## ADVOCACY POSITION - REVIEW OF COSTS AND OUTCOMES OF BUILDING TO BUSHFIRE ATTACK LEVEL RATINGS

## **Background**

In 2015 the State Government introduced requirements that new houses being constructed within designated bushfire prone areas need to be built to a standard which provides resistance to fire. The relevant specific requirements are as follows:

- the requirement to prepare a Bushfire Management Plan and associated Bushfire Attack Level (BAL) rating for dwellings (or sensitive land uses) proposed on a lot with an area greater than 1,100m² within a designated bushfire prone area;
- the lodgement of a development application for proposals located within a BAL 40 or Home Zone area;
- the requirement that dwellings proposed on lots less than 1,100m<sup>2</sup> with a BAL rating of 29 or less must implement BAL construction standards at the building permit stage;
- requiring adherence to Bushfire Construction standards in the construction of dwellings corresponding to the assessed BAL rating.

These provisions are intended to protect property assets, and in doing so, potentially protecting the lives of people who may be inside the properties at the time of a fire.

For housing being constructed in rural or semi-rural areas, where a house generally sits on a large lot surrounded by trees, there is no question that these requirements are extremely valuable.

However, the requirements bring challenges for housing being constructed on smaller lots in urban areas which are undergoing development as the cost of bushfire protection measures is significant. It is estimated that the following BAL ratings increase the cost of constructing a typical home as follows:

BAL Rating	Additional Cost
BAL - LOW	Nil. There are no construction requirements for BAL - Low
BAL - 12.5	\$13,000
BAL - 19	\$18,500
BAL - 29	\$21,300
BAL - 40	\$57,000
BAL - FZ	\$69,000

It should be noted that the above costs are based on an average of additional construction costs provided to the City by a project home builder. However, there is little publicly available information relating to the additional costs associated with building to BAL requirements. An article published in the Fire Australia magazine (Issue Two, 2020) quoted a leading insurance company having estimated that at a national level, the costs of meeting BAL 12.5 – BAL 40 was between \$16,000 and \$56,000 and between \$65,000 and \$277,000 for meeting BAL – FZ. Additionally, the article suggests that at a State level, Western Australian landowners can expect additional costs of \$50,000 - \$120,000 for BAL – FZ and \$45,000 to \$65,000 for BAL – 40. What the article highlights is that the nature and extent of costs associated with achieving BAL compliance can be variable and significant.

The first BAL cost challenge occurs with development at the urban fringe. In such circumstances, housing is often built adjacent to bushland which is earmarked for future subdivision. As the bushland exists when adjacent urban housing is being constructed, housing needs to be constructed to withstand bushfires, adding further cost to already expensive construction. It is often the case that, as soon as, or very soon after, housing with costly bushfire protection measures is constructed, the adjacent bush is removed, and the development front progresses outwards. This creates the situation where the costly protection measures become redundant almost immediately, or within a very short period of time. Appendix 1 of this report shows two aerial photographs which provide evidence of this scenario. In the scenario, there would have been an additional cost in the order of \$13,000 to build each of the 36 dwellings. That equates to almost half a million dollars in redundant fire protection measures.

The second challenge occurs with efforts to grow the forest canopy in urban areas. Concerns about a lack of canopy coverage are driving local governments to seek to plant significantly more trees in urban areas and local parks are one of the key locations to do this. Planting trees and creating increased canopy in small local parks, many of which have historically been predominantly turfed, brings numerous environmental benefits.

However, this action can significantly increase the bushfire rating for surrounding housing. With no retrospectivity requirement, there is no obligation on the surrounding landowners to install additional fire protection measures to their properties under these circumstances.

That said, if a house is demolished and replaced by multiple dwellings, achieving Government objectives of infill development and reducing urban sprawl, bushfire protection measures need to be implemented in the new construction works, adding to the cost of housing.

While measures to protect property from fire are clearly valuable, they need to be tempered with practical and pragmatic consideration of risk and increased costs, compared to the benefits of mitigating that risk. In the two examples above, the costs may outweigh the benefits. Consequently, it will be recommended that Council advocates through WALGA for an analysis of the additional housing costs associated with redundant bushfire protection measures at the urban fringe to determine whether the benefits outweigh the costs, and for a cost benefit analysis of building to bushfire attack level standards in heavily populated urban areas to ensure urban forest initiatives do not have the unintended consequence of making new housing less affordable.

## **Councils Position**

Council supports advocacy to WALGA for:

- 1. An analysis of the additional housing costs associated with redundant bushfire protection measures at the urban fringe to determine whether the benefits outweigh the costs; and
- 2. A cost benefit analysis of building to bushfire attack level standards in heavily populated urban areas to ensure urban forest initiatives do not have the unintended consequence of making new housing less affordable.