

# Measure to Monitor

(a sub-project of Smarter Irrigation in SA)  
South East, South Australia

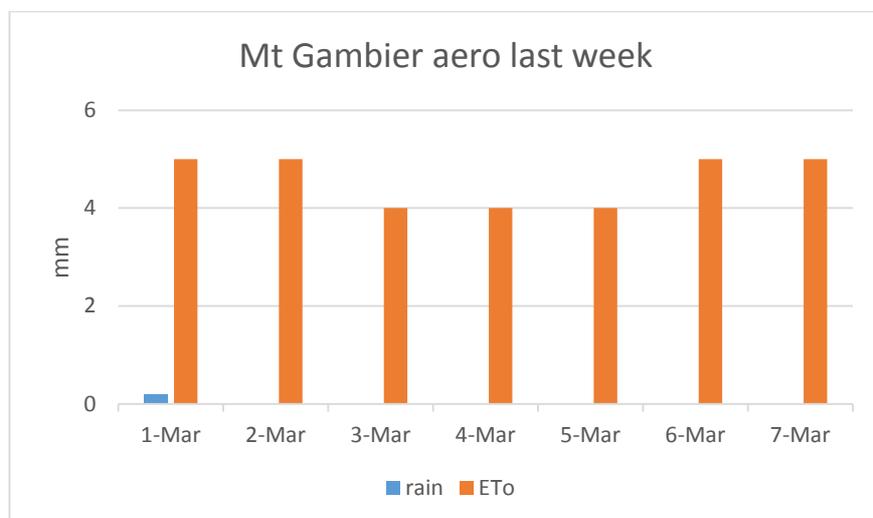
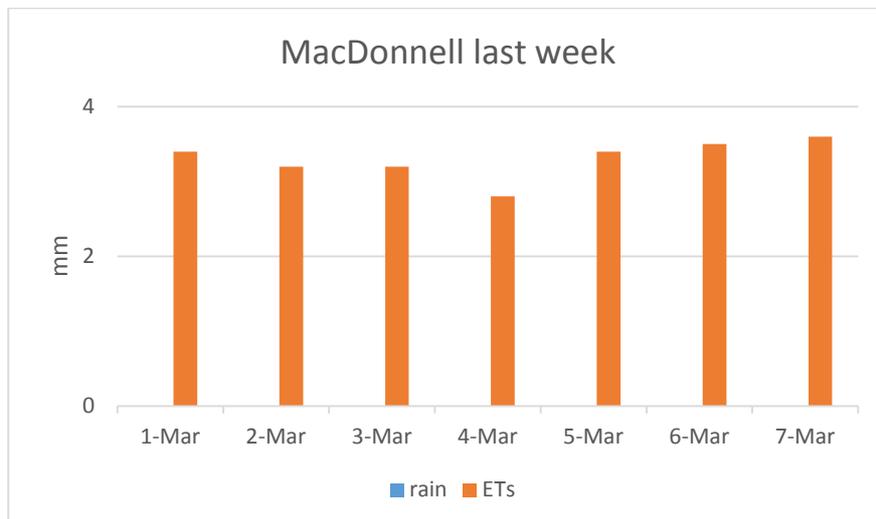
A weekly review of irrigation sensor and pasture growth data to improve irrigation scheduling throughout the year.

**8<sup>th</sup> March 2018**

Brought to you by Nigel Fleming, SARDI, ph (0401) 122 136

## Previous 7 days ~ average Evapotranspiration & Rainfall

	ETo's (mm/day)	Rainfall (mm)
MacDonnell	3.3	0
Mt Gambier aero	4.6	0.2

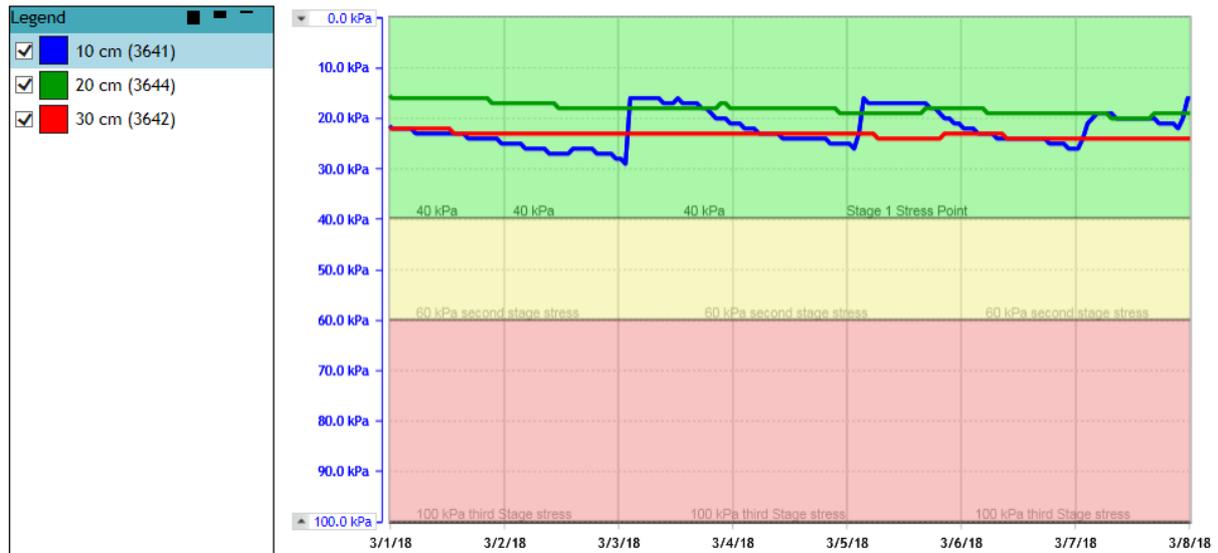


No rain recorded last week. ETo fairly consistent around 3-4 mm/day.

## What are the irrigation sensors telling us:

### Allendale East:

Sensors are producing clean data and tracking nicely - all within the desired moisture range. Soil moisture was increasing slightly at all depths last week, but this has been addressed by reducing the number of waterings.

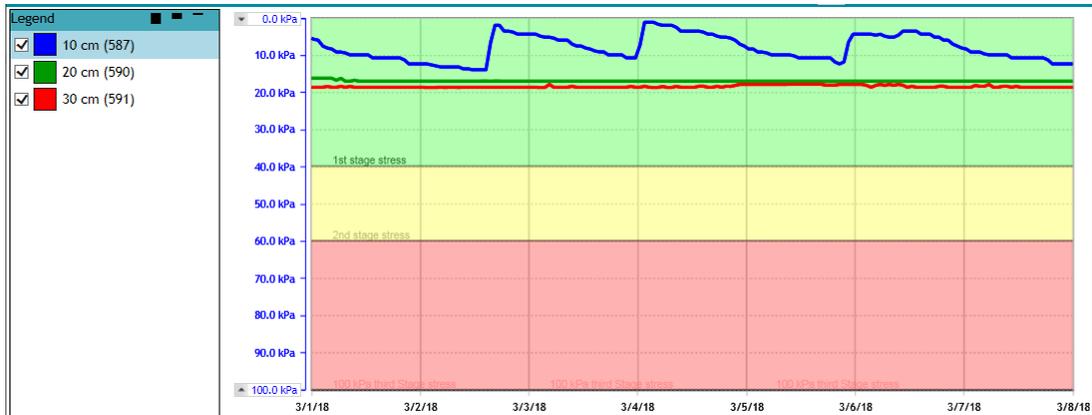


Last week's chart is shown below for comparison, with soil moisture creeping up from daily waterings.

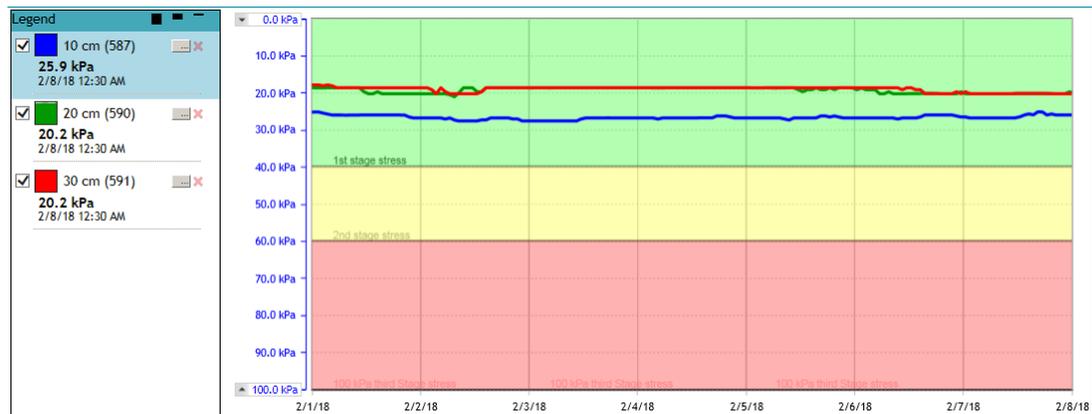


## Mt Schank

The surface sensor, at least, has come back to life and appears to be functioning 100%. Soil moisture is tracking well with three irrigations over the last week. Not sure how representative the deeper sensors are at this stage.



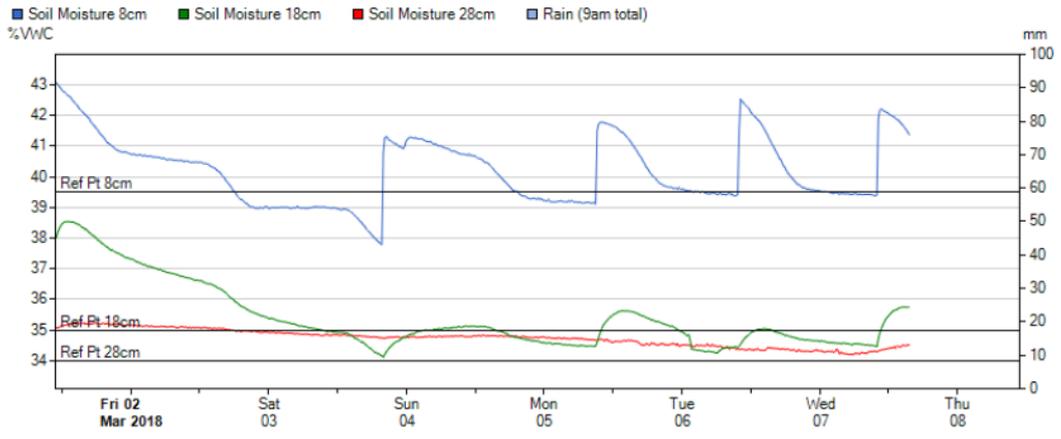
This compares to the chart from a month ago, which is shown below. These traces are just flat lines.



## Eight Mile Creek (pivot 6)

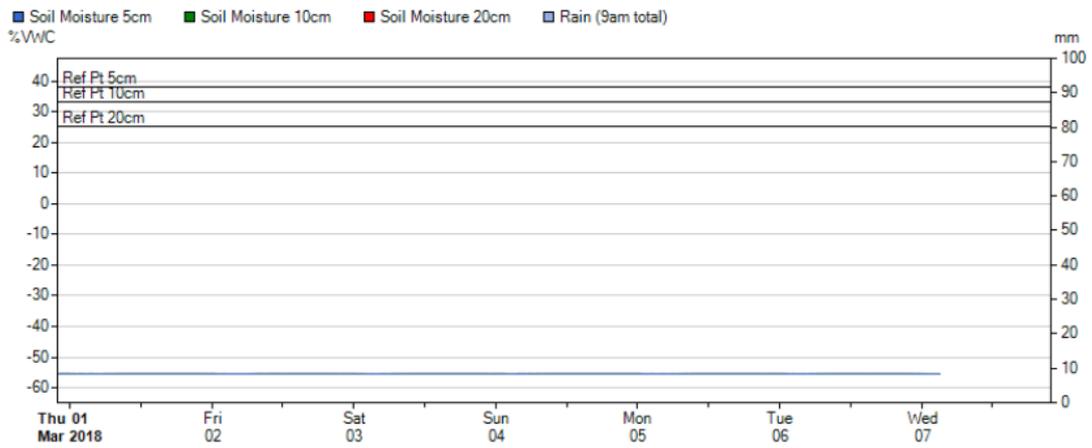
### Dry Area

Communication issues have been fixed at this site. No data was lost. The sensors appear to be showing irrigations as expected, although peaks from the surface sensor are still more rounded than earlier in the irrigation season. Soil moisture at all depths is tracking well - close to the reference lines. Irrigation water is getting into the root zone (18cm sensor), but not past it (28cm sensor).



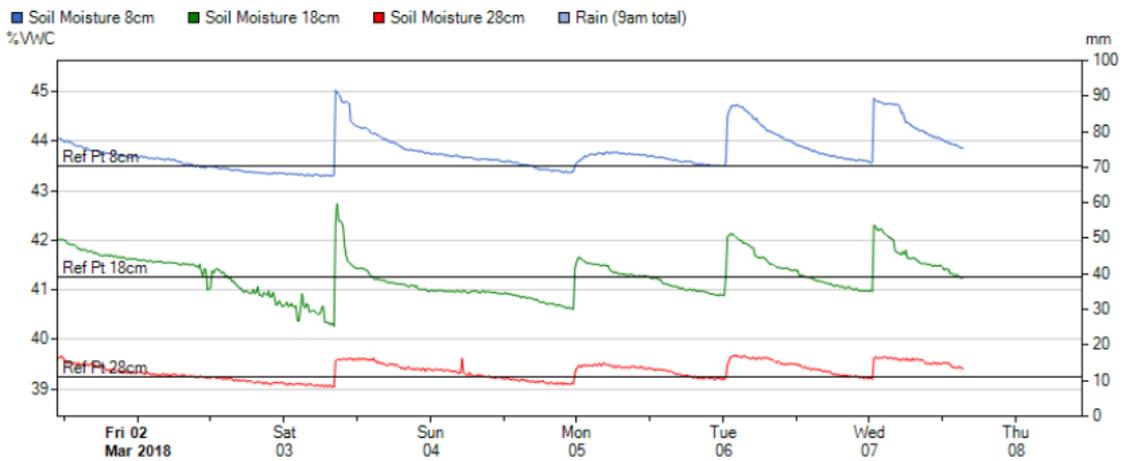
### Normal Area

These sensors are still not functioning.



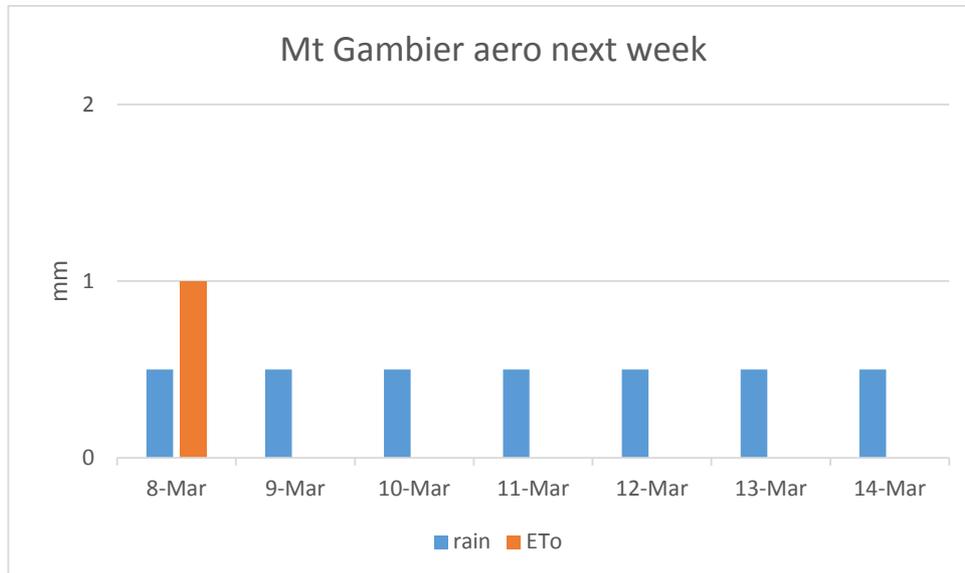
### Wet Area

Soil moisture here is tracking the same as last week.



## Next 7 days ~ average Evapotranspiration & Rainfall

	ETo (mm/day)	Rainfall (mm)
Mt Gambier aero	0.1	3.5



### Summary for the coming week

Traces of rain through the week. ET of 0 mm/day is predicted from tomorrow for the rest of the week. I don't believe this, and think that **The Yield** app might have some technical problems. Predicted temperatures are in the low 30's until Sunday, then in the low 20's. Last week's temperatures were more consistent around the high 20's and low 30's. I would anticipate ET values this week to be similar to last week, which were around 3-4 mm/day. It will be interesting to see what the actual ET values turn out to be.

Irrigators needed to have applied on average 32 mm of irrigation water for last week. The predicted weekly pasture water use (ET minus rainfall) for the Mt Gambier area in the next week is 2.5 mm. As discussed above, this seems very low.

\* These figures are approximate and do not take into account rainfall on farm\*

The intention of this service is not for the information to be used in isolation when making decisions about irrigation scheduling. ETo provides a relatively objective estimate of plant water use and provides another handy 'tool in the irrigation scheduling tool box.' Information in this email is only a guide and should only be used in conjunction with other tools including updated weather information. For improved accuracy, the collection and use of individual farm rainfall measurements is advised.

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