



Position Statement

Risk management of mature/large trees on residential properties

The SACFS seeks to maintain a balance between fire risk mitigation while maintaining environmental values. Mature trees located within 20m of a building, if maintained correctly, do not pose a significant fire risk to a building.

Rationale

The SACFS has a legislated mandate to protect life, property and the environment (in that order). While the emphasis remains on the protection of life, the SACFS will always maintain a balance with protecting properties and conserving the environment.

The biggest fire-related risks to a building are direct flame contact and attack from sparks and embers.

Direct flame contact can be minimised by the active management of vegetation adjacent to buildings. This is generally referred to as 'elevated fuels' and is defined as shrubs and bushes that grow between shin height and shoulder/head height. This does not always include mature trees as they take considerable radiant heat and direct flame contact to initiate combustion.

Research has proven that sparks and embers are the most common direct cause of structure fires. The production of such sparks and embers are most commonly generated from the ignition of fine fuels.

Fine fuel hazards

Fine fuels are generally defined as small pieces of vegetation such as small branches and twigs (less than 6mm in diameter) and light fuels such as



ribbon bark. These fine fuels generally accumulate as surface fuels (on the ground) and slightly elevated fuels (fine fuels suspended in shrubs and bushes).

Fine fuels become airborne and can then lodge against a building or in cracks and vents making the building susceptible to fire ignition.

Management of large trees

The Native Vegetation Legislation allows for landowners to remove all native vegetation within 10m of their dwelling and structures, including large trees (see native vegetation definition). The legislation also allows for landholders to remove all elevated native vegetation for a further 10m from dwellings only with the exception of large or significant trees. If landowners wish to remove those trees for bushfire protection purposes in the 10-20m area then they may apply to the SACFS for approval. It is unlikely that any such approval will be granted as a single tree or even a stand of trees, if they are suitably managed, pose no significant fire risk to a structure or building.

Under the Planning and Development legislation all large trees may be removed within 20m of a "dwelling" (only a dwelling and non native trees) if located in a mapped medium or high bushfire risk area.

A stand of trees may, in some circumstances, act as an ember screen by capturing embers before they can reach a structure. Where a mass of trees exists adjacent a structure, the CFS encourages trimming of the canopy fuels over the removal of large trees to reduce the potential of a canopy fire spreading.

Recommended hazard reduction and maintenance

Regular maintenance and removal of the elevated and fine fuels will mitigate the risk of mature or large trees igniting.

Regular maintenance of mature trees should include the thinning and removal of lower limbs to reduce the risk of ground fire climbing the foliage into the tree limbs and canopy. The removal of the any loose bark on the trunk and the accumulated bark and branches underneath the tree will prevent a fire climbing the trunk of any mature tree.



Brett Loughlin AFSM
Chief Officer
South Australian Country Fire Service