UNDERSTANDING THE CHANGING FIRE ENVIRONMENT OF SOUTH-WEST WESTERN AUSTRALIA

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Fire environment is the resultant effect of factors that influence the ignition, behaviour and extent of fires in a landscape. These factors include climate and weather, vegetation and fuel, topography and ignition. The climate of south-west Western Australia is becoming drier and warmer, and the timing and duration of the traditional fire season is changing. Lightning ignition is also becoming more common in some areas, either as result of greater summer thunderstorm activity or increased opportunity for ignitions to sustain and spread. A combination of land use, socio-economic and organisational factors has resulted in more widespread extent of lands unburnt for two decades or more, increasing the risk of high severity fires with adverse impacts on the community and the environment. Much of the science linking interactions between climate, fire weather and fire behaviour was established in the 1960s and 1970s, and there is a need to review and update baseline information that underpins bushfire risk management and the program of planned burning undertaken on public lands. A variety of new products and services are available to assist fire managers to better understand and interpret the fire environment. This presentation will examine findings from recent research into the fire environment of the south-west with the aim of identifying important factors that are likely to drive future directions in bushfire management on public land.