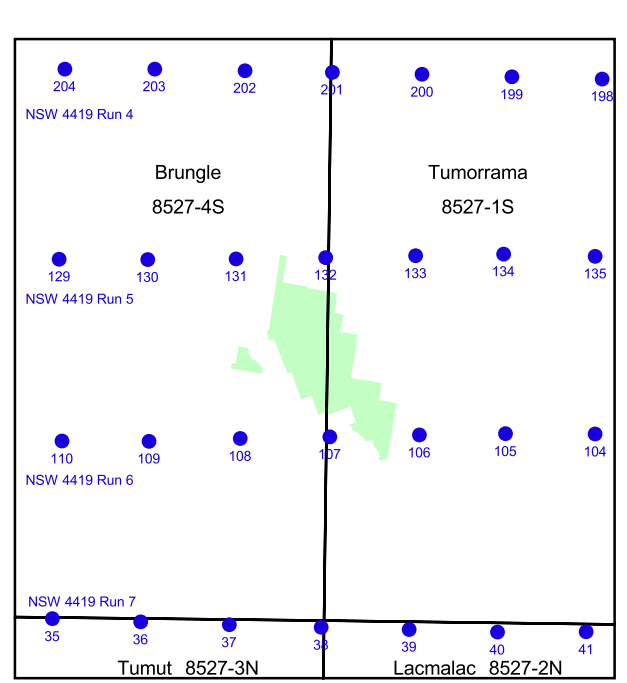
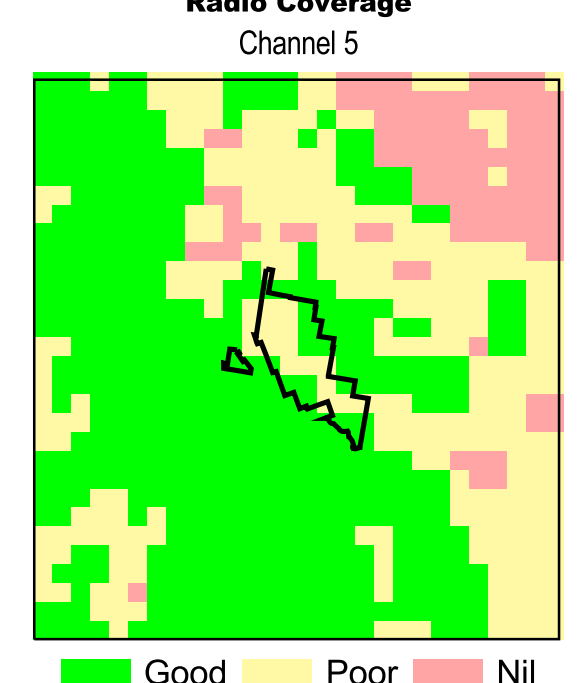


- Assembly Area
- Base Camp
- Control Centre
- Staging Area
- Airbase
- Water Point - Helicopter
- Water Point - Vehicle
- Helipad
- Refuge Area
- Escape Route
- Farm Dam
- Spotlight
- Survey Landmark
- Gate
- Locked Gate
- Homestead Complex
- Asset
- Threatened Fauna
- Threatened Flora
- Asset Buffer Zone
- BFCC Standard Trail
 - Primary
 - Secondary
 - Dormant
- Management Trail
 - Cat 1
 - Cat 2
 - Cat 7
 - Cat 9
- Other Roads
 - Sealed Road
 - Main Unsealed Road
 - Minor Unsealed Road
 - Trail
 - Dormant Trail
- Walking Track
- Railway
- Landing Ground
- Gas Pipe Line
- Major Power Line (With Voltage)
- Minor Power Line
- State Border
- 100m Contour
- 20m Contour
- Cadastral
- River
- Creek
- Drainage Line
- Waterbody
- DEC Estate - HMZ1
- DEC Estate - HMZ2
- Other DEC Estate
- Crown Land
- State Forest
- Timber Plantation
- Wooded Area
- Karst Area
- Recently Burnt Area

Air Photo and Map Index



Radio Coverage



OPERATIONAL GUIDELINES	
ACTIVITY	OPERATIONAL GUIDELINES
Command, control and firefighting arrangements Fire Response (FMM 4.1 & 4.2)	<ul style="list-style-type: none"> First fire personnel of any agency on site may assume control of the fire, but must ensure the relevant land management agency is promptly notified. On arrival of other fire agencies, the initial incident controller will consult with the other agencies on the ongoing command, control and incident management team requirements as per the relevant BFMC Plan of Operations. The use of earth-moving equipment and aerial suppression must be approved by a senior NPWS officer.
Aircraft Operations (NPWS FMM 4.4 & 4.8)	<ul style="list-style-type: none"> Pilots must be briefed on the location and type of powerlines within incident operation area. Exclude the construction of new helipads. Only use identified helipads on this operations map. Aerial water bombing and aerial ignitions are permissible in this reserve, however can only be used and commenced on the instruction of the incident controller or senior NPWS officer. Avoid directly water bombing identified Cultural Heritage features. Water bombing operations should support containment operations by aggressively attacking flanks, hotspots, spot-overs and head fires where required. The use of water bombing aircraft without the support of ground based suppression crews should be limited to specific circumstances as determined by the senior NPWS officer. Ground crews must be briefed and alerted to aerial ignition and water bombing operations.
Back burning (NPWS FMM 4.8)	<ul style="list-style-type: none"> All backburning operations must be planned and approved by a senior NPWS officer. Backburning operations are to minimise the potential run of introduced fire. All crews must be briefed on the sequence and safety precautions of the operation. Generally, burning should commence when the humidity rises in late afternoon or early evening and spotting is minimal. With a low FDI, burning may be safely undertaken during the day. Where practicable, clear 1m radius around dead and fibrous barked trees adjacent to containment lines prior to burning, or wet down these trees as part of the backburn ignition preparation.
Control lines (NPWS FMM 3.9)	<ul style="list-style-type: none"> Existing constructed or natural fire control advantages should be used, wherever possible, to contain bushfires. Trails that comply with the Bush Fire Coordinating Committee Policy 1/03 "Fire Trails" are identified (where they exist) on this operations map. As a minimum, management trails identified on the operations map are maintained to a standard to provide access to Category 9, unless otherwise indicated.
Earth moving machinery (NPWS FMM 4.3)	<ul style="list-style-type: none"> No earthmoving equipment (dozers) is to be used in this reserve.
Fire suppression chemicals (NPWS FMM 4.9)	<ul style="list-style-type: none"> Avoid the use of wetting and foaming agents (surfactants) in suppression tactics. Exclude the use of retardants within this reserve.
Post fire rehabilitation (NPWS FMM 5.1)	<ul style="list-style-type: none"> The rehabilitation process should be addressed during the incident, in the Incident Action Plan.
Smoke management (NPWS FMM 3.4)	<ul style="list-style-type: none"> The potential impacts of smoke and possible mitigation tactics must be considered when planning for wildfire suppression and prescribed burning operations. Where smoke has the potential to be a hazard on local roads or highways, the police, RTA, local shire council and other media must be notified. Monitor local roads and access for smoke hazards and install road safety/warning signs where necessary. Traffic control must comply with RTA Traffic Control at Worksites Manual requirements.
Transmission lines (Powerlines)	<ul style="list-style-type: none"> May cause danger to ground personnel through smoke conduction of electricity through the air Contact the relevant authority to turn the power off prior to back burning operations under lines
Water supplies	<ul style="list-style-type: none"> Access to water supplies on private property will be negotiated prior to use, except according to S44 provisions Arrangements may be made to replace water used after the fire, as required.

FIRE SEASON INFORMATION

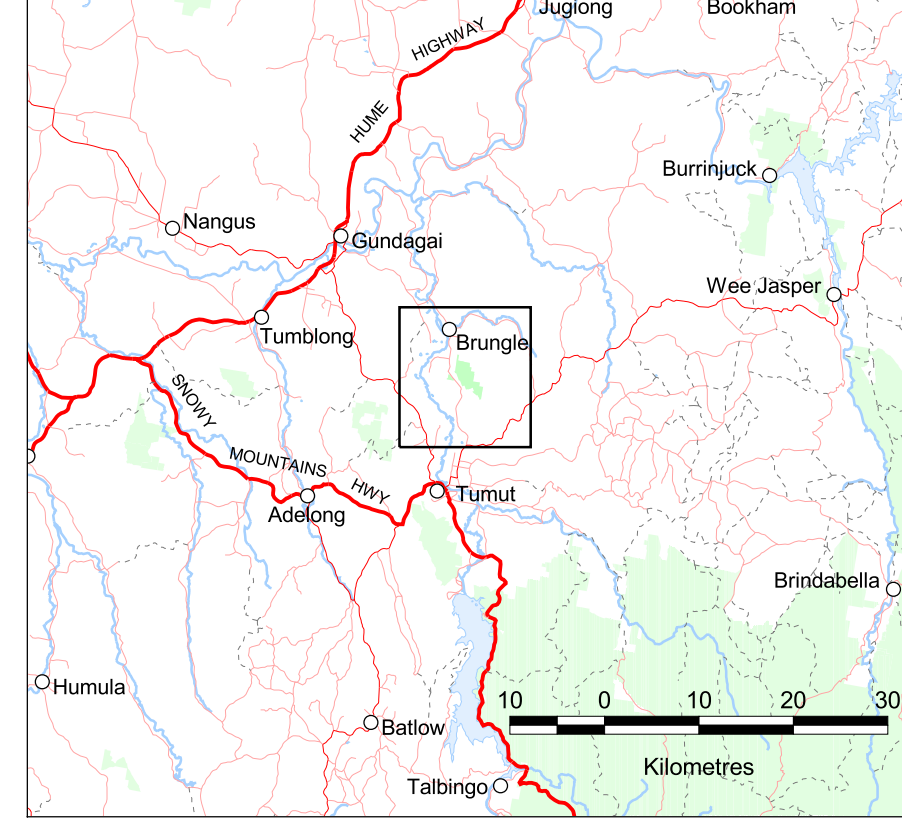
The critical fire season occurs between January and March, when the weather conditions and potential for fire events is at its highest. Particular care and monitoring is required during periods of prolonged drought when strong negative Southern Oscillation indices precede the fire season, and when low pressure systems dominate central and southern Australia during and leading up to the fire season. During these times fires may exhibit high intensity behaviour in windy conditions and exceed current rate of spread indices. Periods of extended drought, may give rise to higher potential bushfire behaviour during winter.

Any proposed prescribed burning should be undertaken before late autumn precipitation occurs. The least likely period that will impact fauna is during prescribed burning between the end of March and early May, depending on weather conditions (past, present and forecast). Prescribed fire should only be implemented when conditions provide low intensity and patchy burning coverage. Any fire in spring should be avoided. During the fire season prevailing winds during the day are from the west and northwest. All ignitions under a SW influence should be managed with the potential for banks to become heads, as fronts pass through, and W to NW wind trends return.

SUPPRESSION STRATEGIES	
FFDI	OPERATIONAL GUIDELINES
Current Low - Mod & Forecast Low - Mod	<ul style="list-style-type: none"> Undertake direct, parallel or indirect attack along existing containment lines. Where practicable, consider maximising the fire area in accordance with the requirements of any proposed prescribed burns in the fire planning strategy and Bushfire Management Committee agreements.
Current Low - Mod & Forecast High or >	<ul style="list-style-type: none"> In order to minimise the fire area and secure the flanks as soon as possible, undertake direct, parallel or indirect attack along the closest containment lines. Pay particular attention to the flank on the next predicted down wind side. Consider fall back containment strategies.
Current High or > & Forecast High or >	<ul style="list-style-type: none"> Undertake indirect attack along existing or newly constructed containment lines. Secure and deepen containment lines along the next predicted down wind side of the fire. Allow sufficient time to secure containment lines to avoid wasted effort and potential failure. Prepare and implement fall back containment strategies.
Fire Advantages	<ul style="list-style-type: none"> Streams in the reserve are intermittent and should not be regarded as passive control lines under normal conditions Reserve trails may function as fire advantages

Note: Always ensure there is sufficient time to secure containment lines prior to the fire impacting upon them.

Location



South West Slopes Region

Mudjarn Nature Reserve

Fire Operations Map

2006

Version: June 2006 ISBN: 1 74137 262 8 DEC: 2005/108

This Map should be used in conjunction with air photos and ground reconnaissance during incidents and the development of incident action plans.

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This map is based on Land and Property Information Standard 1:25000 Topographic Map Series. Reproduced with permission of Land and Property Information.

LIFE & PROPERTY GUIDELINES	
Visitor safety (NPWS FMM 3.8)	<ul style="list-style-type: none"> Where possible, visitors in or adjacent to the fire ground will not be permitted unless authorised by the Incident Controller. The presence of visitors should be reported to the incident controller immediately who will arrange for an evacuation if necessary. "Park closed" or "smoke hazard" signs must be placed in areas used by visitors prior to undertaking prescribed burning. Notify media that wildfire or prescribed fire exists within the reserve/area.
Asset Protection (FMM 4.10)	There are no recorded assets within the reserve.

THE ENTIRE AREA IS CULTURALLY SIGNIFICANT TO THE LOCAL ABORIGINAL COMMUNITY WHO HAVE A SPIRITUAL LINK WITH THIS LAND.

HERITAGE MANAGEMENT ZONE GUIDELINES	
ZONE	GUIDELINES (WITHIN THE ZONE)
HMZ 1 (High Priority)	<ul style="list-style-type: none"> Where possible, contain fires to small areas and lower potential intensity and manage to produce mosaic burn patterns. Exclude the use of earth moving machines. Exclude the use of surfactants/retardants. Protect mature trees and avoid felling large and hollow bearing trees during "mop up" activities. Prescribed fire should be avoided, unless deemed necessary for ecological purposes.
HMZ 2	<ul style="list-style-type: none"> Where possible, minimise the potential for fire to spread and or contain to existing control lines. Where wildfires occur in unburned areas programmed for prescribed burning (ie. SFMZ), prescribed fire or other fuel manipulation program may be applied to the area to reduce potential risks. Manage fire to produce mosaic (patchy) burn patterns (where weather conditions permit). Earthmoving equipment may be used to contain fire within DEC policy guidelines. Retardants and foams may be used to suppress fire, however minimise use within 50m of water courses and dams.

CULTURAL HERITAGE GUIDELINES

THEME	GUIDELINES
Aboriginal & Historic Heritage (FMM 4.11)	<ul style="list-style-type: none"> Brief personnel involved in control line construction and vehicle based fire suppression operations on site locations and the required management strategies for site protection, include in Incident Action Plans. Liaise with the relevant heritage officer and or representative where considered necessary.
Scarred trees 1	<ul style="list-style-type: none"> Clear fuels, with hand tools, from tree base and/or form base to 3m up tree trunk. Do not clear or fell trees. Where possible, avoid new trail construction within 20m of trees and construct trails on the advancing fire side of the tree. Prescribed burn or back burning operations should minimise the potential threat of radiant heat on the tree.
Rock arrangements, rock engravings, rock rings, etc 2	<ul style="list-style-type: none"> Avoid new trail construction or ground disturbance within close proximity of site. Where possible, ensure site is protected by constructing trails or hand tool lines on the advancing fire side. Clear, by hand, excess fuels from the site. Avoid direct attack methods (including aerial water bombing) at known sites. Surfactants and retardants in aerial line drops may be used adjacent to, but not directly on sites. Prescribed burn or back burning operations should protect sites from the potential threat of radiant heat and smoke on sites.
Art sites and overhangs 3	<ul style="list-style-type: none"> Avoid new trail construction or ground disturbance within close proximity of site. Where practicable, ensure site is protected by constructing trails or hand tool lines on the advancing fire side. Clear, by hand (whipper snippers, brush cutters, mowers), excess fuels from the site. Avoid direct attack methods (including aerial water bombing), use of foams and or retardants at known sites. Use of foam or aerial line drops may be used adjacent to, but not directly on sites. Prescribed burn or back burning operations should protect sites from the potential threat of radiant heat and smoke (carbon deposition) on sites.
Open camp sites 4	<ul style="list-style-type: none"> Avoid ground disturbance at or within close proximity of the site (30m). Earthmoving blades should be raised in these locations to avoid damage to sites on trails, unless a "Consent to Destroy" has been obtained. Avoid direct attack methods (including aerial water bombing) at known sites. Use of foam or aerial line drops may be used adjacent to, but not directly on sites.
Historic Heritage 5	<ul style="list-style-type: none"> The mountain peak known as Pine Mountain is recorded as a Historic Site in HIMS. Other sites recorded include, mine shafts (horizontal and vertical), mullock heaps, test pits and timber post and rail fences. Avoid ground disturbance at or within close proximity of the sites (50m). Avoid direct attack methods (including aerial water bombing) at known sites. Use of foam or aerial line drops may be used adjacent to, but not directly on sites.

FMM - contains extracts from NSW National Parks and Wildlife Service Fire Management Manual (December 2004). For the purposes of public exhibition, some information will not be displayed due to obligations under the Freedom of Information Act 1989, Privacy and Personal Information Protection Act 1998, regulations and amendments, and Memorandum of Understanding between the Department of Environment and Conservation and Aboriginal Communities.

RADIO COMMUNICATIONS				
AGENCY/RESOURCE	CHANNEL	MRX FREQ.	MTX FREQ.	NOTES
NPWS (VHF)	5	MRX 77.7000	MTX 80.2000	Big Talbingo Mountain - Southern section has the best coverage.
NPWS (VHF) FIRE GROUND	17	82.3875	82.3875	Channel to be determined by ground crews, crew leaders, Division commanders etc. Any changes will be noted in IAP.
	18	79.8375	79.8375	
	19	79.9625	79.9625	
RFS (PMR)	65	MRX 415.0625	MTX 405.6125	Werboloola - primary channel.
	78	MRX 418.9625	MTX 409.5125	Mount Adrah - secondary channel.
RFS (UHF) CB	10	27.075 Mhz		
	6	27.025 Mhz		
AIRCRAFT COMMUNICATIONS (Fire Communication Traffic Advisory Frequencies F-CTAF)	119.10 Mhz	State wide		Unauthorised and inappropriate use of Aviation Channels is a criminal offence
	120.80 Mhz	State wide		
	122.80 Mhz	State wide		
	123.45 Mhz	Pilots (only chat) "The Numbers" channel		
	128.70 Mhz	State wide		
	132.75 Mhz	State wide		

CONTACT PHONE NUMBERS

NATIONAL PARKS AND WILDLIFE SERVICE	RURAL FIRE SERVICE	EMERGENCY SERVICES	0 0 0
SWIS Tumut Office (BH)	6947 7000	Tumult Fire Control Centre (Ph)	6941 2222
SWIS Tumut Office Fax	6941 4170	(Fax)	6941 2220
Incident Answering Service (AH)	1800 629 104	Duty Officer	6941 2229
COUNCILS			
Tumult Council	6941 2555	Gundagai Fire Control Centre (Ph)	6944 4011
Tumult Brungle ALC	6947 4518	Duty Officer	6944 4013
NEIGHBOUR INFORMATION			
Consult SWIS Region databases	State Operations (24 Hr)	8741 5400	6949 5999

Mudjarn Nature Reserve - Waypoints

Name	Ref No	Description	Easting	Northing	Longitude	Latitude
Blind Creek North	H1	Waterpoint - Helicopter	614570	6106520	148°15' 29"	35°10' 40"
Blind Creek South	H2	Waterpoint - Helicopter	614240	6105850	148°15' 17"	35°10' 01"
Bonnie Doon		Staging Area	612260	6107430	148°13' 58"	35°10' 11"
Nindethana		Staging Area	616620	6101580	148°16' 53"	35°13' 19"
Woolbar Dam 1		Waterpoint - Vehicle	612070	6107110	148°14' 26"	35°10' 21"
Woolbar Dam 2		Waterpoint - Vehicle	613480	6106680	148°14' 46"	35°10' 35"

Projection: AMG 66 - Zone 55
Grid Numbers are given in full at the South West corner of the map.
NOTE: THIS MAP IS NOT GDA COMPLIANT