

# CHANGING TRENDS ACROSS AUSTRALIA



Bushfire seasons are getting longer and catastrophic events are increasing, as hotter, drier conditions make fuels more combustible.

## FACTORS THAT CONTRIBUTE TO BUSHFIRES



High Maximum Temperature



Lower Afternoon Humidity



Higher Wind Speeds

## WHAT MAKES BUSHFIRES WORSE?



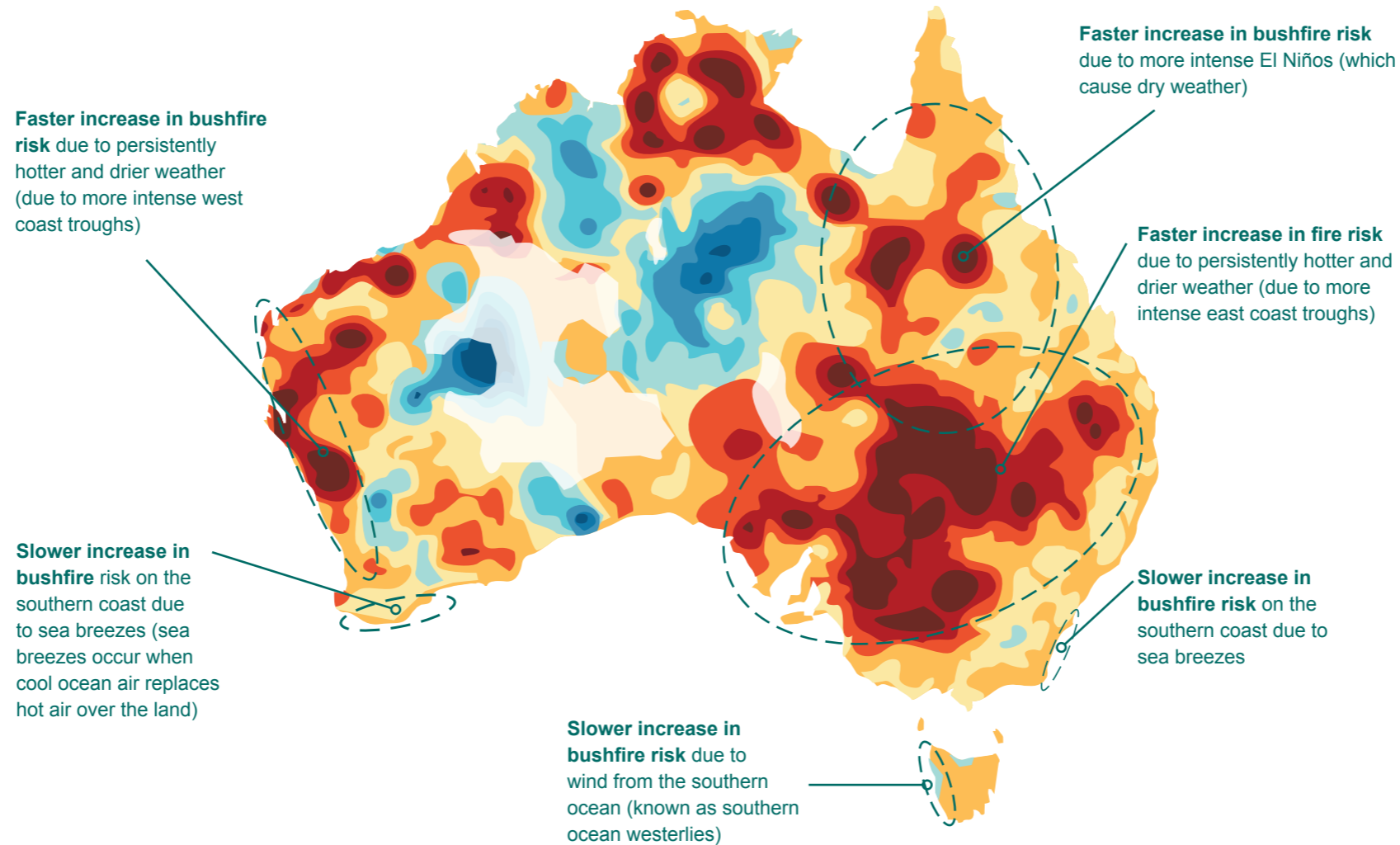
Dry Conditions and Drought



Dry Vegetation  
(dead trees, dried leaves and dry plants)

## HOW BUSHFIRE RISK IS CHANGING ACROSS AUSTRALIA

\*Trends in Daily Forest Fire Danger Index 1978-2017, Bureau of Meteorology 2018.



## FOREST FIRE DANGER INDEX

FFDI points/decade



see also: <http://www.bom.gov.au/weather-services/fire-weather-centre/index.shtml>

## LOCAL GOVERNMENT AREAS WITH HIGH BUSHFIRE RISK\*

NSW
Blue Mountains
Central Coast
Sutherland Shire
Wollongong
Wollondilly
QLD
Brisbane
Gold Coast
Logan
Moreton Bay
Sunshine Coast
SA
Adelaide Hills
Grant
Naracoorte Lucindale
Tea Tree Gully
Wattle Range
TAS
Clarence City
Glenorchy City
Hobart City
Huon Valley
Kingborough
VIC
Cardinia
Macedon Ranges
Mornington Peninsula
Murrindindi
Yarra Ranges
WA
Armadale
Busselton
Kalamunda
Rockingham
Wanneroo

\*based on total sum of premium at risk.

# CHANGING BUSHFIRE RISK ACROSS THE SEASONS

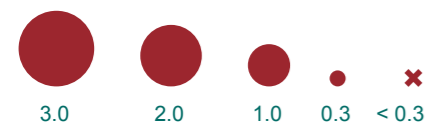


These graphics show where Australia's bushfire risk is changing most rapidly. The diagrams are based on 40 years of data from the Forest Fire Danger Index (FFDI), from 1978-2017. The FFDI measures the severity of bushfire weather conditions over the four seasons, based on factors including vegetation loads, slope, aspect and dryness.

## BUSHFIRE RISK

Points/decade

**Red filled circles**  
Highly confident trends indicating increasing bushfire risk.



**Open Circles**  
Confident trends indicating increasing bushfire risk.

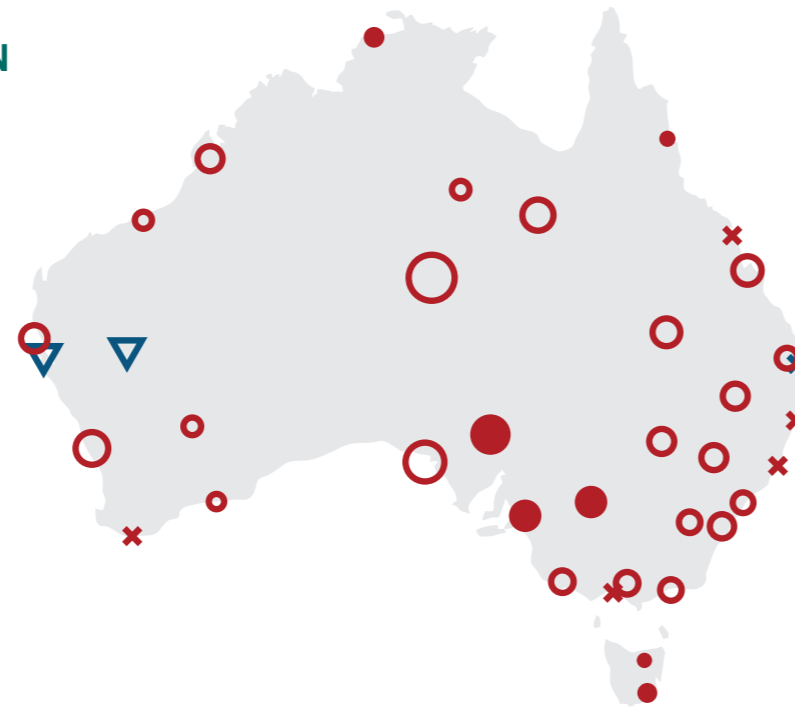


**Open Triangles**  
Confident trends indicating decreasing bushfire risk.

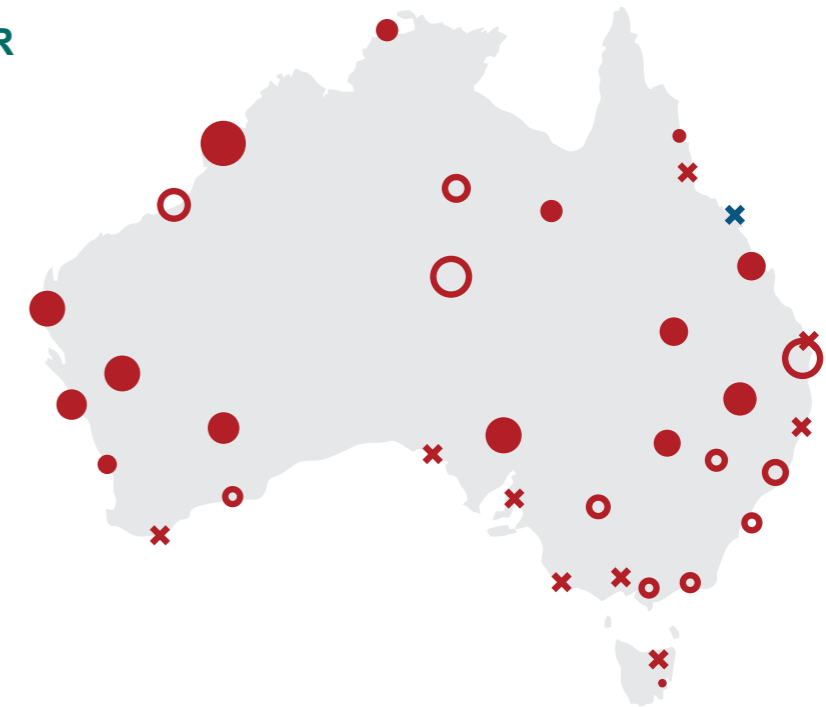


Source: Harris S, Lucas C (2019) Understanding the variability of Australian fire weather between 1973 and 2017. PLoS ONE 14(9): e0222328. <https://doi.org/10.1371/journal.pone.0222328>

## AUTUMN



## WINTER



## SPRING



## SUMMER

