

Date : 20/10/2020 10:32:34 AM

From : "CAMBOURN Neil"

To : "James Haig"

Subject : FW: FMP/tactics for Duling CZ Wildfire

Attachment : image001.png;image002.png;image003.png;image004.png;image005.png;image006.png;image007.png;image009.png;

Hi James, as discussed, the interactions are in the email below re the K'gari fire.

Our guys are getting unwarranted pressure from local officer Andrew Marnie to back burn around Orchid Beach township in conditions that are prescribed in the BOM advice received from QFES as "Backburning is not advised/ extremely risky".

As per our discussion, should there be any risk to Orchid Beach life or property this matter needs to be led by QFES as the State's lead for fire where it threatens life and property.

The fact that QFES have advised they don't want to lead this fire, we assume that life and property is not currently under threat and we will continue to work as the Incident Control to attempt to manage the bushfire in the landscape.

The advice on the water bombing aircraft being deployed to assist this morning, and your offer to provide the predictive modelling to our IC is appreciated thanks.

Thanks, Regards Neil



Neil Cambourn

Assistant Director-General
Queensland Parks and Wildlife Service and Partnerships
Department of Environment and Science
P 07 3199 7518 M **Discreet**
Level 5, 400 George Street, Brisbane QLD 4000

From: CUBIS Mick <Mick.Cubis@des.qld.gov.au>

Sent: Tuesday, 20 October 2020 9:45 AM

To: CAMBOURN Neil

Cc: HEAD Damien; DARGUSCH Marc

Subject: FW: FMP/tactics for Duling CZ Wildfire

Neil,

QFES response fyi.

Mick Cubis

Regional Director, Coastal and Islands Region
GBRMC | QPWS & Partnerships
Department of Environment and Science

P: 07 54471137 M **Discreet**
240 Moorindil Street, Tewantin
Qld 4565
mick.cubis@des.qld.gov.au

From: DARGUSCH Marc <Marc.Dargusch@des.qld.gov.au>

Sent: Tuesday, 20 October 2020 9:39 AM

To: CUBIS Mick

Subject: FW: FMP/tactics for Duling CZ Wildfire

Mick – post latest request to 'stop lighting'. A chronology relating to the tactics decision for Tuesday 20Oct2020 sits below:

9.09am Call from Mick Cubis – okay to start light-up due to 'life and property issue' as unable to get onto ED/ADG.
9.12am I rang James Kuskie (QPWS-IC) to 'start lighting' and work with QFES to undertake as per joint plan.
9.13am I rang for Andrew Marnie (QFES) but he was on another call. Left msg to call me.
9.17am Call from Mick Cubis – stop lighting advice from ADG, unless QFES take ownership of fire effort.
9.18am Andrew Marnie (QFES) rang back - I let him know we needed to stop light-up and the only option to continue with light-up tactic today was for QFES to take control of the fire.
9.20am I rang James Kuskie as IC to 'stop lighting'.
9.22am Andrew Marnie (QFES) rang back again – QFES will definitely not be taking control of the fire and he asked for contact point for ADG so that his hierarchy could interact at level. He also asked for information about who was who in line management and where our ADG sat within the system.

Andrew has requested QPWS stance be put in writing.

Regards, Marc



Marc Dargusch

Principal Ranger – Great Sandy Area
Coastal and Islands Region | QPWS and Partnerships
Department of Environment and Science

M **Discreet** P 07 54869960
Level 6, 12 on First Avenue, Maroochydore 4558
www.des.qld.gov.au
I give my respect to the traditional and custodial Aboriginal and Torres Strait Island Elders and Owners of the Land in which I work, live and walk.

From: DARGUSCH Marc

Sent: Tuesday, 20 October 2020 9:07 AM

To: CUBIS Mick

Subject: RE: FMP/tactics for Duling CZ Wildfire

Hi Mick – anything I can do to assist in getting timely decision ?

Ta, M

From: DARGUSCH Marc

Sent: Tuesday, 20 October 2020 8:22 AM

To: CUBIS Mick

Subject: RE: FMP/tactics for Duling CZ Wildfire

Mick – Just had call from Andrew Marnie. He has approval from QFES side (Peter Hollier) to backburn behind the Orchid Beach township ASAP on the basis of protecting life and property. They want to commence at 9am.

I'll call you.

Regards, Marc

From: DARGUSCH Marc

Sent: Tuesday, 20 October 2020 8:02 AM

To: CUBIS Mick

Subject: FW: FMP/tactics for Duling CZ Wildfire

Hiya – wildfire factors have changed overnight. The fire has advanced significantly to the east across K'gari (nearly to Corroboree Beach) which exposes Orchid Beach to the southerly wind change (refer hotspot maps at bottom of email).

Anyways – I've talked with Andrew Marnie (QFES) and he is currently packaging up things from his side which I will send through. It is highly likely that QFES will want to burn due to threat to life and property.

Talk more soon.

Regards, Marc

From: DARGUSCH Marc

Sent: Tuesday, 20 October 2020 7:38 AM
To: LAVENDER Sven; KUSKIE James
Cc: YETMAN Brendon; DARGUSCH Anthony
Subject: FW: FMP/tactics for Duling CZ Wildfire

Guys – just flagging that there is currently **no approval** to put fire into the Duling CZ wildfire.

I’ve spoken with Andrew Marnie (QFES) and we both acknowledged that we need both organisations (QFES/QPWS) to give nod to backburning at Exec level prior to light-up as some of the factors that drive the need to backburn are diametrically opposed:

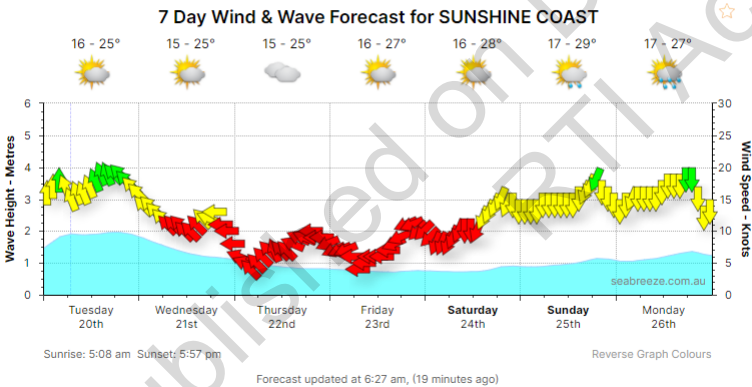
The case for no backburning includes:

- Choose Wildfire or HRB
- Wildfire Behaviour Guidance

3 Day Look Ahead - Daily Peak Wildfire Behaviour Guidance in the Vicinity of
FRASER ISLAND in NORTH COAST Region, MARYBOROUGH Rural Area assuming Heath & Shrubland Fuel

Monday, 19 October 2020	With a forecast peak daily fireline intensity of 8566kW/m in Heath using the Advanced Heath rate of spread model, Direct Attack on the head fire is potentially UNSAFE / backburning is potentially RISKY. Fire behaviour is likely to be a highly vigorous, rapidly spreading surface fire with an estimated peak daily forward rate of spread of 1764m/hr, exhibiting regular torching (or passive crown fire, with possible periodic crowning). Heath fuels are more resistant to changes in humidity and may continue to burn overnight and in high humidity. Heath is also a threshold fuel, which means it may not carry vigorous fire until the wind reaches a threshold, and then it can rapidly intensify and spread.
Tuesday, 20 October 2020	With a forecast peak daily fireline intensity of 10428kW/m in Heath using the Advanced Heath rate of spread model, Direct Attack on the head fire is UNSAFE / backburning is NOT ADVISED/EXTREMELY RISKY. Fire behaviour is likely to be a dangerous, extremely vigorous, very rapidly spreading surface fire with an estimated peak daily forward rate of spread of 2147m/hr, with the potential for active and long period crowning. Heath fuels are more resistant to changes in humidity and may continue to burn overnight and in high humidity. Heath is also a threshold fuel, which means it may not carry vigorous fire until the wind reaches a threshold, and then it can rapidly intensify and spread.
Wednesday, 21 October 2020	With a forecast peak daily fireline intensity of 8593kW/m in Heath using the Advanced Heath rate of spread model, Direct Attack on the head fire is potentially UNSAFE / backburning is potentially RISKY. Fire behaviour is likely to be a highly vigorous, rapidly spreading surface fire with an estimated peak daily forward rate of spread of 1769m/hr, exhibiting regular torching (or passive crown fire, with possible periodic crowning). Heath fuels are more resistant to changes in humidity and may continue to burn overnight and in high humidity. Heath is also a threshold fuel, which means it may not carry vigorous fire until the wind reaches a threshold, and then it can rapidly intensify and spread.

Sunshine Coast Weather Forecast



Elders

Rural ServicesInsuranceReal EstateHome LoansChinaInve

FORECASTRADARS & MAPSWARNINGS

DAM LEVELSCLIMATE

Updated at 06:40 CST

22.0°C↑Feels like 22.4 °C

Dew Point17.4 °C

Relative Humidity75%

Wind511km/h

Gusts13km/h

Pressure1015.2hPa

Rainfall0.0mm

Clearing shower17 °C27 °C40%< 1mm

Orchid Beach for Tuesday

Partly cloudy. Slight chance of a shower, most likely in the late morning and afternoon. The chance of a thunderstorm from late this morning. Winds NE/SE 15 to 20 km/h becoming light in the morning then becoming E/NE 15 to 25 km/h in the middle of the day. Daytime maximum temperatures around 30.

Fire DangerHigh

DAM LEVELS

HERVEY BAYMARYBOROUGHBUNDABERG

LADY ELLIOT ISLAND

ORCHID BEACH 7 DAY FORECAST

28 DAYS RAINFALL12 MONTHS RAINFALLNEXT 48 HOURS

	TUE Oct 20	WED Oct 21	THU Oct 22	FRI Oct 23	SAT Oct 24	SUN Oct 25	MON Oct 26
Summary	Clearing shower	Mostly sunny	Mostly sunny	Mostly sunny	Mostly cloudy	Mostly cloudy	Heavy showers
Maximum	27°C	27°C	27°C	28°C	28°C	29°C	28°C
Minimum	17°C	16°C	16°C	17°C	18°C	19°C	19°C
Chance Of Rain	40%	40%	30%	10%	60%	90%	90%
Rain Amount	< 1mm	< 1mm	< 1mm	< 1mm	< 1mm	20-40mm	20-40mm
UV Index	Very High	Very High	Extreme	Extreme	-	-	-
Frost Risk	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	9am3pm	9am3pm	9am3pm	9am3pm	9am3pm	9am3pm	9am3pm
Wind Speed	18 km/h25 km/h	15 km/h20 km/h	12 km/h15 km/h	13 km/h18 km/h	19 km/h20 km/h	21 km/h22 km/h	14 km/h18 km/h
Wind Direction	SSESE	SEESE	EENE	ENE	NNE	NNE	NN
Relative Humidity	75%	75%	70%	70%	71%	74%	85%

HERVEY BAYMARYBOROUGHBUNDABERG

LADY ELLIOT ISLAND

The case for backburning includes:

The fire has advanced significantly overnight towards east coast meaning that there is a real threat to Orchid Beach if winds are from South.

The Queensland fire scar mapping below Bowen is being updated in 2020 - down to the orange boundary. (more info)

The figure is a satellite map of a coastal region in Queensland, Australia, specifically the area around Orchid Beach. The map shows a dark, forested coastline with numerous red dots indicating fire scars. The coastline is irregular, with several bays and points. Labels on the map include 'MARLOO BAY' at the top, 'ORCHID BEACH' in the center, 'WADDY POINT' to the right, 'BIRNINGSAND BLOW' further right, 'TURKEE SAND BLOW' below that, and 'INDIAN HEAD' at the bottom right. The map is overlaid with a grid of red dots, which are more densely packed in some areas than others. The background is a satellite image showing the terrain and vegetation. The map is framed by a blue border, and there are some faint text labels like '© 2020 Google' scattered across the image.

20-206

File K Release

Page 3 of 23

Re



I'll continue to liaise with Andrew and QPWS hierarchy to determine a way forward. Do not put fire in block until this is sorted.

Thanks for continued work. My mobile is on if you need to talk.

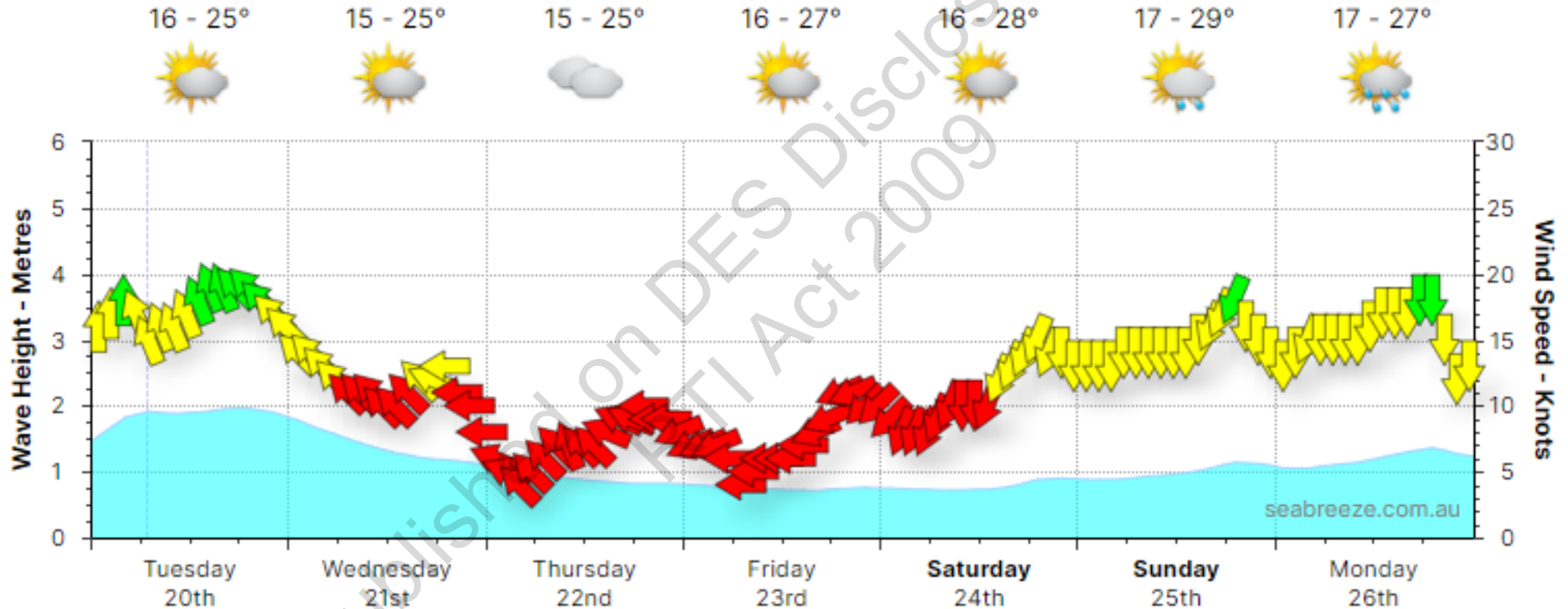
Regards, Marc

3 Day Look Ahead - Daily Peak Wildfire Behaviour Guidance in the Vicinity of
FRASER ISLAND in NORTH COAST Region, MARYBOROUGH Rural Area assuming Heath & Shrubland Fuel

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Sunshine Coast Weather Forecast

7 Day Wind & Wave Forecast for SUNSHINE COAST



Sunrise: 5:08 am Sunset: 5:57 pm

Reverse Graph Colours

FORECAST ▾

RADARS & MAPS ▾

WARNINGS

DAM LEVELS ▾

CLIMATE ▾

Updated at 06:40 EST

22.0°C



Feels like 22.4 °C

Dew Point
17.4 °CGusts
13km/hRelative
Humidity
75%Pressure
1015.2hPaWind
S 11km/hRainfall
0.0mm[HERVEY BAY](#) [MARYBOROUGH](#) [BUNDABERG](#)[LADY ELLIOT ISLAND](#)Clearing
shower

17 °C 27 °C

40%
< 1mm

Orchid Beach for Tuesday

Partly cloudy. Slight chance of a shower, most likely in the late morning and afternoon. The chance of a thunderstorm from late this morning. Winds NE/SE 15 to 20 km/h becoming light in the morning then becoming E/NE 15 to 25 km/h in the middle of the day. Daytime maximum temperatures around 30.



Fire Danger

High

DAM LEVELS

ORCHID BEACH 7 DAY FORECAST

28 DAYS RAINFALL

12 MONTHS RAINFALL

NEXT 48 HOURS

	TUE Oct 20		WED Oct 21		THU Oct 22		FRI Oct 23		SAT Oct 24		SUN Oct 25		MON Oct 26	
Summary	 Clearing shower		 Mostly sunny		 Mostly sunny		 Mostly sunny		 Mostly cloudy		 Mostly cloudy		 Heavy showers	
Maximum	27°C		27°C		27°C		28°C		28°C		29°C		28°C	
Minimum	17°C		16°C		16°C		17°C		18°C		19°C		19°C	
Chance Of Rain	40%		40%		30%		10%		60%		90%		90%	
Rain Amount	< 1mm		< 1mm		< 1mm		< 1mm		< 1mm		20-40mm		20-40mm	
UV Index	Very High		Very High		Extreme		Extreme		-		-		-	
Frost Risk	Nil		Nil		Nil		Nil		Nil		Nil		Nil	
	9am	3pm	9am	3pm	9am	3pm	9am	3pm	9am	3pm	9am	3pm	9am	3pm
Wind Speed	18 km/h	25 km/h	15 km/h	20 km/h	12 km/h	15 km/h	13 km/h	18 km/h	19 km/h	20 km/h	21 km/h	22 km/h	14 km/h	18 km/h
Wind Direction	 SSE	 SE	 SE	 ESE	 E	 ENE	 ENE	 NE	 NNE	 NNE	 N	 N	 N	 NE
Relative Humidity	75%	75%	70%	70%	70%	68%	70%	71%	74%	74%	85%	84%	87%	86%

[HERVEY BAY](#) [MARYBOROUGH](#) [BUNDABERG](#) [LADY ELLIOT ISLAND](#)

File K Release

Date : 4/12/2020 7:32:15 AM

From : "CAMBOURN Neil"

To : "gary.mccormack@qfes.qld.gov.au" , "james.haig" , "SPINKS Troy"

Cc : "KLAASSEN Ben"

Subject : FW: Some intelligence information for Fraser Islnd North End Bushfire

Attachment : Fire Behaviour Summary by Incident Fraser Island 20 10 2020.pdf;IDQ20102.pdf;Fraser updated 20201020.pdf;image001.jpg;image002.png;image003.png;image006.png;

Morning gents, there has been a call from Premier's this morning re the CourierMail articles seeking clarification on the timing of use of the LAT (specifically).

Our understanding based on the advice below was that we were doing a LAT run on 20 October, did we do that one?

For clarity for DPC this morning and informing estimates next week, could we please have a copy of the water drop records from the start of the fire?

Troy is at SOC so may be able to assist with collating information for us.

Many thanks, Neil



Neil Cambourn

Executive Director

Queensland Parks and Wildlife Service

Department of Environment and Science

P 07 3199 7518 M **Personal info**

Level 5, 400 George Street, Brisbane QLD 4000

From: CAMBOURN Neil

Sent: Thursday, 3 December 2020 9:02 AM

To: MERRICK Jamie; KLAASSEN Ben

Subject: FW: Some intelligence information for Fraser Islnd North End Bushfire

Jamie, as discussed the first LAT application was 20 October, and the cooperative nature of QFES working with us in support is evident in these comms.



Neil Cambourn

Executive Director

Queensland Parks and Wildlife Service

Department of Environment and Science

P 07 3199 7518 M **Personal info**

Level 5, 400 George Street, Brisbane QLD 4000

From: James Haig <James.Haig@qfes.qld.gov.au>

Sent: Tuesday, 20 October 2020 11:44 AM

To: CAMBOURN Neil

Cc: Michael Wassing; John Bolger

Subject: Some intelligence information for Fraser Islnd North End Bushfire

Hi Neil, please find attached some information on the Fraser Island Fire. To give some clarity the attachments are (in order):

- A Fire Behaviour Snap Report – Fire Behaviour Summary prepared by QFES Predictive Services Unit prepared this morning which covers some of the key fire behaviour parameters. The report runs until Friday.
- A site specific weather forecast from the Bureau of Meteorology from Yesterday but also covering today. I understand an updated forecast has also been requested for preparation today. Please be aware
That during the conversation with the senior meteorologist at the BoM, PSU was informed that the SE wind change originally forecast for later this morning in the yesterday's forecast arrived early to the fire ground this morning (I understand it may have been by 06:00 but not sure. This is good as it will reduce the westerly spread of the fire towards Orchid Beach.
- A copy of a the fire mapping from QFES mapping system (TOM) from this morning.

Additionally, as discussed over the phone, QFES will be undertaking a Large Air Tanker water drop on the fire this morning in coordination with the ground incident management. This is a regular testing run for the DASH 8 size aircraft based at Bundaberg.

I do not know whether the Incident Control Team has requested a detailed Phoenix fire prediction but, should this be required, it can be done through the QFES liaison in the IMT or direct. Certainly QFES Predictive Services Unit is very happy to support such predictive planning that the IMT requests. I understand that there has been liaison with this unit already on this fire although a full prediction may not have been done, if desired this can be done by IMTs (including QPWS only IMTs) by calling 3635 1808.

Regards

James

James Haig

Superintendent

Executive Manager Bushfire Mitigation

Office Of Bushfire Mitigation, Rural Fire Service



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All reasonable precautions will be taken to respect the privacy of individuals in accordance with the Information Privacy Act 2009 (Qld).

Published on DES Disclosure Log
RTI Act 2009



STEP 1 - Select Incident
QF4-20-116117 FRASER ISLAND

STEP 2 - ROS Model
Heath & Shrubland

STEP 3 - Forest Fuel Load (t/ha)
10.00t/ha

Published by QFES Predictive Services Unit (PSU). For assistance, further predictive products or expert fire behaviour advice call (All Hours) (07) 3635 1808 or e-mail PSU@qfes.qld.gov.au

STEP 4 - Heath Height (m)
1.0m

STEP 5 - Slope (Degrees)
0Deg

Fuel load selector only used Forest Model
Heath Height only used in Heath Model

Incident SNAP Fire Behaviour Summary for QF4-20-116117 FRASER ISLAND for

Today Tuesday, 20 October 2020

Fire Loc: Lat:-24.912 Long: 153.2777

Using Heath & Shrubland Rate of Spread Model, Slope = 0Deg

Based on BOM Forecast Data Updated @ 20/10/2020 8:16:12 AM

Note: Forecast weather does not fully account for local terrain effects on wind speed and direction.

HEADFIRE SAFETY: Forecast peak intensity 7623kW/m @ 15:00hr on 20th of October. Direct Attack on the headfire/ Backburning may be locally achievable, but is considered LESS SAFE and LESS EFFECTIVE. Expect around 17hr above 4000kW/m

FLANK FIRE SAFETY: Forecast peak intensity 1906kW/m @ 15:00hr on 20th of October. Direct Attack on the flank fire is indicated to be SAFE and EFFECTIVE.

PEAK WIND SPEED: Wind speed today is forecast to peak at 28km/hr from the South East

RATES OF SPREAD: In Advanced Heath expect headfire travelling North West peaking in speed around 1962m/hr @ 15:00hr, with flanks spreading around 491m/hr. Terrain will affect direction of travel.

SPOT FIRE IGNITION RISK: Given any ember/firebrand production, spot fire ignition risk is moderate. .

IGNITION EASE & SPREAD: Minimum fuel moisture 10% burning readily sustained. Expect moderately fast development consuming most surface fuels.

CONDITIONS TONIGHT: Between 1800hr & midnight fire is likely to continue burning for around 6hr (i.e. hours below Fuel Moisture of 20%)

SHOULD I BURN TODAY BASED ON COMING DAYS FDI? Yes. Normal blacking out distances and patrolling regimes recommended

Fuel Load Used for Calculations:
Heath / Shrubland Model Uses Height & Wind Speed, Not Load

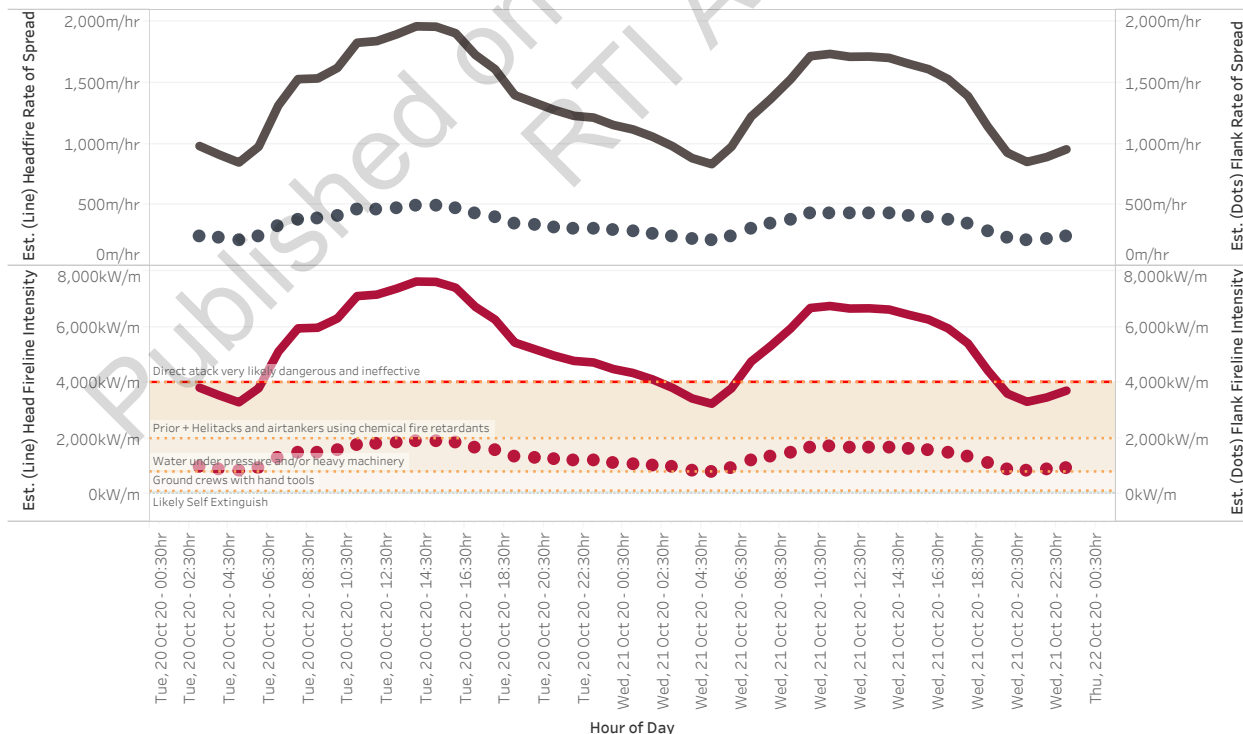
Indicative Peak Forest Spotting Distance
Today: None



Today's Peak Forest Fire Danger Index

10.4
Low-Moderate

Estimated Rate of Spread - HEADFIRE (top thick line) - FLANK No Slope (top dots) & Fireline Intensity: HEADFIRE (bottom thick line) - FLANK No Slope (bottom dots) for Tue, 20 Oct 20 - 03:00hr to Wed, 21 Oct 20 - 23:00hr in Heath & Shrubland Assumed Slope = 0Deg



Disclaimer

This Fire Behaviour Prediction Snap Report ('this Report') is provided solely for information purposes and is not to be construed, under any circumstances, by implication or otherwise, as anything other than as the opinions of the Queensland Fire and Emergency Services Predictive Services Unit in relation to anticipated fire behaviour. The information contained in this Report is provided on the basis that readers will be responsible for making their own assessment of the information contained herein.



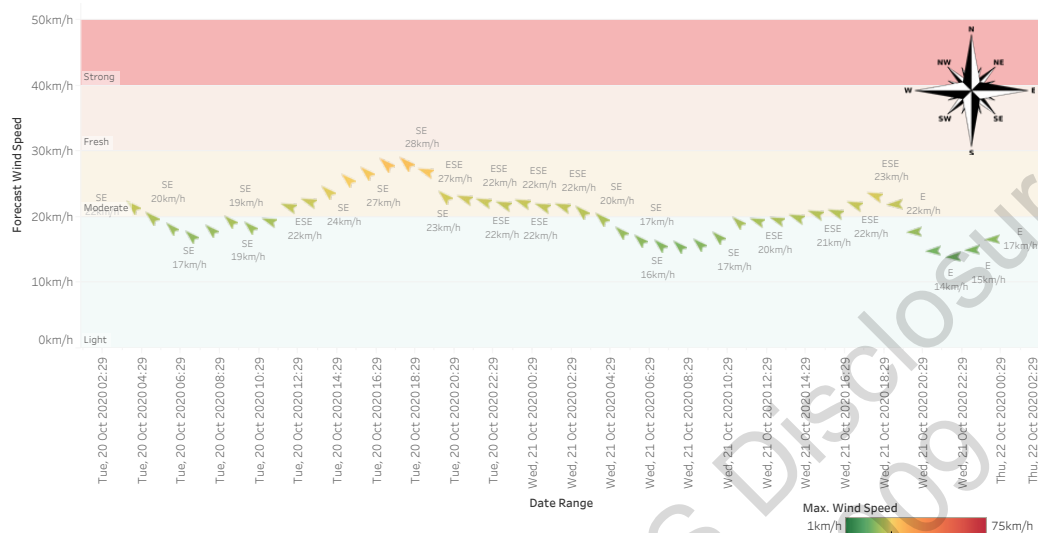
Look Ahead Wind Forecast & Fire Behaviour Guidance

6 Day Look Ahead - Estimated Peak Daily Forest Fire Danger Index Rating for QF4-20-116117 FRASER ISLAND

	Tue, October 20, 2020	Wed, October 21, 2020	Thu, October 22, 2020	Fri, October 23, 2020	Sat, October 24, 2020	Sun, October 25, 2020
QF4-20-116117 FRASER ISLAND	10.4 Low-Moderate	12.0 Low-Moderate	11.3 Low-Moderate	12.6 High	12.0 Low-Moderate	11.3 Low-Moderate

2 Day Wind Forecast in the Vicinity of Incident QF4-20-116117 FRASER ISLAND

Note: BOM forecast wind speed and direction does not fully account for local terrain effects. Thus if your fire is in the lee of hills etc., direction and speed may differ from forecast.



Look Ahead - Daily Peak Wildfire Behaviour Guidance in the Vicinity of QF4-20-116117 FRASER ISLAND assuming Heath & Shrubland Fuel, Slope = 0Deg

Wednesday, 21 October 2020

With a forecast peak daily fireline intensity of 6746kW/m in Heath using the Advanced Heath rate of spread model, Direct Attack is potentially UNSAFE / backburning is potentially RISKY. Fire behaviour is likely to be a highly vigorous, rapidly spreading surface fire with an estimated peak daily headfire forward rate of spread of 1736m/hr and flank rate of spread on flat ground of 434m/hr, exhibiting regular torching (or passive crown fire, with possible periodic crowning). Heath fuels are more resistant to changes in humidity and may continue to burn overnight and in high humidity. Heath is also a threshold fuel, which means it may not carry vigorous fire until the wind reaches a threshold, and then it can rapidly intensify and spread.

Thursday, 22 October 2020

With a forecast peak daily fireline intensity of 6563kW/m in Heath using the Advanced Heath rate of spread model, Direct Attack is potentially UNSAFE / backburning is potentially RISKY. Fire behaviour is likely to be a highly vigorous, rapidly spreading surface fire with an estimated peak daily headfire forward rate of spread of 1689m/hr and flank rate of spread on flat ground of 422m/hr, exhibiting regular torching (or passive crown fire, with possible periodic crowning). Heath fuels are more resistant to changes in humidity and may continue to burn overnight and in high humidity. Heath is also a threshold fuel, which means it may not carry vigorous fire until the wind reaches a threshold, and then it can rapidly intensify and spread.

Friday, 23 October 2020

With a forecast peak daily fireline intensity of 7296kW/m in Heath using the Advanced Heath rate of spread model, Direct Attack is potentially UNSAFE / backburning is potentially RISKY. Fire behaviour is likely to be a highly vigorous, rapidly spreading surface fire with an estimated peak daily headfire forward rate of spread of 1878m/hr and flank rate of spread on flat ground of 469m/hr, exhibiting regular torching (or passive crown fire, with possible periodic crowning). Heath fuels are more resistant to changes in humidity and may continue to burn overnight and in high humidity. Heath is also a threshold fuel, which means it may not carry vigorous fire until the wind reaches a threshold, and then it can rapidly intensify and spread.

Backburning Approval Guidance: TacD 28.05.00-Backburn and Burning Out Operations

Condition	Approval Process
Incident Controller is to approve or not approve the burning operation. Form OM 202 – Incident Controllers Checklist to Authorise Backburn Operations assists in decision-making.	
Local Forest or Grass Fire Danger Index is not predicted to exceed 30 (Very High) during the incident.	The Incident Controller can consult the Area Director, Regional Manager Rural Fire Service (RFS); Area Commander or Fire and Rescue Service (FRS) Director, Regional Operations; or On-Call Senior Officer.
Local Forest or Grass Fire Danger Index is predicted to EXCEED 30 (Very High) during the period of operation.	Level 1 Incidents The Incident Controller must seek approval from the Regional Manager RFS or Commander Regional Operations (or their delegate). Level 2 or 3 Incidents The Incident Controller appointed by the Regional Manager RFS or Commander Regional Operations can approve as part of a formalised and documented IAP.



Forecast Weather Summary

Day Number
Multiple values

Detailed Weather Forecast in the Vicinity of QF4-20-116117 FRASER ISLAND

Source: Bureau of Meteorology Gridded Weather. This information may have changed since time of release.

Any Special Fire Weather Forecasts Issued will supersede this information.

Hour of Select Date Range	Headfire Fire Direction of Travel	Estimated Ignition / Carry Potential	Temperature (C)	Humidity (%)	Wind Direction (Deg)	Wind Speed (km/h)	GFDI	FFDI	Max. Combined Fuel Moisture	Max. Estimated Headfire Rate of Spread
Tue, 20/10/20 03:00	North West	Difficult, Patchy	16	100	138	22km/h	0	0.5	19%	982m/hr
Tue, 20/10/20 04:00	North West	Difficult, Patchy	16	100	139	20km/h	0	0.5	19%	911m/hr
Tue, 20/10/20 05:00	North West	Difficult, Patchy	17	100	141	18km/h	0	0.5	19%	847m/hr
Tue, 20/10/20 06:00	North West	Sustained	21	83	140	17km/h	0	1.4	16%	977m/hr
Tue, 20/10/20 07:00	North West	Readily Sustained	25	62	141	18km/h	0	4.8	13%	1,314m/hr
Tue, 20/10/20 08:00	North West	Readily Sustained	27	55	135	19km/h	0	7.3	11%	1,530m/hr
Tue, 20/10/20 09:00	North West	Readily Sustained	28	51	130	19km/h	0	8.6	11%	1,535m/hr
Tue, 20/10/20 10:00	West North West	Readily Sustained	29	50	122	19km/h	0	9.2	11%	1,622m/hr
Tue, 20/10/20 11:00	West North West	Readily Sustained	29	48	123	22km/h	0	10.4	10%	1,827m/hr
Tue, 20/10/20 12:00	West North West	Readily Sustained	29	50	124	22km/h	0	9.8	11%	1,841m/hr
Tue, 20/10/20 13:00	North West	Readily Sustained	28	53	129	24km/h	0	9.0	11%	1,896m/hr
Tue, 20/10/20 14:00	North West	Readily Sustained	27	55	136	26km/h	0	8.2	12%	1,962m/hr
Tue, 20/10/20 15:00	North West	Readily Sustained	26	58	134	27km/h	0	7.1	12%	1,959m/hr
Tue, 20/10/20 16:00	North West	Sustained	24	64	129	28km/h	0	5.3	13%	1,905m/hr
Tue, 20/10/20 17:00	North West	Sustained	22	72	128	28km/h	0	3.3	14%	1,728m/hr
Tue, 20/10/20 18:00	West North West	Sustained	21	74	123	27km/h	0	2.8	15%	1,611m/hr
Tue, 20/10/20 19:00	North West	Sustained	21	74	124	23km/h	0	2.5	15%	1,398m/hr
Tue, 20/10/20 20:00	West North West	Sustained	20	77	123	23km/h	0	2.1	15%	1,338m/hr
Tue, 20/10/20 21:00	West North West	Sustained	19	79	121	22km/h	0	1.8	16%	1,278m/hr
Tue, 20/10/20 22:00	West North West	Sustained	19	81	120	22km/h	0	1.6	16%	1,229m/hr
Tue, 20/10/20 23:00	West North West	Difficult, Patchy	19	83	122	22km/h	0	1.4	16%	1,215m/hr
Wed, 21/10/20 00:00	West North West	Difficult, Patchy	18	85	121	22km/h	0	1.2	17%	1,154m/hr
Wed, 21/10/20 01:00	West North West	Difficult, Patchy	18	88	121	22km/h	0	1.0	17%	1,118m/hr
Wed, 21/10/20 02:00	North West	Difficult, Patchy	17	90	125	21km/h	0	0.9	17%	1,058m/hr
Wed, 21/10/20 03:00	North West	Difficult, Patchy	17	92	127	20km/h	0	0.7	18%	981m/hr
Wed, 21/10/20 04:00	North West	Difficult, Patchy	16	93	126	18km/h	0	0.7	18%	883m/hr
Wed, 21/10/20 05:00	North West	Difficult, Patchy	17	92	127	17km/h	0	0.7	18%	834m/hr
Wed, 21/10/20 06:00	North West	Sustained	21	75	130	16km/h	0	2.0	15%	976m/hr
Wed, 21/10/20 07:00	North West	Readily Sustained	25	55	136	16km/h	0	5.9	12%	1,223m/hr
Wed, 21/10/20 08:00	North West	Readily Sustained	27	48	144	16km/h	0	8.8	11%	1,369m/hr
Wed, 21/10/20 09:00	North West	Readily Sustained	29	44	143	17km/h	0	11.0	10%	1,528m/hr
Wed, 21/10/20 10:00	North West	Readily Sustained	29	44	130	19km/h	0	11.7	10%	1,718m/hr
Wed, 21/10/20 11:00	West North West	Readily Sustained	29	44	122	19km/h	0	12.0	10%	1,736m/hr
Wed, 21/10/20 12:00	West North West	Readily Sustained	29	45	117	20km/h	0	11.0	10%	1,713m/hr
Wed, 21/10/20 13:00	West North West	Readily Sustained	28	47	114	20km/h	0	10.4	10%	1,715m/hr
Wed, 21/10/20 14:00	West North West	Readily Sustained	27	49	111	21km/h	0	9.4	11%	1,703m/hr
Wed, 21/10/20 15:00	West North West	Readily Sustained	26	52	104	21km/h	0	8.1	11%	1,655m/hr
Wed, 21/10/20 16:00	West North West	Readily Sustained	24	58	103	22km/h	0	5.8	12%	1,611m/hr
Wed, 21/10/20 17:00	West North West	Sustained	22	67	101	23km/h	0	3.7	14%	1,529m/hr
Wed, 21/10/20 18:00	West	Sustained	21	70	96	22km/h	0	3.0	14%	1,391m/hr
Wed, 21/10/20 19:00	West	Sustained	20	70	92	18km/h	0	2.6	14%	1,143m/hr
Wed, 21/10/20 20:00	West	Sustained	20	74	90	15km/h	0	2.0	15%	927m/hr
Wed, 21/10/20 21:00	West	Sustained	19	76	84	14km/h	0	1.6	15%	852m/hr
Wed, 21/10/20 22:00	West	Sustained	19	78	81	15km/h	0	1.5	15%	892m/hr
Wed, 21/10/20 23:00	West	Sustained	18	80	83	17km/h	0	1.4	16%	955m/hr



Forecast Weather Summary

Day Number
Multiple values

Detailed Weather Forecast (2) in the Vicinity of QF4-20-116117 FRASER ISLAND

Source: Bureau of Meteorology Gridded Weather. This information may have changed since time of release.

Any Special Fire Weather Forecasts Issued will supersede this information.

Hour of Select Date Range	Headfire Fire Direction of Travel	Estimated Ignition / Carry Potential	Temperature (C)	Humidity (%)	Wind Direction (Deg)	Wind Speed (km/h)	GFDI	FFDI	Max. Combined Fuel Moisture	Max. Estimated Headfire Rate of Spread
Thu, 22/10/20 00:00	West South West	Difficult, Patchy	18	82	77	11km/h	0	1.0	16%	614m/hr
Thu, 22/10/20 01:00	West South West	Difficult, Patchy	17	84	71	11km/h	0	0.9	16%	608m/hr
Thu, 22/10/20 02:00	West South West	Difficult, Patchy	17	86	65	10km/h	0	0.8	17%	559m/hr
Thu, 22/10/20 03:00	West South West	Difficult, Patchy	16	90	58	10km/h	0	0.6	17%	548m/hr
Thu, 22/10/20 04:00	West South West	Difficult, Patchy	16	89	58	11km/h	0	0.7	17%	575m/hr
Thu, 22/10/20 05:00	West South West	Difficult, Patchy	17	89	57	10km/h	0	0.7	17%	549m/hr
Thu, 22/10/20 06:00	West South West	Sustained	21	73	56	10km/h	0	1.9	15%	646m/hr
Thu, 22/10/20 07:00	South West	Readily Sustained	25	55	55	11km/h	0	5.6	12%	906m/hr
Thu, 22/10/20 08:00	South West	Readily Sustained	28	47	48	12km/h	0	8.6	10%	1,108m/hr
Thu, 22/10/20 09:00	South West	Readily Sustained	30	42	43	12km/h	0	10.9	10%	1,160m/hr
Thu, 22/10/20 10:00	South West	Readily Sustained	30	42	49	14km/h	0	11.3	10%	1,307m/hr
Thu, 22/10/20 11:00	West South West	Readily Sustained	29	43	57	15km/h	0	10.8	10%	1,345m/hr
Thu, 22/10/20 12:00	South West	Readily Sustained	29	44	46	16km/h	0	10.7	10%	1,453m/hr
Thu, 22/10/20 13:00	South West	Readily Sustained	29	45	49	19km/h	0	10.9	10%	1,638m/hr
Thu, 22/10/20 14:00	South West	Readily Sustained	28	48	51	20km/h	0	9.8	11%	1,689m/hr
Thu, 22/10/20 15:00	South West	Readily Sustained	27	51	53	21km/h	0	8.5	11%	1,662m/hr
Thu, 22/10/20 16:00	South West	Readily Sustained	25	58	54	20km/h	0	6.0	12%	1,522m/hr
Thu, 22/10/20 17:00	South West	Sustained	23	68	53	19km/h	0	3.3	14%	1,270m/hr
Thu, 22/10/20 18:00	South West	Sustained	22	71	54	19km/h	0	2.7	14%	1,194m/hr
Thu, 22/10/20 19:00	South West	Sustained	21	72	52	17km/h	0	2.4	14%	1,063m/hr
Thu, 22/10/20 20:00	South West	Sustained	20	75	54	16km/h	0	1.9	15%	980m/hr
Thu, 22/10/20 21:00	South West	Sustained	20	78	55	15km/h	0	1.6	15%	914m/hr
Thu, 22/10/20 22:00	South West	Sustained	19	79	54	15km/h	0	1.5	16%	897m/hr
Thu, 22/10/20 23:00	South West	Sustained	19	81	54	14km/h	0	1.3	16%	812m/hr
Fri, 23/10/20 00:00	South West	Difficult, Patchy	18	83	53	14km/h	0	1.1	16%	789m/hr
Fri, 23/10/20 01:00	South West	Difficult, Patchy	18	85	52	13km/h	0	1.0	16%	717m/hr
Fri, 23/10/20 02:00	South West	Difficult, Patchy	17	86	52	12km/h	0	0.8	17%	637m/hr
Fri, 23/10/20 03:00	South West	Difficult, Patchy	17	89	51	11km/h	0	0.7	17%	598m/hr
Fri, 23/10/20 04:00	South West	Difficult, Patchy	17	88	49	12km/h	0	0.7	17%	624m/hr
Fri, 23/10/20 05:00	South West	Difficult, Patchy	18	86	47	11km/h	0	0.9	17%	604m/hr
Fri, 23/10/20 06:00	South West	Sustained	21	72	45	11km/h	0	2.1	14%	748m/hr
Fri, 23/10/20 07:00	South West	Readily Sustained	26	54	43	14km/h	0	6.2	12%	1,157m/hr
Fri, 23/10/20 08:00	South West	Readily Sustained	28	48	41	15km/h	0	8.8	10%	1,289m/hr
Fri, 23/10/20 09:00	South West	Readily Sustained	29	44	39	14km/h	0	10.2	10%	1,271m/hr
Fri, 23/10/20 10:00	South West	Readily Sustained	30	44	44	17km/h	0	11.5	10%	1,576m/hr
Fri, 23/10/20 11:00	South West	Readily Sustained	30	43	43	19km/h	0	12.6	10%	1,753m/hr
Fri, 23/10/20 12:00	South West	Readily Sustained	29	44	42	20km/h	0	11.7	10%	1,732m/hr
Fri, 23/10/20 13:00	South West	Readily Sustained	29	46	41	21km/h	0	11.3	10%	1,807m/hr
Fri, 23/10/20 14:00	South West	Readily Sustained	28	49	41	23km/h	0	10.2	11%	1,878m/hr
Fri, 23/10/20 15:00	South West	Readily Sustained	27	53	40	22km/h	0	8.3	11%	1,773m/hr
Fri, 23/10/20 16:00	South West	Readily Sustained	25	60	40	22km/h	0	5.6	12%	1,573m/hr
Fri, 23/10/20 17:00	South West	Sustained	23	69	41	21km/h	0	3.3	14%	1,342m/hr
Fri, 23/10/20 18:00	South West	Sustained	22	73	44	21km/h	0	2.6	15%	1,284m/hr
Fri, 23/10/20 19:00	South West	Sustained	21	75	38	18km/h	0	2.2	15%	1,117m/hr
Fri, 23/10/20 20:00	South West	Sustained	21	78	36	17km/h	0	1.8	15%	1,027m/hr
Fri, 23/10/20 21:00	South South West	Sustained	20	81	32	16km/h	0	1.5	16%	945m/hr
Fri, 23/10/20 22:00	South South West	Sustained	20	82	30	17km/h	0	1.4	16%	990m/hr
Fri, 23/10/20 23:00	South South West	Difficult, Patchy	19	83	27	16km/h	0	1.3	16%	920m/hr



Forecast Weather Summary

Day Number
Multiple values

Detailed Weather Forecast (3) in the Vicinity of QF4-20-116117 FRASER ISLAND

Source: Bureau of Meteorology Gridded Weather. This information may have changed since time of release.

Any Special Fire Weather Forecasts Issued will supersede this information.

Hour of Select Date Range	Headfire Fire Direction of Travel	Estimated Ignition / Carry Potential	Temperature (C)	Humidity (%)	Wind Direction (Deg)	Wind Speed (km/h)	GFDI	FFDI	Max. Combined Fuel Moisture	Max. Estimated Headfire Rate of Spread
Sat, 24/10/20 00:00	South South West	Difficult, Patchy	19	85	25	16km/h	0	1.1	16%	897m/hr
Sat, 24/10/20 01:00	South South West	Difficult, Patchy	18	87	22	16km/h	0	1.0	17%	875m/hr
Sat, 24/10/20 02:00	South South West	Difficult, Patchy	18	88	20	16km/h	0	0.9	17%	843m/hr
Sat, 24/10/20 03:00	South South West	Difficult, Patchy	17	91	17	16km/h	0	0.7	17%	826m/hr
Sat, 24/10/20 04:00	South South West	Difficult, Patchy	17	90	13	17km/h	0	0.8	17%	859m/hr
Sat, 24/10/20 05:00	South South West	Difficult, Patchy	18	90	10	16km/h	0	0.8	17%	832m/hr
Sat, 24/10/20 06:00	South South West	Sustained	22	75	6	16km/h	0	2.2	15%	1,009m/hr
Sat, 24/10/20 07:00	South South West	Readily Sustained	26	57	3	20km/h	0	6.3	12%	1,490m/hr
Sat, 24/10/20 08:00	South	Readily Sustained	28	50	359	21km/h	0	9.1	11%	1,702m/hr
Sat, 24/10/20 09:00	South	Readily Sustained	29	48	356	20km/h	0	10.2	10%	1,703m/hr
Sat, 24/10/20 10:00	South	Readily Sustained	30	47	354	20km/h	0	11.0	10%	1,725m/hr
Sat, 24/10/20 11:00	South	Readily Sustained	30	45	350	21km/h	0	12.0	10%	1,825m/hr
Sat, 24/10/20 12:00	South South East	Readily Sustained	30	46	347	19km/h	0	11.2	10%	1,681m/hr
Sat, 24/10/20 13:00	South	Readily Sustained	30	48	352	20km/h	0	10.7	10%	1,743m/hr
Sat, 24/10/20 14:00	South	Readily Sustained	29	51	355	22km/h	0	9.2	11%	1,775m/hr
Sat, 24/10/20 15:00	South	Readily Sustained	27	56	358	22km/h	0	7.3	12%	1,673m/hr
Sat, 24/10/20 16:00	South South West	Readily Sustained	25	64	6	22km/h	0	4.9	13%	1,511m/hr
Sat, 24/10/20 17:00	South South West	Sustained	23	75	9	21km/h	0	2.5	15%	1,266m/hr
Sat, 24/10/20 18:00	South South West	Sustained	22	81	10	21km/h	0	1.9	15%	1,196m/hr
Sat, 24/10/20 19:00	South South West	Sustained	21	82	12	21km/h	0	1.8	16%	1,200m/hr
Sat, 24/10/20 20:00	South South West	Difficult, Patchy	21	85	14	20km/h	0	1.4	16%	1,098m/hr
Sat, 24/10/20 21:00	South South West	Difficult, Patchy	20	87	15	19km/h	0	1.2	17%	1,036m/hr
Sat, 24/10/20 22:00	South	Difficult, Patchy	20	90	349	19km/h	0	1.0	17%	995m/hr
Sat, 24/10/20 23:00	South South East	Difficult, Patchy	19	92	348	19km/h	0	0.9	17%	950m/hr
Sun, 25/10/20 00:00	South	Difficult, Patchy	19	94	356	20km/h	0	0.8	18%	972m/hr
Sun, 25/10/20 01:00	South South East	Difficult, Patchy	19	96	347	19km/h	0	0.7	18%	924m/hr
Sun, 25/10/20 02:00	South	Difficult, Patchy	18	97	351	18km/h	0	0.6	18%	867m/hr
Sun, 25/10/20 03:00	South	Difficult, Patchy	18	100	349	18km/h	0	0.5	18%	820m/hr
Sun, 25/10/20 04:00	South	Difficult, Patchy	18	100	350	19km/h	0	0.5	19%	858m/hr
Sun, 25/10/20 05:00	South South East	Difficult, Patchy	19	100	341	18km/h	0	0.6	18%	851m/hr
Sun, 25/10/20 06:00	South South East	Sustained	22	84	340	19km/h	0	1.6	16%	1,084m/hr
Sun, 25/10/20 07:00	South South East	Readily Sustained	26	62	340	23km/h	0	5.5	13%	1,619m/hr
Sun, 25/10/20 08:00	South South East	Readily Sustained	29	54	339	24km/h	0	8.8	11%	1,912m/hr
Sun, 25/10/20 09:00	South South East	Readily Sustained	30	51	338	23km/h	0	10.2	11%	1,908m/hr
Sun, 25/10/20 10:00	South South East	Readily Sustained	30	50	345	23km/h	0	10.4	11%	1,915m/hr
Sun, 25/10/20 11:00	South South East	Readily Sustained	31	49	339	25km/h	0	11.3	10%	2,051m/hr
Sun, 25/10/20 12:00	South South East	Readily Sustained	30	52	340	24km/h	0	10.0	11%	1,919m/hr
Sun, 25/10/20 13:00	South South East	Readily Sustained	30	53	341	24km/h	0	9.3	11%	1,895m/hr
Sun, 25/10/20 14:00	South South East	Readily Sustained	29	57	345	24km/h	0	7.9	12%	1,850m/hr
Sun, 25/10/20 15:00	South	Readily Sustained	27	61	350	23km/h	0	6.0	12%	1,669m/hr
Sun, 25/10/20 16:00	South	Sustained	26	68	353	23km/h	0	4.2	13%	1,532m/hr
Sun, 25/10/20 17:00	South	Sustained	24	79	354	22km/h	0	2.3	15%	1,298m/hr
Sun, 25/10/20 18:00	South	Sustained	23	83	352	22km/h	0	1.8	16%	1,220m/hr
Sun, 25/10/20 19:00	South	Sustained	22	83	354	22km/h	0	1.8	16%	1,254m/hr
Sun, 25/10/20 20:00	South	Difficult, Patchy	22	87	359	21km/h	0	1.3	16%	1,108m/hr
Sun, 25/10/20 21:00	South South West	Difficult, Patchy	21	89	2	20km/h	0	1.2	17%	1,042m/hr
Sun, 25/10/20 22:00	South South West	Difficult, Patchy	21	91	3	20km/h	0	1.0	17%	1,012m/hr
Sun, 25/10/20 23:00	South	Difficult, Patchy	20	92	359	18km/h	0	0.9	17%	941m/hr



Fire in surface fuels only
 Flame Height = 0.5-1.0m,
 Forward Rate of Spread = 50-100m/hr
 Intensity ~ 200 to 400 kW/m
Direct Attack Very Safe / Very Effective



Fire in surface and bark fuels
 Flame Height = 1.5 m (plus height of bark fires),
 Forward Rate of Spread = 100-300 m/hr
 Intensity ~ 500 to 1000 kW/m
Direct Attack Safe / Effective



Fire in Surface, Bark and Elevated Fuels
 Flame Height = 1.5 to 3 m,
 Forward Rate of Spread = 300-500 m/hr
 Intensity ~ 1500 to 2500 kW/m
Direct Attack Safe / Effective



Fire in Surface, Bark and Elevated Fuels
 Some Passive Crowning
 Flame Height = 3 to 5 m,
 Forward Rate of Spread = 500-1200 m/hr
 Intensity ~ 3000 to 4000 kW/m
Direct Attack Safe / Effective (Upper end)



Fire in Surface, Bark and Elevated Fuels
 Periodic Active Crowning
 Flame Height = 5 to 10 m,
 Forward Rate of Spread = 1200-2000 m/hr
 Intensity ~ 4000 to 10000 kW/m
Direct Attack NOT Safe / NOT Effective



Fire in Surface, Bark and Elevated Fuels
 Sustained Active Crowning
 Flame Height > 10 m,
 Forward Rate of Spread > 2000 m/hr
 Intensity ~ > 10000 kW/m
Direct Attack NOT Safe / NOT Effective

Assumptions:

Fuel / Moisture Models:

1. Forest is the McArthur Mk 5 model using the Matthews Fuel Moisture reformulation.
2. The Health model is Anderson's Health Model with the Fuel Moisture Model therein.
3. Grass Models are the CSIRO Grass models for Eaten Out (1.5t/ha), Grazed (3.5t/ha) and Natural (5t/ha).
4. Woodlands used the Natural Grass ROS model with a speed reduction factor applied based on % canopy cover as outlined in the AFAC Rate of Spread guide.



IDQ20102
Australian Government Bureau of Meteorology
Queensland

Incident Weather Forecast for Fraser Island

Issued at 11:41 am EST on Monday 19 October 2020.

Incident Type: Wildfire	Website Form No: 003
Forecast Location: 1.4 km south of Lake Yeenan	Request No: 4
Latitude/Longitude: -24.91 153.238611	Fax Number: ##
Elevation (metres ASL): 43-70	Contact Ph: Personal inform 07 3635 1808
Fuel Type: Other	Contact Name: Russell Stephens-Peacock
	Email: russell.stephens-peacock@qfes.qld.gov.au

Significant wind changes during the forecast period, including uncertainties

Winds are expected to be moderate from the northwest during the day today (25-30 km/hr). From late this evening (around 8pm), winds should become light (around 10km/hr) from the northeast, before a moderate southeasterly chance (around 20 km/hr) arrives early tomorrow morning, at around 1am. These southeasterly winds will persist and strengthen during the day tomorrow, up to 25 km/hr.

Forecast thunderstorm potential, precipitation and cloud, including uncertainties

40% chance of showers overnight tonight with the southeasterly change, reducing to a 20% chance tomorrow afternoon before clearing. Nil chance of thunderstorms during the forecast period. Pyrocumulus is possible but dry lightning is unlikely.

Spatial variation of conditions and other important information

The nearest, most similar observation site is Hervey Bay, with current conditions of 26C, 25 km/hr northerly winds and relative humidity of 60%.

30 Hour Forecast commencing 1200 hours Monday 19 October 2020													
Drought factor: 10				Curing value (%): 35				Fuel Load (t/ha): 3.8					
Local Time	Temp (C)	Dewpt (C)	RH (%)	10m Wind (km/h)			1000m AGL Wind (km/h)		FFDI	GFDI	cHaines	Mix Height (m) MSL	TAL
				Dir	Speed	Gust	Dir	Speed					
1200	30	17	46	WNW	25	40	NW	20	13	0	3	2300	0
1300	30	17	46	NW	25	35	NW	20	13	0	3	2200	0
1400	30	17	46	NW	25	40	NW	20	13	0	4	2200	0
1500	29	17	48	NNW	25	45	WNW	15	11	0	4	2000	0
1600	27	17	54	NNW	25	45	W	15	9	0	5	1500	0
1700	25	18	65	NNW	30	45	W	15	6	0	5	1000	0
1800	23	18	73	NNW	25	45	W	15	4	0	5	800	0
1900	23	18	73	NNW	15	25	W	15	3	0	5	600	0
2000	22	18	78	NE	10	15	W	15	2	0	5	600	0
2100	21	18	83	NE	10	15	W	10	2	0	4	400	0
2200	21	18	83	ENE	10	15	ESE	10	2	0	4	300	1
2300	20	18	88	ENE	10	15	E	10	1	0	3	100	1
0000	19	18	94	NE	10	15	ENE	10	1	0	3	0	1
0300	17	17	100	SE	20	30	SW	5	1	0	2	0	1

30 Hour Forecast commencing 1200 hours Monday 19 October 2020													
Drought factor: 10				Curing value (%): 35				Fuel Load (t/ha): 3.8					
Local Time	Temp (C)	Dewpt (C)	RH (%)	10m Wind (km/h)			1000m AGL Wind (km/h)		FFDI	GFDI	cHaines	Mix Height (m) MSL	TAL
				Dir	Speed	Gust	Dir	Speed					
0600	17	17	100	SE	20	30	SSW	5	1	0	2	0	1
0900	27	18	58	SE	15	25	S	15	6	0	1	2000	1
1200	29	17	48	ESE	15	30	SSE	20	9	0	1	2400	0
1500	27	17	54	SE	25	40	SE	30	9	0	1	2100	0
1800	22	17	73	SE	25	45	SE	30	4	0	1	1100	0

AGL - Above Ground Level, RH - Relative Humidity, Dir - Direction, Dewpt - Dew Point, cHaines - Continuous Haines (0-13), TAL - Thunderstorm Activity Level (0-3). Note: Mixing height is above Mean Sea Level (MSL), to get AGL height subtract incident elevation from value given.

Outlook for Tuesday

Maximum temperature 29 C. Minimum relative humidity about 50%. Chance of at least 5 mm rainfall 10%. 9 am conditions: Temperature: 27 C; Relative humidity: 55%; Wind: SE 15 km/h. 3 pm conditions: Temperature: 27 C; Relative humidity: 55%; Wind: SE 25 km/h.

Outlook for Wednesday

Maximum temperature 29 C. Minimum relative humidity about 40%. Chance of at least 5 mm rainfall 5%. 9 am conditions: Temperature: 27 C; Relative humidity: 50%; Wind: SE 15 km/h. 3 pm conditions: Temperature: 28 C; Relative humidity: 45%; Wind: E 20 km/h.

Outlook for Thursday

Maximum temperature 29 C. Minimum relative humidity about 40%. Chance of at least 5 mm rainfall 5%. 9 am conditions: Temperature: 27 C; Relative humidity: 50%; Wind: NE 10 km/h. 3 pm conditions: Temperature: 28 C; Relative humidity: 50%; Wind: NE 15 km/h.

Outlook for Friday

Maximum temperature 30 C. Minimum relative humidity about 45%. Chance of at least 5 mm rainfall 0%. 9 am conditions: Temperature: 28 C; Relative humidity: 50%; Wind: N 15 km/h. 3 pm conditions: Temperature: 29 C; Relative humidity: 50%; Wind: N 20 km/h.

* ##

TOM Map

Fraser Island

Legend

Current Incidents

- FIRE VEHICLE *
- FIRE VEHICLE *
- FIRE VEGETATION
- FIRE VEGETATION EXPOSURES (FIRE VEGETATION)
- PERMITTED BURN (ATTENDANCE)
- HAZARD *
- HAZARD *
- HAZARD *
- HAZARD *
- HAZARD *
- FIRE STRUCTURE *
- FIRE STRUCTURE *
- FIRE STRUCTURE *
- FIRE STRUCTURE *
- FIRE STRUCTURE *
- (FIRE STRUCTURE)
- ASSIST ANIMAL RESCUE
- ALARM *
- ALARM *
- ALARM *
- ALARM *
- ASSIST EXTREME WEATHER
- RESCUE ROAD *
- RESCUE ROAD *
- RESCUE ROAD *
- RESCUE ROAD *
- RESCUE WATER ALL TYPES

Fire Direction

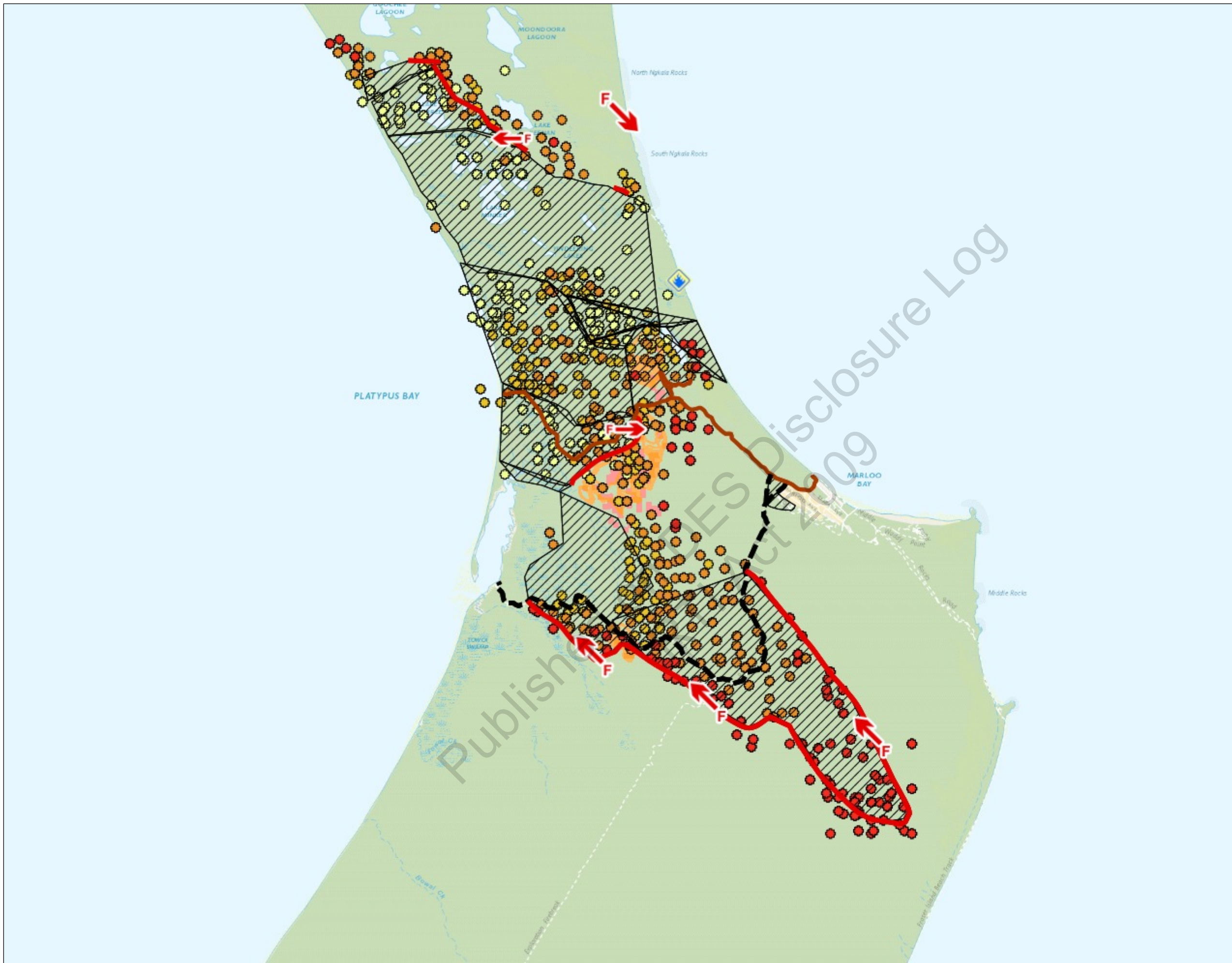
- Fire E
- Fire N
- Fire NE
- Fire NW
- Fire S
- Fire SE
- Fire SW
- Fire W

Fire Lines

- Access Track
- Back Burn - Completed
- Back Burn - Planned
- Evacuation Route
- Fire Control Line - Completed
- Fire Control Line - Planned
- Fire Edge - Active
- Fire Edge - Predicted
- Powerlines
- Sector Boundary

Fire Areas

- Burnt Area - Current
- Control Area
- All Current Hotspots
- Perimeters
- Hour Spot



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20-206

File K Release



When printed at A3 - 1: 100,000
0 2.54 5.08
Kilometres
WGS_1984_Web_Mercator_Auxiliary_Sphere

This map was automatically generated using Geocortex Essentials.



A3 map produced at:
October 20, 2020 10:23:21 AM
Page 18 of 23

Rel

Date : 28/11/2020 5:17:06 PM

From : "CAMBOURN Neil"

To : "james.haig" , "Gary McCormack" , "HEAD Damien" , "KLAASSEN Ben" , "WATSON Matthew" , "CUBIS Mick"

Cc : "BROOK Scott" , "John Pappas"

Subject : RE: QPWS closures plan for staged closures on Fraser Island central area

Attachment : Duling_WF_CLOSURE_planning_28112020_1200.docx;image002.png;image004.jpg;image001.png;

Thanks James, the strategy is endorsed by QPWS as a sound safety management strategy and we support IC decision to implement and/ or adjust as deemed necessary as conditions evolve.

I have provided some recommendations for consideration in comments in the doc – mainly to be clear about what we are closing (for key messages) to avoid any confusion.

Mick can you please arrange the necessary Park Alerts in line with IMT directions at each stage and seek clearance of wording from IC (again to ensure consistent messaging).

Regards Neil



Neil Cambourn

Assistant Director-General

Queensland Parks and Wildlife Service and Partnerships

Department of Environment and Science

P 07 3199 7518 M **Personal info**

Level 5, 400 George Street, Brisbane QLD 4000

From: james.haig <james.haig@qfes.qld.gov.au>

Sent: Saturday, 28 November 2020 4:14 PM

To: Gary McCormack; HEAD Damien

Cc: BROOK Scott; CUBIS Mick; CAMBOURN Neil; John Pappas

Subject: QPWS closures plan for staged closures on Fraser Island central area

Please find attached the proposed staged closures for these tracks and campgrounds. These have been prepared by QPWS staff embedded within our joint IMT and approved by Deputy IC Scott Brook. This QPWS process reflects the authorising environment required to implement and the defined responsibilities within the IMT.

I endorse the attached proposals and confirm that they align with overall incident planning and have been informed by fire behaviour predictive modelling and other intelligence within our joint IMT.

I would also reiterate the comments that the tracks are becoming increasingly difficult to traverse and bogging of vehicles is a real issue.

We will reassess stage 2 triggers as new intelligence such as updated weather forecasts and predictive modelling is completed.

Once approved by QPWS as the authorising agency please advise me directly and I will update any public messaging as required.

Regards

James Haig

Incident Controller.

James Haig

Superintendent

Executive Manager Bushfire Mitigation

Office Of Bushfire Mitigation, Rural Fire Service

Queensland Fire and Emergency Services

P 07 3635 3883 M **Personal info**



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Fraser island closure planning 28/11/2020 – 15:00 PM

Rainbow Beach IMT - QPWS planning – Jack Hargreaves

NOTE: this plan covers the QPWS run divisions of the Duling W/F only.

IAP Context:

Priority remains the protection of life and property – particularly the communities of KBVR and Happy Valley (under control of Deputy IC Asset Protection).

Fire control lines remain difficult to traverse due to dryness of the sand. Visitor and fire crew welfare is to be considered in all movements around the island.

Control of fire across the landscape is unlikely for the next 5 days (fire weather). Mitigation of impact will be likely best outcome.

Key Fire update points of note;

1. No significant change from yesterday.
2. Closure planning is well advanced and due for IC approval at 12pm today. In short;
 - a. Trigger point is the loss of fire across the Smith Poyungan fire control line.
 - b. This will trigger closure of Kingfisher Bay Resort and implementation of the park closure plan involving the sweeping of remaining roads and visitor nodes south to Wangoolba Track.
 - c. Full detail in final plan.
3. With pending conditions and all associated complications, fire containment is unlikely for the next five days.
 - a. We are focussing upon impact mitigation, rather than high risk containment actions with limited chance of success.
 - b. Western Division maintains the fire north of the Smith Poyungan Fire control line.
 - c. Eastern Division is planning mitigation actions to reduce impact as the fire moves south along east coast over next five days.
4. We recognise the importance of recovery.
 - a. We are using local resources to inspect and prepare suitable sites for re-opening.
 - b. We want to enter discussions with QPWS management on Monday about Bushfire Rapid Assessment processes to start informing the impact of the fire.
 - i. I suspect that while broadscale, intensity mapping will show the impact to be less than a single fire extent polygon will indicate.
5. We were recently informed of one small structure burned 8km north of KFB. Investigations underway to find out what that was and associated implications.

STAGE 1: Immediate actions for implementation as of 24:00 28/11/2020

- Close all internal tracks to non-emergency vehicles – leaving the coast. So all tracks heading off the beach and onto the island north of Eurong.
 - This includes closing immediately Lake McKenzie, and all tracks leaving Eurong and Kingfisher to all non-emergency service vehicles.
 - Vehicles currently on these tracks are okay to leave, but no new vehicles to enter this area.
- Wanggoolba to Eurong will REMAIN OPEN under stage 1.
- Central Station Campground – all campers encouraged to leave now but Central Station campground will be closed as of.

Commented [CN1]: Please be specific about this as North of Eurong in any messaging if visitors can still access southern lakes drive as an alternative to Lake Mackenzie – ie Lake Birrabeen, Boomanjin etc

Commented [CN2]: Incomplete sentence?

Key steps to execute this plan –

- QPWS staff to engage with visitors at Central Station
- Police to work with QPWS to execute closures
- QPWS to organise Park alert system with current information

STAGE 2: The trigger point to initiate stage 2 is the fire crossing the Smith-Poyungan track.

When the trigger point is reached, the following immediate action to commence;

- QFES to manage Kingfisher Bay per arrangement with KBRV management.
- Evacuate/Remove all remaining campers from Central Station (hopefully non left)
- Close from Eurong to Wanggoolba Creek Rd North inland tracks on Fraser Island.
- No traversing of the island is to occur to meet ferry bookings – safest exit only.

Commented [CN3]: Provide a little extra clarity here please specifically that it's KBRV and Wanggoolba barge landings, as Hook Point would remain the primary exit route at the moment?

Risk analysis background supporting decision;

- Significantly degraded track conditions across the island making it difficult to leave central camping area quickly.
- There are key tracks in the area that are one-way only, and currently in a very poor condition.
- Most campers at Central station have large camping set ups and are usually longer-term visitors. This means their camping set ups and/or families which means that they have generally significantly bigger set ups and will require more time to evacuate the area.
- Predictive modelling suggests the fire will take at least 3 days after crossing the Smith-Poyungan Road before it would impact Central Station.
- Vehicle traffic on the internal road network of the island is contributing to their degraded state and is increasing risk to emergency service who will rely on the road network
- There are no key landscape features, fuel type or fire scars to prevent, slow or restrict fire spread beyond the Smith-Poyungan Road
- Some visitors will have ferries booked on the opposite of the island and will attempt to cross the island to keep their booking.
 - This is a risk that needs to be managed with QPS.

Commented [CN4]: Again please be specific to KBRV and Wanggoolba barges ie west coast.

Commented [CN5]: Is it worth checking with sealink (KBRV) if they would consider repositioning their barge to hook point/ inskip if we close access to west coast to assist with moving their bookings off that way and assisting with any further evacuations? There may be some technical permit landing issues with this but I think we can get around that under the circumstances. Let us know if you would like us to qualify that as a possibility.

Date : 20/10/2020 12:05:02 PM
From : "CAMBOURN Neil"
To : "James Haig"
Cc : "Michael Wassing" , "John Bolger"
Subject : RE: Some intelligence information for Fraser Islnd North End Bushfire
Attachment : image002.png;image003.png;image004.jpg;
Excellent, many thanks James.



Neil Cambourn
Assistant Director-General
Queensland Parks and Wildlife Service and Partnerships
Department of Environment and Science
P 07 3199 7518 M **Personal info**
Level 5, 400 George Street, Brisbane QLD 4000

From: James Haig <James.Haig@qfes.qld.gov.au>
Sent: Tuesday, 20 October 2020 11:44 AM
To: CAMBOURN Neil
Cc: Michael Wassing; John Bolger
Subject: Some intelligence information for Fraser Islnd North End Bushfire

Hi Neil, please find attached some information on the Fraser Island Fire. To give some clarity the attachments are (in order):

- A Fire Behaviour Snap Report – Fire Behaviour Summary prepared by QFES Predictive Services Unit prepared this morning which covers some of the key fire behaviour parameters. The report runs until Friday.
- A site specific weather forecast from the Bureau of Meteorology from Yesterday but also covering today. I understand an updated forecast has also been requested for preparation today. Please be aware
That during the conversation with the senior meteorologist at the BoM, PSU was informed that the SE wind change originally forecast for later this morning in the yesterday's forecast arrived early to the fire ground this morning (I understand it may have been by 06:00 but not sure. This is good as it will reduce the westerly spread of the fire towards Orchid Beach.
- A copy of a the fire mapping from QFES mapping system (TOM) from this morning.

Additionally, as discussed over the phone, QFES will be undertaking a Large Air Tanker water drop on the fire this morning in coordination with the ground incident management. This is a regular testing run for the DASH 8 size aircraft based at Bundaberg.

I do not know whether the Incident Control Team has requested a detailed Phoenix fire prediction but, should this be required, it can be done through the QFES liaison in the IMT or direct. Certainly QFES Predictive Services Unit is very happy to support such predictive planning that the IMT requests. I understand that there has been liaison with this unit already on this fire although a full prediction may not have been done, if desired this can be done by IMTs (including QPWS only IMTs) by calling 3635 1808.

Regards

James

James Haig
Superintendent
Executive Manager Bushfire Mitigation
Office Of Bushfire Mitigation, Rural Fire Service
Queensland Fire and Emergency Services
P 07 3635 3883 M **Personal info**



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