



## WEEKLY PASTURE GROWTH AND EVAPOTRANSPIRATION UPDATE

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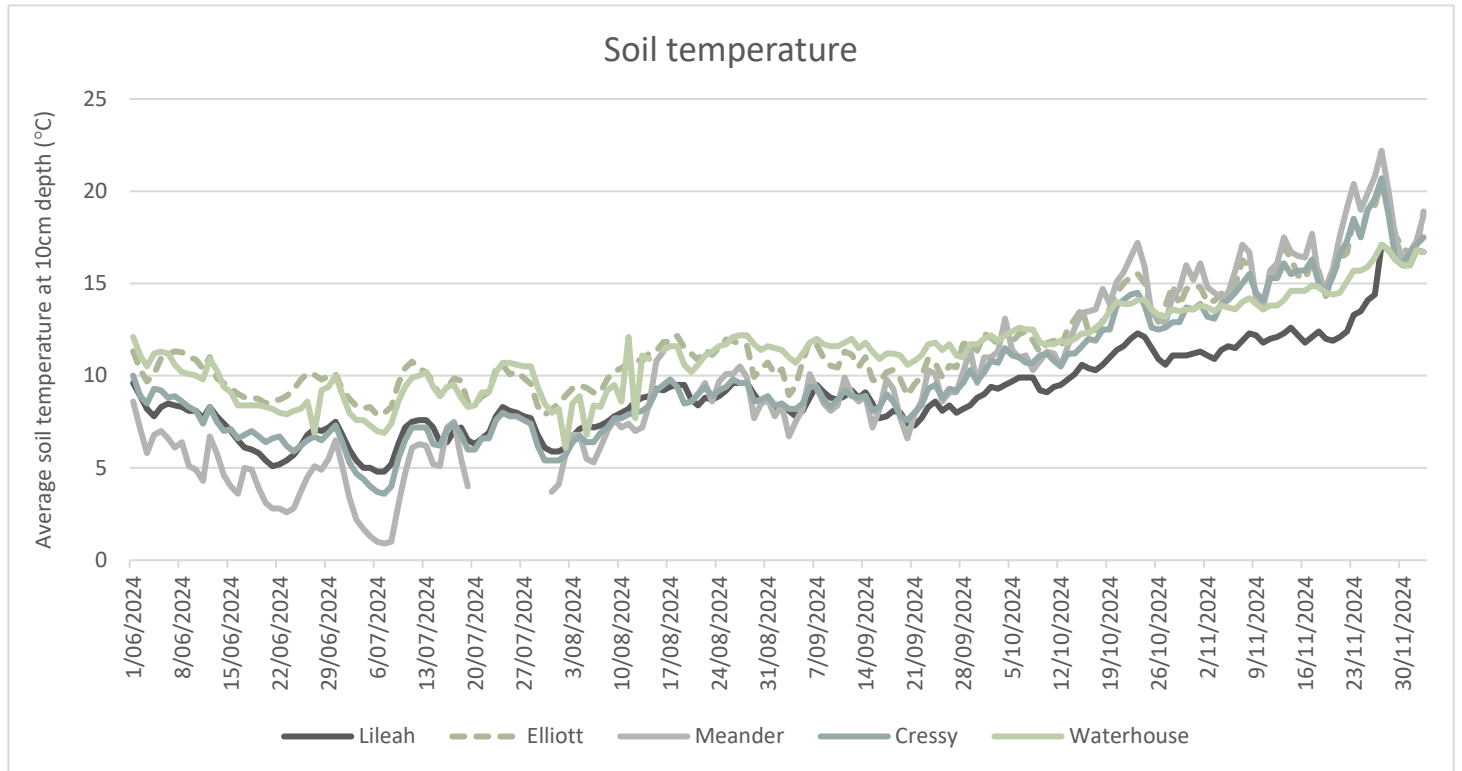
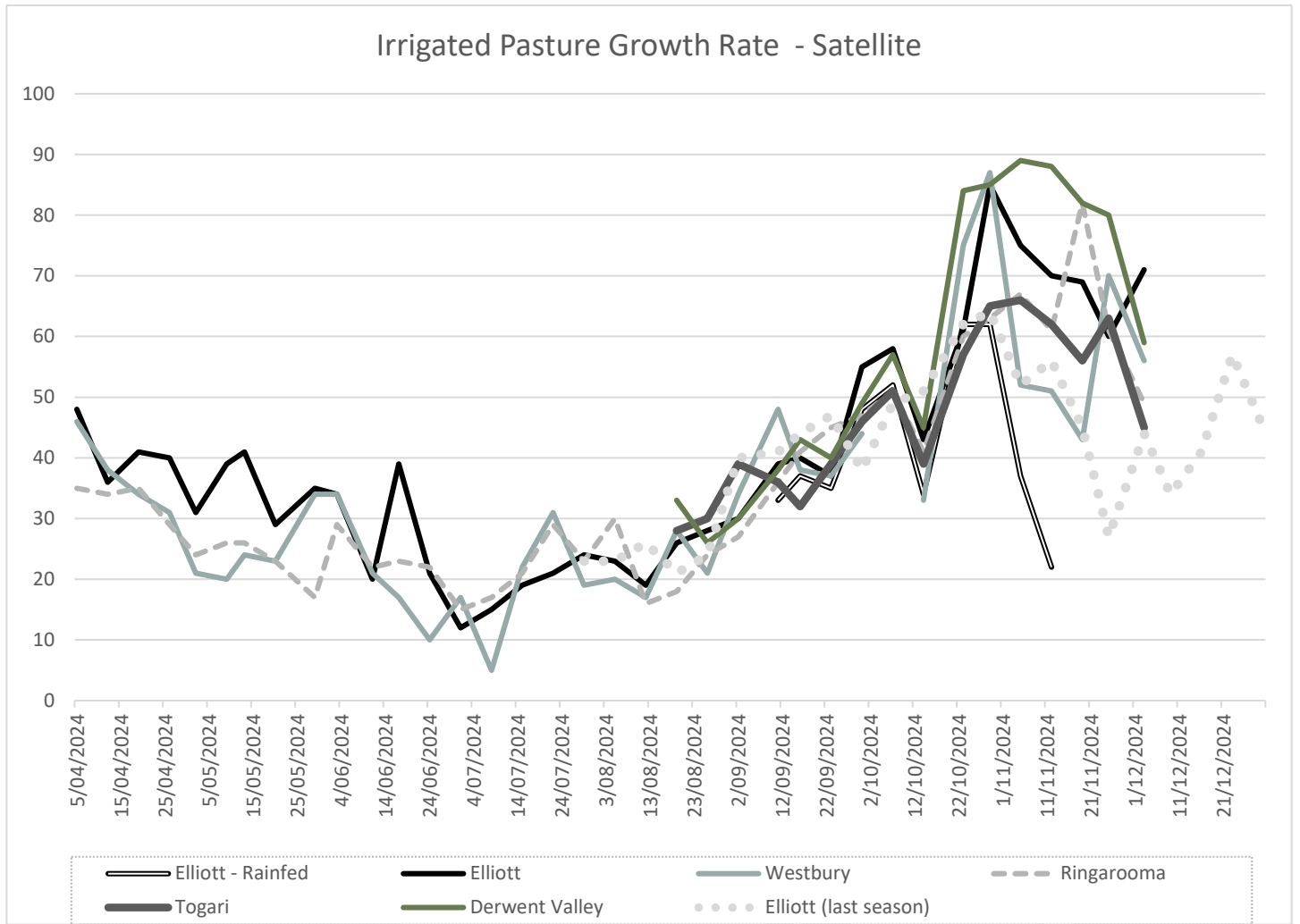
### Regional Pasture Growth Rates

Region	Pasture growth rate (kg DM/ha/day) - Satellite	
	Irrigated	Rainfed
Togari	45	-
Elliott	71	22
Westbury	56	-
Ringarooma	49	-
Derwent Valley	59	-

Pasture growth rates will vary between farms for many reasons including: climate, soil type, nutrient availability and management. Satellite pasture growth rates are sourced from Pasture.io (<https://pasture.io>).

Leaf emergence rate at Elliott			
Leaf emergence rate (days per leaf)	Days to 2 leaf stage	Days to 2.5 leaf stage	Days to 3 leaf stage
Irrigated	8	16	20
			24

# WHAT HAS HAPPENED OVER THE PAST WEEK



# Weekly Evapotranspiration & Rainfall

Wednesday, 27 November to Tuesday, 3 December 2024

Location	ET <sub>0</sub> <sup>1</sup> (mm)	Rainfall (mm)	Rainfall (month-to-date; mm)	Soil temp (°C) 9:00 a.m. @ 10 cm
Pegarah (KI)	-	-	-	-
Lileah	6.7	87.6	46.4	13.6
Elliott	12.5	135.8	45.2	18.9
Meander	17.6	101.8	43.8	18.7
Cressy	18.7	92.6	46.2	17.5
Ringarooma	-	-	-	-
Waterhouse	17.2	59.2	33.6	16.7

Data for this table is collected from the [UNITAS Weathermation weather stations](#) at Lileah, Elliott (Elliott Research), Meander (Clear Springs) and Waterhouse (Forester Lodge). These weather stations have been installed on [Smarter Irrigation for Profit II](#) optimised irrigation farms. Data for Pegarah (King Island) and Ringarooma is sourced from the Ag Logic Weather Station and Probe Network (<https://www.aglogic.com.au/>)

<sup>1</sup>ET<sub>0</sub> is the reference evapotranspiration, an estimation of the evapotranspiration from the “reference surface” – grass with an assumed height of 0.12m.

Monday, 25 November to Sunday, 1 December 2024

Location	ET <sub>0</sub> <sup>1</sup> (mm)	Rainfall (mm)	Rainfall (month-to-date; mm)	Soil temp (°C) 9:00 a.m. @ 10 cm
Ouse	23.5	29.8	18.8	18.3*

Climate data for Ouse is collated from [www.bom.gov.au](http://www.bom.gov.au). It is displayed in a different table because the date that data is available is different to the UNITAS Weathermation stations.

\* This soil temp information is from Bushy Park <http://www.bom.gov.au/products/IDT65176.shtml>

<sup>1</sup>ET<sub>0</sub> is the reference evapotranspiration, an estimation of the evapotranspiration from the “reference surface” – grass with an assumed height of 0.12m.

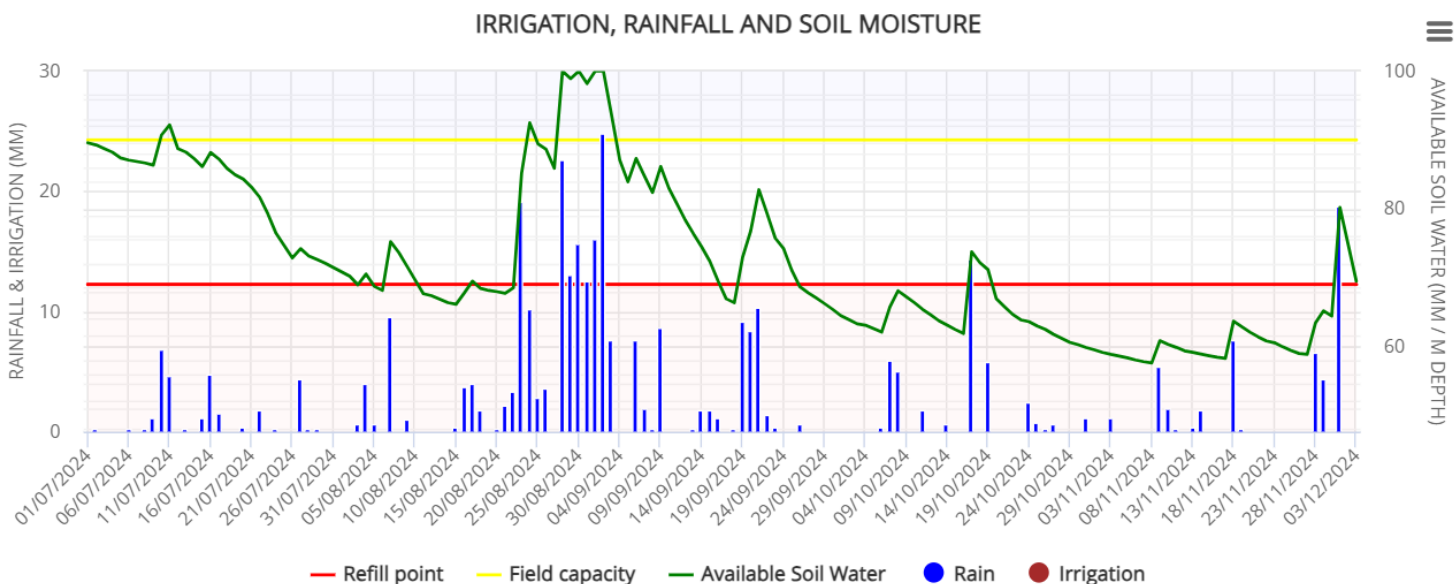
# Soil Moisture Budgets

The soil moisture budgets below have been produced using IrriPasture (<https://irripasture.com/>). This is a free budgeting tool that can help you make decisions about your irrigation scheduling. This report has budgets for Bushy Park/Ouse, Scottsdale, Meander, Sheffield, Elliott and Lileah. The graphs show the available soil moisture (green line). The aim is to keep this green line between the red line (refill point) and the yellow line (field capacity). The distance between the yellow and red line is how much Readily Available Water (RAW) the soil holds. The amount of RAW your soil can hold will depend on your soil type. As a guide, the amount of Readily Available Water that is held in the top 30 cm for common soil types is:

- Sand = 9 mm
- Loamy sand = 15 mm
- Sandy loam = 21 mm
- Loam = 27 mm
- Clay = 15 mm
- Clay loam = 24 mm

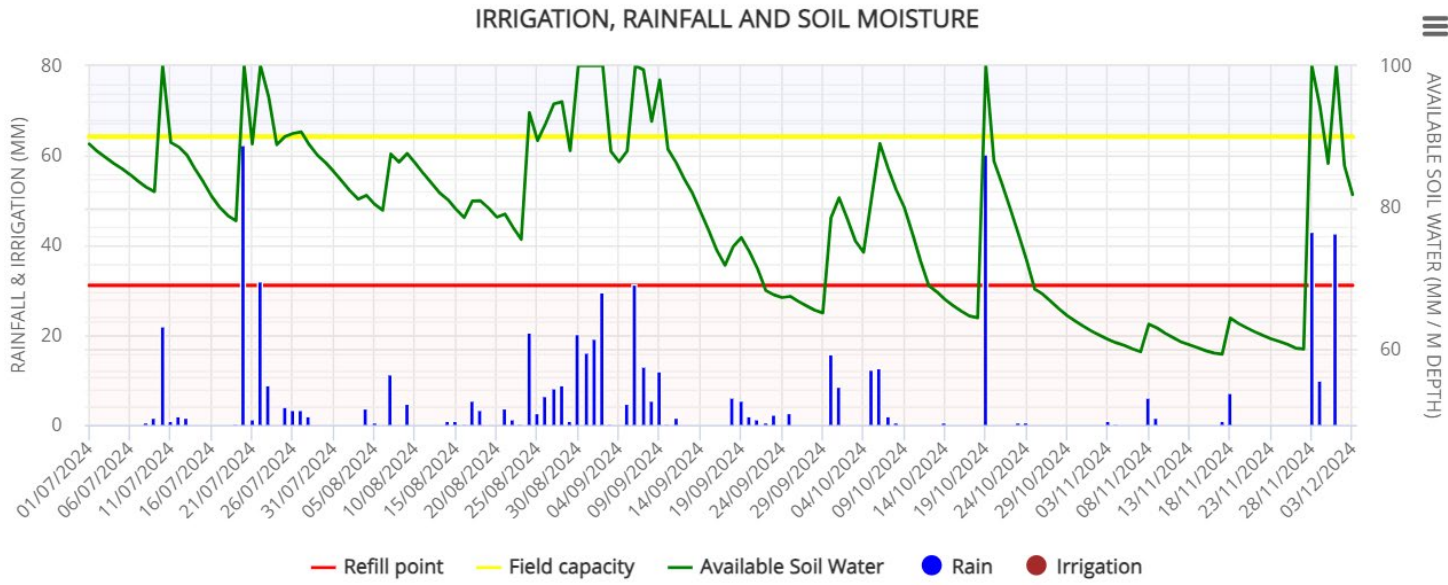
The soil moisture budgets in this report have used an 'average' RAW value of 21 mm. If your soil holds less soil moisture than this, you will need to irrigate earlier than the water budget indicates. If your soil holds more moisture than this, you probably don't need to irrigate as soon. **THESE SOIL MOISTURE BUDGETS ARE A GUIDE ONLY.** Please do a physical check of the soil moisture on your farm to help make the decision when to start irrigating.

## Ouse

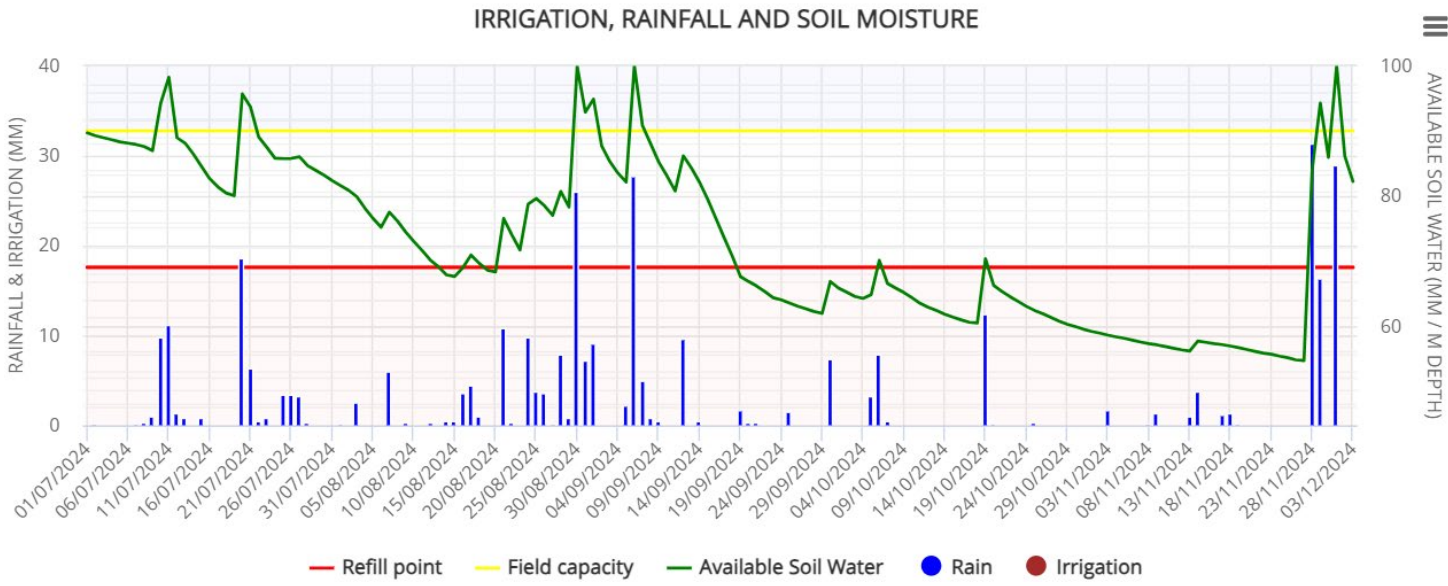




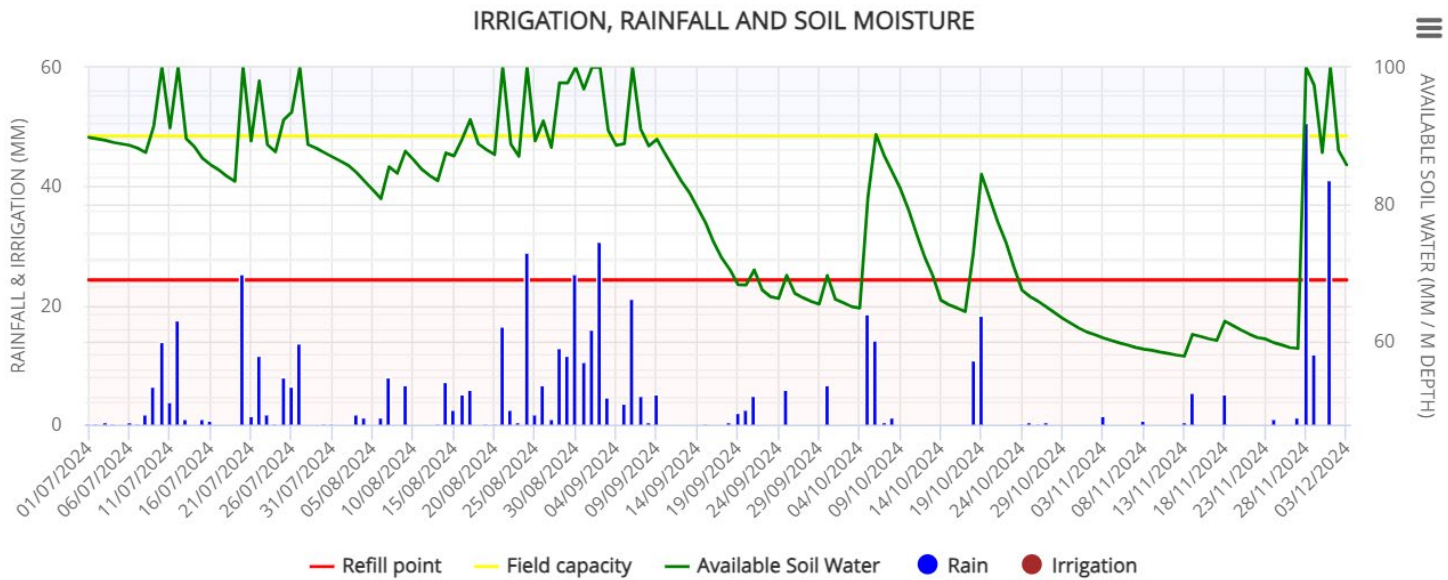
# Scottsdale



# Cressy

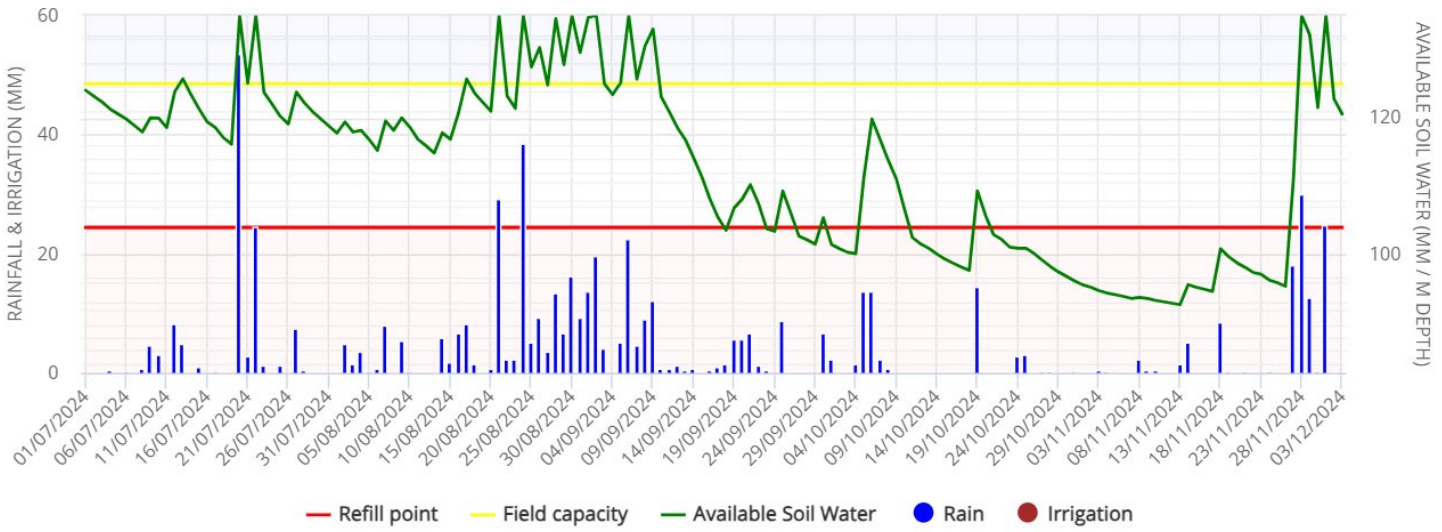


# Sheffield



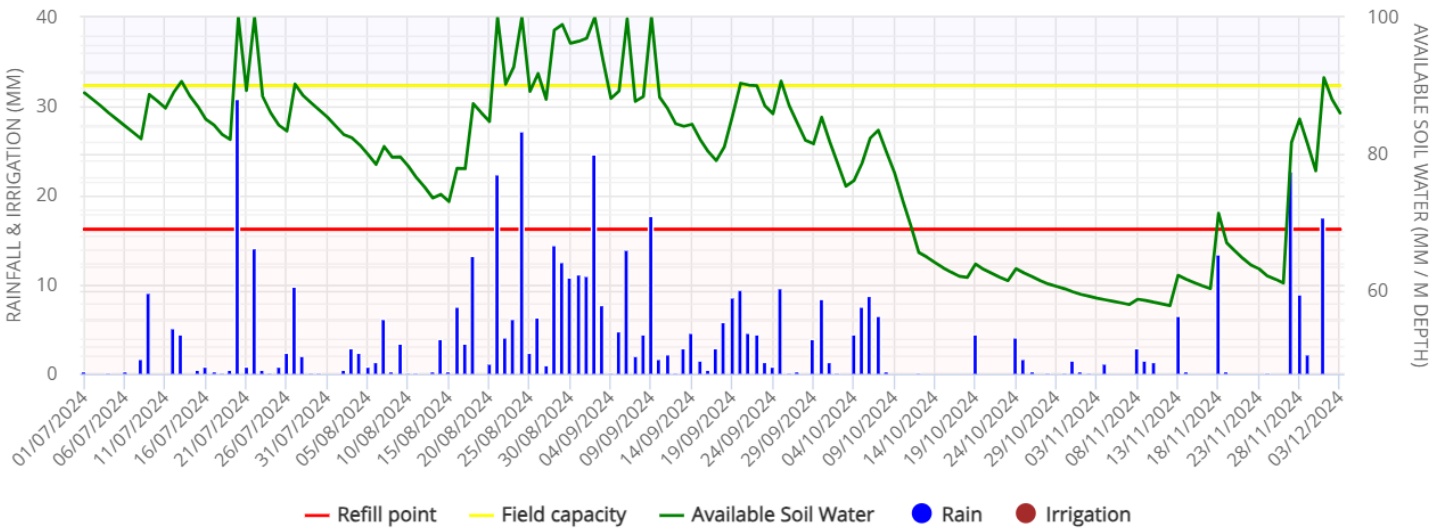
# Wynyard

IRRIGATION, RAINFALL AND SOIL MOISTURE



# Smithton

IRRIGATION, RAINFALL AND SOIL MOISTURE



# WHAT IS GOING TO HAPPEN OVER THE NEXT WEEK

## 7 Day Forecast

The following tables present the 7-day evapotranspiration, rainfall, temperature, humidity, and forecast for key dairy regions in Tasmania. The data is sourced from the Weatherwise Watering Swan Systems (<https://www.swansystems.com.au/irrigation-harnessing-power-of-data/>)

### 7 Day Forecast for Ouse

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Fri, 06-Dec	5.5	50	0-2	2	11-30	62	7
Sat, 07-Dec	4.3	85	7-15	11	14-24	70	12
Sun, 08-Dec	4.1	65	1-3	2.4	8-17	61	25
Mon, 09-Dec	4.1	40	0-1	1	9-20	63	18
Tue, 10-Dec	4.4	40	0-1	1	9-21	64	11
Wed, 11-Dec	3.7	60	1-3	2.9	8-17	68	16
Thu, 12-Dec	3.2	45	0-2	2	8-16	74	22
<b>TOTAL</b>	<b>29.3</b>			<b>22.3</b>			

### 7 Day Forecast for Scottsdale

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Fri, 06-Dec	4.9	55	0-2	2	11-27	65	7
Sat, 07-Dec	4.1	90	10-20	14	15-23	79	12
Sun, 08-Dec	5	15	< 1	0	10-18	58	22
Mon, 09-Dec	4.3	15	< 1	0	8-20	70	15
Tue, 10-Dec	4.2	25	< 1	0	8-20	74	12
Wed, 11-Dec	4.2	45	0-1	1	10-19	72	15
Thu, 12-Dec	3.9	20	< 1	0	7-19	76	18
<b>TOTAL</b>	<b>30.6</b>			<b>17</b>			

### 7 Day Forecast for Meander

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Fri, 06-Dec	5	60	0-3	3	11-27	65	7
Sat, 07-Dec	4.1	90	10-20	14	14-24	75	11
Sun, 08-Dec	4.1	30	< 1	0	8-17	59	20
Mon, 09-Dec	4.2	15	< 1	0	7-20	66	12
Tue, 10-Dec	4.5	20	< 1	0	7-21	68	11
Wed, 11-Dec	3.8	40	0-1	1	7-18	69	14
Thu, 12-Dec	3.5	25	< 1	0	6-18	73	16
<b>TOTAL</b>	<b>29.2</b>			<b>18</b>			

**7 Day Forecast for Sheffield**

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Fri, 06-Dec	4.5	65	1-4	4	10-25	72	9
Sat, 07-Dec	4	90	10-20	15.6	15-23	78	13
Sun, 08-Dec	4.1	30	< 1	0	9-16	63	23
Mon, 09-Dec	4.2	15	< 1	0	8-19	68	15
Tue, 10-Dec	4.4	15	< 1	0	8-20	71	14
Wed, 11-Dec	3.7	35	0-1	1	8-17	71	16
Thu, 12-Dec	3.4	25	< 1	0	8-16	77	20
<b>TOTAL</b>	<b>28.3</b>			<b>20.6</b>			

**7 Day Forecast for Elliott**

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Fri, 06-Dec	4.1	70	2-6	5.6	11-23	73	8
Sat, 07-Dec	3.8	90	10-20	13.6	15-22	79	17
Sun, 08-Dec	4.4	25	< 1	0	9-17	62	27
Mon, 09-Dec	4.2	20	< 1	0	10-19	66	19
Tue, 10-Dec	4.4	20	< 1	0	10-20	70	15
Wed, 11-Dec	3.7	35	0-1	1	10-18	72	19
Thu, 12-Dec	3.3	25	< 1	0	9-17	76	23
<b>TOTAL</b>	<b>27.9</b>			<b>20.2</b>			

**7 Day Forecast for Smithton**

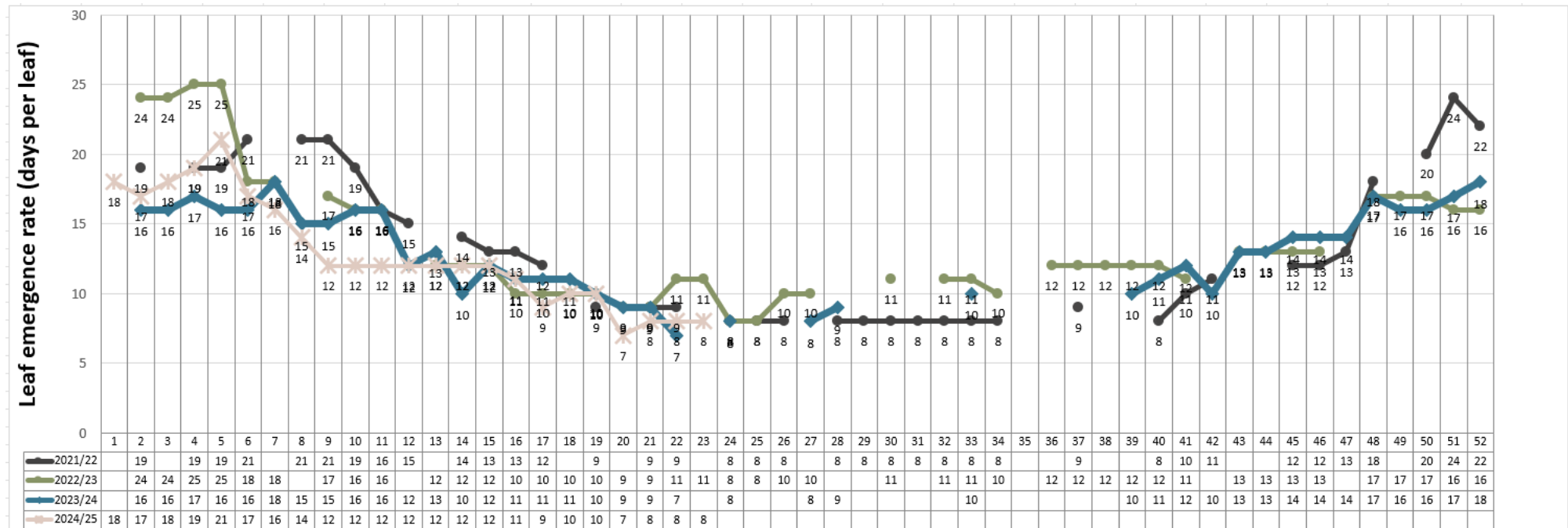
Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Fri, 06-Dec	4.2	75	2-7	6.3	12-25	81	14
Sat, 07-Dec	3.9	90	9-20	13.3	14-23	83	23
Sun, 08-Dec	4.6	45	0-1	1	10-18	65	35
Mon, 09-Dec	4.1	40	0-1	1	10-20	70	23
Tue, 10-Dec	4	40	0-1	1	10-20	76	19
Wed, 11-Dec	3.7	55	0-2	2	10-18	76	24
Thu, 12-Dec	3.3	40	0-1	1	9-18	79	30
<b>TOTAL</b>	<b>27.8</b>			<b>25.6</b>			



### 7 Day Forecast for King Island

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Fri, 06-Dec	4.1	75	3-9	7.6	14-23	83	10
Sat, 07-Dec	3.2	90	7-15	10.8	14-20	88	21
Sun, 08-Dec	4.2	50	0-1	1	11-17	69	31
Mon, 09-Dec	3.5	40	0-1	1	11-18	74	18
Tue, 10-Dec	3.9	45	0-1	1	11-18	77	14
Wed, 11-Dec	3.5	55	0-2	1.9	12-18	76	24
Thu, 12-Dec	3	40	0-1	1	10-17	81	28
TOTAL	25.4			24.3			

# Leaf emergence rate



This graph shows the leaf emergence rate in days per leaf for the past two seasons compared to the current season. The numbers directly below the graph (1-52) represent the weeks in the financial year. Week 1 is the first week in July, Week 52 is the last week in June.

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