ◆ Under the Best case financial scenario, the level of prevention and protection will increase and therefore this will have a positive impact. ◆ There will however be more travelling requirements for members, middle and senior officers and corporate staff. This can be partially offset by a strategic hub in Salisbury with new ways of working and through greater use of video conferences and other new technology 	Positive	L
<i>WORST</i> case	<ul style="list-style-type: none"> ◆ Under this scenario, cuts or changes to service delivery and support departments will be of the order of £0.15m a level that will not give rise to a significant environmental impact. 		

Summary

In undertaking this analysis, we have recognised the role that fire and rescue services have to play, not just in managing our own carbon, but also the unique and significant role we play in reducing carbon emissions and other environmental damage caused by fire. Where we do produce negative impacts to the environment, these are due to our work in savings lives, reducing property damage and minimising the impact on the environment from fires, road traffic collisions, and hazardous material incidents or in managing the effects of climate change such as increased flooding and more severe weather events.

Environmental impact therefore directly correlate to the level prevention and protection activities to drive down fire and other emergency incidents and response times as fire will burn longer and be consequentially larger. Option 1 gives rise to the greatest need for financial cuts to support and frontline delivery and therefore by inference has the highest environmental impacts. Although in scenario 2, joint approaches with Dorset will be beneficial, the significant financial gaps will mean that the environmental damage will still be very significant. Under scenario 3 the levels of prevention and protection increase with home safety checks doubling and with Government support 20,000 children will benefit from a new safety centre and associated educational programmes. Under the **Best** case financial scenario the impacts on the environment are believed to be positive. Under the **Worst** there would be a need to instigate cuts and changes to frontline services and support departments and therefore it would not be unreasonable to assume similar impacts to scenario 2.

Table 3-6 Principal environmental impacts to achieve a balanced budget in 2017/18

(using Best case financial case)

Adverse impact rating	Scenario 1	Scenario 2	Scenario 3*
Environmental impacts	Red/Red	Amber/ Red	Amber/Green
Ranking (1 Best, 3 Worst)	3	2	1