



WA's Climate Adaptation Program

Adaptive capacity and resilience for Western Australian agriculture

The global climate has been changing and Western Australia (WA) is experiencing the impact now.

More changes are inevitable even if greenhouse gas emissions are capped quickly.

Likely effects in WA include:

- lower average winter rainfall;
- less run-off to dams;
- decreased aquifer recharge;
- increased variability between and within seasons;
- increased risk of prolonged drought;
- higher average temperatures;
- rising atmospheric carbon dioxide concentrations; and
- more extreme events such as hot days, storms and wild fires.

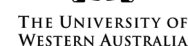
Western Australia's \$12 billion agri-food sector and related industries are vulnerable to these changes, which could cause significant production losses and damage agricultural ecosystems.

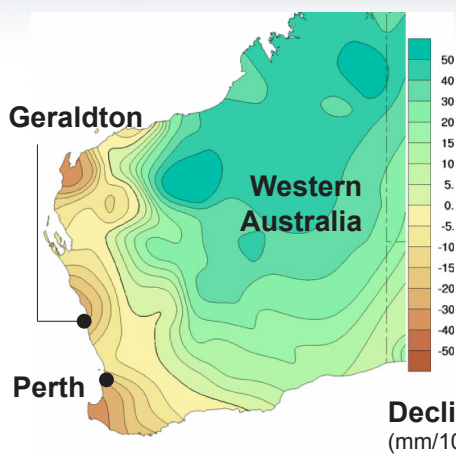
A Western Australian initiative

To address the challenge presented by climate change in WA the Climate Adaptation Program has been developed – a collaboration between the Department of Agriculture and Food Western Australia, The University of Western Australia, Curtin University of Technology, Murdoch University and CSIRO.

The Program will bring together the capability of all the partners to undertake priority climate change impact and adaptation research projects that will deliver outcomes beyond the reach of any individual research institute.

Linked to national and international research programs, including CSIRO's Climate Adaptation Flagship, the Climate Adaptation Program will deliver the information, knowledge, tools and innovations to help decision makers manage the risks and capture the opportunities a changing climate will present to rural industries and communities in southern Western Australia.





Lower rainfall in the last 50 years in South West of Western Australia, indicate WA is facing the effects of climate change already. Source: Australian Bureau of Meteorology.

Climate Adaptation Program: proposed projects and contacts

Project	Contact	Phone	Email
*Downscaled climate projections	Dr Bryson Bates Dr Steve Charles	08 9333 6554 08 9333 6795	bryson.bates@csiro.au steve.charles@csiro.au
Learning from the past	Dr Ian Foster	08 9441 8109	ifoster@agric.wa.gov.au
*Vulnerability of farm businesses and rural communities to climate change	A/Prof Ross Kingwell	08 9368 3225	rkingwell@agric.wa.gov.au
Managing mixed livestock and cropping systems in a more variable and changing climate	Dr Steve Gherardi	08 9368 3130	sgherardi@agric.wa.gov.au
*New land use systems/industries as a response to climate change	Dr Michael Robertson	08 9333 6461	michael.robertson@csiro.au
Animals that cope with change: embracing variability	Dr Dean Revell	08 9333 6492	dean.revell@csiro.au
Trade-offs from public investment in climate adaptation	Prof David Pannell	08 6488 4735	dpannell@cyllene.uwa.edu.au
*Hydrology, soil conditions and nutrient cycling	Dr Neil Coles Prof Zed Rengel	08 6488 1668 08 6488 2557	ncoles@agric.wa.gov.au zengel@agric.uwa.edu.au
*Other major socio-economic drivers	Dr David Bowran	08 9690 2000	dbowran@agric.wa.gov.au
*Biosecurity – impact on pests, weeds and disease	Dr John Scott	08 9333 6647	john.k.scott@csiro.au
*A virtual laboratory of the Northern Agricultural Region	Dr Senthold Asseng	08 9333 6615	senthold.asseng@csiro.au
*Analysis and prediction of critical events in response to climate	Prof Christoph Hinz	08 6488 3466	chinz@cyllene.uwa.edu.au
Pathways to adaptation	Dr David Beard	08 9525 9315	dbeard@agric.wa.gov.au
*Adapting wheat to climate change in Western Australia	Dr Steve Milroy	08 9333 6680	stephen.milroy@csiro.au
One tonne per 100 mm season rainfall	Dr Steve Davies	08 9333 6655	sdavies@agric.wa.gov.au
*Crop adaptation to climate change	Prof Kadambot Siddique	08 6488 7012	ksiddique@fnas.uwa.edu.au
*Improving seasonal climate forecasts for South West WA	Dr Senthold Asseng	08 9333 6615	senthold.asseng@csiro.au

* received funding/commenced

Climate Adaptation Program

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