

# **IPA** MEDIA RELEASE

Institute of Public Affairs | Australia's leading free market think tank

24 February 2016

## **RAINFALL FORECASTS SHOULD BE BENCHMARKED**

The Bureau of Meteorology uses outdated methods for rainfall forecasts, and needs to adapt to modern technology to help rural farmers, according to free market think tank the Institute of Public Affairs

“There is no evidence to indicate that there has been any improvement in the skill of the Bureau’s seasonal rainfall forecasts over the last decade. These forecasts are particularly important to farmers and also organisation’s concerned with management of water storages,” according to Institute of Public Affairs Senior Fellow Dr Jennifer Marohasy.

“As Bill Gates famously said, ‘You can achieve incredible progress if you set a clear goal and find a measure that will drive progress towards that goal.’”

“This may seem basic, but it’s not practiced enough, and certainly not when it comes to rainfall forecasting,” says Dr Marohasy.

At an information session in Deniliquin on Friday Dr Marohasy will suggest, “A key Bureau goal should be the best possible rainfall forecast for the public. These rainfall forecast should be presented and reported in a measurable and understandable way. The probabilities currently provided are inadequate, and furthermore, research has shown these forecasts are often misinterpreted by farmers.”

Dr Marohasy will also explain an alternative approach using artificial neural networks. This type of forecasts fits under the umbrella of ‘Big Data’ and ‘machine learning with algorithms.’ It relies on pattern analysis. This technique has proven successful at forecasting in fields as diverse as medical diagnostics, financial forecasting and marketing analysis.

Dr Marohasy will provide monthly rainfall forecasts for Deniliquin based on output from an artificial neural network, and also a longer term forecast for the Murray Darling Basin using sinusoidal projections after deconstructing a 2,000 year temperature reconstruction from a proxy record.

**The information session is being held by West Berriquin Irrigators at the local Deniliquin RSL from 6pm. RSVP to Linda Fawns on 0409 044 754 or [westberriquinirrigators@gmail.com](mailto:westberriquinirrigators@gmail.com)**

**For media and comment: Dr Jennifer Marohasy, Senior Fellow, Institute of Public Affairs, [jmarohasy@ipa.org.au](mailto:jmarohasy@ipa.org.au) or 041 887 32 22**