

# Fire Weather Forecasting Services

Northern Australia Fire Managers Forum 2017









# Service Changes

- 7 days of Fire Weather grids
- 4 days of text-based Fire Weather forecast
- Fuel type determined on a grid-cell level
- Standardised District Weather Elements
- Curing values no longer rounded
- Online Spot Fire Forecast request system
- Changes to Registered User webpages



### **District Weather Elements**

#### District Weather Elements for Thursday 8 June 2017

Issued at 4:30 am WST on Thursday 8 June 2017.

	36					
District	TAL	Prob Rain >5	mm			
North Kimberley Coast	0	0				
West Kimberley Coast	0	0				
Kimberley Inland	0	0				
East Pilbara Coast	0	0	District Weather Element	S		
West Pilbara Coast	0	0	for Thursday 8 June 2017			
East Pilbara Inland	0	0	Issued at 4:00 pm EST on W	ednesday 7	June 2017.	
Ashburton Inland	0	0	Fire Area	TAL	cHaines	Prob Rain
Exmouth Gulf Coast	0	0	Peninsula	0	4	< 5
North Interior	0	0	Gulf Country	0	9	0

3000m Wind (km/h)

Fire Area	TAL	cHaines	Prob Rain >5mm	1500m Wind (km/h)	Mix Height (m)
Peninsula	0	4	< 5	ESE 30	2100
Gulf Country	0	9	0	ESE 30	1700
Northern Goldfields and Upper Flinders	0	10	0	SE 25	1800
North Tropical Coast and Tablelands	0	9	0	ESE 25	1800
Herbert and Lower Burdekin	0	9	0	SSE 25	1700
Central Coast and Whitsundays	0	8	0	S 30	1500
Capricornia	0	6	0	S 40	1600
Central Highlands and Coalfields	0	6	0	S 30	1800
Central West	0	9	0	SSE 30	1700
North West	0	9	0	SE 35	1500
Channel Country	0	8	0	SSE 30	1400
Maranoa and Warrego	0	4	0	SSE 30	1800



## **Curing Values**

### Location Forecasts at Time of Maximum Fire Danger for Thursday 8 June 2017

Issued at 4:00 pm EST on Wednesday 7 June 2017.

	Regions	Time	Tomp	ри	W	find (km/	(h)	May T	Cur %	Fuel	DF	Max FDI
Regions	Time	Temp	КП	Dir	Speed	Gust	WIGA I	Cui 70	(t/Ha)	DF	Fuel	
	Weipa	11	28	55	ESE	30	50	30	80	4.5	10	G
Peninsula	Coen Airport	11	27	48	ESE	25	50	29	70	5.0	10	G
	Palmerville	15	30	24	SSE	10	20	3/	60	5.0	10	G
Gulf Country	Normanton	14	27	15	SSE	25	45	28	75	4.5	10	G

Value included in forecast will no longer be rounded

Will match Fire Weather Bulletin value

Station		Grass Curing %	100000000000000000000000000000000000000	Current Observations									
	DF			Time EST	T	Td	RH	Wd	Ws km/h		FFDR/ FFDI	GFDR GFDI	
Coen Ap	10	71	5.0	1130	27	15	47	SE	19	26	§	L-M 2	
Scherger RAAF	10	74	4.5	1130	26	19	65	SE	15	26	-	L-M 1	
Weipa Ap	10	78	4.5	1130	27	20	65	SE	17	26	- 5	L-M 2	
Burketown Ap	10	84	4.5	1130	23	-2	19	SSE	30	39		H 13	
Century Mine	10	82	4.5	1130	23	-4	16	ESE	11	26	8	L-M 3	
Kowanyama Ap	10	63	4.5	1130	27	10	34	SE	19	28	¥	L-M 1	
Lockhart River Ap	10	64	5.0	1130	25	20	74	SE	28	43	- 5	L-M 1	
Normanton Ap	10	75	4.5	1130	24	0	20	SSE	19	28	2	L-M 3	



## Registered User Pages

#### Fire Weather Services for NSW Fire Agencies



#### **NSW Rural Fire Service Fire Weather Portal**

Tools for displaying and working with official Bureau of Meteorology weather forecast data. (Requires external login details)



#### Fire Danger Rating Estimates

Fire danger ratings estimates are routinely provided between September and March in line with the New South Wales bush fire danger period.

#### Fire Weather Forecast

Preliminary Fire Weather Forecast

**ACT Fire Weather Forecast** 

**Preliminary ACT Fire Weather Forecast** 



#### Four Day Outlook Products

Four day fire weather outlook products for forward planning and preparedness.

Four Day Fire Weather Estimates

Four Day Fire Weather Maps



#### **Current Observations**

Weather and ground moisture observations from Bureau automatic weather stations and Rural Fire Service portable weather stations.

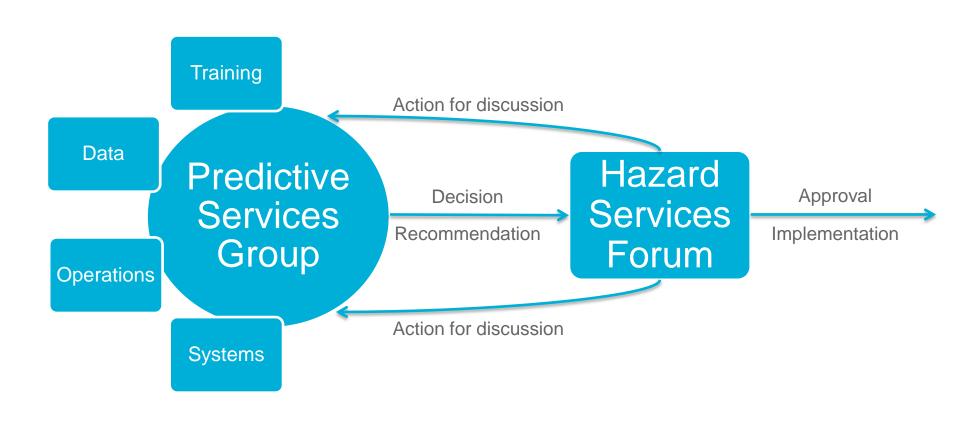
Fire Weather Bulletin

**Ground Moisture Bulletin** 





### Fire Weather Service Governance





### Spot Fire Forecasting Service Review

### Aims;

- Document needs in context of bushfire/prescribed burn
- Identify needs not being meet
- Develop short and long term plans for service



# Spot Fire Forecasting Service Review

Date	Activity
20 April 2017	Feedback template sent to fire agency contacts for completion, with support from Bureau review team members
12 May 2017	Completed feedback templates returned to the Bureau
25 May 2017	Summary of key themes from the feedback distributed to all
13/14 June 2017	Workshop to discuss key issues and determine recommendations
29 June 2017	Workshop report drafted and distributed to all, with opportunity for feedback/clarification
28 July 2017	Prototype new product constructed and distributed to all for feedback
18 August 2017	Second round of prototyping to incorporate feedback from round 1
14 September 2017	Finalise recommendations and prototype and send paper to PSG for consideration / approval
October 2017 through 2018	Develop implementation plan for the approved service changes

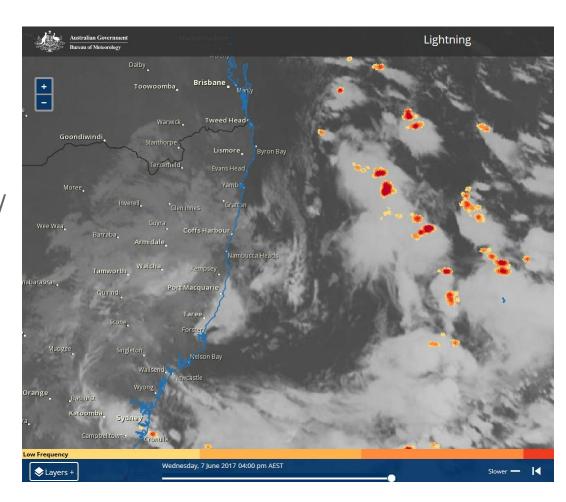


## **Lightning Data**

Lightning observations

Himawari satellite viewer

http://satview.bom.gov.au/

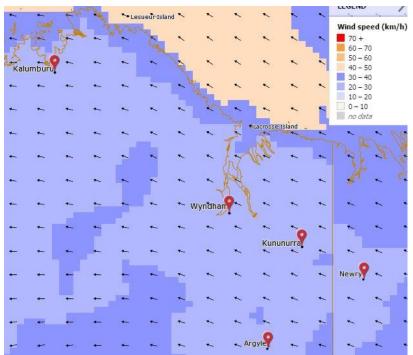




## Spot Fire Forecasts & Meteye



Image courtesy DPaW, Google Earth



Trial for Kimberley, Goldfields and Pilbara



### Thank you...

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