

FIRE NOTE

ISSUE 5 SEPTEMBER 2006

SEASONAL BUSHFIRE ASSESSMENT 2006-2007

AUSTRALIAN FIRE SEASON OUTLOOK - SEPTEMBER 2006

Above-normal fire potential is predicted for much of Australia for the upcoming fire season, according to expert assessments from climatologists, meteorologists and state based fire-agency personnel. Also expected is an early start to the fire season in southern and eastern Australia. These conclusions were reached during the inaugural Seasonal Bushfire Assessment Workshop, held in June at the Bureau of Meteorology Head Office. Fire potential is the likelihood of bushfire events influenced by factors including fuel conditions, weather, climate and fire-fighting resource capability. This report updates the initial findings of the workshop, utilising the latest climate and weather information.

A map created at the workshop (see right) highlights the fire potential outlook for the 2006-7 fire season. The map reflects the outlook through to February 2007. The fire potential conditions indicated are expected to eventuate over the course of the season, but will not necessarily be valid for the entire outlook period. Rather, the map indicates the fire potential during the active part of the coming fire season for a given region.

CRITICAL FACTORS

Above-normal fire potential is expected across much of Australia for the up coming fire season. The interior of the continent is an exception, with below normal fire potential for much of the centre. Critical factors in this decision making process include:

INCREASED FUEL LOADS

Early 2006 featured an active tropical cyclone season in northern and western Australia, with significantly above normal precipitation observed over much of the region. This heavy rainfall has enhanced grass growth and vegetation in normally vegetation sparse areas. The enhancement of fuel suggests above normal fire potential.

DROUGHT

Over the January-August 2006 period, drought conditions have been observed over much of southern Australia, particularly the coastal regions of WA and the southeast from the Eyre Peninsula to southeast QLD. These conditions ready the forest fuels for burning and are consistent with enhanced fire potential in those regions.

CLIMATE OUTLOOKS

In recent months, the El- Niño/Southern Oscillation has been moving towards weak El Niño conditions, suggesting warm and dry conditions are more likely over eastern and northern Australia. Only small El Niño effects are usually seen in the southwest, but the serious rainfall deficits suggest the continuation of above normal fire potential there.

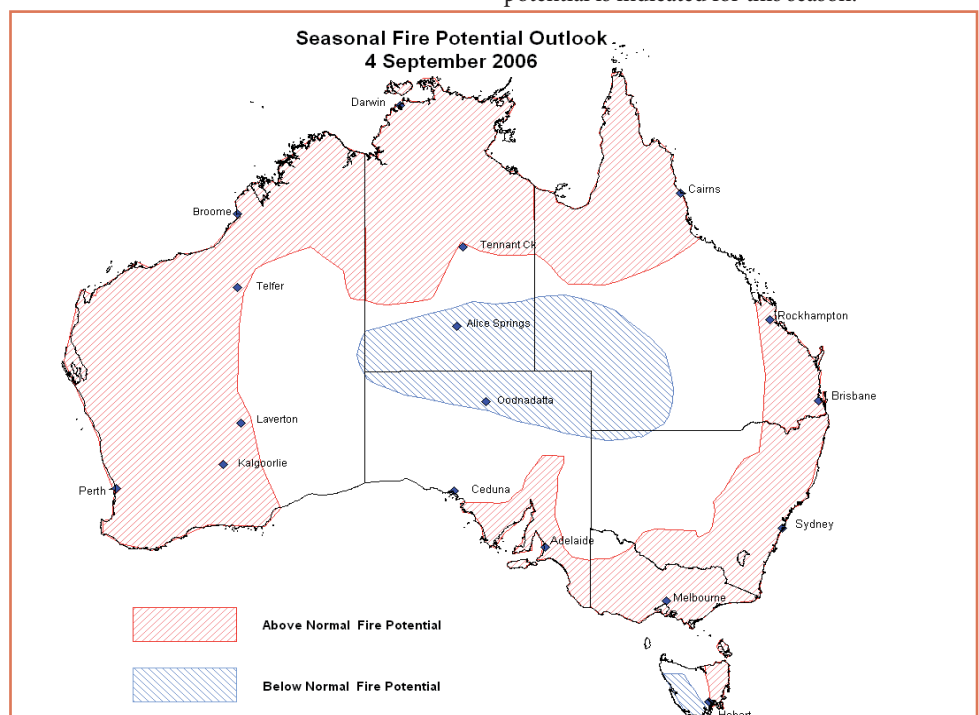
REGIONAL SUMMARIES

NORTHERN AUSTRALIA

Including the northern and central Northern Territory, northern Queensland and northwestern Western Australia: Fire potential is likely to be above normal. The long wet season and enhance produced heavy grass fuel loads in many areas and inhibited early season fuel reduction burns. The monsoon extended south into central Northern Territory this year, allowing higher than normal grass fuel loads in those regions. The long wet season produced a late start to the fire season, although it is well underway now.

CENTRAL AUSTRALIA

Including southern Northern Territory northern South Australia and western Queensland: The low observed rainfall has resulted in lighter than normal grass fuel loads. These regions usually only experience large fires after an extended wet period, when fuels become more continuous. Hence, low fire potential is indicated for this season.



SOUTHEAST AUSTRALIA

Including southern South Australia, Victoria, New South Wales, Australian Capital Territory and southeastern Queensland: Above normal fire potential is indicated, as well as an early start to the season. This is a result of the extended drought priming the forest fuels, leading to a higher fuel load in those regions. Normal rainfall will allow grass to grow and increase fuel loads in the grasslands of those regions.

WESTERN AUSTRALIA

Including southern and central Western Australia: Fire potential is expected to be above normal over much of the area. A variety of factors are contributing to this. While fuel loads are generally low in the wheatbelt region, remnant native vegetation and dry conditions will interact to enhance the fire potential, particularly in the uncropped areas. For the western regions, above-normal potential is due to the extremely dry winter which was observed over most of the area, priming the forest fuels and accelerating the curing of the grass fuels. In the interior, earlier rains from tropical cyclones have led to above normal grass growth. The dry winter will allow this grass to cure early, and produce an above normal fire potential.

TASMANIA

For the eastern portion of Tasmania, above normal fire potential and an early start to the fire season are expected. The extended drought has primed forest fuels, resulting in a heavy fuel load. Without significant spring rain, the situation will worsen into summer. In the west, abundant rain has increased soil moisture and resulted in low-to-normal fire potential.

EL NIÑO SCENARIO

Recent months have seen a tendency towards weak El Niño conditions later in the year. This could exacerbate the fire potential in many areas. Historically, El Niño brings strong drought conditions to much of eastern and southern Australia, and a late onset to the wet season in the tropics. Southwest Australia is relatively unaffected. Continued drought would worsen water shortages and further prime fuels in the Southeast, creating more fire potential. In the tropics, a late wet season onset could extend the fire season later in the year.

VALUE OF THE WORKSHOP

This assessment is designed to provide information to assist fire authorities in making strategic decisions such as resource planning and prescribed fire management and to reduce the negative impacts of bushfire in Australia. This report represents a consensus opinion reached by representatives from the participating institutions. It is based on the latest information available at the time of the workshop. Given the uncertainty associated with seasonal climate outlooks, updates will be issued as required. This was the first Seasonal Bushfire Assessment Workshop held in Australia. It was organised under the auspices of the Bushfire CRC. The workshop was modelled on the successful National Seasonal Assessment Workshops held annually in the United States since 2003.

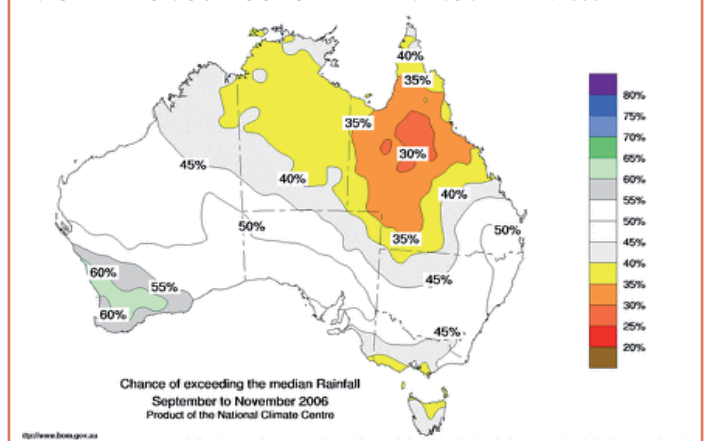
A copy of the entire report can be obtained from the Bushfire CRC web site for access by Bushfire CRC members only. For inquiries on the project contact Dr Chris Lucas, Climate Forecasting Group, Bureau of Meteorology, Phone (03) 9669-4783 Email: c.lucas@bom.gov.au

Fire Note is published by the Bushfire Cooperative Research Centre (Bushfire CRC). This Fire Note is an outcome of the Fire Weather Research Project A 2.1.

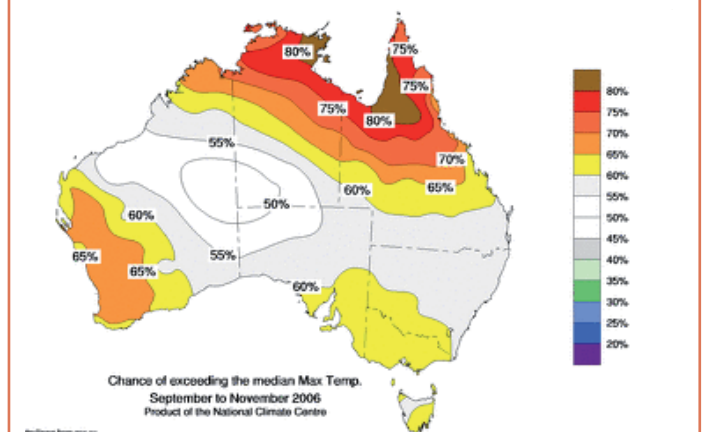
Bushfire CRC is a national research centre part of the Cooperative Research Centre (CRC) program, formed in partnership with fire and land management agencies in 2003 to undertake end-user focused research

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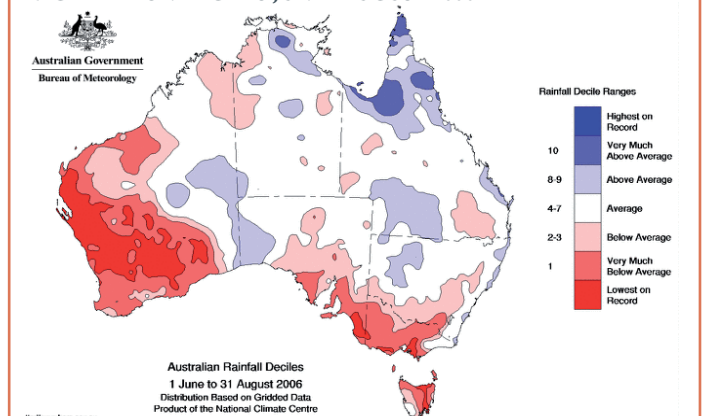
PRECIPITATION OUTLOOK SEPTEMBER - NOVEMBER 2006



MAXIMUM TEMPERATURE OUTLOOK SEPTEMBER - NOVEMBER 2006



PRECIPITATION DECILES JUNE - AUGUST 2006



Participating Organisations

- Australasian Fire Authorities Council
- Bushfire CRC
- Bureau of Meteorology
- Bushfires Council NT
- Conservation and Land Management
- Cape York Fire Management Project
- Country Fire Authority
- Country Fire Service
- Department of Environment and Heritage
- Desert Research Institute
- Department of Sustainability and Environment
- Fire and Emergency Services Authority
- Forest NSW
- NSW Fire Brigades
- NSW Rural Fire Service
- Queensland Fire and Rescue
- Tasmania Fire Service