11:35pm 5/2/19

antil 700

notial Attach

Incide	ent Management Structure	(1) 上的建物基础		
Prepa Positi Date/t Build/I positio , name	red by: on: ime: Draw your structure and fill in ons es & radio call signs [RCS] Planning/Intelligence Name RCS Situation Resources Management suppor	Incident Controller Name RCS Operations Name RCS	Name RCS Supplies Facilities Communication Medical	polistics
	veture Protection (FCP) (ICP) Lotur Protection Craw		Finance Runa Arass 2 S Prof	1 Crows tractive tection
Opera Sector	Resource Plagges NPT Annul Weller	Task Create Waher Flying in Bann	Grid Paints	Tasked at hrs 23 30 18 00

Any Question Ring

IAP Cover Sheet

INCIDE	NT ACTION PLAN	
The items checked beloe SITUATION REPORT INCIDENT OBJECTIVE ORGANISATIONAL IS SECTOR ASSIGNME DIVISIONAL ASSIGN AIR OPERATIONS PI COMMUNICATION SAFETY PLAN MEDICAL PLAN FIRE MAP WEATHER FORECAS FIRE BEHAVIOUR FO FACILITIES LAYOUT	IST NT IMENT LAN PLAN ORECAST	n Plan
Approved by Incident Controller:	Signed	Date/Time



1. Pigeon Valley	2. 6Feb2019 0700 to 1900		

Situation Report

RF201

1. Incident Name	2. Operational Period	SITUATION
Pigeon Valley	Date 6 th Feb 20	REPORT
	Time 04:30	RF201
3. Location	4. Vegetation	5. NZ TM Grid Ref.
Pigeon Rd, Eves Valley	Forest/Scrub/Grass/Slash/	41°22'32.51"S
,Tasman		173° 1'31.81"E

6. Assessment

A large scrub/ forest fire is currently burning estimated to be 1870ha at 00:30 hrs with a perimeter of 20km.

Values at risk are life and property.

We have unconfirmed reports of potential property losses in Eves Valley and Redwood Valley

The Eves Valley sawmill is at risk and fire crews are carrying out structural protection on structures.

Evacuations have occurred in the

- Eves Valley,
- Golden Hills Rd,
- Redwood Valley Rd
- Mallings Rd
- Greenacres Rd

We have confirmed records of 74 households (97 people) evacuated.

Notice of potential evacuations in place for Sunrise Valley (top end), Deepdale Rd (Upper Moutere), Pigeon Valley and South Pigeon Valley.

Crews are working in these areas as much as they can do safely, but fire conditions are proving challenging. At times crews have needed to retreat from property protection as dense smoke and ember attack meant conditions were too dangerous.

Prepared by: Date	ate:6Feb2019	Time: 0445
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1. Pigeon Valley

2. 6Feb2019 0700 to 1900

7. Action taken

Six helicopters worked on the fire during yesterday afternoon and evening and another six are confirmed for this morning for suppression activities. Two fixed wing planes have also been requested for this morning.

A National Incident Management Team has been organised to assist the operations and is planned to commence arrival at 10am this morning.

Extreme fire behaviour has made it difficult for ground crews to directly work on the fire. These crews are being tasked with structure protection and controlling the fire when it has spotted onto grassland.

8. Factors

On Tuesday strong winds fanned the forest fire and the fire itself was creating its own extreme fire behaviour. Fire behaviour at night was still very active with highly flammable grass and scrubland carrying the fire.

The wind shift to a light northerly at midnight, is now forecast to happen at dawn (Wednesday)

9. Predicted Incident Development

Rates of spread were very fast on the afternoon and evening of the first day with the fire travelling 5km in 6 hours, through production forest area and into cured grassland.

Rates of spreads decreased during the night but with highly flammable fuels, the fire behaviour is extreme and unpredictable.

Winds are planned to ease in the morning possibly with a small amount of rain and a northerly change. Strong northerly winds are expected to develop this afternoon (Wednesday 6th Feb). Contingency plans for this are currently being worked on.

10. Prepared by:	Date/Time 04:30 6 th Feb 2019
Authorised by (Incident	
controller)	

Prepared by:	Date:6Feb2019	Time: 0445

Incident Objectives

RF202

3. Overall Incident Objectives

Protect life (Public and Residents)

Protect Property

Identify and keep stakeholders informed

Ensure Firefighter Safety

Identify and protect Critical Infrastructure

Transition to NIMT using shadow process by 1500hrs

Protect Other Assets (Forests, crop etc)

Prepare for Northerly Wind Change

Contain then Extinguish fire

4. Objectives for specified Operational Period

Protect life (Public and Residents)

Identify and keep stakeholders informed

Allow for Firefighter Safety

Identify and protect Critical Infrastructure

Transition to NIMT by 1500hrs

Establish High volume Water Supplies

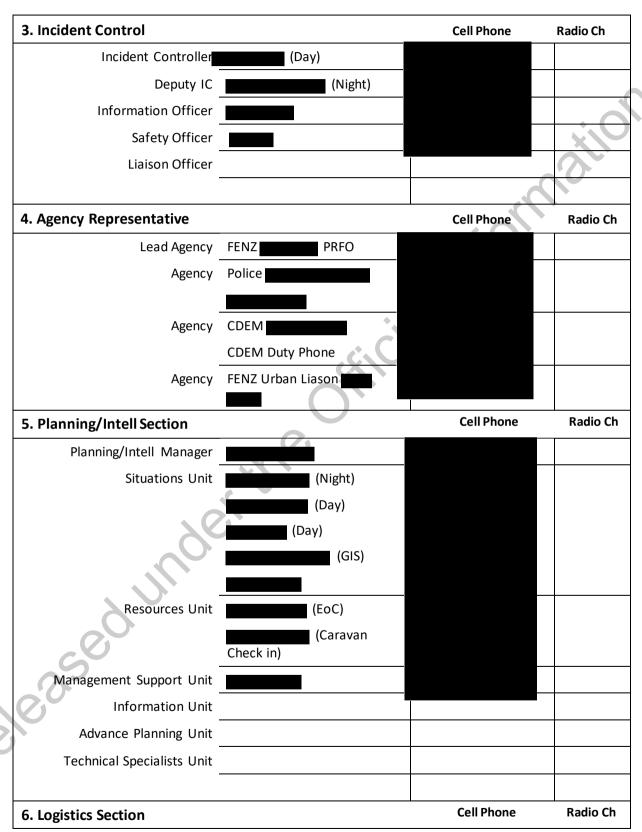
Protect property and critical infrastructure be establishing hard containment lines with heavy equipment or Identify opportunities for laying down retardant ahead of wind change to protect property/infrastructure

Establish trigger points with 3hrs lead-time for evacuations

Prepared by: Date:6Feb2019 Time: 0445

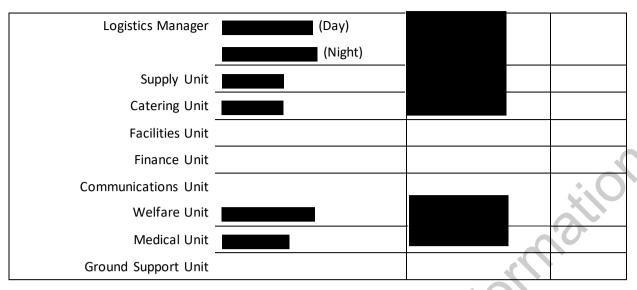
Organisation List

RF203



Prepared by:	Date:6Feb2019	Time: 0445

1. Pigeon Valley 2. 6Feb2019 0700 to 1900



7. Operations Section	Cell Phone	Radio Ch
Operations Manager	Centione	Waimea 1
Operations inlanager		vvaiiiica 1
Deputy Operations Manager		Waimea 1
Division Pigeon Commander	. (Fire 1
Division Hayton Commander		Fire 2
Division Teapot Commander		Fire 3
Division Redwood Commander		Fire 1
Division Moutere Commander		Fire 2
Division Two Commander		
Sector E Supervisor		
Sector F Supervisor		
Sector G Supervisor		
Sector H Supervisor		
Air Division Commander		
Air Attack Supervisor		Fire 4
Air Support Supervisor		
2,0		

1. Pigeon Valley	2. 6Feb2019 0700 to 1900

Sector Assignment

	<u> </u>				1	
3. Sector	4. Description				5. Divisio	n Assigned
						1
6. Sector Supervisor	Affiliation		Cellp	hone	Radio Ch	.0
7. Resources Assigned th	nis period					X
- /-				Transport	Drop-	Pickup
Resource/Crew	Leader	# Pei	rsons	Required	off Point/	Point/time
					time	
				8	\mathbf{O}	
			•			
			C			
		C				
8. Sector Assignment / S	pecial Instruction	s				
		,				
	N/C					
	0					
9. Sector Communication	ns				Phone	Radio Ch
Division/Division Cmdr						
Air Attack Supervisor						
Safety Officer						

Prepared by:	Date:6Feb2019	Time: 0445
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1. Pigeon Valley	2. 6Feb2019 0700 to 1900

3. Pigeon			4.Point of ig	nition to	Dove Saddle		
6. Sector Commander	Affili	iation Cellpho		one	Rad	dio Ch	
	Tasn	nan VI	RFF			Fire	e 1
6. Resources Assigned th	nis Per	iod					
Sector			Supervisor	•	Crews		Radio Ch
2 Taylors D8 jd850		1x H	EQB				
2 Taylors Excavator		1xHE	QB			3	
Tasman VRFF 4px					ζ(
West Coast +	3рх						
1 Smoke chaser + 2px Hi	ra						
1 Appliance + 4px Hira				•			
1 rural tanker							
7. Division Assignment/ Protect Life and Propert Keep Residents and Stak change Dozer to establish hard of Excavator to Establish his Hoult Valley Rd secon Provide Situation Report *Laydown Retardant to	contai gh vo nd t to Si prote	lers in nmen lume tuatio	formed in pro at lines for pro water supplie ons Unit at lea	perty/ir es Wai-it	nfrastructure p i river Baigents	rote	ction first and end of
8. Division Communicati					Phone		Radio Ch
Operations Manager							
Air Division Commander							

Prepared by:	Date:6Feb2019	Time: 0445
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1. Pigeon Valley	2. 6Feb2019 0700 to 1900

3. Haytons			4. Point of i	gnition t	o Teapot Valle	y Rd	end
6. Sector Commander	Affi	liation		Cellphone		Radio Ch	
	Do	C Motu	eka			Fire	2
6. Resources Assigned th	nis Pe	eriod			<u> </u>		X
Sector			Supervisor		Crews		Radio Ch
TLC Bulldozer D7							
TLC Excavator							
Appleby VRFF 4px					&(
North Canterbury							
+3px							
Nelson Lakes VRFF 4px				-			
1x smoke chaser					(O'		
1x appliance)		
2x rural tanker							
7. Division Assignment/	-	ial Inst	ructions				
Protect life and Property Keep Residents and Stake	•	ders in	formed in pr	eparatio	n for potential	nort	h easterly wind
change 1x Excavator establish H	igh \	/olume	Water Point	s Wai-iti	River end of B	ird La	ane
1x Bulldozer for Propert along Haytons Rd	_						
Ground crew begin 5m k	olack	out of	flank				
Provide Situation Repor	~			ast every	two hours		
*Laydown Retardant to		ect pro	perties				
8. Division Communicati					Phone	ı	Radio Ch
Operations Manage							
Air Division Commande	r						

Prepared by:	Date:6Feb2019	Time: 0445
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1. Pigeon Valley	2. 6Feb2019 0700 to 1900

3. Teapot		4.Eves Valle	y Rd to (Golden Hills Rd		
6. Sector Commander	Affiliation	<u> </u> 1	Cellph	one	Radio (Ch
	Wakefield	d VFB/NML			Fire 3	
6. Resources Assigned th	nis Period					X
Sector		Supervisor		Crews		Radio Ch
1 Taylors Bulldozer D8					_ <	
1 Taylors Excavator						•
Wakefield VFB 4px				<u>\$</u> (
DoC crew 4px						
Ngatimoti VRFF 4px						
4x Urban crew			*			
2x rural tankers						
7. Division Assignment/ Protect life and Property Keep Residents and Stak change Establish High Volume W 1x Bulldozer for Propert Eastern Flank/Eder Re Urban crew for Protection Provide Situation Report *Laydown Retardant to	Vater supp Vater supp y/Infrastru d? on of Eves V	nformed in pro ly end of Bells cture Protecti Valley Mill or o ons Unit at lea	rd Wai i on first, other pro	ti River with Ex Establish hard operties as req	cavator contain	
8. Division Communicati				Phone	Ro	adio Ch
Operations Manager						
Air Division Commander	<u> </u>					

Prepared by:	Date:6Feb2019	Time: 0445
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1. Pigeon Valley	2. 6Feb2019 0700 to 1900

3. Redwood	4. Golden Hills Rd to Cut Hill Rd				
6. Sector Commander	Affiliation	Cellphone	Ra	dio Ch	
Urban Officier to be Confirmed	d FENZ		Fir	e 1	
6. Resources Assigned this Per	iod	1			
Sector	Supervisor		Crews	Radio Ch	
1 Dozer Burson D65 Komatsu					
1 TLC Excavator			XO		
AFM 4px					
DoC crew 4px					
		A.C.			
7. Division Assignment/Special Protect Life and Property Keep Residents and Stakehold change Evacuation and notification of Excavator to identify and estal 1x Bulldozer for Property/Infra Contain fire South of Moutere Urban crew for protection of E Provide Situation Report to Sit *Laydown Retardant to protect	ers informed in properties of the properties of	vacuation h volume wate on assisted by t Golden Hills F ous Landfill ist every two h	er supply in e ground crev Rd ours	existing ponds	
8. Division Communications		Phon	е	Radio Ch	
Operations Manager					
Air Division Commander					

Prepared by:	Date:6Feb2019	Time: 0445
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1. Pigeon Valley	2. 6Feb2019 0700 to 1900

3. Moutere		4. Cut Hill Ro	d to Dov	e Hill Saddle	
6. Sector Commander	Affiliatio	n	Cellph	one	Radio Ch
	Bruce Foi	estry			Fire 2
6. Resources Assigned th	nis Period				
Sector	<u> </u>	Supervisor		Crews	Radio Ch
Taylors Hitachi 20T Excavator (on site)				Taylors	TPFL Ops 2
1 TLC Excavator ?				X	O
1 Taylors Dozer					
3x 4px crews TBC 1000h	rs?				
2x 4px mid Canterbury			•	%	
West Coast 4px			C		
		(
7. Division Assignment/ Protect Life and Propert Keep Residents and Stak change Excavator to Identify and 1x Bulldozer for Propert Taylors Excavator to esta Sunrise/Heines rd Provide Situation Report *Laydown Retardant to	y seholders i d Establish y/Infrastru ablish esca t to Situati protect pr	nformed in pre high volume v icture Protection pe route/acce	vater ac on, sunr ss down	cess to existing ise valley, esta Supplejack Va two hours	g ponds blish escape routes illey rd and
8. Division Communicati				Phone	Radio Ch
Operations Manage	-				
Air Division Commande	r				

Prepared by:	Date:6Feb2019	Time: 0445
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3. Personnel and Commu Position		ame	Affiliation	Phone	Radio Chan
Air Div Commander		<u> </u>			7
Air Attack Supervisor					
Air Support Supervisor					
Lead Helicopter Pilot					
Lead Fixed-Wing Pilot					2
4. Air Resource Assignme	nts				
Company	Type of Heli	Call Sign	Capacity	Pilot Name	Contact Details
Garden City Helicopters	B4 Squirrel	IWN	1000L		20000
Marlborough Helicopters	Long Range	HTA	600L		
Independent Helicopters	Squirrel	IMS	1000L		
Amuri Helicopter	Squirrel	HJM	1000L	-	
Anderson Helicopters	B2 Squirrel	HKA	1000L	-	
Christchurch Helicopters	B2 Squirrel	HND	1000L		
Christchurch Helicopters	B2 Squirrel	HFF	1000L		
Mount Hutt Helicopters	Squirrel	HDQ	1000L		
Heli Ventures	Squirrel	IER	1000L		
Beck Helicopters	BellUH1B		1500L		
Beck Helicopters	BellUH1F		1500L		
Fixed Wing					
1 TBC 1200hrs	Cresco				
2 TBC 1200hrs					
3 TBC 1200hrs					
5. Location of Filling Poin	ts/Service A	reas			
Name			Grid R	eference	
Sharp Rd (Divison Pigeon)	41 22 03.7 S	173 00 55.6 E		
Fixed Wings:		41 22 39.9 S	173 05 04.6 E		
airstrip via Teapot Valley					

Prepared by: Date:6Feb2019 Time: 0445		
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1. Pigeon Valley	2. 6Feb2019 0700 to 1900

7. Air Operations Special Equip or Service

Communications Plan

RF205

3. Radio Channels				
Assigned To	Function	Channel	Frequency	System
Command		Waimea 1	152.55000 RX	
			154.33125 TX	20
Division Pigeon	Operational	Fire 1	143.82500	
Division Hayton	Operational	Fire 2	143.78750	0,
Division Teapot	Operational	Fire 3	140.92500	
Division Redwood	Operational	Fire 1	143.82500	
Division Moutere	Operational	Fire 2	143.78750	
Air Ops -Heli	Operational	Fire 4	140.61250	
Air Ops – Fixed Wing	Operational	Fire 10	140.98750	
Emergency		Waimea 1	152.55000 RX	
		01	154.33125 TX	
FireCom		FireCom		
	10)			
4. Telephone Assigned To	Landline	Cell phone	Fax	Comments
Emergency	•	111		
Regional Command Centre (RCC)				
25				
0.0				
6. Other (e.g. email, Sat	tphone, etc)			
GIS Mapping	planning.intellige	nce@nelsontasmar	ncdem.govt.nz	
ICP	Reception.nelson	tasman@fireemerg	ency.nz	
Command Unit	lcu.nelson@fireer	nergency.nz		

Prepared by:	Date:6Feb2019	Time: 0445
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Safety Plan

RF209

3. General Safety Points

Everyone is to be signed in and out of the fire ground through the Incident Control Point for both safety check and payment records.

Maintain regular situation reports (containing all relevant information) via line supervisors.

LACES	Fire Orders	Watchouts
L - Lookout(s) A - Awareness - Anchor Point(s) C - Communication(s) E - Escape Route(s) S - Safety Zone(s)	 conditions and forecasts Know what your fire is doing at all times. Base all actions on current and expected fire behaviour of the fire. Identify escape routes and safety zones and make them known. Post lookouts when there is possible danger. Stay alert. Keep calm, Think clearly, act decisively. Maintain prompt communication with your crew/s, your supervisor and adjoining crews. Give clear instructions and ensure they are understood. Maintain control of your crew/s at all times. Fight fire aggressively having provided for safety first. 	 Fire size is unknown (no size up). Unfamiliar territory Safety zones and escape routes not identified. Unfamiliar with weather and local factors influencing fire behaviour. No communications link with crew members or supervisor. Instructions and assignments not clear. Weather is getting hotter, drier and relative humidity dropping Wind increases and/or changes direction. Getting frequent spot fires across the line Working uphill or downwind of a fire Working on a steep slope Working in rugged terrain Can't see main fire In unburnt vegetation Walking through hot ashes Working alone Getting tired Working near power lines Working mear machinery Working around trees or spars

4. Specific Safety Points

- Access points into fire controlled. Only those authorized to enter and they must receive a brief and be logged in. Time and access point
- Public access Managed
- Weather fire behaviour monitored for changes and communicated to crews. Risk identified to crews
- All crews to have adequate food, water, PPE to manage fatigue and hydration
- Crews to have identified emergency escape routes and emergency plan in the event of harm. Meeting point identified once evacuated.
- All workers to ensure they are competent for the tasks and risks given.
- Air and ground crews to be isolated from risk areas during operations.
- Potential methane flares (Division Hayton) from Eves Valley Landfill

Prepared by:	Date:6Feb2019	Time: 0445
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Medical Plan

RF206

3. First Aid Station Name	Location	Phone/Ro Channel		Param vailable d		010 =
		Channel		valiable (at Stati	on
Each Crew must have available one First aid Level 1 Certified	Each crew					1
Nelson 91 Ambulance	Forward command post	Waimea 1	1 Para	amedica	nd 1 EN	T T
				~		
			80			
4. Transportation Ambulance Service	Address	Phone/Ra Channel		Param able witl		lance
Ambulance St Johns	Richmond station	111	Yes			
	Motueka/Stoke Nelson/					
	0,					
5. Hospitals	Address	Phone	-		Burn	Heli
Hospital Name Nelson Public Emergency	Waimea Rd.	035461800	Road 27m	<i>Air</i> 4min	Unit	Pad
	vvaimea ka.	045666999	n/a	40min	Y	У
Hutt Hospital (Burn Unit)						
6. Special Emergency Procedur Emergency Helicopter statione		11"				l
8. Reviewed by Safety Advisor:		Date/	Time			

1. Pigeon Valley

2. 6Feb2019 0700 to 1900

FIRE WEATHER FORECAST

For Location Pidgeon Valley near Wakefield

Issued by MetService at 01:38am 06-Feb-2019, and valid for the following 9 hours

Wind: Light southerly (5-10km/h) turning northeast to northerly around dawn.

Precipitation:

A few light showers this morning may bring about 1-2mm of rain, clearing late morning.

Temperature:

About 16C, rising to 20C midday.

Humidity: 70%, lowering to 50% midday.

Outlook for the next 12 hours:

Northeast to northerly winds rising to 20 to 30km/h in the afternoon.

Weather becoming fine, with temperatures in the low 20's this afternoon, humidity 40-50%.

Winds easing in the evening and turning light southeast to southerly.

Outlook for next 6 days:

Thursday: Light winds, sunny, dry and max temperature around 21C. Friday: Light winds, sunny, dry and max temperature around 20C. Saturday: Light winds, sunny, dry and max temperature around 22C.

Sunday: Northerlies, partly cloudy, a few light showers and max temperature about 22C.

Monday: Northerlies and rain, max temperature around 21C. Tuesday: Light winds, sunny and max temperature around 23C.

Fire Indices for Wednesday 6th Feb 2019

FFMC 86 (easy Ignition)

DMC 96.8 DC 457

816926

ISI 4.7 (moderately fast rate)

BUI 126 (Extreme)

FWI 20.8 (high fire intensity)

Prepared by:	Date:6Feb2019	Time: 0445

1. Pigeon Valley	2. 6Feb2019 0700 to 1900

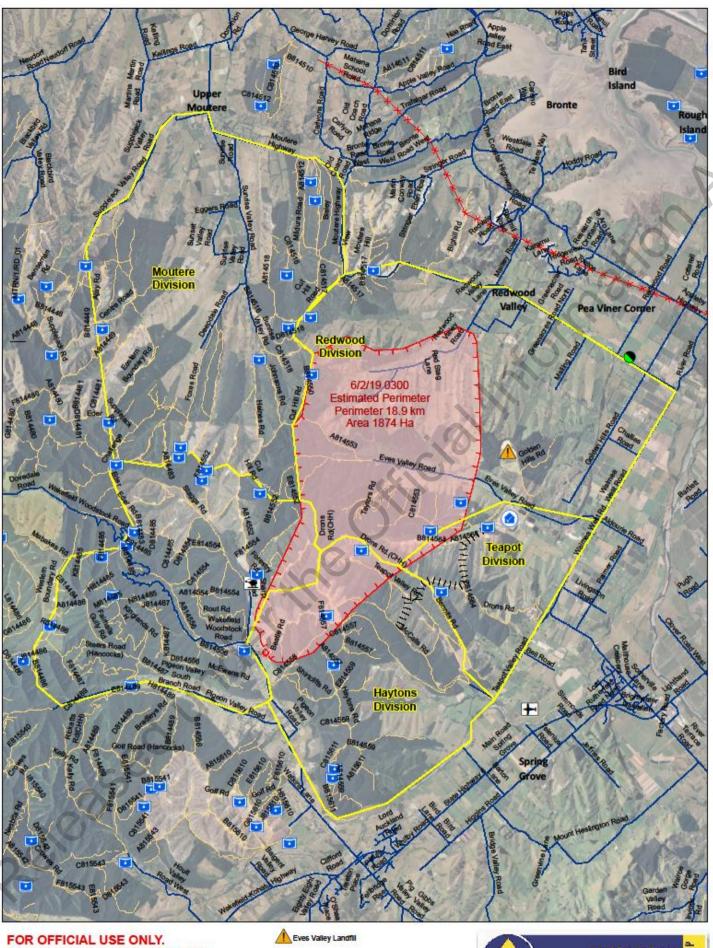
FIRE BEHAVIOUR FORECAST

Prepare	Fire name: Pigeon Road			Prediction for: 0800-1800 06 Feb-19					
Prepared by:			Time and date issued: 0300 Feb 19						
				Day Shift					
		Wind	Cloro*	today's fo		DC	TOT	ртп	Trax?
Temp	RH 71	Wind 13	Slope *	FFMC 86	DMC 97	DC 457	ISI 4.7	BUI 127	FW.
		he equilibriur	-						
		2							
	80								

1. Pigeon Valley	2. 6Feb2019 0700 to 1900

Expect HF rate of spread of 100-200 m/hr HF Intensity 150-350 kw/m Flame lengths 1.2 m Flame lengths 2 m Safety Considerations:	Expected fire beh	aviour – slope 0°	Forecast worst case	– 28°C 45% RH slope 20° 14
Expect HF rate of spread of 10-40 m/hr HF Intensity 200-700 kw/m Flame lengths 1-1.5 Flame lengths 3 m Fuel type: Scrub/gorse 2m height Expect HF rate of spread of 500-1000 m/hr HF Intensity <10000 kw/m Flame lengths 7.2 m Flame lengths 13 m Fuel type: Grass-70% GC, 100% cover, 0.1m height Expect HF rate of spread of 100-200 m/hr HF Intensity 150-350 kw/m Flame lengths 1.2 m Flame lengths 2 m Flame lengths 2 m Flame lengths 2 m Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.1m height Expect HF rate of spread of 600 m/hr HF Intensity 150-350 kw/m Flame lengths 2 m Flame lengths 2 m Flame lengths 2 m Flame lengths 3 m Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.1m height Expect HF rate of spread of 600 m/hr HF Intensity 150-350 kw/m Flame lengths 2 m Flame lengths 2 m Flame lengths 2 m Flame lengths 3 m Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.2m height Expect HF rate of spread of 600 m/hr HF Intensity 1050 kW/m Flame lengths 2 m Flame lengths 2 m Flame lengths 3 m Fuel type: Scrub/gorse 2m height Expect HF rate of spread of 3000 m/hr HF Intensity 10000 kw/m Flame lengths 5 m Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.2m height Expect HF rate of spread of 3000 m/hr HF Intensity 10000 kw/m Flame lengths 5 m Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.2m height Expect HF rate of spread of 3000 m/hr HF Intensity 10000 kw/m Flame lengths 1 m Fuel type: Scrub/gorse 2m height Expect HF rate of spread of 3000 m/hr HF Intensity 10000 kw/m Flame lengths 1 m Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.2m height Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.2m height Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.2m height Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.2m height Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.2m height Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.2m height Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.2m height Fuel type: Ungrazed Grass -70% GC, 100%			1800	
HF Intensity 200-700 kw/m Flame lengths 1-1.5 Flame lengths 3 m Fuel type: Scrub/gorse 2m height Expect HF rate of spread of 500-1000 m/hr HF Intensity <10000 kw/m Flame lengths 7.2 m Flame lengths 13 m Fuel type: Grass-70% GC, 100% cover, 0.1m height Expect HF rate of spread of 100-200 m/hr HF Intensity 150-350 kw/m Flame lengths 1.2 m Flame lengths 2 m Safety Considerations: Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ scrub fuels. Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	Fuel type: Mature Pir	ne – 5m pruned	Fuel type: Mature P	Pine – 5m pruned
Flame lengths 1-1.5 Flame lengths 3 m Fuel type: Scrub/gorse 2m height Expect HF rate of spread of 500-1000 m/hr HF Intensity <10000 kw/m Flame lengths 7.2 m Fuel type: Grass-70%GC, 100%cover, 0.1mheight Expect HF rate of spread of 3000 m/hr HF Intensity >10000 kw/m Flame lengths 13 m Fuel type: Grass-70%GC, 100%cover, 0.1mheight Expect HF rate of spread of 100-200 m/hr HF Intensity 150-350 kw/m Flame lengths 1.2 m Flame lengths 2 m Safety Considerations: Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ scrub fuels. Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	Expect HF rate of spre	ead of 10-40 m/hr	Expect HF rate of sp	oread of 200 m/hr
Fuel type: Scrub/gorse 2m height Expect HF rate of spread of 500-1000 m/hr HF Intensity <10000 kw/m Flame lengths 7.2 m Flame lengths 7.2 m Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.1m height Expect HF rate of spread of 600 m/hr Fuel type: Ungrazed Grass -70% GC, 100% cover, 0.1m height Expect HF rate of spread of 100-200 m/hr HF Intensity 150-350 kw/m Flame lengths 1.2 m Flame lengths 2 m Safety Considerations: Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ scrub fuels. Head Fire intensity exceed threshold for direct attack in gorse/ scrub fuels. Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	HF Intensity	200-700 kw/m	HF Intensity	2100 kw/m
Expect HF rate of spread of 500-1000 m/hr HF Intensity <10000 kw/m Flame lengths 7.2 m Flame lengths 7.2 m Flame lengths 13 m Fuel type: Grass-70%GC, 100%cover, 0.1mheight Expect HF rate of spread of 100-200 m/hr HF Intensity 150-350 kw/m Flame lengths 1.2 m Flame lengths 2 m Safety Considerations: Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ scrub fuels. Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	Flame lengths	1-1.5	Flame lengths	3 m
HF Intensity < 10000 kw/m Flame lengths 7.2 m Flame lengths 13 m Fuel type: Grass-70% GC, 100% cover, 0.1m height Expect HF rate of spread of 100-200 m/hr HF Intensity 150-350 kw/m Flame lengths 1.2 m Flame lengths 2 m Safety Considerations: Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ scrub fuels. Head of the fire intensity is now to high for ground crews Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	Fuel type: Scrub/gorse 2m height		Fuel type: Scrub/ go	orse 2m height
Flame lengths 7.2 m Flame lengths 13 m Fuel type: Grass-70% GC, 100% cover, 0.1m height 0.2m height Expect HF rate of spread of 100-200 m/hr HF Intensity 150-350 kw/m HF Intensity 1050 kW/m Flame lengths 1.2 m Flame lengths 2 m Safety Considerations: Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ scrub fuels. Head Fire intensity is now to high for ground crews Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	Expect HF rate of spre	ead of 500-1000 m/hr	Expect HF rate of sp	oread of 3000 m/hr
Fuel type: Grass-70% GC, 100% cover, 0.1m height Expect HF rate of spread of 100-200 m/hr HF Intensity 150-350 kw/m Flame lengths 1.2 m Fame lengths 2 m Safety Considerations: Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ scrub fuels. Head Fire intensity is now to high for ground crews Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	HF Intensity	<10000 kw/m	HF Intensity	>10000 kw/m
Expect HF rate of spread of 100-200 m/hr HF Intensity 150-350 kw/m Flame lengths 1.2 m Flame lengths 2 m Safety Considerations: Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ scrub fuels. Head Fire intensity exceed threshold for direct attack in gorse. Flank fires intensity is now to high for ground crews Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	Flame lengths	7.2 m	Flame lengths	13 m
Expect HF rate of spread of 100-200 m/hr HF Intensity 150-350 kw/m Flame lengths 1.2 m Flame lengths 2 m Safety Considerations: Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/scrub fuels. Flame lengths 1.2 m Head Fire intensity exceed threshold for direct attack in gorse/scrub fuels. Flame lengths 2 m Head Fire intensity exceed threshold for direct attack in gorse. Flank fires in gorse and mature pine fuels, and flame for ground crews Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	Fuel type: Grass-70%	GC, 100% cover, 0.1m height	Fuel type: Ungrazed	d Grass -70% GC, 100% co
HF Intensity 150-350 kw/m Flame lengths 1.2 m Flame lengths 2 m Safety Considerations: Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ scrub fuels. Head Fire intensity exceed threshold for direct attack in gorse/ attack in gorse and mature pine fuels, and flank fires in gorse. Flank fires intensity is now to high for ground crews Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the				>
Flame lengths 1.2 m Flame lengths 2 m Safety Considerations: Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ attack in gorse and mature pine fuels, and flow fires in gorse. Flank fires intensity is now to high for ground crews Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	Expect HF rate of spre	ead of 100-200 m/hr	Expect HF rate of sp	oread of 600 m/hr
Safety Considerations: Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ attack in gorse and mature pine fuels, and flows fires in gorse. Flank fires intensity is now to high for ground crews Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	HF Intensity	150-350 kw/m	HF Intensity	1050 kW/m
Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ scrub fuels. Head Fire intensity exceed threshold for direct attack in gorse/ attack in gorse and mature pine fuels, and fl fires in gorse. Flank fires intensity is now to high for ground crews Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	Flame lengths	1.2 m	Flame lengths	2 m
Head Fire intensity, and flank fire intensity exceed threshold for direct attack in gorse/ scrub fuels. Head Fire intensity exceed threshold for direct attack in gorse/ attack in gorse and mature pine fuels, and fl fires in gorse. Flank fires intensity is now to high for ground crews Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the				
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. Northerly change in the morning will move the head of the fire to the south/ eastern flank as wind strengthens during the day. The nature of the fuels means that fire behaviour has the	scrub fuels.		fires in gorse. Flank	fires intensity is now too
wind strengthens during the day. The nature of the fuels means that fire behaviour has the		70,	high for ground crev	vs
	. Northerly change in	the morning will move the	head of the fire to the	south/ eastern flank as t
potential for extreme fire behaviour especially with wind, temperature and fuel changes.	wind strengthens during	ng the day. The nature of the	he fuels means that fir	re behaviour has the
		<mark>fire behaviour especially w</mark>	ith wind, temperature	and fuel changes.
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Prepared by:	Date:6Feb2019	Time: 0445
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NOT FOR PUBLIC DISTRIBUTION.

Date saved: 6/02/2019, 0417 hrs

Scale at A3 1:52,511 0 0.25 0.5 Eves Valley Sawmill







Pigeon Valley Fire Extent
Pigeon Valley Fire Extent





NOT FOR PUBLIC DISTRIBUTION.

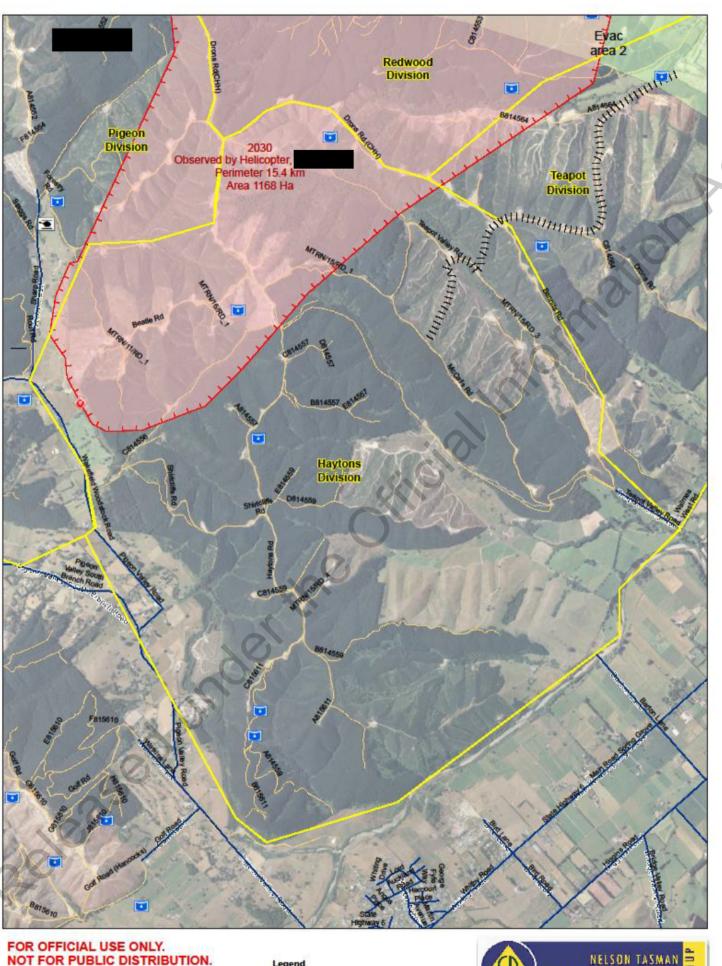
Date saved: 6/02/2019, 0400 hrs Prepared by: kilmenys

0.25 Scale at A3 1:25,000

Waterpoints Fire Origin

Pigeon Valley Fire Extent Estimated based on Police report at Malsey Road
Observed by Helicopter,





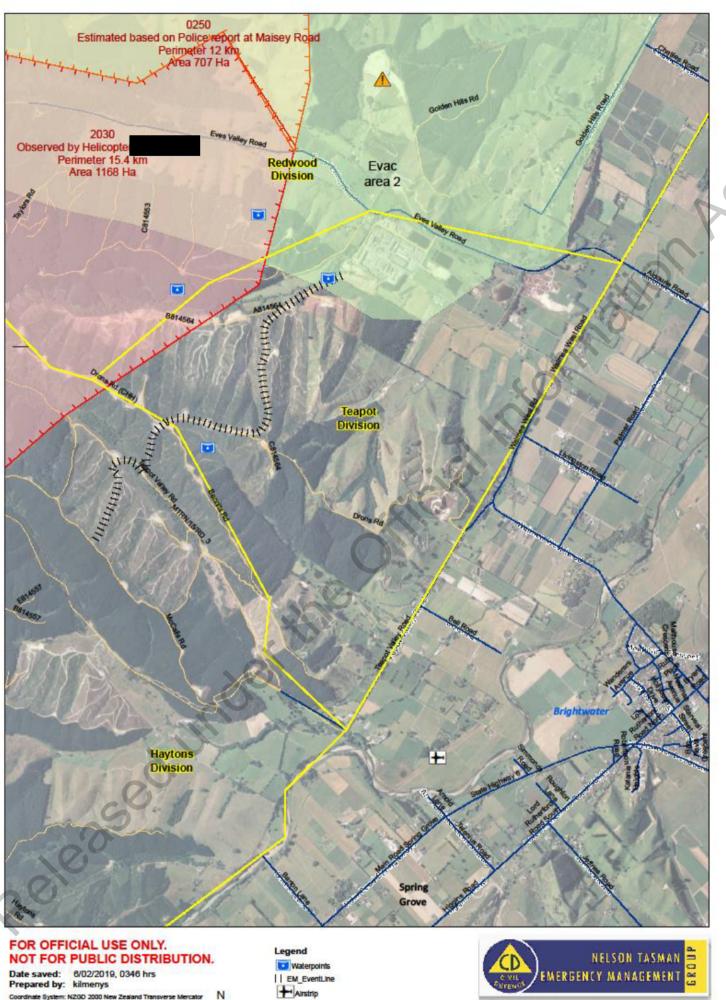
NOT FOR PUBLIC DISTRIBUTION.

Date saved: 6/02/2019, 0346 hrs Prepared by: kilmenys

Scale at A3 1:20,000

Legend Waterpoints | EM_EventLine Fire Origin Pigeon Valley Fire Extent
Cobserved by Helicopter,



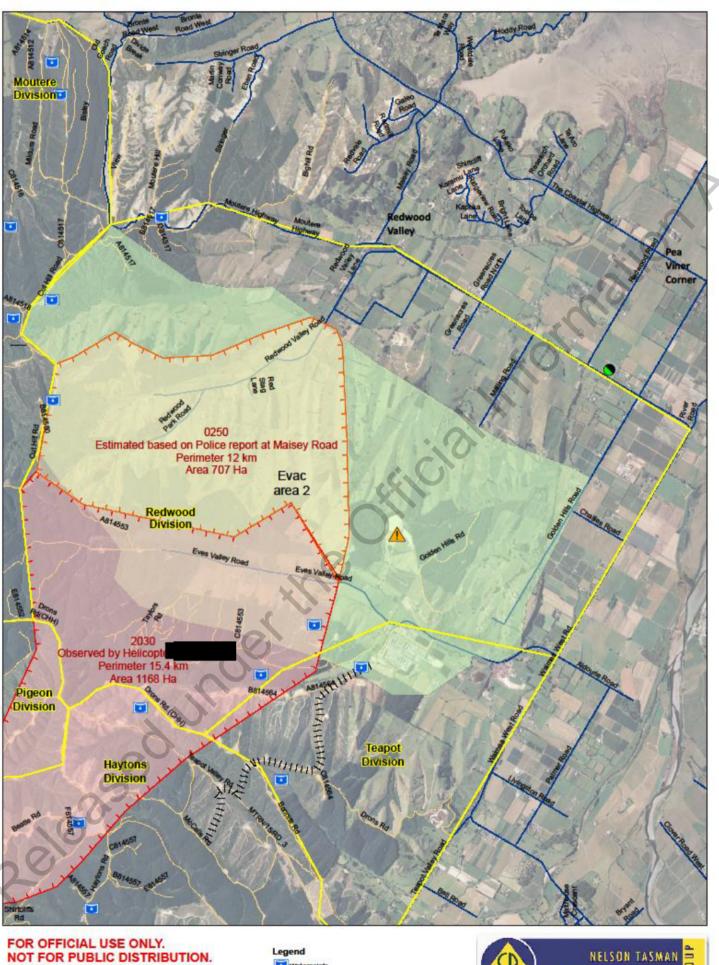




Scale at A3 1:20,000







Date saved: 6/02/2019, 0346 hrs

Prepared by: kilmenys

Scale at A3 1:30,000

0.25 0.5

Waterpoints

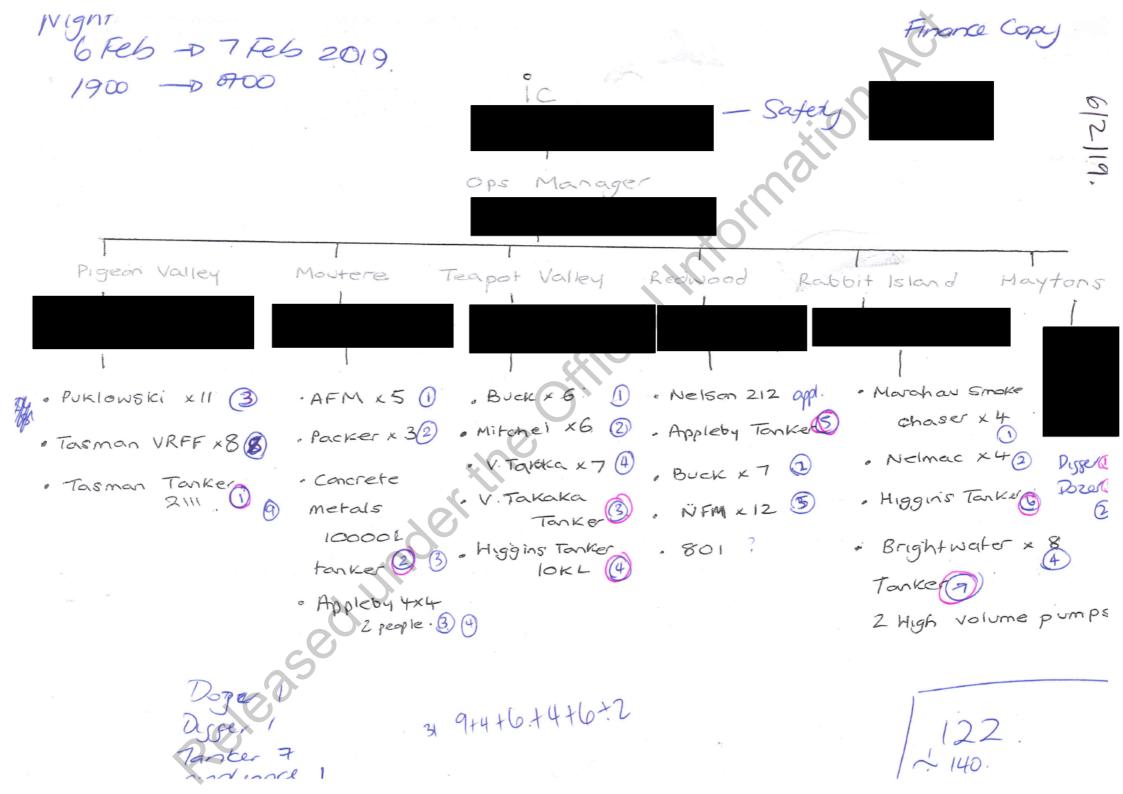
| EM_EventLine

Eves Valley Landfill

Pigeon Valley Fire I

Estimated based on Police
Observed by Helicopter,





7/2/19

IAP Cover Sheet

INCIDENT ACTION PLAN
The items checked below are included in the incident Action Plan SITUATION REPORT INCIDENT OBJECTIVES ORGANISATIONAL LIST SECTOR ASSIGNMENT DIVISIONAL ASSIGNMENT AIR OPERATIONS PLAN COMMUNICATION PLAN SAFETY PLAN MEDICAL PLAN FIRE MAP WEATHER FORECAST AND MAP FIRE BEHAVIOUR FORECAST FACILITIES LAYOUT PLAN
Approved by Incident Controller: Signed Date/Time
1810



Situation Report

RF201

1. Incident Name	2. Operational Period	SITUATION
Pigeon Valley	Date 6 th Feb 2019	REPORT
	Time 1330	RF20
3. Location	4. Vegetation	5. NZ TM Grid Ref.
Pigeon Rd, Eves Valley	Forest/Scrub/Grass/Slash/	41°22'32.51"S
,Tasman		173° 1'31.81"E

6. Assessment

A large scrub/ forest fire is currently burning estimated to be 1870ha at 12:30 hrs with a perimeter of 22km.

Values at risk are life and property, assets.

Confirmed minor property damaged. Unconfirmed reports of potential property losses in Eves Valley and Redwood Valley.

The Eves Valley sawmill is at risk and fire crews are carrying out structural protection on structures. Telecommunications site on the end of Cooks Rd (near Wakefield) is at risk with northerly wind.

Evacuations have occurred in the

- Eves Valley,
- Golden Hills Rd,
- Redwood Valley Rd
- Mallings Rd
- Greenacres Rd

We have confirmed records of 170 households evacuated.

Evacuation of North and South Pigeon Valley, Teapot Valley, Eves Valley, Redwood Park, Malling Rd and Golden Hills Rd.

Notice of potential evacuations in place for Sunrise Valley (top end), Deepdale Rd (Upper Moutere).

Crews are working on most areas on the ground safely and are progressing fire containment due to more favourable weather conditions.

Prepared by	Date:7Feb2019	Time: 1500

1. Pigeon Valley

2. 7Feb2019 0700 to 1900

7. Action taken

14 Helicopters managed fire as requested throughout the day

Firebreaks being located to manage NNE wind change.

More predictable fire behaviour has made the fire ground more accessible for ground crews in particularly on the Northern front. These crews are being tasked with structure protection and controlling the fire when it has spotted onto grassland. Black out work has commenced in this area.

8. Factors

On Tuesday strong winds fanned the forest fire and the fire itself was creating its own extreme fire behaviour. Fire behaviour at night was still very active with highly flammable grass and scrubland carrying the fire. Wednesday day bought a change in wind direction pushing the fire back into the burnt stand areas and changing fire fronts along with more benign fire behaviour from lower temperatures and higher RH.

Light winds and higher relative humidity's have prevailed through the day enabling crews to move into direct attack.

9. Predicted Incident Development

The prevailing weather is supporting fire fighter activities with an increased in containment of existing fire lines. This will continue based on the forecast until unfavourable weather conditions occur. Significant reduction in the rate of spread due to current weather.

10. Prepared by:	Date/Time 16:30 6 th Feb 2019
Authorised b (Incident controller)	

Prepared by Date:7Feb2019 Time: 1500

Incident Objectives RF202

3. Overall Incident Objectives

Protect life (Public and Residents, firefighters)

Protect Property

Identify and keep stakeholders informed

Ensure Firefighter Safety

Identify and protect Critical Infrastructure

Transition to NIMT using shadow process by 1500hrs

Protect Other Assets (Forests, crop etc)

Prepare for significant wind/weather change

Containment lines constructed

- Haytons division; Wakefield cell tower retardant line, Firebreak at the base of the hill in the grass paddock
- Teapot Valley; back up the firebreak around the Eve's Valley Sawmill with retardant
- Redwood Valley; Progress firebreaks during northly winds
- Moutere; Assessing situation and developing a containment plan. Looking to develop a additional firebreak along Eder road and the southern end of Cuthill?

Contain then Extinguish fire

4. Objectives for specified Operational Period

Protect life (Public and Residents)

Identify and keep stakeholders informed

Allow for Firefighter Safety

Sectorise each divisional area

Identify and protect Critical Infrastructure

Transition to NIMT by 1500hrs

Establish High volume Water Supplies

Protect property and critical infrastructure be establishing hard containment lines with heavy equipment or Identify opportunities for laying down retardant ahead of wind change to protect property/infrastructure

Establish trigger points with 3hrs lead-time for evacuations

Prepared by	Date:7Feb2019	Time: 1500
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Organisation List

3. Incident Control	,	Cell Phone	Radio Ch
Incident Controller	(NIMT)		
Ops Strategy advisor	(MMIT)		
Information Officer			
Safety Officer	(NMIT)		0
Liaison Officer			
4. Agency Representative		Cell Phone	Radio Ch
Lead Agency	FENZ PRFO		
Agency	Police		
Agency	CDEM		
	CDEM Duty Phone		
Agency	FENZ Urban Liason		
5. Planning/Intell Section		Cell Phone	Radio Ch
Planning/Intell Manager			
Situations Unit	(FBAN) (Day)		
9 nuge	(Day) (GIS) (GIS) (Observer) (Observer) +2		
Resources Unit	(EoC)		
3	(Caravan Cneck in)		
Management Support Unit			
Information Unit	3		
Advance Planning Unit			
Technical Specialists Unit			

1. Pigeon Valley

2. 7Feb2019 0700 to 1900

-			
6. Logistics Section		Cell Phone	Radio Ch
Logistics Manager	(NMIT)		
	(Day) (Night)		
Supply Unit			
Catering Unit			
Facilities Unit			XIC
Finance Unit			70
Communications Unit			
Welfare Unit	-	•	
Medical Unit			
Ground Support Unit	8		

7. Operations Section	Cell Phone	Radio Ch
Operations Manager		Waimea 1
Deputy Operations Manager		Waimea 1
Ops Planning		Waimea 1
Division Pigeon Commander		Fire 1
Division Hayton Commander		Fire 2
Division Teapot Commander		Fire 3
Division Redwood Commander		Fire 1
Division Moutere Commander		Fire 2
Division Two Commander		
Sector E Supervisor		
Sector F Supervisor		
Sector G Supervisor		
Sector H Supervisor		
Air Division Commander	(NMIT)	
Air Attack Supervisor		Fire 4
Air Support Supervisor	J 19 2812	Fire 4

Prepared by:		Date:7Feb2019	Time: 1500	

1. Pigeon Valley	2. 7Feb2019 0700	to 1900
Public information section	(NMIT)	
	(NMIT)	
(NI	MIT)	
	(NMIT)	
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Prepared by	Date:7Feb2019	Time: 1500

Prepared by	Date:7Feb2019	Time: 1500
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 Pigeon Valley 	1.	Pigeon	Valley
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2. 7Feb2019 0700 to 1900

Sector Assignment

3. Sector	or 4. Description				5. Division Assigned		
6. Sector Supervisor	Affiliation		Cellp	hone .	Radio Ch		
7. Resources Assigned	this period		<u> </u>			11O)	
Resource/Crew	Leader	# Pe	rsons	Transport Required	Drop- off Point/ time	Pickup Point/time	
				4	0)		
	,						
×							
8. Sector Assignment /	Special Instruction	ns					
·	2 CONTROLLER)					
9. Sector Communicati					Phone	Radio Ch	
Division/Division Cmd		1-1141					
Air Attack Supervisor	·		_				
Safety Officer		······································					

Prepared by Date:7Feb2019 Time: 1500	
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3. Pigeon - Alpha			4.Point of ig	nition to	o Dove Saddle		
6. Sector Commander	Affiliation			Cellph	Cellphone		io Ch
	Tasm	an VF	RFF			Fire	1
6. Resources Assigned th	his Peri	od		i .	755 a. 210 MARY 2 dat 27 a. 5 a.		1:40
Sector			Supervisor		Crews		Radio Ch
1 Taylors D8 jd850		1x H	EQB				20
1 Taylors Excavator		1xHE	QB				
Tasman VRFF 6px					8		
1 Smoke chaser + 2px H	ira					Landa Co	
1 Appliance + 5px Hira						THE PERSON NAMED IN	
1 rural tanker 5075				*			
7. Division Assignment/ Protect Life and Propert Keep Residents and Stal change Dozer to establish hard Excavator to Establish h Hoult Valley Rd secon Provide Situation Repor *Laydown Retardant to	keholde contair igh vole nd t to Sit	ers in nmen ume uatio	formed in pro at lines for pro water supplie ons Unit at lea	pperty/in	nfrastructure p i river Baigent	rote	ction
8. Division Communicat					Phone		Radio Ch
Operations Manage							
Air Division Commande	<u>r</u>						

·····			T ' 4500
Prepared by		Date:7Feb2019	Time: 1500
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3. Haytons – Zulu		4. Point of i	gnition to	o Teapot Valle	y Rd end	
6. Sector Commander	Affiliation		Cellpho	one	Radio Ch	
	DoC Motu	eka			Fire 2	-
6. Resources Assigned th	nis Period				, , , , , , , , , , , , , , , , , , ,	3
Sector		Supervisor	•	Crews	Radio C	h
TLC Bulldozer D7					20	
+ additional dozer						
TLC x2 Excavator				. (
Appleby VRFF 4px				X	9	
Nelson Lakes VRFF 4px						
1x smoke chaser				Lake Rotoiti		
1x appliance			+_(Lake Rotoiti		
2x rural tanker			*. C)		-	
7. Division Assignment/ Protect life and Property Keep Residents and Stake change 1x Excavator establish H 1x Bulldozer for Properte along Haytons Rd Ground crew begin 5m k Provide Situation Reporte along Resident to 100C Lakes Crew	deholders in seholders in sigh Volume y/Infrastruction plackout of t to Situation protect pro	oformed in proceed water Point cture Protect flank ons Unit at le	s Wai-iti ion and E	River end of B stablish hard o	ird Lane	
8. Division Communicati				Phone	Radio Ch	
Operations Manager						
Air Division Commander	<u> </u>		*****			

Prepared by:	Date:7Feb2019	Time: 1500
Prepared by:	Date:7Feb2019	Time: 1500

3. Teapot - Yankie		4.Eves Valle	ey Rd to (Golden Hills Ro	d
6. Sector Commander	Affiliation	I VFB/NML	Cellpho	one	Radio Ch
C. Dansauran Ansima al Al					11103
6. Resources Assigned to Sector	nis Perioa	Supervisor		Crews	Radio Ch
1 Taylors Bulldozer D8					
2x Taylors Excavator					
Wakefield 02 VFB 4px			:		
Upper Moutere 321, 32	11			<u> </u>	O
Ngatimoti VRFF					
4x Urban crew				Upper Moute	ere
2x rural tankers					
2x Tankers 10000L Concrete& Metals		(Dow	ner		No PPE No PPE
7. Division Assignment	-	tructions			
Protect life and Propert Keep Residents and Sta	-	nformed in n	onaratio	n for notentia	I north eactarly wind
change	kenoluersi	momieu m pi	eparatio	ii ioi poteiitia	i north easterly wind
Establish High Volume V	Water supp	ly end of Bell	s rd Wai i	ti River with E	xcavator
1x Bulldozer for Propert Eastern Flank/Eder R	A	icture Protect	ion first,	Establish hard	l containment line on
Urban crew for Protecti		•	-	•	quired
Provide Situation Repor			ast every	two hours	
*Laydown Retardant to	protect pr	operties			
8. Division Communicat	ions			Phone	Radio Ch
Operations Manage	er				
Air Division Commande	r				

Time: 1500

Date:7Feb2019

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Prepared by

3. Redwood - Xray	4. Golden H	ills Rd to Cut	Hill Rd	
6. Sector Commander	Affiliation FENZ	Cellphone		Radio Ch Fire 1
6. Resources Assigned this Period			,	
Sector	Supervisor	П	Crews	Radio Ch
1 Dozer Burson D65 Komatsu?		·		
1 TLC Excavator			~(
AFM 2px				
Wainui VRFF 2px				MR.000.00.00.00.00.00.00.00.00.00.00.00.0
- Smoke Chaser				
3 Military Crews	S.			
7. Division Assignment/Special in Protect Life and Property Keep Residents and Stakeholders change Excavator to identify and establis 1x Bulldozer for Property/Infrastr Contain fire South of Moutere His Urban crew for protection of Eve Provide Situation Report to Situa Build containment lines where provide Staydown Retardant to protect process.	informed in process for hig ructure Protecti ghway and Wes s Valley Hazard tions Unit at lea ractical in light f	h volume wa on assisted b it Golden Hills ous Landfill ast every two uel areas. rovide contai	ter supply y ground o s Rd hours inment	in existing ponds
8. Division Communications		Pho 	ne	Radio Ch
Operations Manager Air Division Commander				

Prepared by: Date:7Feb2019 Time: 1500

3. Moutere – Bravo		4. Cut Hill	Rd to Dove	Hill Saddl	е	
6. Sector Commander	Affiliation		Cellpho	ne	Ra	dio Ch
	Bruce Fore	estry			Fir	e 2
o. kesources Assi gned th	nis Period					X
Sector		Superviso)r	Crev	/5	Radio Ch
Taylors Hitachi 20T Excavator (on site)	}			Taylors		TPFL Ops 2
1 TLC Excavator ?						
1 Taylors Dozer		· · · · · · · · · · · · · · · · · · ·				
1x 3px crew VRFF -						
Brightwater	THE STATE OF THE S					•
2x 4px mid Canterbury?				0.		
			.c.O			
West Coast 4px?						
Brightwater 5071 Appliance 5px)			
7. Division Assignment/ Protect Life and Propert Keep Residents and Stake change Excavator to Identify an 1x Bulldozer for Propert Taylors Excavator to est Sunrise/Heines rd Develop Containment linglan for additional co	y keholders in d Establish y/Infrastruc ablish escap nes from Cu entainment t to Situatio	nformed in phigh volume eture Protect oe route/act at Hill to Ede lines throug ons Unit at l	e water acc ction, sunri cess down er Road wh gh Dovedal	ess to exis se valley, e Supplejach ere safe to e saddle.	sting po establis Valley o do so.	nds h escape routes rd and
8. Division Communicati		***************************************		Phone		Radio Ch
Operations Manage						
Die Diesialan Carana auchter			ı			

Air Operations Plan

		RF208				
3. Personnel and Commun Position		ame	Affiliation	Phone	Radio Cha	า
Air Div Commander		_				
Air Attack Supervisor						>
Air Support Supervisor						
Lead Helicopter Pilot					10	
Lead Fixed-Wing Pilot						
4. Air Resource Assignme	nts			7,6		
Company	Type of Heli	Call Sign	Capacity	Pilot Name	Contact Details	
	1			Pilot walle	Details	
Garden City Helicopters	B4 Squirrel	IWN	1000L	-		
Marlborough Helicopters	Long Ra\nge	IMS IWS	600L			
Independent Helicopters	Squirrel		1000L			
Amuri Helicopter	Squirrel	HJM	1000L			
Anderson Helicopters	B2 Squirrel	HKA	1000L			
Christchurch Helicopters	B2 Squirrel	HND	1000L			
Christchurch Helicopters	B2 Squirrel	HFF	1000L			
Mount Hutt Helicopters	Squirrel	HDQ	1000L			
Heli Ventures	Squirrel	IER	1000L			
Beck Helicopters	BellUH1B		1500L			
Beck Helicopters	BellUH1F	V	1500L			
Fixed Wing	1					
1 TBC 1200hrs	Cresco	OAS				
2 TBC 1200hrs	Airtractor	SKF				
3 TBC 1200hrs	V					
5. Location of Filling Point	ts/Service Ar	eas				
Name			Grid	Reference		
Sharp Rd (Divison Pigeon)	41 22 03.7 S 17	3 00 55.6 E	Flight Summ	narjes	
					. 0	_
Fixed Wings:		41 22 39.9 S 17	3 05 04.6 F	Southern Heli	1199 HUE	
airstrip via Teapot Valley		11 22 3313 3 27		Garden City	141	
6. Safety Notes / Hazards		erage Limitation	s	Govalen Cita	TIL	
Di Barcey Notes / Hazaras	, madio cov	Champlov's C	H77	Garden City Garden City	IGF	
		Skyworks	1122	Itelicharter Nel	enn ill	
				Reid Helicopter	C HOE	
7. Air Operations Special	Equip or Serv	vice		KEYN HOUMPTON	HEV	
					1100	
				Mardleman 1	II HIT	
				Marlborough He	11/11/1	
				V		

Prepared by	Date:7Feb2019	Time: 1500
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Communications Plan

RF205

3. Radio Channels				
Assigned To	Function	Channel	Frequency	System
Command		Waimea 1	152.55000 RX	
			154.33125 TX	
Division Pigeon (Alpha)	Operational	Fire 1	143.82500	. 0
Division Hayton (Zulu)	Operational	Fire 2	143.78750	
Division Teapot (Yankie)	Operational	Fire 3	140.92500	70
Division Redwood (Xray)	Operational	Fire 1	143.82500	
Division Moutere (Bravo)	Operational	Fire 2	143.78750	
Air Ops -Heli	Operational	Fire 4	140.61250	
Air Ops – Fixed Wing	Operational	Fire 10	140.98750	
Emergency		Waimea 1	152.55000 RX	
,		· C	154.33125 TX	
FireCom		FireCom		÷
п				
4. Telephone	100			
Assigned To	Landline	Cell phone	Fax	Comments
Emergency	_ <	111		
Regional Command Centre (RCC)	3			
70,				
6. Other (e.g. email, Satpho	ne, etc)			
GIS Mapping	planning.intellige	nce@nelsontasr	mancdem.govt.nz	
ICP	Reception.nelson	tasman@fireem	ergency.nz	
Command Unit	lcu.nelson@fireer	mergency.nz		

Prepared by:	Date:7Feb2019	Time: 1500	
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Safety Plan

RF209

3. General Safety Points

Everyone is to be signed in and out of the fire ground through the Incident Control Point for both safety check and payment records.

Maintain regular situation reports (containing all relevant information) via line supervisors.

L - Lookout(s) A - Awareness - Anchor Point(s) C - Communication(s) E - Escape Route(s) S - Safety Zone(s) 1. conditions and forecasts 2. Know what your fire is doing at all times. 3. Base all actions on current and expected fire behaviour of the fire. 4. Identify escape routes and safety zones and make them known. 5. Post lookouts when there is possible danger. 6. Stay alert. Keep calm, Think clearly, act decisively. 7. Maintain prompt communication with your crew/s, your supervisor and adjoining crews. 8. Give clear instructions and ensure they are understood. 9. Maintain control of your crew/s at all times. 10. Fight fire aggressively having provided for safety first. 1. Fire size is unknown (no size up). 2. Unfamiliar vitrivory 3. Safety zones and escape routes not identified. 4. Unfamiliar with weather and local factors influencing fire behaviour. 5. No communications link with crew members or supervisor. 6. Instructions and assignments not clear. 7. Weather is getting hotter, drier and relative humidity dropping 8. Wind increases and/or changes direction. 9. Getting frequent spot fires across the line 10. Working uphill or downwind of a fire 11. Working on a steep slove influencing fire behaviour. 5. No communications link with crew members or Supervisor. 6. Instructions and assignments not clear. 7. Weather is getting hotter, drier and relative humidity dropping 8. Wind increases and/or changes direction. 9. Getting requent spot fires across the line 10. Working uphill or downwind of a fire 11. Working on a steep slove influencing fire behaviour. 12. Working on a steep slove influencing fire behaviour. 13. Can't see main fire 14. In unburnt vegetation 15. Walking through hot ashes 16. Working near machinery 16. Stay alert. Keep calm, Think clearly, and decisively humidity dropping 18. Working on a steep slove influencing fire behaviour. 19. Working uphill or downwind of a fire influencing fire behaviour. 19. Working uphill or downwind of a fire influencing fire behaviour. 19. Working uphill or down	LACES	Fire Orders	Watchouts
	A – Awareness – Anchor Point(s) C – Communication(s) E – Escape Route(s)	 Know what your fire is doing at all times. Base all actions on current and expected fire behaviour of the fire. Identify escape routes and safety zones and make them known. Post lookouts when there is possible danger. Stay alert. Keep calm, Think clearly, act decisively. Maintain prompt communication with your crew/s, your supervisor and adjoining crews. Give clear instructions and ensure they are understood. Maintain control of your crew/s at all times. Fight fire aggressively having provided 	 Unfamiliar territory Safety zones and escape routes not identified. Unfamiliar with weather and local factors influencing fire behaviour. No communications link with crew members or supervisor. Instructions and assignments not clear. Weather is getting hotter, drier and relative humidity dropping Wind increases and/or changes direction. Getting frequent spot fires across the line Working uphill or downwind of a fire Working on a steep slope Working in rugged terrain Can't see main fire In unburnt vegetation Walking through hot ashes Working alone Getting tired Working near power lines Working mear machinery Working with aircraft

4. Specific Safety Points

- Access points into fire controlled. Only those authorized to enter and they must receive a brief and be logged in. Time and access point
- Public access Managed
- Weather fire behaviour monitored for changes and communicated to crews. Risk identified to crews
- All crews to have adequate food, water, PPE to manage fatigue and hydration
- Crews to have identified emergency escape routes and emergency plan in the event of harm. Meeting point identified once evacuated.
- All workers to ensure they are competent for the tasks and risks given.
- Air and ground crews to be isolated from risk areas during operations.
- Potential methane flares (Division Hayton) from Eves Valley Landfill

Prepared by Date:7Feb2019 Time: 1500	
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Medical Plan

RE206

3. First Aid Station		Pho	ne/Radio	<u> </u>	Parame	edics	:
Name	Location		annel	available at Station			
Each Crew must have available one First aid Level 1 Certified	Each crew						
Nelson 91 Ambulance	Forward command post	Wain	nea 1	1 Para	medic an	id 1 EM	Т
			<u> </u>	O'	0,0		
4. Transportation Ambulance Service	Address		one/Radio annel		Parame able with		lance
Ambulance St Johns	Richmond station	111		Yes			
	Motueka/Stoke Nelson/			,			
	0),						
	(2)						
5. Hospitals Hospital Name	Address	Ph	one	<u>Trave</u> Road	l Time Air	Burn Unit	Heli Pad
Nelson Public Emergency	Waimea Rd.	03546	1800	27m	4min	у	У
Hutt Hospital (Burn Unit)		04566	6999	n/a	40min	Υ	У
6. Special Emergency Procedur Emergency Helicopter statione		11"					
8. Reviewed by Safety Advisor	.		Date/Tin	ne			

repared by	Date:7Feb2019	Time: 1500
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1. Pigeon Valley

2. 7Feb2019 0700 to 1900

FIRE WEATHER FORECAST

Attention Tasman Fire CD

FIRE WEATHER FORECAST

For Location Pigeon Valley near Wakefield

Issued by MetService at 08:55am 06-Feb-2019, and valid for the following 9 hours

Wind: East to northeast 15-20km/h gusting 25-30km/h rising to east to southeast 25km/h gusting 40km/h this afternoon.

Precipitation: Remaining drizzle clearing this morning - Less than 1mm.

Temperature: Rising to 20-21C this afternoon.

Humidity: 65% lowering to 40-50% this afternoon.

Outlook for the next 12 hours:

Mailny fine, some cloud about. Temperatures lowering to 10-12C. Humidity increasing to 70-80%. Southeast easing to 10-15km/h.

Outlook for next 6 days:

FWI 14.5 (high fire intensity)

Thursday: Light winds, sunny, dry and max temperature around 21C. Friday: Light winds, sunny, dry and max temperature around 20C. Saturday: Light winds, sunny, dry and max temperature around 22C.

Sunday: Northerlies, partly cloudy, a few light showers and max temperature about 22C.

Monday: Northerlies and rain, max temperature around 21C. Tuesday: Light winds, sunny and max temperature around 23C.

Fire Indices for Wednesday 6th Feb 2019 (8:00am) FFMC 83 (easy Ignition) DMC 95.8 DC 451.1 ISI 2.9 (moderately fast rate) BUI 125.1 (Extreme) 1. Pigeon Valley

2. 7Feb2019 0700 to 1900

Prepared by 1918?

FIRE BEHAVIOUR FORECAST

Fire name: Pigeon Road			Prediction for: 0800-1800 07 Feb-19						
Prepared	by			Time and date issued: 1500 06 Feb 19					
Forecast	no. I				Day Sl	nift	4 TE CO. C.		
Assump	tions;			today's fe	orecast				
Temp	RH	Wind	Slope *	FFMC	DMC	DC	ISI	BUI	FWI
17.1	59.4	10.7	0	86	98.3	463.3	4.2	128.1	19.1

Rates of spread are the equilibrium rate of spread, not the build-up phase, with continuous fuel and similar fuel type.

Fire Behaviour General:

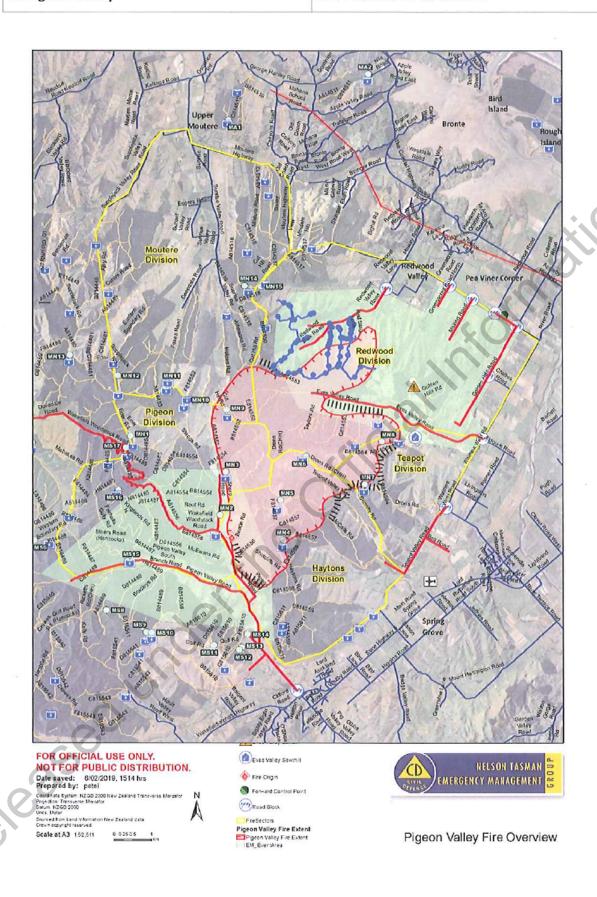
Expected fire behaviour – slope 0°	Forecast worst case – 28°C 45%RH slope 20° 1400-
	1800
Fuel type: Mature Pine – 5m pruned	Fuel type: Mature Pine – 5m pruned
Expect HF rate of spread of 40 m/hr	Expect HF rate of spread of 200 m/hr
HF Intensity 633 kw/m	HF Intensity 2100 kw/m
Flame lengths 1.5	Flame lengths 3 m
Fuel type: Scrub/gorse 2m height	Fuel type: Scrub/ gorse 2m height
Expect HF rate of spread of 926 m/hr	Expect HF rate of spread of 3000 m/hr
HF Intensity >10000 kw/m	HF Intensity >10000 kw/m
Flame lengths 6.7 m	Flame lengths 13 m
Fuel type: Grass-70% GC, 100% cover, 0.1m heig	ht Fuel type: Ungrazed Grass -70% GC, 100% cover,
	0.2m height
Expect HF rate of spread of 187 m/hr	Expect HF rate of spread of 600 m/hr
HF Intensity 296 kw/m	HF Intensity 1050 kW/m
Flame lengths 1.1 m	Flame lengths 2 m
Safety Considerations:	
Head Fire intensity, and flank fire intensity	Head Fire intensity exceed threshold for direct
exceed threshold for direct attack in gorse/	attack in gorse and mature pine fuels, and flank
scrub fuels.	fires in gorse. Flank fires intensity is now too
7	high for ground crews
. Weather conditions for Thursday are predeic	eted to be similar to Wednesday. The NE conditions

. Weather conditions for Thursday are predeicted to be similar to Wednesday. The NE conditions should continue to provide higher relative hunidities and enable a focus on containment activity. Watch for a fall in RH as the afternoon develops and be prepared to adjust your attack strategy.

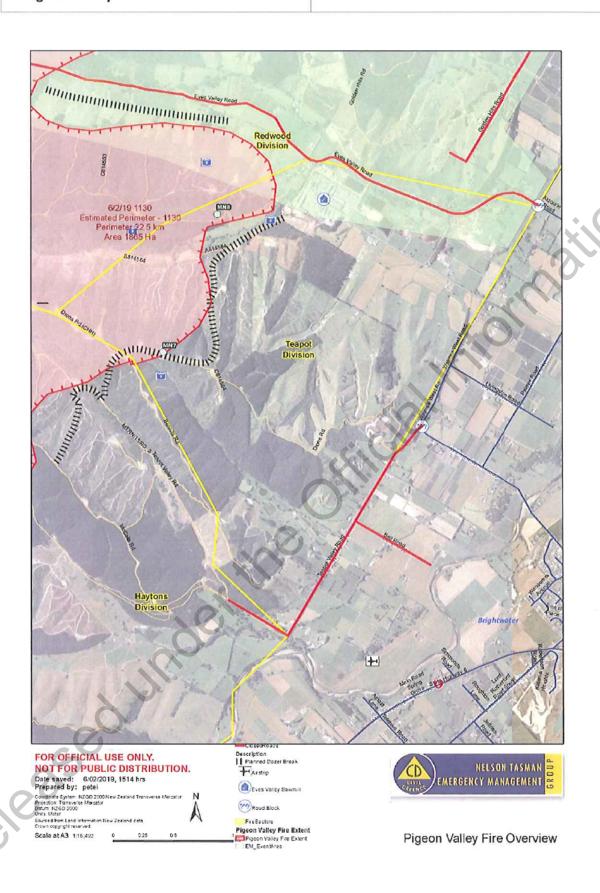
ared by	Date:7Feb2019	Time: 1500
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Released under the Official Information Act

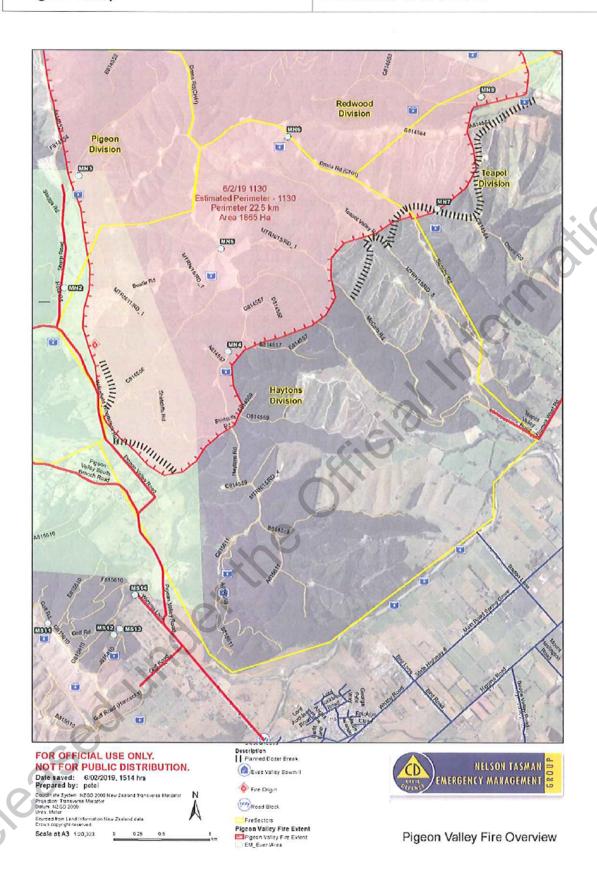
Prepared by Date:7Feb2019 Time: 1500	
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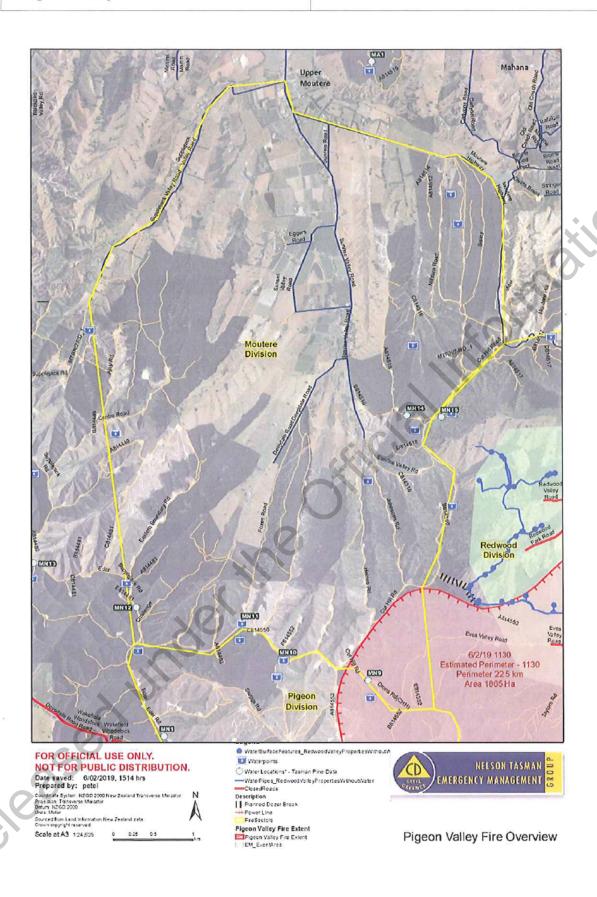
Prepared by	Date:7Feb2019	Time: 1500	



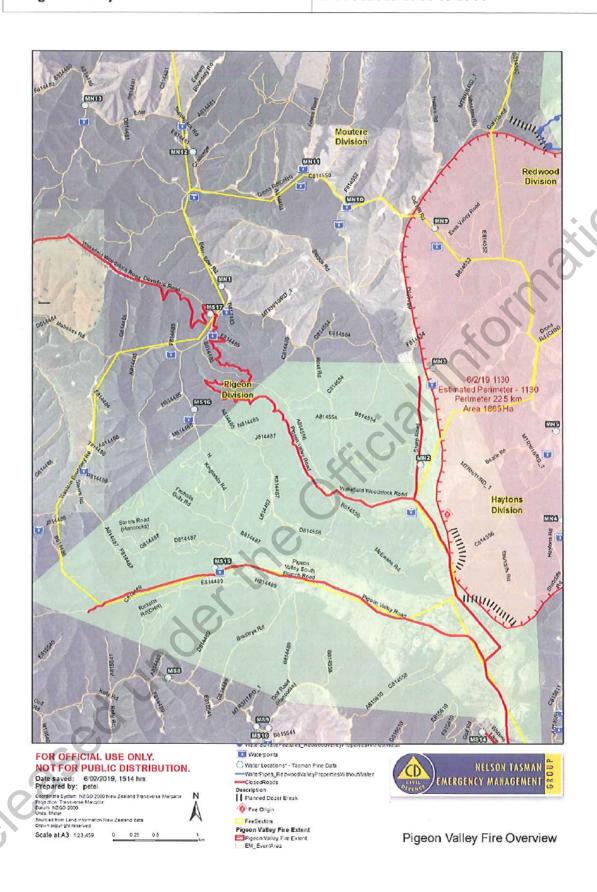
B 11	D . HH 10040	Time: 1500	
Prepared by:	Date:7Feb2019	Time. 1500	



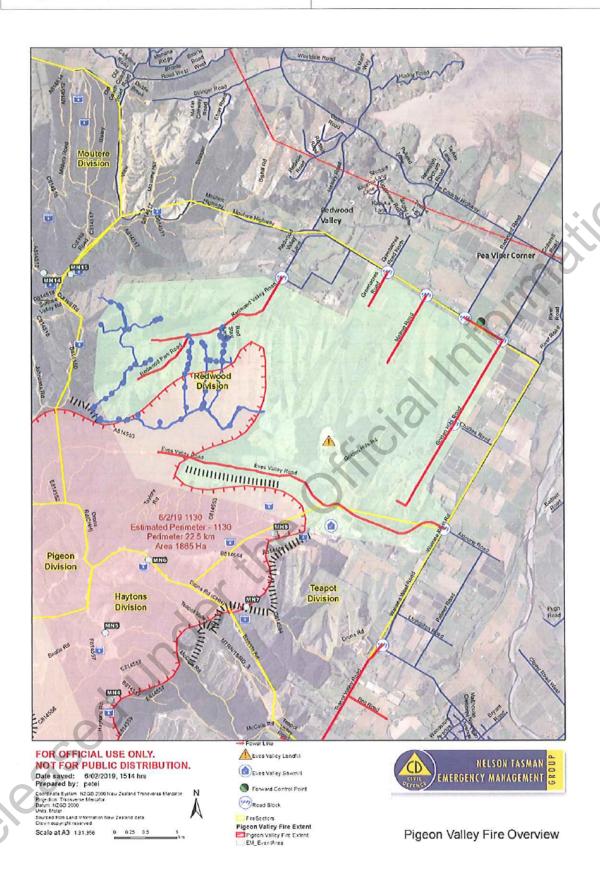
Prepared by:	Date:7Feb2019	Time: 1500	



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Prepared by:		Date:7Feb2019	Time: 1500

1.	Pigeon	Vall	ey
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2. 7Feb2019 0700 to 1900

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Prepared by:		Date:7Feb2019	Time: 1500	

IAP Cover Sheet

INCIDENT ACTION PLAN
The items checked below are included in the incident Action Plan SITUATION REPORT INCIDENT OBJECTIVES ORGANISATIONAL LIST SECTOR ASSIGNMENT DIVISIONAL ASSIGNMENT AIR OPERATIONS PLAN COMMUNICATION PLAN SAFETY PLAN MEDICAL PLAN FIRE MAP WEATHER FORECAST AND MAP FIRE BEHAVIOUR FORECAST FACILITIES LAYOUT PLAN
Approved by Incident Controller: Signed Date/Time



Situation Report

RF201

1. Incident Name	2. Operational Period	SITUATION
Pigeon Valley	Date 6 th Feb 20	REPORT
	Time 16:30	RF201
3. Location	4. Vegetation	5. NZ TM Grid Ref.
Pigeon Rd, Eves Valley	Forest/Scrub/Grass/Slash/	41°22'32.51"S
,Tasman		173° 1'31.81"E

6. Assessment

A large scrub/ forest fire is currently burning estimated to be 1900ha at 12:30 hrs with a perimeter of 22km.

Values at risk are life and property, assets.

Confirmed minor property damaged. Unconfirmed reports of potential property losses in Eves Valley and Redwood Valley.

The Eves Valley sawmill is at risk and fire crews are carrying out structural protection on structures. Telecommunications site on the end of Cooks Rd (near Wakefield) is at risk with northerly wind.

Evacuations have occurred in the

- Eves Valley,
- Golden Hills Rd,
- Redwood Valley Rd
- Mallings Rd
- Greenacres Rd

We have confirmed records of 170 households evacuated.

Evacuation of North and South Pigeon Valley, Teapot Valley, Eves Valley, Redwood Park, Malling Rd and Golden Hills Rd.

Notice of potential evacuations in place for Sunrise Valley (top end), Deepdale Rd (Upper Moutere).

Crews are working on most areas on the ground safely and are progressing fire containment due to more favourable weather conditions.

1. Pigeon Valley

2. 6 Feb2019 0700 to 1900

7. Action taken

14 Helicopters managed fire as requested throughout the day

Firebreaks being located to manage NNE wind change.

More predictable fire behaviour has made the fire ground more accessible for ground crews in particularly on the Northern front. These crews are being tasked with structure protection and controlling the fire when it has spotted onto grassland. Black out work has commenced in this area.

8. Factors

On Tuesday strong winds fanned the forest fire and the fire itself was creating its own extreme fire behaviour. Fire behaviour at night was still very active with highly flammable grass and scrubland carrying the fire. Wednesday morning brought a change in wind direction pushing the fire back into the burnt stand areas and changing fire fronts along with more benign fire behaviour from lower temperatures and higher RH.

Light winds and higher relative humidity have prevailed through the day enabling crews to move into direct attack.

9. Predicted Incident Development

The prevailing weather is supporting fire fighter activities with an increased in containment of existing fire lines. This will continue based on the forecast until unfavourable weather conditions occur. Significant reduction in the rate of spread due to current weather.

10. Prepared by:	Date/Time 16:30 6 th Feb 2019
Authorised by (Incident controller)	

Prepared by:	Date:6 Feb2019	Time: 1500
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Incident Objectives RF202

3. Overall Incident Objectives

Protect life (Public and Residents, firefighters)

Protect Property

Identify and keep stakeholders informed

Ensure Firefighter Safety

Identify and protect Critical Infrastructure

Transition to NIMT using shadow process by 1500hrs

Protect Other Assets (Forests, crop etc)

Prepare for significant wind/weather change

Containment lines constructed

- All divisions maintain existing contament lines
- Maintain patrols within divisional areas
- Any flares ups as they occur.

Contain then Extinguish fire

4. Objectives for specified Operational Period

Protect life (Public and Residents)

Identify and keep stakeholders informed

Allow for Firefighter Safety

Sectorise each divisional area

Identify and protect Critical Infrastructure

Protect property and critical infrastructure be establishing hard containment lines with heavy equipment or Identify opportunities for laying down retardant ahead of wind change to protect property/infrastructure

Establish trigger points with 3hrs lead-time for evacuations

Organisation List

3. Incident Control		Cell Phone	Radio Ch
Incident Controller	(Day)		
Deputy IC	(Night)		
Information Officer			
Safety Officer			(0)
Liaison Officer			
			0
4. Agency Representative		Cell Phone	Radio Ch
Lead Agency	CDEM		
Agency	Police		
Agency	CDEM		
	CDEM Duty Phone		
Agency	FENZ Urban Liason		
5. Planning/Intell Section		Cell Phone	Radio Ch
Planning/Intell Manager			
Situations Unit			
Resources Unit			
Management Support Unit			
Information Unit			
Advance Planning Unit			
Technical Specialists Unit			
0			
6. Logistics Section		Cell Phone	Radio Ch
Logistics Manager			
Supply Unit			
Catering Unit			
Facilities Unit			
Finance Unit			
	•	·	•

Prepared by: Da	ate:6 Feb2019	Time: 1500
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1.	Pigeor	າ Valley

2. 6 Feb2019 0700 to 1900

Communications Unit		
Welfare Unit		
Medical Unit		
Ground Support Unit		.:(0)

7. Operations Section		Cell Phone	Radio Ch
Operations Manager			
Deputy Operations Manager		(0)	
Division Pigeon Commander			
Division Hayton Commander			
Division Teapot Commander	÷ (2	
Division Redwood Commander			
Division Moutere Commander			
Division Two Commander			
Sector E Supervisor			
Sector F Supervisor	W6		
Sector G Supervisor			
Sector H Supervisor			
Air Division Commander			
Air Attack Supervisor			
Air Support Supervisor			
0			
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repared by:	Date:6 Feb2019	Time: 1500
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Sector Assignment

3. Sector	4. Description				5. Divisi	on Assigned
6. Sector Supervisor	Affiliation Cellphone		Radio Cl	1		
7. Resources Assigned t	his period			_	_	£,0),
Resource/Crew	Leader	# Pe	rsons	Transport Required	Drop- off Point/ time	Pickup Point/time
				ζ.(
					>	
			*			
8. Sector Assignment / S	Special Instruction	s		l		
	erine					
9. Sector Communication					Phone	Radio Ch
Division/Division Cmdr						
Air Attack Supervisor Safety Officer						
Salety Officer						

Prepared by:	Date:6 Feb2019	Time: 1500
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3. Pigeon		4.Point of ignition to Dove Saddle				
6. Sector Commander	Affiliation	Cellphone		Radio Ch		
6. Resources Assigned the Sector	nis Period	Supervisor		Crews	Radio Ch	
1 Ground Crew						
1 Smoke chaser						
1 Appliance				, (
					9	
7. Division Assignment/ Protect Life and Propert Keep Residents and Stak change Provide Situation Repor *Laydown Retardant to	y keholders ir t to Situatio	nformed in pre			north easterly wind	
8. Division Communicati	ions			Phone	Radio Ch	
Operations Manage	r					
Air Division Commande	r					

repared by:	Date:6 Feb2019	Time: 1500
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3. Haytons		4. Point of ignition to Teapot Valley Rd end				
6. Sector Commander	Affiliation		Cellphone		Radio Ch	
6. Resources Assigned th	nis Period		1		.40)	
Sector		Supervisor		Crews	Radio Ch	
1 Ground Crew				20		
1 Smoke chaser						
1 Appliance						
				X)	
7. Division Assignment/	Special Inst	ructions	+_(
Protect life and Property Keep Residents and Stal change Provide Situation Repor	keholders in	ons Unit at lea			north easterly wind	
*Laydown Retardant to	protect pro	perties				
100C Lakes Crew	Servi					
8. Division Communicat	ions			Phone	Radio Ch	
Operations Manage	r					
Air Division Commande	r					

repared by:	Date:6 Feb2019	Time: 1500
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3. Teapot		4.Eves Valley Rd to Golden Hills Rd				
6. Sector Commander	Affiliation	Cellphone		Radio Ch		
6. Resources Assigned the Sector	nis Period	Supervisor		Crews	Radio Ch	
1 Ground Crew					~0.	
1 Smoke chaser						
1 Appliance						
Urban crew for Protection Provide Situation Report *Laydown Retardant to	t to Situatio	ns Unit at lea		=	uired	
	×	76				
	A.V					
	Sel					
8. Division Communicat	ions		Pho	one	Radio Ch	
8. Division Communications Manage			Pho	one	Radio Ch	

repared by:	Date:6 Feb2019	Time: 1500
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	4. Golden I	4. Golden Hills Rd to Cut Hill Rd				
6. Sector Commander	Affiliation	ffiliation Cellphone		adio Ch		
6. Resources Assigned this Pe	eriod Superviso	r (Crews	Radio Ch		
2 Ground Crew				~0		
2 Smoke chaser						
1 Appliance			. ~			
-			XO			
change		, () Y				
Property/Infrastructure Prote Contain fire South of Mouter Urban crew for protection of Provide Situation Report to S Build containment lines when *Laydown Retardant to prote	e Highway and We Eves Valley Hazard Situations Unit at le re practical in light	st Golden Hills R dous Landfill ast every two ho fuel areas.	ours			
Contain fire South of Mouter Urban crew for protection of Provide Situation Report to S Build containment lines when	e Highway and We Eves Valley Hazard Situations Unit at le re practical in light	st Golden Hills R dous Landfill ast every two ho fuel areas.	ours ment	Radio Ch		
Contain fire South of Mouter Urban crew for protection of Provide Situation Report to S Build containment lines when *Laydown Retardant to prote	e Highway and We Eves Valley Hazard Situations Unit at le re practical in light	st Golden Hills R dous Landfill east every two ho fuel areas. provide containn	ours ment	Radio Ch		

repared by:	Date:6 Feb2019	Time: 1500
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3. Moutere		4. Cut Hill Rd to Dove Hill Saddle				
6. Sector Commander	Affiliatio	Affiliation Cells			Radio Ch	
	Bruce Forestry				Fire 2	
6. Resources Assigned th	nis Period				.:(0)	
Sector	<u> </u>	Supervisor		Crews	Radio Ch	
1 Ground Crew					20	
1 Smoke chaser						
1 Appliance				, (
				X		
				111,		
Protect Life and Propert Keep Residents and Stalchange Excavator to Identify an 1x Bulldozer for Propert Taylors Excavator to est Sunrise/Heines rd Develop Containment linglan for additional containment to Provide Situation Report *Laydown Retardant to	d Establish y/Infrastro ablish esca nes from (ontainmen t to Situat protect pr	n high volume ucture Protect ape route/act Cut Hill to Ede t lines throug ions Unit at l	e water access ction, sunrise v cess down Sup er Road where gh Dovedale sa east every two	to existing valley, estal oplejack Val safe to do addle. o hours	ponds blish escape routes lley rd and so. Consider and	
8. Division Communication			Pho	one	Radio Ch	
Operations Manage						
Air Division Commande	<u> </u>					

Prepared by:	Date:6 Feb2019	Time: 1500
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Communications Plan

RF205

Assigned To	Function	Channel	Frequency	System
Command		Waimea 1	152.55000 RX	System
Communa		vvaiiiica 1	154.33125 TX	
Division Diggon	Operational	Fire 1	143.82500	
Division Pigeon	Operational			
Division Hayton	Operational	Fire 2	143.78750	
Division Teapot	Operational	Fire 3	140.92500	.0.
Division Redwood	Operational	Fire 1	143.82500	
Division Moutere	Operational	Fire 2	143.78750	
Air Ops -Heli	Operational	Fire 4	140.61250	
Air Ops – Fixed Wing	Operational	Fire 10	140.98750	
Emergency		Waimea 1	152.55000 RX	
		. (154.33125 TX	
FireCom		FireCom		
4. Telephone		3		
Assigned To	Landline	Cell phone	Fax	Commer
Emergency		111		
Regional Command	70,			
Centre (RCC)				
70.				
6. Other (e.g. email, Sa	tphone, etc)			
GIS Mapping	planning.intelliger	nce@nelsontasman	cdem.govt.nz	
ICP	Reception.nelsont	asman@fireemerg	ency.nz	

Prepared by:	Date:6 Feb2019	Time: 1500

Safety Plan

RF209

3. General Safety Points

Everyone is to be signed in and out of the fire ground through the Incident Control Point for both safety check and payment records.

Maintain regular situation reports (containing all relevant information) via line supervisors.

LACES	Fire Orders	Watchouts
L - Lookout(s) A - Awareness - Anchor Point(s) C - Communication(s) E - Escape Route(s) S - Safety Zone(s)	 conditions and forecasts Know what your fire is doing at all times. Base all actions on current and expected fire behaviour of the fire. Identify escape routes and safety zones and make them known. Post lookouts when there is possible danger. Stay alert. Keep calm, Think clearly, act decisively. Maintain prompt communication with your crew/s, your supervisor and adjoining crews. Give clear instructions and ensure they are understood. Maintain control of your crew/s at all times. Fight fire aggressively having provided for safety first. 	 Fire size is unknown (no size up). Unfamiliar territory Safety zones and escape routes not identified. Unfamiliar with weather and local factors influencing fire behaviour. No communications link with crew members or supervisor. Instructions and assignments not clear. Weather is getting hotter, drier and relative humidity dropping Wind increases and/or changes direction. Getting frequent spot fires across the line Working uphill or downwind of a fire Working in rugged terrain Can't see main fire In unburnt vegetation Walking through hot ashes Working alone Getting tired Working near power lines Working with aircraft Working around trees or spars

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- Air and ground crews to be isolated from risk areas during operations.
- Potential methane flares (Division Hayton) from Eves Valley Landfill

Prepared by:	Date:6 Feb2019	Time: 1500	l
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Medical Plan

RF206

3. First Aid Station Name	Location		Phone/Radio Channel		o Paramedics available at Station			
Each Crew must have available one First aid Level 1 Certified	Each crew						P	
Nelson 91 Ambulance	Forward command post	Wain	nea 1	1 Para	ımedic ar	nd 1 EM	T	
					\(\frac{1}{2}\)			
				1				
4. Transportation Ambulance Service	Address		one/Radio nannel		Param able witl		lance	
Ambulance St Johns	Richmond station	111		Yes				
	Motueka/Stoke Nelson/	3						
	0,,							
	0							
5. Hospitals Hospital Name	Address	Ph	one	<u>Trave</u> Road	<u>l Time</u> Air	Burn Unit	Heli Pad	
· ·	Waimea Rd.	03546	1800	27m	4min	у	у	
Hutt Hospital (Burn Unit)		04566	6999	n/a	40min	Y	У	
6. Special Emergency Procedure Emergency Helicopter statione		1"	<u> </u>					
8. Reviewed by Safety Advisor:			Date/Tim	ne				

Prepared by:	Date:6 Feb2019	Time: 1500
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1. Pigeon Valley

2. 6 Feb2019 0700 to 1900

FIRE WEATHER FORECAST

Attention Tasman Fire CD

FIRE WEATHER FORECAST

For Location Pigeon Valley near Wakefield

Issued by MetService at 08:55am 06-Feb-2019, and valid for the following 9 hours

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Precipitation: Remaining drizzle clearing this morning - Less than 1mm.

Temperature: Rising to 20-21C this afternoon.

Humidity: 65% lowering to 40-50% this afternoon.

Outlook for the next 12 hours:

Mailny fine, some cloud about. Temperatures lowering to 10-12C Humidity increasing to 70-80%. Southeast easing to 10-15km/h.

Outlook for next 6 days:

Thursday: Light winds, sunny, dry and max temperature around 21C. Friday: Light winds, sunny, dry and max temperature around 20C. Saturday: Light winds, sunny, dry and max temperature around 22C.

Sunday: Northerlies, partly cloudy, a few light showers and max temperature about 22C.

Monday: Northerlies and rain, max temperature arond 21C. Tuesday: Light winds, sunny and max temperature around 23C.

Fire Indices for Wednesday 6th Feb 2019 (8:00am) FFMC 83 (easy Ignition)

DMC 95.8 DC 451.1

ISI 2.9 (moderately fast rate)

BUI 125.1 (Extreme)

FWI 14.5 (high fire intensity)

FIRE BEHAVIOUR FORECAST

Fire nam	e: Pigeo	n Road			Predic	tion for:	0800-1	.800 07 F	eb-19
Prepared	by:				Time a	nd date	issued	: 1500 06	Feb 19
Forecast	no. 1				Day Sh	nift			
Assumpt	tions:		today's forecast						
Temp	RH	Wind	Slope *	FFMC	DMC	DC	ISI	BUI	FWI
17.1	59.4	10.7	0	86	98.3	463.3	4.2	128.1	19.1

Rates of spread are the equilibrium rate of spread, not the build-up phase, with continuous fuel and similar fuel type.

Fire Behaviour General:

Expected fire beha	aviour – slope 0°	Forecast worst case – 28°C 45%RH slope 20° 1400-			
		1800			
Fuel type: Mature Pin	te – 5m pruned	Fuel type: Mature P	Pine – 5m pruned		
Expect HF rate of spre	ead of 40 m/hr	Expect HF rate of sp	oread of 200 m/hr		
HF Intensity	633 kw/m	HF Intensity	2100 kw/m		
Flame lengths	1.5	Flame lengths	3 m		
Fuel type: Scrub/gors	e 2m height	Fuel type: Scrub/ go	orse 2m height		
Expect HF rate of spre	ead of 926 m/hr	Expect HF rate of sp	oread of 3000 m/hr		
HF Intensity	>10000 kw/m	HF Intensity	>10000 kw/m		
Flame lengths	6.7 m	Flame lengths	13 m		
Fuel type: Grass-70%	Fuel type: Grass-70% GC, 100% cover, 0.1m height		Fuel type: Ungrazed Grass -70% GC, 100% cover,		
		0.2m height			
Expect HF rate of spre	ead of 187 m/hr	Expect HF rate of spread of 600 m/hr			
HF Intensity	296 kw/m	HF Intensity	1050 kW/m		
Flame lengths	1.1 m	Flame lengths	2 m		
Safety Consideration	s:	1			
Head Fire intensity, ar	nd flank fire intensity	Head Fire intensity exceed threshold for direct			
exceed threshold for d	irect attack in gorse/	attack in gorse and mature pine fuels, and flank			
scrub fuels.		fires in gorse. Flank fires intensity is now too			
		high for ground crews			
. Weather conditions f	or Thursday are predeicte	d to be similar to Wed	nesday. The NE conditions		

Prepared by:	Date:6 Feb2019	Time: 1500

should continue to provide higher relative hunidities and enable a focus on containment activity.

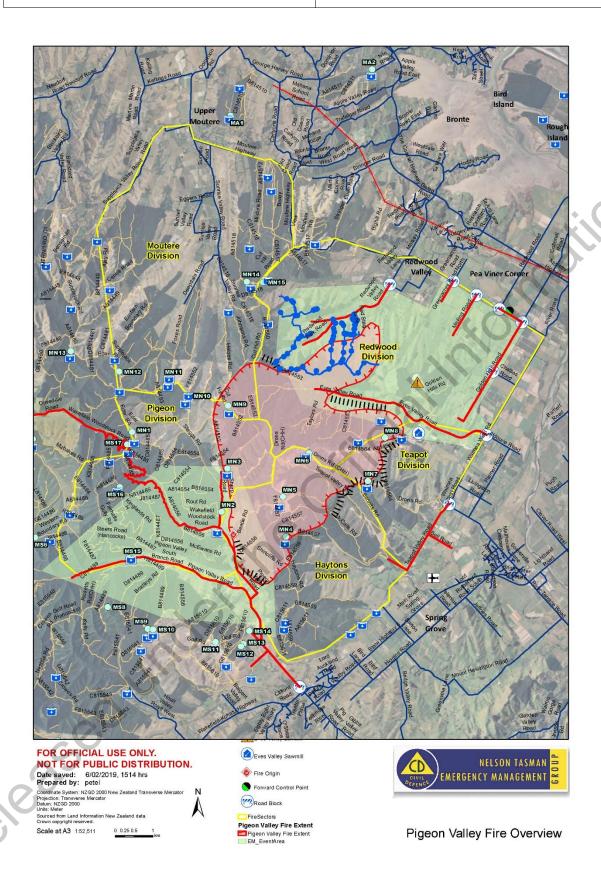
Watch for a fall in RH as the afternoon develops and be prepared to adjust your attack strategy.

2. 6 Feb2019 0700 to 1900

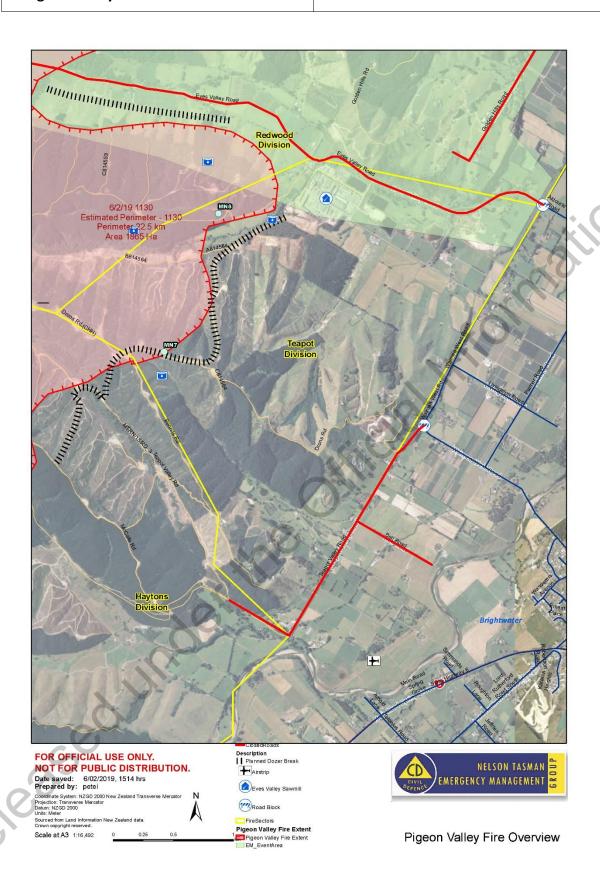
Prepared.

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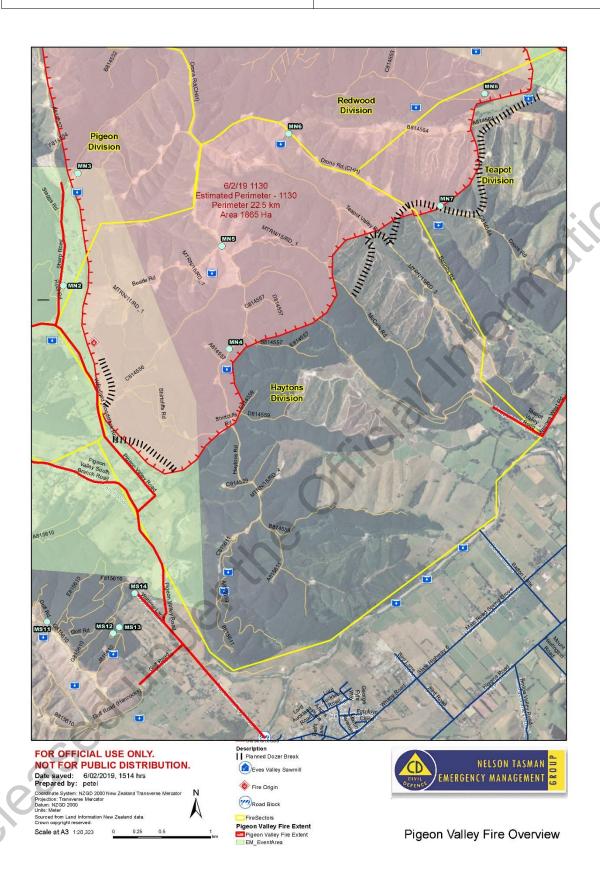
Prepared by:	Date:6 Feb2019	Time: 1500
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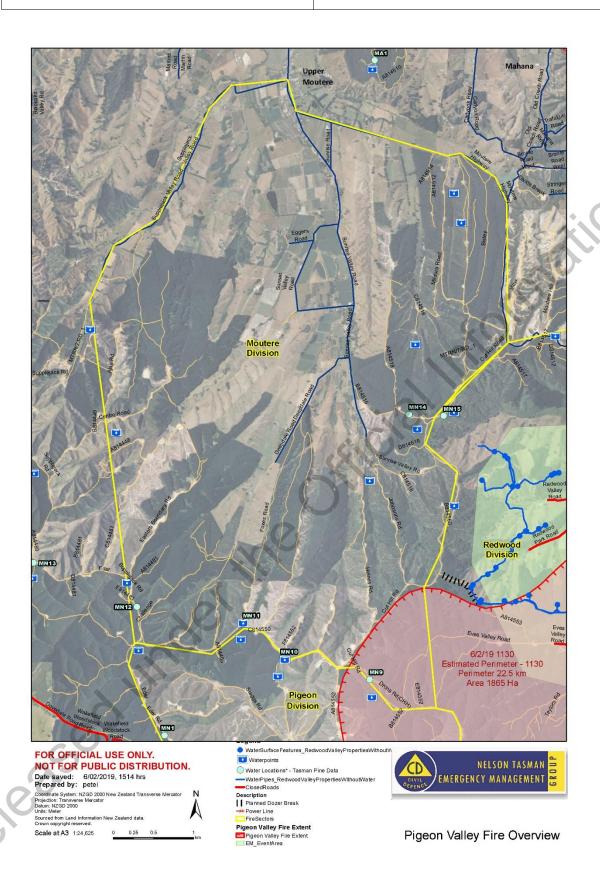
Prepared by:	Date:6 Feb2019	Time: 1500
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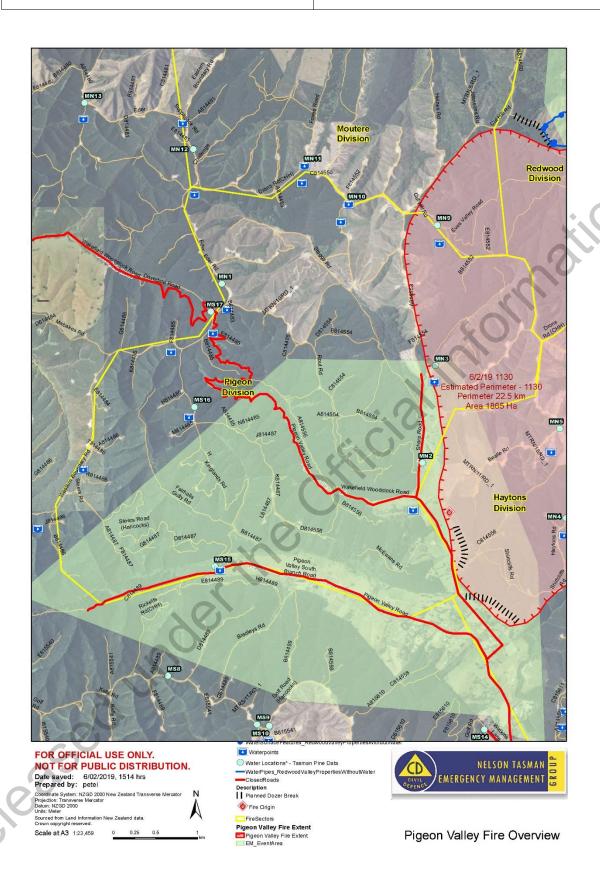
Prepared by:	Date:6 Feb2019	Time: 1500
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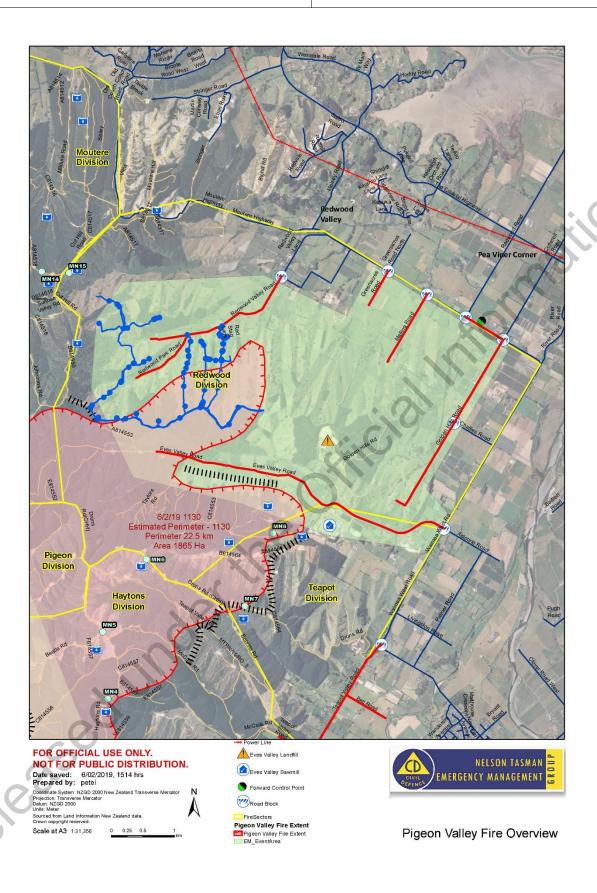
Prepared by:	Date:6 Feb2019	Time: 1500
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Prepared by:	Date:6 Feb2019	Time: 1500
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Prepared by:	Date:6 Feb2019	Time: 1500
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	Incident Name	Operati	onal Period	IAP	COVER SHEET
	Pigeon Valley	Date 8/	2/2019	1	RF199
		Time 07	00 - 1900		
	IN	ICIDEI	NT ACTION	PLAN	
	The items che	cked belov	w are included in the	incident Actio	on Plan
	SITUATION REP	ORT			
	<u> </u> INCIDENT OBJE	CTIVES	S		
	ORGANISATION	NAL LIS	ST .		
	SECTOR ASSIGN	MEN ⁻	Γ		
	DIVISIONAL ASS	SIGNIV	IENT		
	AIR OPERATION	NS PLA	N		
	COMMUNICAT	ION PL	.AN		
	SAFETY PLAN		-		
	☐ MEDICAL PLAN		<i>*</i> . C		
	FIRE MAP				
	☐ WEATHER FORI	ECAST	AND MAP		
	FIRE BEHAVIOU	JR FOR	ECAST		
	OVERVIEW MA	PS AN	D DOWNLOA	ND QR CC	DES
	DUBLIC INFORM	OITAN	N & MEDIA		
	Approved by Incident Cont	troller:	Signed		Date/Time
	Name				2000 7/2/19
	0		**		
20		HAKARATONGA I	FIR EMERGEN		



1. Incident Name	2. Operational Period	SITUATION
Pigeon Valley	Date 8/2/2019	REPORT
	Time 0700 - 1900	RF201
3. Location	4. Vegetation	5. NZ Topo50 Grid Ref.
Pigeon Rd, Eves Valley,	Forest/Scrub/Grass/Slash/	41°22'32.51"S
Tasman	Other:	173° 1'31.81"E

6. Assessment

A large scrub/ forest fire is currently burning estimated to be 1874ha as at 1900hrs on 7th Feb with a This afternoon we have experienced a breakout in an area where the boundary hadn't been secured approximately 170ha of heavy fuels (pine forest).

25 residences on the boundary of this breakout have been evacuated Values at risk are life, property.

Telecommunications site on the end of Cooks Rd (near Wakefield) is at risk with northerly wind. Evacuations are still in place for the following areas while operations are still active.

• Eves Valley, Golden Hills Rd, Redwood Valley Rd, Tea Pot Valley, Bartons Lane

7. Action taken

Resources deployed include 6 bull dozers, 7 excavators, 6 tankers, 15 rural appliances, 9 urban appliances, 3 Defence Force appliances and 22 Helicopters are currently working today as well as two fixed wings. A lot of this resource is now targeting the breakout area.

Due to the nature of the terrain and vegetation helicopter resources are targeting this area, though control is proving difficult with the current weather conditions, extreme dryness of the forest/ scrub fuels and the resulting high fire intensity.

Changes in fuel as the fire moves to pasture and to the contingency fire-breaking (on the northern end) will assist in suppressing this breakout.

Black out work, machine fire breaking and hot spot targeting is continuing on the other parts of the fire ground.

For night shift there will be 11 crew, 5 bull dozers, 5 excavators, 4 tankers, 3 rural appliances and 6 urban appliances. No Defence Force resources.

8. Factors,

Extreme fire conditions. Limited water supply. Changeable wind conditions. Wind conditions the current breakout fire is creating. Sustained 20km winds gusting to 30km/hr, warm temperatures and lower humidity.

9. Predicted Incident Development

Weather conditions and fuel continuity will have a large influence on the management of the current breakout.

6pm Today – 6am Friday Rainfall: None expected.

Sustained wind: NNE 10 km/h or less through to about 10 pm. After 10 pm, winds shift to SSW, remaining less than 10 km/h through to 6 am.

Wind gusts: Gusts up to 30 km/h possible through to about 8 pm. Thereafter, gusts overnight will remain 20 km/h or less.

Temperature: Around 19°C at 6pm, decreasing to 11-12°C by 6am Friday.

Humidity: Near 45% at 6pm, increasing to 70-75% by 6 am Friday.

Efforts to suppress the fire are continuing but proving to be challenging for helicopters due to the height of the vegetation (e.g. trees and grass) and the height of the flames. The effectiveness of our efforts will improve as the fire heads towards the flatter grassland. We are also anticipating that the wind will decrease during the night.

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10. Pre	epared by:		Date/Time:	
Author	rised by	(Incident Controller)	1900 7 th Feb 2019	

1. Incident Name	2. Operational Period	INCIDENT
Pigeon Valley	Date 8/2/2019	OBJECTIVES
	Time 0700 - 1900	RF202

3. Overall Incident Objectives

- 1. Ensure the safety of responders and public at all times during the incident
- 2. Minimise the impact on structures, infrastructure, assets and values during the incident
- 3. Minimise impact on environment, culture and historic values during the incident
- 4. Ensure communication and information, liaison with stakeholders/ community/ public/ government bodies and affected parties is timely, meets standards and requirements at all times during the incident
- 5. Report on costs on a daily basis by 1800
- 6. Return community to homes/normal life as soon as practicable
- 7. Investigate cause (including protect initial ignition site and evidence)

4. Strategies to meet objectives

- 1. Create a safety plan and safety briefing for all staff and contractors. Monitor fire behaviour and establish triggers and cordons for withdrawals and evacuation.
- 2. Use media, trusted community channels and stakeholders to establish communications and engagements. Establish regular briefings and updates.
- 3. Identify critical infrastructure, assets and values. Structures have structure protection crews and technical liaison where required. Water courses and dip sites identified with environmental protection.
- 4. Cultural/Historical/environmental values identified on incident ground (Actual and projected)
- 5. Assign fire investigation to determine cause
- 6. Financial reporting established and continued
- 7. Create a recovery plan with community and stakeholders to assist post incident.
 - Consider operation delivery to minimise impacts in support of the recovery plan.

5. Prepa	red by:	Date/Time: 1900 7/2/19
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Time 0700 - 1900 3. Incident Control Incident Controller Deputy IC Information Officer Safety Officer NMIT) Radio Ch NMIT) NMIT)		1. Incident Name	2. Operational Period		ORGANISATION
Incident Controller Deputy IC Information Officer Safety Officer NMIT)					ASSIGNMENT RF203
Deputy IC Information Officer Safety Officer NMIT)		3. Incident Control		Phone	Radio Ch
Information Officer Safety Officer NMIT)		Incident Controller	(NIMT)		
Safety Officer NMIT)		Deputy IC	NMIT)		
		Information Officer			
Lipicon Officor		Safety Officer	NMIT)		
Liaison onicei		Liaison Officer			;(O)
4. Agency Representative Phone Radio Ch		4. Agency Representative		Phone	Radio Ch
Lead Agency FENZ PRFO		Lead Agency	FENZ PRFO		*
Agency Police Police		Agency	Police		
Agency		Agency			
Agency CDEM CDEM		Agency			
Agency CDEM Duty Phone		Agency	CDEM Duty Phone		
Agency FENZ Urban Liason		Agency	FENZ Urban Liason		
5. Planning/Intell Section Phone Radio Ch		5. Planning/Intell Section		Phone	Radio Ch
Planning/Intell Manager		Planning/Intell Manager			
Situations Unit		Situations Unit			
(FBAN)					
(Observer)			\ <u>-</u>		
(Intel)		76	<u> </u>		
(GIS)		,70,	·		
(GIS)					
(Observer)				_	
(Observer)					
Resources Unit (Fact)		Resources Unit	-		
(EoC)		2.0	_	_	
Check in)					
Management Support Unit	20	Management Support Unit			
Information Unit			<u> </u>		
Advance Planning Unit			_		
Technical Specialists Unit			-		

6. Logistics Section		Phone	Radio Ch	
Logistics Manager	(NMIT)			
	(Day)			
	Night)			
Supply Unit				
Catering Unit				
Facilities Unit				
Finance Unit			:\O'	
Communications Unit				
Medical Unit				
		έO,		
7. Operations Section		Phone	Radio Ch	
Operations Manager				
Deputy Operations Manager				
Division One Commander	U,			
Sector A Supervisor	0,			
Sector B Supervisor				
Sector C Supervisor				
Sector D Supervisor				
Division Two Commander				
Sector E Supervisor				
Sector F Supervisor				
Sector G Supervisor				
Sector H Supervisor				
Air Division Commander	(NMIT)			
Air Attack Supervisor				
Air Support Supervisor				
8. Prepared by:		Date/Time: 1900 7/2/19		

	1. Incident Name Pigeon Valley	2. Operational Period Date 8/2/2019 Time 0700 – 1900			DIVISION ASSIGNMENT RF204a				
	3. Division	4. Description					111 20 10		
	Alpha	Point of ignition to Dove Saddle on Eder Rd							
	5. Division Commander	Affiliation		Phone			Radio Ch		
							Command: Fire		
							Crew	: Simplex	
	6. Resources Assigned this Period Sector		Supervisor		Crews Radio		Radio Ch		
	Bulldozer D7 Excavator 20T		TLC						
			TLC						
	Tasman Smoke Chaser + 3px	(<u>Ç</u> (&O)			
	Hira Smoke Chaser + 3px Hira 5575 +4px Doc Motukea 3px								
	DOC Takaka 8px								
	Greymouth 4px			<u> </u>					
	7. Division Assignment/Special Instructions Ground Crews: Blacking out to 30 metres in to the forest in susscive 10 metre increments along the length of the perimeter where safe to do so. Provide 2 hourly SITREP to FCP by COMMS Channel OPS2 or Mobile. Join Comms Facebook Group "Pigeon Valley – INTERNAL COMMS" and contribute imagery and video throughout day. Also view images and video collected by aerial ops during day.								
	 Heavy Equipment – Widen the break from the head of Sharps Valley up the ridge to connect to Cut Hill Rd Bryants using fellerbunchers to remove large trees on the east side of Cut hill Rd (already on site). Strength Eder road fire break from Cuthill Rd to Route Rd and down Route Rd to North pigeon Valley Rd. 								
	Helicopters: Support ground) with requirements 8. Division Communications		as requ	ired and	divisional cor	nmanders to		r attack (
Operations Manager						T TIOTIE		Fire 1/Cellphone	
00	Air Division Commander							Fire 4/Cellphone	
	9. Prepared By:					Date/Time	1900	7/2/19	