

Drought Hub Update

Stirlings to Coast Farmers, as a 'Drought Hub Node', provides guidance to the Nationally coordinated 'Future Drought Fund' on drought & climate resilience issues for the Albany Region.

WHAT'S NEW

The SW WA Drought Hub presents 'Dry season resources' podcasts!

Season one of the Hub's Dry Season Resources podcast is here. Released in two parts, key experts explore financial risk, soil management, and key agronomy tips for a dry season in episodes 1 - 3.

Throughout the season you'll hear from growers and industry experts on managing dry season responses, ranging from early planning to tactical decision-making throughout the year and setting up for the following season. Topics cover business decisions, soil management, water use efficiency, nitrogen considerations, a look into life in the northern agricultural region, and livestock operations in a dry season.

WHAT'S THE DROUGHT HUB ALL ABOUT?

The Hub is dedicated to sharing information that supports growers in preparing for and responding to a dry season. This podcast is just one of the extension tools in the works to provide value to growers facing dry season challenges. Find links to the podcasts and other drought preparedness resources at https:// hub.gga.org.au/resources/dry-season-resources/.

SCF FARMERS - GET YOUR CLIMATE NERD ON!!

Climate tool made for farmers

The Climate Services for Agriculture (CSA) program has a new name and website for its farmer-focused climate information tool. My Climate View is a free online climate information tool helping farmers understand what the future climate might mean for their location, down to a 5km2 resolution, to inform decisionmaking and build climate resilience. It presents agriculturally relevant historical and future climate information in one place so farmers can explore climate trends for specific commodities at a local scale.

Along with the new name and website, other updates to the My Climate View tool include significant improvements to how farmers can access and view their local and commodity-specific climate information, and insight into how climate information is calculated.

As an example of what the website can do, Image 1 shows a graph of the past and present rainfall data for the Albany postcode. The dots represent the yearly data, the solid lines represent the average, and the dotted lines represent the 10th and 90th percentiles. The shaded green blocks are the long-term climate predictions under the RCP4.5 emissions scenario (semiconservative).



Image 1: An example of the data that can be accessed from the My Climate View for the Albany postcode. This graph shows past and future growing season rainfall (1 April to 31 October).





What's an RCP4.5 Scenario?

We didn't know much about these emissions scenarios either, so we did a bit of (quality) googling and found a good explanation on the CSIRO website:

RCPs are prescribed pathways for greenhouse gas and aerosol concentrations, together with land use change, that are consistent with a set of broad climate outcomes used by the climate modelling community (CSIRO, 2020).

RCP4.5 - CO2 concentrations are slightly above those of RCP6.0 until after mid-century, but emissions peak earlier (around 2040), and the CO2 concentration reaches 540 ppm by 2100.



Image 2: Emissions of CO2 across the RCPs (left), and the trends in concentrations of carbon dioxide (right).

Medium term outlooks

If you're keen on getting a bit of a feel for the medium-term rainfall outlook the My Climate View can help out again. We used the Albany postcode to generate the below forecast for the next 3 months (Image 3). It shows that there is a high prediction of receiving at least 42mm in this period with a moderate level of accuracy. Good news for summer sown legumes, bad news for having to spray summer weeds!

If you're keen on having a look yourselves, you can find the new website at https://myclimateview.com.au/

CSA is a collaboration between CSIRO and the Bureau of Meteorology and part of the Future Drought Fund's investment in better climate information for Australia's agriculture sector.



Image 3: Forecast rainfall for the Albany postcode – December 2023 to February 2024.





Interested in Hyperlocal forecasts? SCF has created 'Climate Great Southern'

Last year SCF completed a Future Drought Fund supported project that supported the development of the 'Climate Great Southern' website – a hub for local climate information and drought management resources, including:

- Local week-ahead weather forecasts (from machine learning weather stations installed in the region).
- Pasture groundcover predictions based on farming system and the local weather data.

The ongoing aim of Climate Great Southern is to provide a centralised weather dashboard & climatic resource information service to enable farmers to make better business decisions and improve their farm's resilience to a changing climate.

The climate and pasture data on the website is driven by information coming from weather stations, rain-gauges and soil moisture probes located on SCF member properties.

By increasing the amount of local weather and soil moisture data collected over time, the site aims to:

- Improve the accuracy of weather forecasting at a hyperlocal level.
- Better measure stored soil moisture levels to determine how risky it would be to grow a summer crop or cut/ increase fertiliser applications late in the season.
- Better understand the effects of current climate conditions on pasture growth, enabling the ability to better manage stocking rates & pasture regrowth.

As an example of the information that can be accessed, Image 4 shows a screenshot of the weather forecast for the South Stirlings (Drawbin Rd) location. With machine learning, these forecasts should be continually increasing their accuracy over time.

You can find the site at https://climategreatsouthern.com. au/. Check it out today and let us know what you think!

To keep up to date with all that is happening with the Southwest WA Drought Resilience Adoption and Innovation Hub and anything climate resilience related, check out their

Weather Forecast

South Stirlings (Drawbi 🚿

Forecast data provided by DTN

	Chance of Rain	Rainfall	Temperature	Warnings
Today	0%	0mm	14-24°C	1127
Sat	61%	0.9mm	14-21°C	1155
Sun	0%	0mm	14-21°C	1192
Mon	80%	3mm	14-22°C	1113
Tue	80%	3mm	16-28°C	
Wed	0%	0mm	14-25°C	
Thu	0%	0mm	14-23°C	

Image 4: Weather forecast taken from the Climate great Southern website for the for South Stirlings area (24 November 2023).

web page and subscribe to their newsletter here - https:// hub.gga.org.au/

If you are interested in knowing more and being involved in project development for improving climate resilience in our local area, give Kathi McDonald (Albany Regional Node) a call on 0408 418 531 or email kathi.mcdonald@scfamers. org.au and check out the Albany Node webpage for further locally relevant information - https://www.scfarmers.org.au/ swwadroughthub-albany.

