

# Drought and climate adaptation program

## DAF Project # 7 **The Use of Bureau of Meteorology Multi-Week and Seasonal Forecasts to Facilitate Improved Management Decisions in Queensland's Vegetable Industry**



### Granite Belt Region



#### Who

The Project Team are working closely with high value vegetable production businesses (both Qld and nationally significant) and supply chain managers who source and market produce into the National retail chain (Coles Woolworths, Aldi, & IGA). Several of these businesses are nationally significant food processors, supplying trimmed, shredded, bagged and branded product both within Australia and to the export market.

### Lockyer Valley Region



#### What

Our project team has worked closely with the Australian Bureau of Meteorology (BoM) R&D group to define and develop targeted (crop specific) forecasts for the major two vegetable production regions in Queensland (Lockyer Valley and Granite Belt). We defined refined specific targeted district specific forecast boundaries and use the new BoM ACCESS-S climate model to develop and test the accuracy (ground-truth) of these bi-monthly experimental forecasts with interested, forward thinking, vegetable business's and their supply chain partners

### Bowen Region



#### Where

Our DCAP ACCESS-S experimental forecast model is being tested and refined with the industry in the Lockyer Valley and Granite Belt vegetable production regions. The Lockyer Valley is predominantly a winter growing area while the Granite Belt is a significant summer production region. Both these locations supply the local, national and export market with quality product. We have also voluntarily provided experimental forecasts for the Bowen region at the request of local industry since February 2017. The Bowen forecast region is a "legacy"

forecast region from an early BoM project, and has a much broader geographic spread. Two nationally significant vegetable businesses involved in the Lockyer Valley project work group also farm in the Bowen region so we currently continue to provide the Bowen Experimental Forecast.



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## How

The project team works closely with local vegetable businesses and invites local collaborating businesses to a "start of season" DCAP Experimental Forecast Forum where project staff;

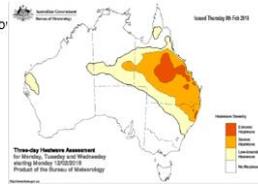
- Introduce useful existing BoM forecast tools, raising awareness of these tools and show examples of how they can help make a more informed decision.

### Heatwave Service for Australia

<http://www.bom.gov.au/australia/heatwave/>

The Heatwave Forecast is a Bureau of Meteorology product that shows the location and severity of heatwaves, with a lead-time of 4 Days.

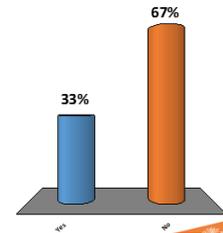
(from November to March)



### DCAP

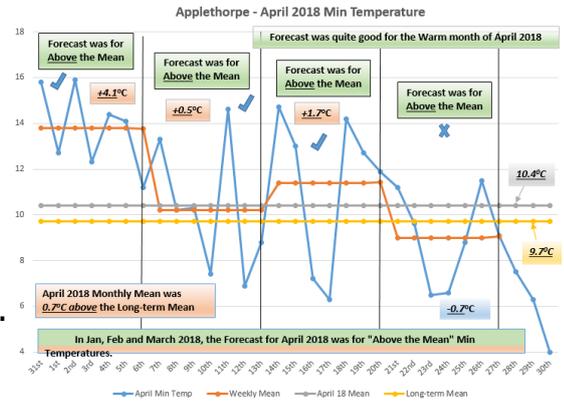
Before today were you aware of the BoM Heatwave Forecast ?

1. Yes
2. No



- Discuss how these extreme "out of season" weather events impact on crop production volume, quality and the effect this has on the consumer focused supply chain.
- Provide a regular vegetable region experimental forecast and then check (ground-truth) that forecast against what actually happened. This ground (retrospective) truing review is shared with our collaborating vegetable business with the next forward forecast.

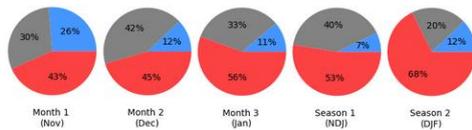
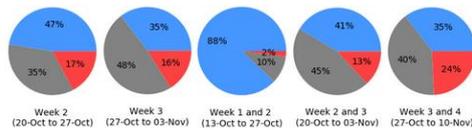
- Our project team has worked closely with BoM R&D staff to enhance the DCAP ACCESS-S Experimental Forecast Website page, and enhanced the graphics so that model output is more easily understood.



### Maximum Temperature Pie Charts

Region: HAL Lockyer Valley

Start: 13-Oct-2018



Created: 2018-10-16 08:03:14 +0000  
Climatology: 1990 to 2012  
Resource: access-s1\_w\_ens\_s\_ens

