South West Land Division

Monthly rainfall, temperature and streamflow
Month: DECEMBER

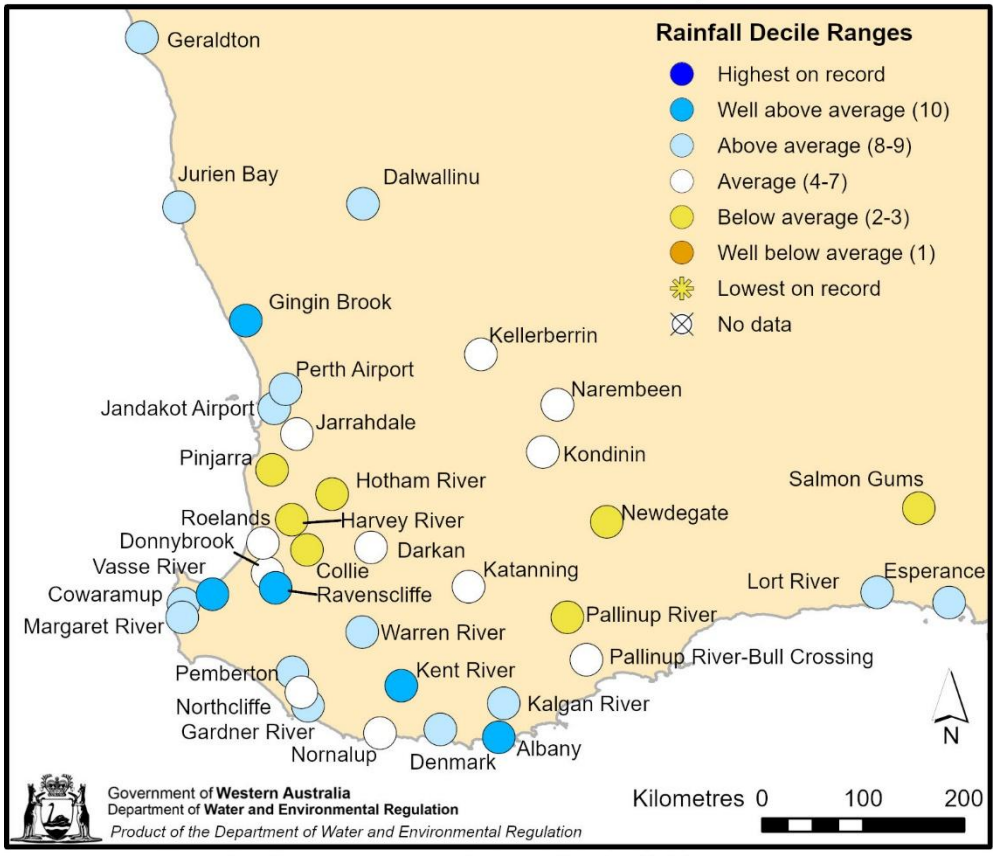
History - Rainfall and streamflow for 2025

Rainfall

Long-term trends show declining rainfall in south-west WA (see 'Climate context' below).

Rainfall was average or below average across much of the South West Land Division in December 2025. January to December rainfall has been average or above at most tracking sites in the south-west corner and along the south coast. Conditions remain drier at Salmon Gums, Newdegate and Pallinup River and in the area south of Pinjarra where January to December rainfall was mostly below average.

South West Western Australia Rainfall Deciles - 1 January to 31 December 2025



Classifications compared to the 1975 to 2024 base period

Map 1: Rainfall deciles* for January to December for the SWLD

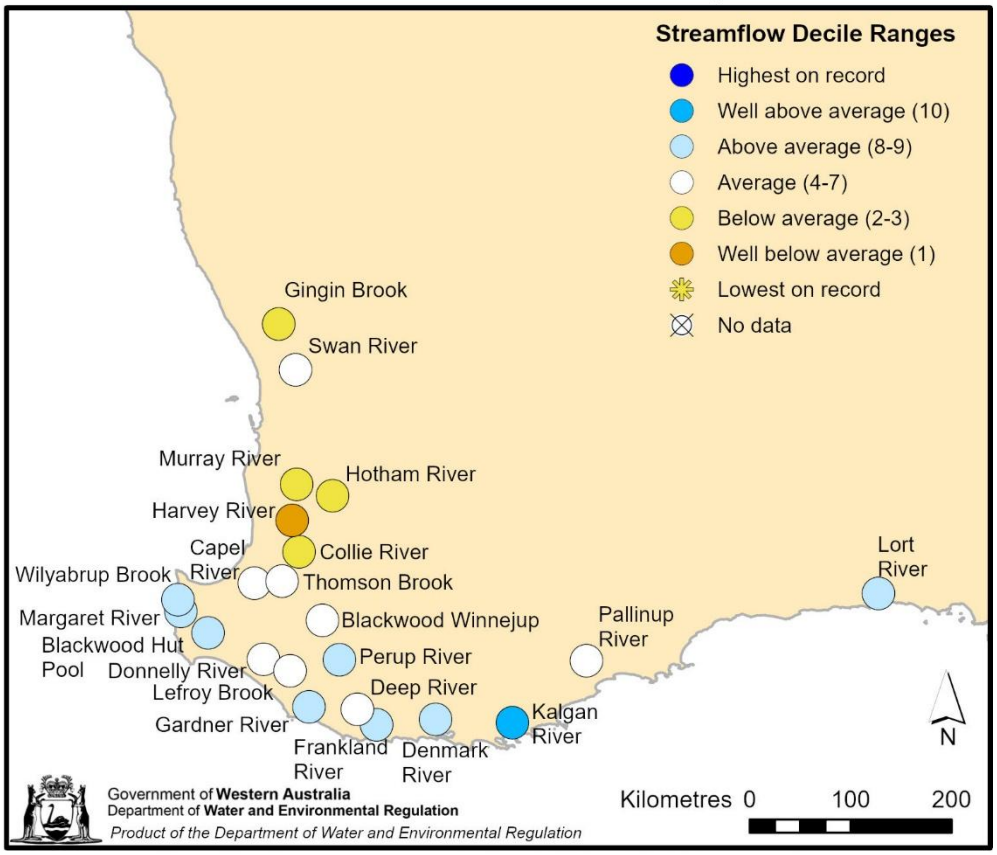
* A rainfall decile is a way to compare the amount of rain for a particular place and period. The rain volumes at each location for the same calendar period for each year between 1975–2024 are ranked from least to most and then divided into ten groups. The first group (‘decile 1’) contains the lowest 10 per cent of rainfalls so it is the driest 10 per cent of measures and is considered to be a well-below average amount of rain. At the other end of the spectrum, ‘decile 10’ contains the highest/wettest 10 per cent of measures and is considered to be well-above average rainfall. The coloured circles in the map show how a 2025 rain amount fits with these 10 groups of ranked historical rainfall.

Streamflow

Average to wet rainfall conditions so far this year in the south-west corner and along the south coast, has resulted in mostly average to above average streamflow in this area. Gingin Brook and sites between Murray River and Collie River reported below average to well below average streamflow from January to December. So far this year:

- All sites in the south-west corner observed average or above streamflow.
- Harvey River recorded well below average streamflow.
- Kalgan River recorded well above average streamflow.

South West Western Australia Streamflow Deciles - 1 January to 31 December 2025



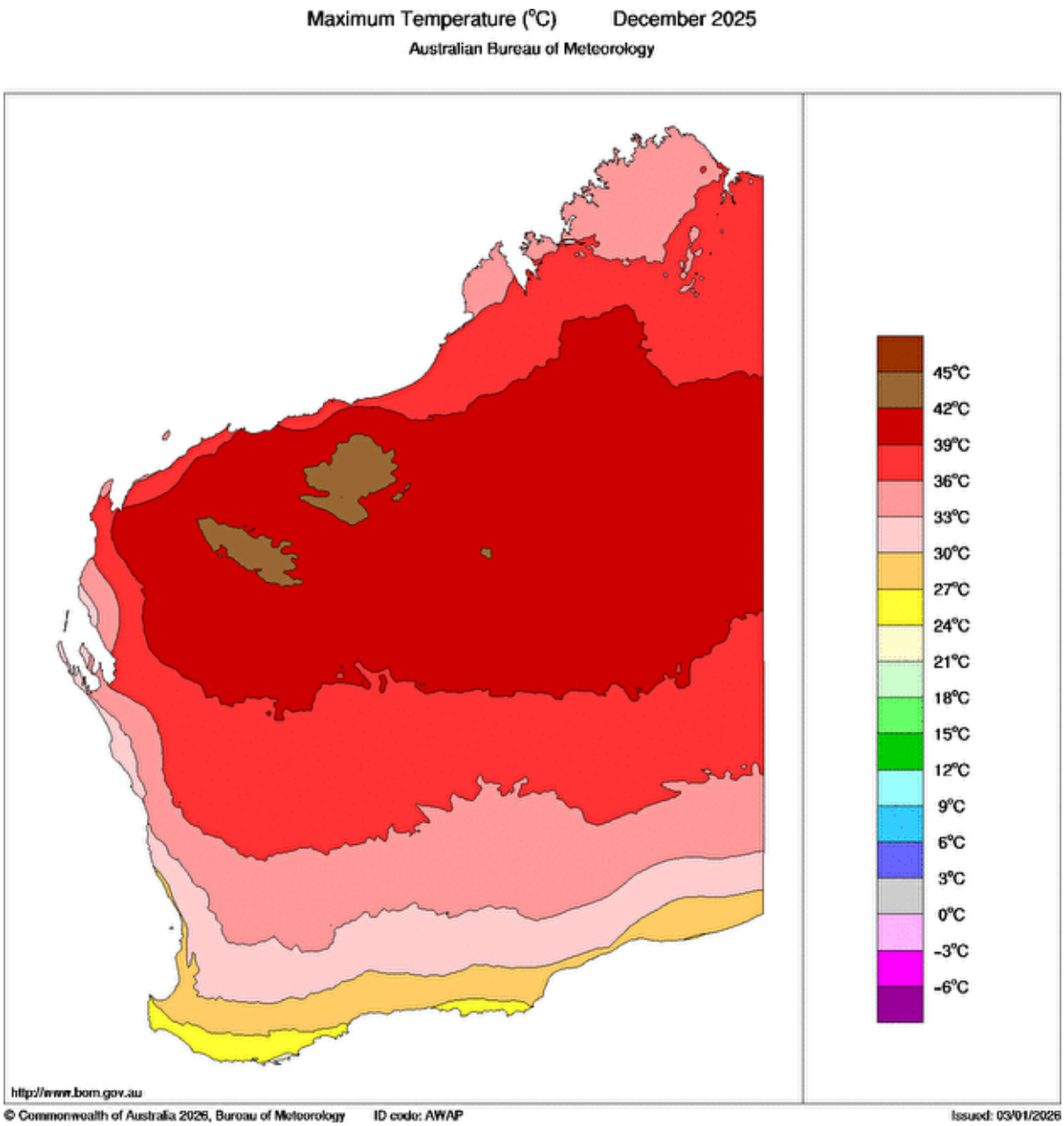
Classifications compared to the 1975 to 2024 base period

Map 2: Streamflow deciles† for January to December for the SWLD

† A streamflow decile is a way to compare the amount of water flowing in a stream, river or other channel for a particular place and period. Streamflow at each location for the same calendar period for each year between 1975–2024 are ranked from least to most and then divided into ten groups. The first group (‘decile 1’) contains the lowest 10 per cent of streamflow and is considered to be well-below average streamflow. At the other end of the spectrum, ‘decile 10’ contains the highest 10 per cent of measures and is considered to be well-above average streamflow. The coloured circles in the map show how a 2025 streamflow fits with these 10 groups of ranked historical streamflow.

History - Temperature 2025

To complement the tracking we are undertaking for the SWLD, we will also regularly update the mean maximum observed temperature and temperature forecasts, along with rainfall forecasts, produced by the Bureau of Meteorology.



Map 3: Mean maximum temperature (°C) for December 2025

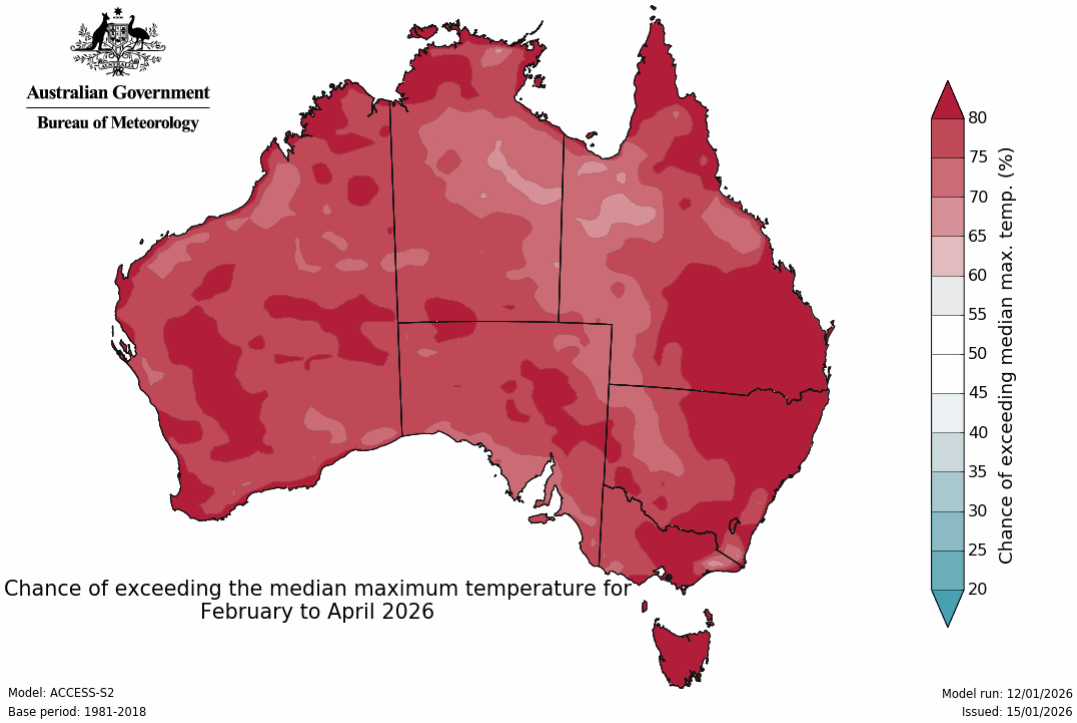
Source: *Climate Maps - Temperature Latest*

The mean maximum temperatures in December were well above average for most of the SWLD. The mean maximum temperatures ranged from 24 to 36 degrees.

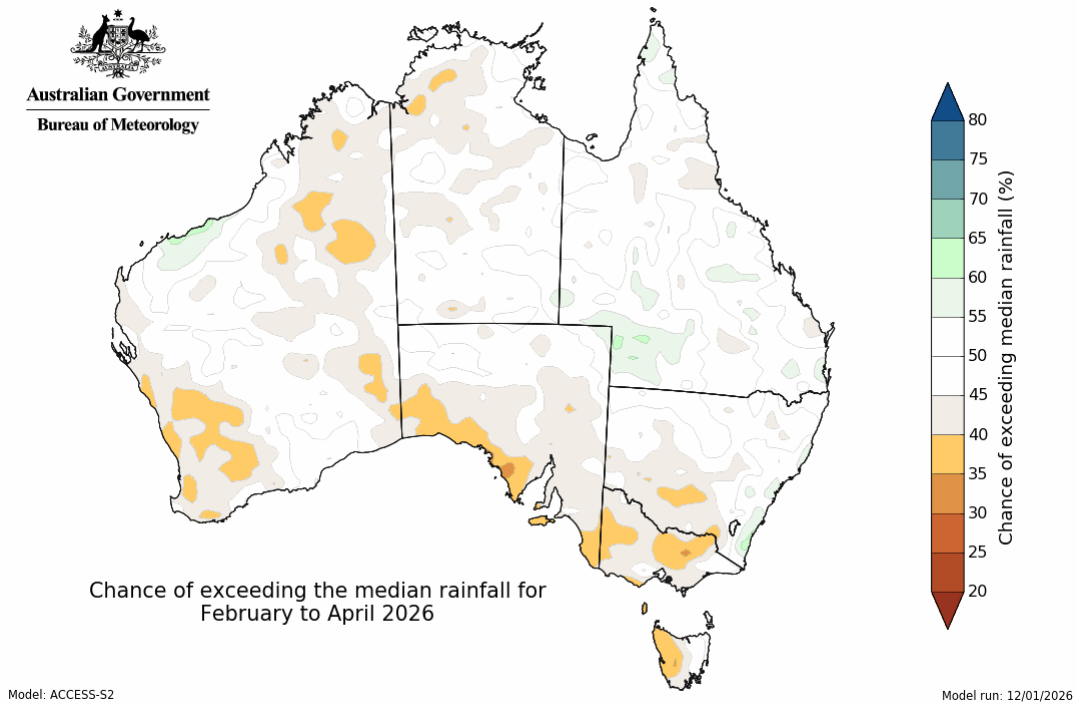
Future - Seasonal forecast

When considering forecasts, it is important to look at the forecast and the forecast model's accuracy. Model accuracy is a measure of how well the forecasts matched real records previously.

Maps 4 and 5 below show the temperature and rainfall forecasts for Australia using Bureau of Meteorology modelling, while maps 6 and 7 show the modelling accuracy of these forecasts (i.e. how well the model has previously forecast the weather at that time of year).



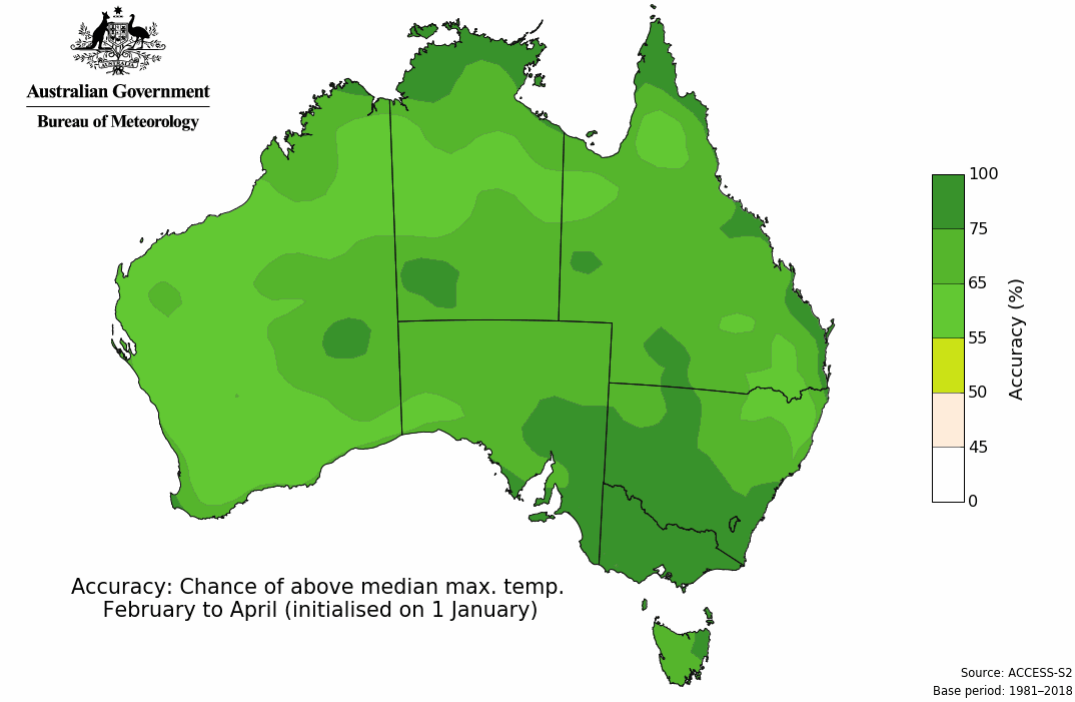
Map 4: 3-month temperature outlook



Model: ACCESS-S2
Base period: 1981-2018

Model run: 12/01/2026
Issued: 15/01/2026

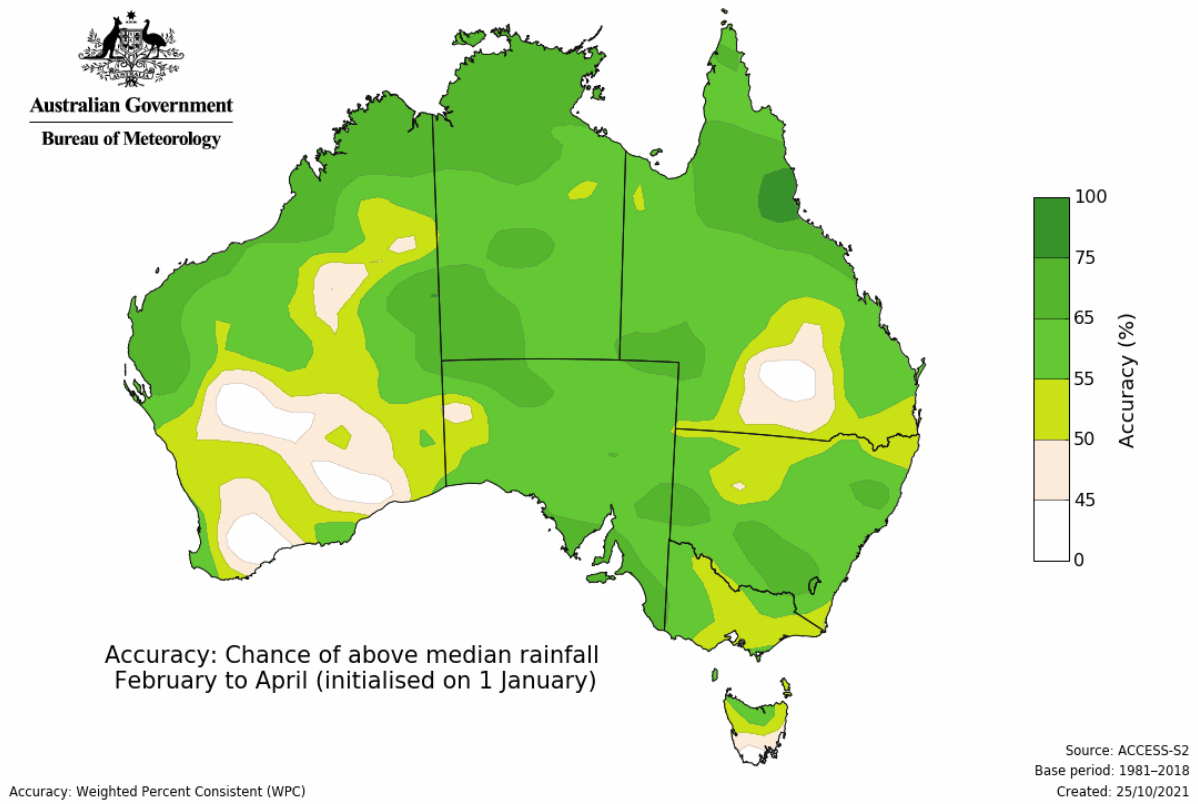
Map 5: 3-month rainfall outlook



Accuracy: Weighted Percent Consistent (WPC)

Source: ACCESS-S2
Base period: 1981–2018
Created: 25/10/2021

Map 6: Temperature outlook accuracy



Map 7: Rainfall outlook accuracy

As at 15 January 2026:

- The Bureau of Meteorology expects warm conditions to continue, with an over 70 per cent chance of exceeding the median maximum temperatures for the SWLD in February - April (Map 4).
- The accuracy of the temperature forecast is greater than 55 per cent in the SWLD. This indicates a moderate to high level of confidence in the forecast (Map 6).
- The rainfall forecast shows no strong indication for unusually wet or dry conditions for the February to April period with most areas across the SWLD indicating a 35 to 50 per cent chance of exceeding median rainfall (Map 5).
- The accuracy of the rainfall forecast is between 45 and 65 per cent in the SWLD. This indicates a low to moderate level of confidence in the forecast (Map 7).[1]

Climate context

Rainfall decline in south-west WA has been greater than anywhere else in Australia. Almost all climate projections indicate a warmer and drier future for the region, marking it as a global hotspot for reduced rain because of climate change.

Since the 1970s, in south-western WA there has been:

- a 16 per cent decline in April–October rainfall[2]
- about 80 per cent less flow into Perth's water supply dams[3]
- up to 70 per cent less recharge to groundwater.[4]

Climate change poses significant challenges for communities in WA that are experiencing more extreme weather events such as tropical storms, floods and bushfires. The State Government is supporting businesses, communities and local governments to understand the future climate and adapt to the impacts of climate change.

The Climate Science Initiative will produce the most detailed and comprehensive Western Australian climate change projections to date, extending to the year 2100