

Tuncurry Bushfire Begins October 18, 2019

Denis O'Bryan
Red Eagle Bushfire Protection Services
20 November 2019

Introduction

ABC on line Saturday 26th October “A fire around Minimbah Road to the west of Tuncurry, which has been **burning for weeks** flared up this afternoon, prompting its elevation to emergency level.”

The aim of this study is to document the spread of this fire by making use of publicly available data from the fire agency, other government agencies and the media. The primary purpose is to seek to understand why it grew so large and to explore the respective role of weather, bushfire behaviour and fire agency policies in that growth, specifically, to identify policies and procedures that encouraged or prevented its growth. The secondary purpose is to record the impact it has on people and their property in the pathway of a running bushfire in severe weather, to contemplate their rights to remedy for unwanted life or property loss and to collect evidence to support the case for neighbourhood self-defence as a complementary bushfire prevention policy.

The site of the bushfire origin is a few km west of Tuncurry at sea level. The nearest weather stations are at Forster, the neighbouring town at the same elevation and Taree at 8m elevation about 35 km to the North. Taree has the full suite of records long term rainfall, daily max / min temperature data, and 9am and 3pm readings weather readings. Forster records long term rainfall, daily max / min temperature data, and 9am weather. Based on proximity, landform and more complete records, the Taree weather is used for this fire ground.

Source data for this study uses updates media reports as the framework and supplements it with Rural Fire Service (RFS) Tweets, and Bureau of Meteorology records. Sourced quotes are in blue. Author narrative in black. Author highlights in red.

Note: Date stamps of FRS tweets do not match actual event times. We reconstruct the fire's development on the most severe weather day (26th October) to match the primary independent source, ie, the full daily weather data for Taree on 26th.

Chronology by the day

Weather

This bushfire begins on or before Friday October 18th 2019.

Taree weather station is a useful indication of bushfire-significant air flow over the fireground.

Observations from Taree Airport, about 6 km from the centre of Taree.

Date	Day	Temps		Rain	Evap	Sun	Max wind gust			9 am				3 pm					
		Min	Max				Dir	Spd	Time	Temp	RH	Cld	Dir	Spd	MSLP	Temp	RH	Cld	Dir
		°C	°C	mm	mm	hours	km/h	local	°C	%	g th	km/h	hPa	°C	%	g th	km/h	hPa	
16	We	12.0	26.7	0			SW	39	19:23	20.2	73								
17	Th	16.3	34.5	3.4			WSW	61	14:49	18.4	99	5	1006.2	33.1	17	3	W	28	1003.3
18	Fr	7.6	22.3	0			SE	33	13:35	18.4	25		1017.7	20.1	37		ESE	24	1015.9
19	Sa	6.1	28.0	0			ESE	44	12:25	17.9	41		1017.0	26.3	14		E	24	1012.1
20	Su	12.6	20.9	0			SSW	43	01:18	18.0	54	5	1021.5	19.2	49		ESE	22	1020.7
21	Mo	6.6	22.7	0			ESE	33	11:19	16.7	63		1026.8	21.6	40		E	20	1024.4
22	Tu	7.0	23.8	0			ENE	33	11:46	17.2	60		1026.0	22.7	53		E	22	1022.5
23	We	8.5	26.2	0			E	39	14:23	18.2	71		1024.4	24.7	50		E	28	1019.6
24	Th	10.9	31.4	0.2			ESE	31	12:12	22.0	54	5	1018.6	25.8	39	7	SSW	11	1016.8
25	Fr	9.1	33.1	0			ENE	46	14:22	22.6	45		1015.3	31.5	27	7	ENE	31	1010.0
26	Sa	14.4	36.7	0			WNW	61	11:18	22.0	55	8	1007.2	34.3	14	8	WNW	24	1001.9
27	Su	10.1	23.9	0			ESE	37	13:39	20.9	23		1016.0	21.7	38		ESE	24	1013.6
28	Mo	8.5	23.8	0			E	39	13:14	17.4	59	8	1020.1	21.6	53	2	E	22	1019.8

Most days in this period have 3pm readings of temperatures in the low 20C's and high humidity, eg > 40%, which keep a bushfire at low intensity.

Between 11th and 13th October, there was 30mm of rain which dampens bushfire potential for several days in high humidity weather.

Dry air flow occurs on three days as potential candidates for higher intensity fire behaviour. They are the 17th October with 33C, 17% RH and W winds @ 28kph, the 19th with 26C 14% RH and E winds @ 24 kph and the 26th October with 34C, 14% RH and WNW winds at 24 kph.

Fire and Events

Before Friday 18 October

RFS Tweet Firefighters and aircraft are working on a bush fire on the northern side of Wallis Lake, near Minimbah Rd, (Mid Coast LGA). The fire is producing lots of smoke but there is no immediate threat to homes.

Comment This is the first public indication of a local bushfire, just to the west of the Forster-Tuncurry area. The Tweet date is not accurate. It could refer to the 17th or the 19th when the humidity was a bit lower.

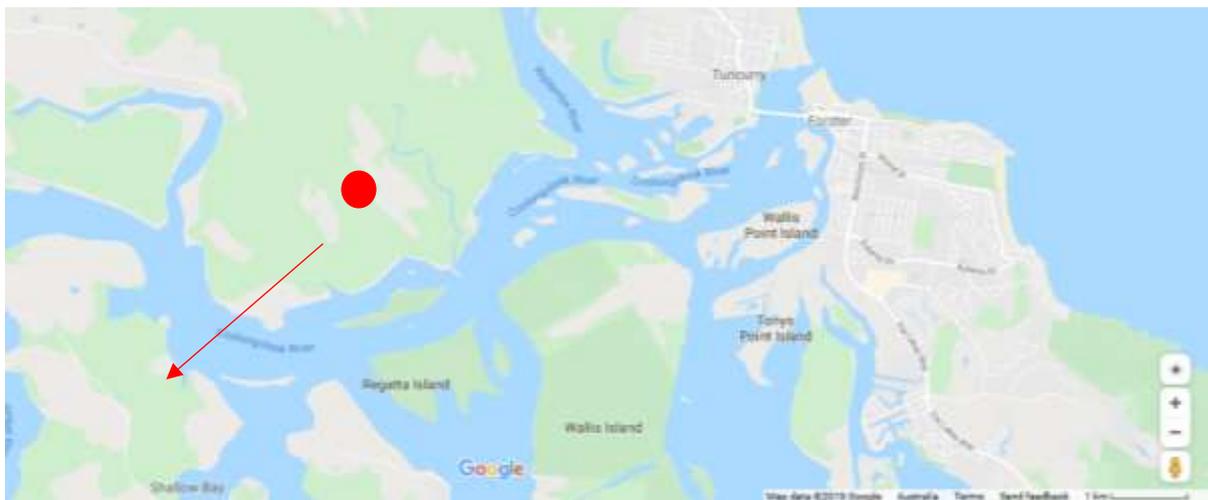
Saturday 19 October

RFS Tweet

WATCH AND ACT - Minimbah Road fire, Wallis Lake (Mid Coast LGA). Fire has crossed the Coolongoolook River. If you're in the Wallingat, Shallow Bay or Coomba Park areas, watch out for spot fires. Info at [rfs.nsw.gov.au/fire-informati ...](https://rfs.nsw.gov.au/fire-informati...) #nswrfs #nswfires



Comment Below is a map of the area. The Tweet means the fire from the yellow spot on the RFS map is throwing embers SW towards Shallow Bay area, a distance of 5 or more km away. This suggests there is a strong wind from NE or ENE, which occurred on afternoon of 19th.



RFS Tweet

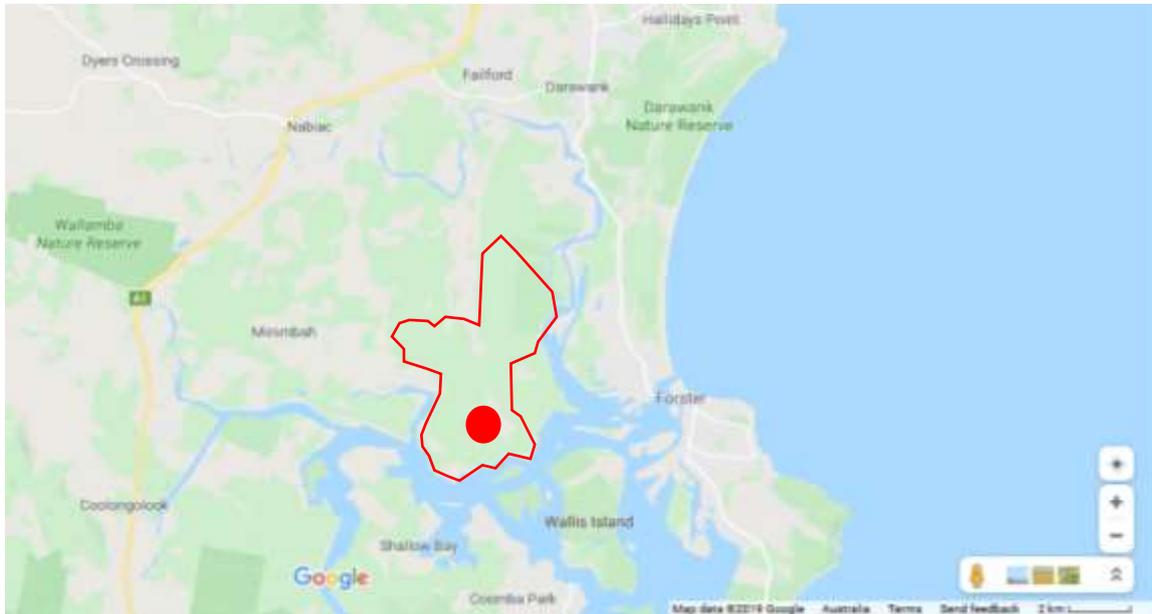


11:10 PM - 19 Oct 2018

Comment Now the bushfire scenario makes some sense. This fire is equivalent to a control burn. It may have may have started by surprise, but they have let it or encouraged it to burn out a bit more in the National Park, presumably to containment lines.

We now have a large fire burning within 1km of Tuncurry forest and within 2km of Tuncurry township, separated by a water firebreak 500m wide. The fire is freshly lit, and 8 km from north to south and 2+km deep = 1,600 ha

The town is clearly well protected from an expanding flame by the waterway, but may get some of its smoke and embers if the wind is strong from the West or NW.

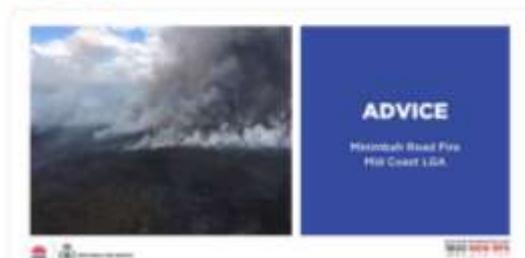


Sunday October 20

RFS Tweet 45 fires burning across NSW, 18 yet to be contained. Almost 800 firefighters and support personnel continue to work across these firegrounds. Favourable weather expected over the next few days before hot & windy weather returns later in the week

RFS Tweet

Smoke from the Minimbah Road Fire has settled across a number of areas including Forster and Tuncurry this morning. This is due to an inversion, which should lift by mid morning, as the day warms up. Crews will work today to consolidate containment lines.
#NSWRFS



Monday October 21

RFS Tweet

Firefighters are currently conducting backburns on the Minimbah Fire west of #Forster. People in the area will notice an increase of smoke and fire activity as these burns are undertaken. #NSWRfS

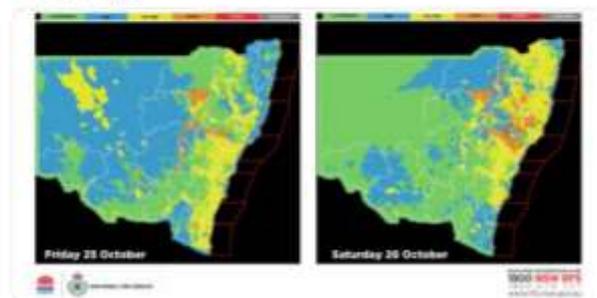


Comments Fresh fire perimeter being laid in middle of dry season is a risky business with NSW beset with many going fires this September and October across the state.

Tuesday October 22

RFS Tweet

The @BOM_NSW are forecasting hot, dry and windy conditions later this week. This will drive up fire dangers particularly on Friday and Saturday. It is important to discuss your bush fire survival plan tonight and know what your household will do if threatened by fire. #NSWRFS



Friday 25 October

Weather

The weather readings at Taree for yesterday and today appear balmy and mild.

24th Thurs 9am 22.0C, 54% RH, Wind from NW @ 9kph
3pm 25.8C, 39% RH Wind from SSW @ 11kph

25th Fri 9am 22.6C, 45% RH, Wind from SSE @ 7kph
3pm 31.5C, 27% RH Wind from ENE @ 31kph

The weather charts have widely spaced isobars, meaning local weather influences prevail, for which we have no records. The charts suggest a general NW air flow overnight on the 24 / 25th, but the Taree weather is a light southerly in the morning, whereas Forster has a light ENE air flow. There is a strong ENE wind in afternoon of 25th along the coast.

The spotting later today in the north means a stiff southerly air flow occurred at some stage. The following photo supports the theory that there was a southerly air flow in the afternoon. unless these new spot fires were deliberately lit.



© ABC News Residents

of the beachfront town of Forster watched as smoke billowed on the horizon on Friday afternoon.

Comment The shadow is short, meaning it is early afternoon. The shadow of the afternoon sun run to the easterly, which means the picture looks from NE to SW. The smoke is heading Northward, meaning a Southerly wind. The smoke stacks have gentle angles, meaning a light breeze. The smoke stacks are separated, meaning different spot fires.

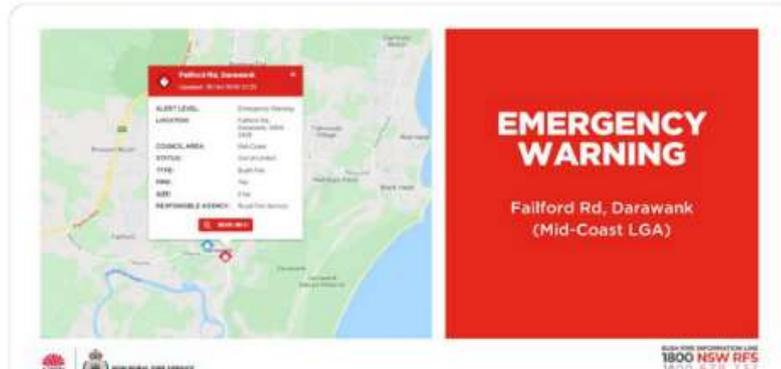
Fire and Events

Midday *RFS Tweet*

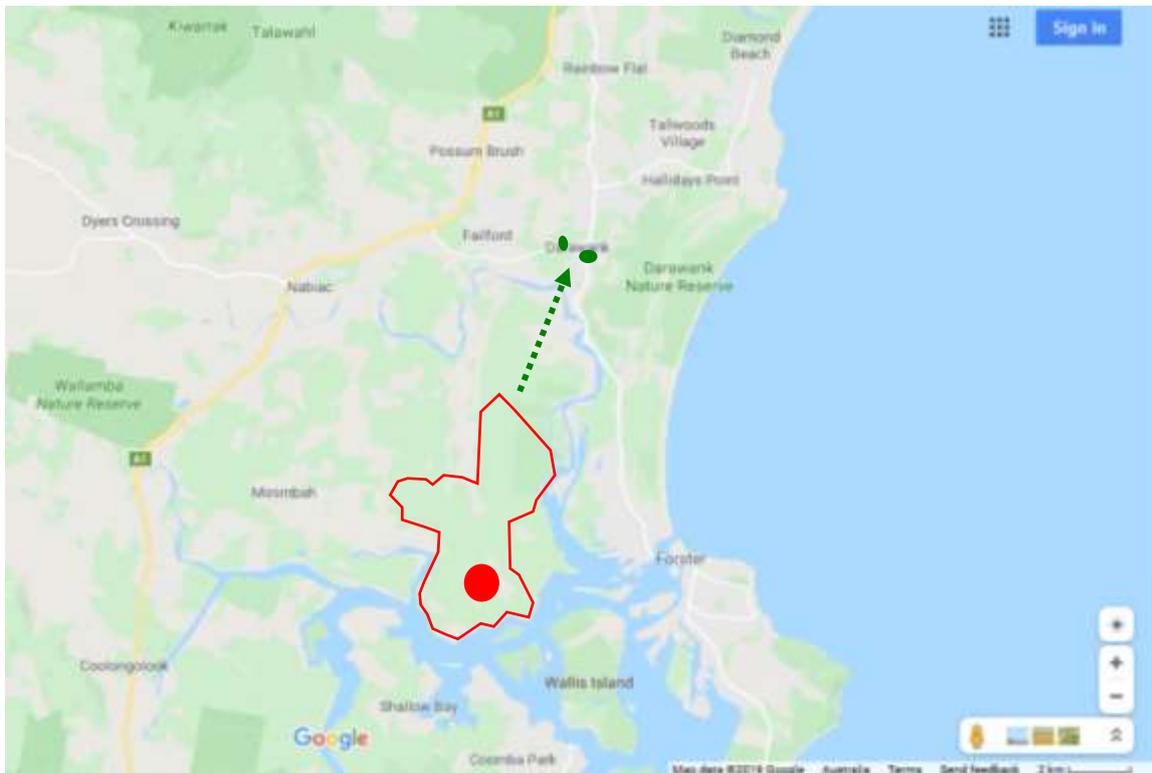
Firefighters are on scene of bush fire at
Failford Road at Durawank, north of Forster.
Additional crews being sent. Avoid the area.
[#nswrfs](#) [#nswfires](#)

1.30 pm *RFS Tweet*

EMERGENCY WARNING: Failford Rd,
Darawank (Mid-Coast LGA)
A fire is threatening homes in the areas of
Corrigan, Darawank and Hallidays Point. If
you are in the area, seek shelter as the fire
approaches. #NSWRFS #NSWFIRE



Comment These spot fires are 6 km from the northern fire edge. Available wind records do not support such long spotting distances. Other spot fires to the west on later maps raise further suspicions of foul play. Needs verification.



Saturday 26 October

Weather

Taree weather:

Before 11.30 am	20 – 30C, 30%+ RH, winds from E / ENE @ < 10kph
11.30 am to 3.45pm	35C, 14% RH, winds from NW / WNW @ 30 – 40 kph
3.45 to 4.45 pm	30C, 25% RH, winds from WSW to WNW @ 30 - 40 kph
4.45 to 8.30 pm	20 – 25C, 30 – 35% RH, winds from N / NW @ 10 – 20kph
8.30 – 11.30 pm	20 – 25C, 35 – 60% RH, winds from S / SSE @ 15 – 25kph

Fire and Events

Mid-Morning - Before 11.30am

EMERGENCY WARNING: Failford Rd, Darawank (Mid-Coast LGA)
Smoke, ash and embers from the Failford Rd and Minimbah Rd fires are blowing towards Forster-Tuncurry. Residents should be aware that falling embers may create spot fires and threaten properties. #NSWRFS #NSWFIRES



Comment: Embers and smoke are blowing across the freshly lit fires to the towns and settlements in the east. They have to cross 500m of watery firebreak to reach the Tuncurry area.

The spot fires in the Failford / Darawank area are still small and should have been blacked out by now and should have been resourced well enough to prevent escape. Instead it soon escaped into a nature reserve, grew larger and required fire fighter attention for several days later, causing much local resident concern.

Early afternoon 11.30 am to 3.45pm

ABC on line A fire around Minimbah Road to the west of Tuncurry, which has been burning for weeks flared up this afternoon, prompting its elevation to emergency level. Properties around South Street, Tuncurry were under threat from the blaze, and residents had been warned to seek shelter.

RFS spokesperson Anthony Clark said conditions are expected to ease slightly on Sunday, so today is a "race against the clock".

Port News The Minimbah Road fire, which has been burning for more than week, broke containment lines as a result of strong and gusty winds on Saturday, October 26. The fire crossed the river and now is burning in bushland on the western side of Tuncurry.

RFS Tweet

EMERGENCY WARNING: Minimbah Rd (Mid-Coast LGA)
A number of fires are burning in the Tuncurry and Minimbah areas, threatening homes in the vicinity of South St, Tuncurry. Residents in this area should take shelter as the fire approaches. #NSWRFS #NSWFIRE



Mandurah mail On the mid-north coast, a blaze that began more than a week ago at Minimbah jumped a river and began moving towards Tuncurry - home to more than 6000 people. Embers travelled kilometres ahead of the blaze, with one small blaze igniting on the headland at Forster Main Beach.

Andrew O'Sullivan, whose five-acre property on the edge of the Tuncurry township is covered in rainforest, said he'd been "right in the guts" of the blaze.

The Darawank fire burnt east towards the coast, before a southerly wind change spread the blaze along its flanks and in the direction of Hallidays Point.

RFS Tweet

WATCH & ACT: Failford Rd, Darawank (Mid-Coast LGA)
Fire has burnt towards the coast & is spreading along its flanks towards Blackhead Rd. Wind change in the coming hours will move it towards Hallidays Point. Residents should enact their bush fire survival plans #NSWRFS #NSWFIRE



SBS on line The Darawank fire burnt east towards the coast, before a southerly wind change spread the blaze along its flanks and in the direction of Hallidays Point.

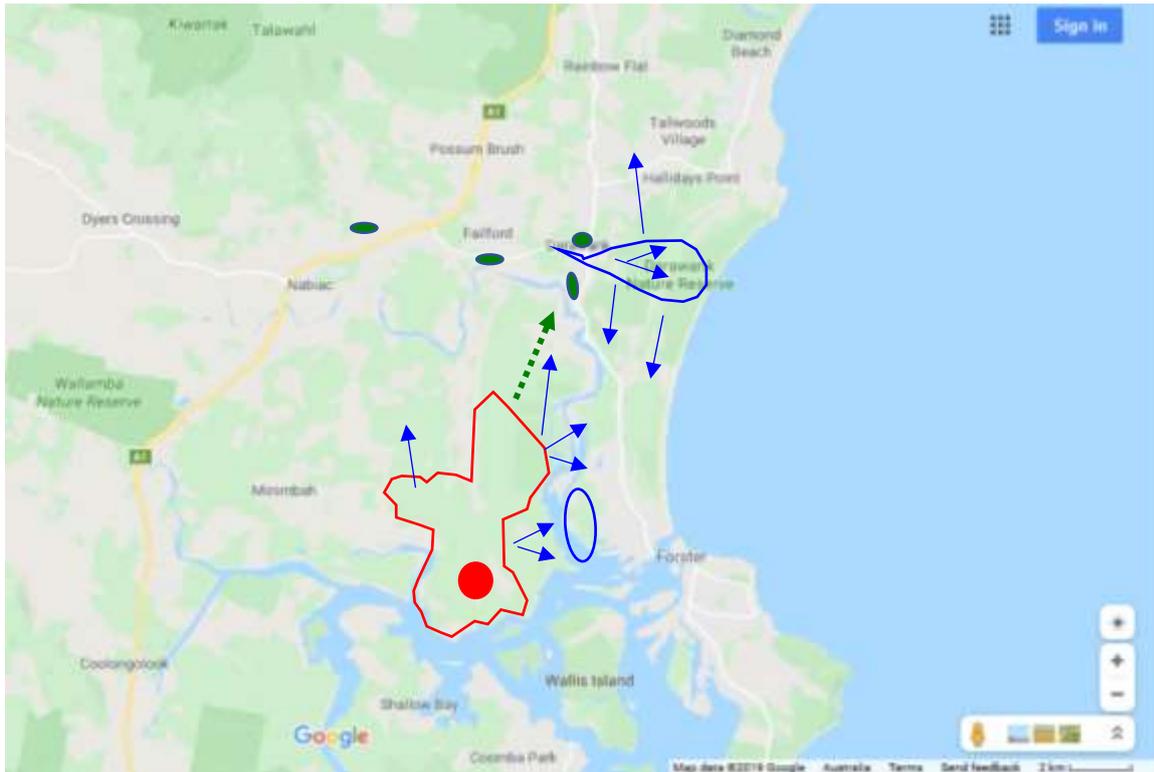
Late afternoon / evening 3.45 to 11.30 pm

RFS Tweet

EMERGENCY WARNING - Failford Rd
Darawank fire (Mid Coast LGA). Fire has burnt to the coast and continues to spread north and south. There is significant smoke in the area. Reports of at least one property being damaged or destroyed. #nswrfs #nswfires



ABC on line Residents on the NSW mid-north coast have been told it is too late to evacuate their homes as bushfires burn at emergency level in the region. At least two homes have been destroyed near the town of Darawank as firefighters battle dozens of uncontained fires across the state. The Rural Fire Service (RFS) cancelled emergency warnings overnight for three blazes in the mid-north. The RFS said with a southerly change, the blaze in Darawank, near Forster, was burning in a northerly direction towards Hallidays Point, Corrigan and Black Head. The service is advising residents that embers may blow ahead of the main blazes and start spot fires. Blazes at Tuncurry and Mount George have been downgraded to watch and act after burning more than 2,000 hectares. The RFS says a fire has crossed the river and is burning on the western side of Tuncurry. The fire at Tuncurry has burnt for more than a week, with strong winds fanning the flames. High temperatures and strong winds had resulted in high fire danger across the state. At 10:00pm AEDT there were 90 bush and grass fires burning across NSW, with 42 uncontained. A fire around Minimbah Road to the west of Tuncurry, which has been burning for weeks flared up this afternoon, prompting its elevation to emergency level. Properties around South Street, Tuncurry were under threat from the blaze, and residents had been warned to seek shelter.



Red area has been burning for at least a week before 26th.

Green expansion occurred on 25th.

Blue expansion occurred on 26th - 11.30 to 3.45pm towards SE, 3.45 to 4.45pm towards E, 4.45 to 8.30pm, towards S / SE, 8.30 – 11.30pm, towards N / NW.

RFS Tweet It's been a difficult and dangerous day across NSW. 1680 firefighters, 460 fire trucks, 75 aircraft. Sadly, there are reports of properties being damaged or destroyed. At 8:30pm there's 90 bush and grass fires, 42 yet to be contained

Sunday 27 October

Weather

12.30pm till 6.30pm Strong winds from ESE

Fire and Events

RFS Tweet

ADVICE: Minimbah Fire, Tuncurry (Mid-Coast LGA) Conditions have eased across the fireground as crews continue work to strengthen containment lines & suppress the fire. Residents in the area of Tuncurry and Minimbah should continue to monitor conditions. #NSWRFS



Comment Fire continues to expand via short distance spot fires and containment line breaches on the western sides due to wind direction.

RFS Tweet Watch & Act: Failford Rd, Darawank. Conditions have eased as more than 120 firefighters continue work on this fire. There is no immediate threat to properties in the area. Residents in the area should continue to monitor conditions & know what they'll do if fire threatens

ABC on line

- A blaze around Darawank is at Watch and Act level after erratic winds increased fire activity
- The fire around Minimbah is also at Watch and Act and covering 3,225 hectares
- There are 45 uncontained fires burning across NSW

A fire in Darawank, which has destroyed two homes, is now at a Watch and Act level and moving towards Corrigan.

The NSW Rural Fire Service (RFS) is warning people in Hallidays Point, Corrigan, Tallwoods Village, Black Head, Red Head and Diamond Beach should be aware of burning embers.

Another blaze, near Minimbah, which has been burning for more than a week, was brought under control overnight but also lifted to a Watch and Act this afternoon.

"Fire activity is increasing in the north-western part of the fireground. If your plan is to leave, leave early before the fire threatens," the RFS said.

Many residents in the Tuncurry area were metres from losing their homes to the blaze yesterday.

The Bourke family fought 30-metre flames for more than three hours and saved their heritage-listed home. "It was terrifying, I thought we were done for," Sharon Bourke said. "The fire surrounded us on all sides and was above the trees, so we grabbed the hoses and stayed because this house means too much to us to leave."



The Bourke family stayed to defend their heritage-listed Tuncurry home. (ABC News: Selby Stewart)

Neighbour Karen Burton was evacuated by firefighters and grabbed her husband's ashes before fleeing.



Photo: Karen Burton raced home to collect her husband John's ashes. (ABC News: Selby Stewart)

"There was smoke everywhere, I just ran and took my important belongings," she said. "I haven't seen anything like this here before, I'm just so grateful we are still here."

news.com.au The fires - one of which burned through more than 2600 hectares in the Darawank area, north of Forster-Tuncurry, and a separate fire in Tuncurry which jumped a river and began spotting close to town - were declared under control on Sunday evening. At midday on Sunday some 85 fires were burning across the state with 45 not contained, but by early evening that number had been downgraded to 74.

Monday 28 October

RFS Tweet Firefighters are taking advantage of favourable conditions to undertake backburning operations on the Minimbah fire which will produce an increase in smoke in the area.

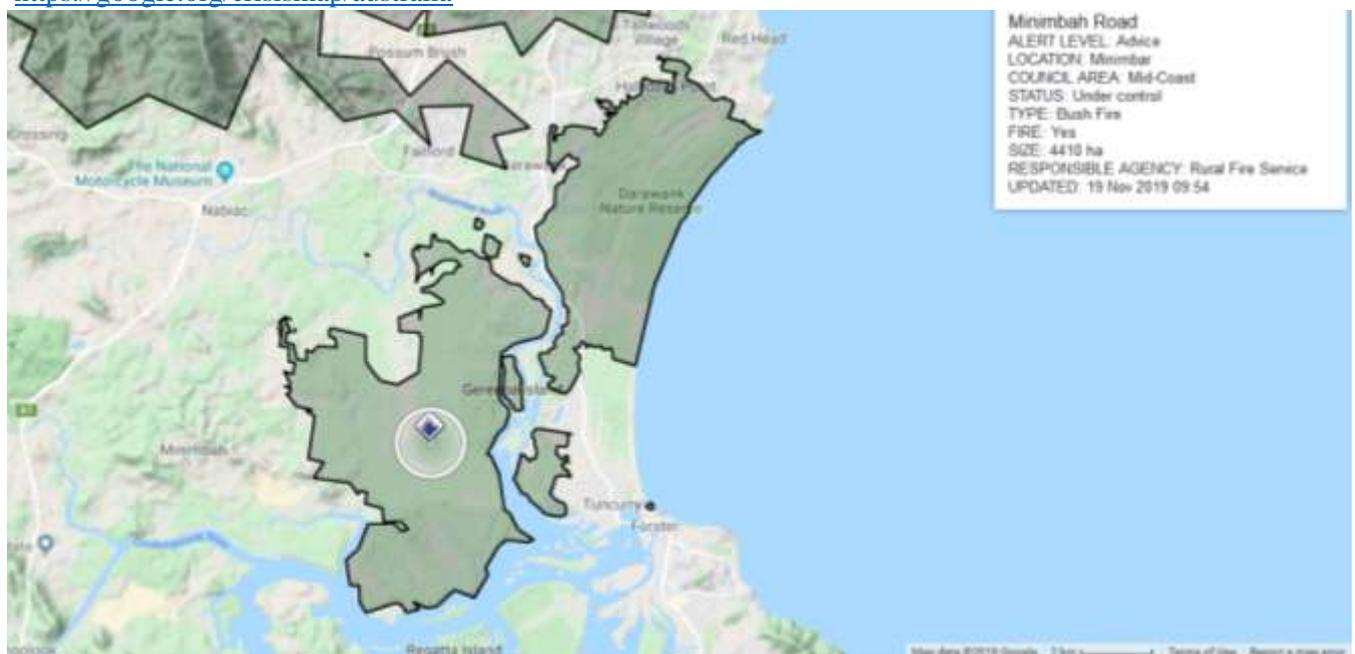
Advice: Minimbah Rd fire (Mid-Coast LGA).
 Firefighters are taking advantage of favourable conditions to undertake backburning operations on the Minimbah fire, which will produce an increase of smoke in the area. Please only report unattended fires to Triple Zero (000). #NSWRFS



Comments Undeterred by the massive disruption their last bit of backburning just caused when it escaped, back burning policy continues during the peak of the fire season. Presumably they have adequate resources for blacking out and subsequent patrolling. Presumably, this policy has the approval of National Parks and forest managers and is consistent with fauna and flora conservation. The smoke problem? Presumably, people tolerate it. If in Victoria, suppression money is from a bottomless Treasury pocket. Same here?

19 November Update

<https://google.org/crisismap/australia>



Conclusion

The Minimbah fire caused a lot of people in Tuncurry a lot of unnecessary anxiety and disruption. Their decision to enlarge the fire was not well thought out. Creating a large very fresh burn (a 3km wide exposure that is 1km deep) in a semi dry swamp, in peak of the dry season, one kilometre upwind from Tuncurry, a few days before strong winds, are ingredients for a risky outcome. The escape of the Darawank spot fires suggests incomplete blacking out and under-resourced suppression. Luckily there was relatively low house loss for both fires.

The fact that these burns escaped shows misunderstanding of forest fire behaviour in the height of a dry season / drought. The fire controller made the same error during the Suppression Creek / Wye River suppression – trees and stumps smoulder for days as hot spots when forest fuel is bone dry. They reinvigorate in wind and they reinvigorate again at each wind direction change.

Curious to know if National Parks approve these burn offs to extend burn area, or if it is RFS's call.

The messages from RFS to the people are interesting. They are quite matter of fact and adult compared to Victoria's generalised nanny state messages (eg, leave home early this morning and go to a big city shopping centre all day), sometimes dangerous messages (eg, when embers come, go inside), and sometimes inane messages (it is too late to leave, seek shelter in an open paddock). Here is a selection:

Bushfire survival plan:

People are expected to have a plan of survival and to know what to do. The Victorian plan is a pseudonym for an evacuation plan. I hope the NSW one is more protective of the property.

- Discuss fire survival plan tonight and know what your household will do if threatened by fire
- Residents should enact their bush fire survival plans
- If your plan is to leave, leave early before the fire threatens
- Residents in this area should take shelter as the fire approaches
- Stay alert for burning embers and spot fires. Seek shelter if the fire impacts on your property.
- If you're in the area, watch out for spot fires.
- Residents should be aware that falling embers may create spot fires and threaten properties.
- It is now too late to leave. Seek shelter if the fire impacts on your property
- Residents in the area should continue to monitor conditions & know what they'll do if fire threatens

Instructive:

- This video shows the danger of ember attack, even if you're a few streets back

Backburns:

- People in the area will notice an increase of smoke and fire activity as these burns are undertaken.
- Firefighters have been working to contain the fire burning in wet lands within the Minimbah National Park. This fire is likely to remain visible to surrounding areas for some days. Smoke will settle in areas locally overnight.