



COMMENT ON FIRE BEHAVIOUR

Map 4 represents the potential (uphill) fire behaviour for an average January bushfire in 2007, fire behaviour will differ markedly with different climatic conditions. Management for worst-case conditions focuses on property protection and effective pre-fire measures will focus on maintenance of property Asset Protection Zones along with general property maintenance.

Average summer fires in the reserve are expected to be mild enough to be contained with initial direct attack, although fire behaviour in the western facing gullies is likely to be more intense.

Paupong Nature Reserve and the bushland to the south as far as the Snowy River forms part of a major historic fire corridor burnt through under extreme weather and drought conditions in the fires of 2003 and 1939, and hence has high strategic value for the protection of land to the east. Mitigation of such events through regular burning will be most effective where the north and west facing slopes are left unburnt and readily available for backburns ahead of an actual fire front.

CONTACT NUMBERS

NATIONAL PARKS AND WILDLIFE SERVICE		RURAL FIRE SERVICE	
Jindabyne Office	6450 5555	State Operations	8845 3501 (24hr)
Operations Room	6450 5573	Berridale Fire Control Centre	6450 5100
Senior Ranger Fire - Ian Dicker	6450 5576		
mobile	0427 700 168		
Technical Officer Fire - Phil Zylstra	6450 5595		
mobile	0428 462 880		
Area Manager - Pam O'Brien	6450 5575		
Ranger - Steve Wright	6450 5577		
mobile	0427 703 494		
After hours			
Incident Answering Service	1800 629 104		
		EMERGENCY SERVICES	
		POLICE	6452 0099
		Cooma	
		AMBULANCE	131 233
		STATE EMERGENCY SERVICE	6452 3763
		Cooma	
		RADIO COMMUNICATIONS	
		NPWS VHF channels available will be channels 1, 7 or 18. Reception will be marginal on all channels	
		UHF RFS PMR Channel 4	

**Snowy Mountains Region
Paupong Nature Reserve
Fire Management Strategy
2005**

Version: May 2005

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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FIRE MANAGEMENT OPERATIONAL GUIDELINES

Area/Resource	Operational Guidelines
Command and Control	<p>If a ground crew from a non-responsible agency confirms the fire location, an initial attack may be mounted. Contact must then be made with the National Parks and Wildlife Service as soon as possible.</p> <p>Attack methods must be consistent with the service's usual practices</p> <p>If responsibility is unconfirmed, or is confirmed and contact cannot be made with the Service, then the first responsible agency should mount initial attack until such time as responsibility for control is established.</p> <p>Cost for initial attack will be borne by the responding agency.</p> <p>The transfer of control to the responsible agency from the first attack agency is to be (as much as possible) a smooth process. All information is to be passed on and should include verbal and hardcopy reports. Personnel in the field are to be advised of the transfer of control via a formal briefing.</p> <p>The initial fireground Incident Controller is to remain in control until such time as he/she is relieved by the responsible agency. In some instances the responsible agency will request that the initial fireground Incident Controller remain in charge for the duration of the shift and direct incoming resources as required.</p>
Suppression strategies - seasons with saturated subsoils	<p>Vehicle and earth-moving equipment may be limited due to the risk of bogging and should be avoided in areas known or identified to be prone to surface soil and subsoil saturation. Includes valley areas.</p>
Suppression strategies - seasons with moderate conditions	<p>Severe or dry unstable weather conditions forecast</p> <p>Direct or parallel attack with plant and fire units to minimise the fire area and secure the flank as soon as possible.</p> <p>Moist weather forecast</p> <p>Maximise area when in accordance with proposed hazard reduction burns to meet long-term fire and land management objectives.</p>
Suppression strategies - seasons with severe conditions	<p>Containment Strategy</p> <p>Undertake property protection of identified assets as highest priority</p> <p>Fall back to existing trails, roads and recently burnt areas when fire runs exceed control line construction rates, or are predicted to exceed during weather with very low humidities and shifting winds</p> <p>0-3 year burn may hold head fire if deep enough and conditions mild enough</p> <p>3-5 year burns will only reduce fire intensity in areas without grassy understorey</p> <p>Secure and deepen control lines on the next predicted downwind side of the fire</p> <p>Burn out the area between the control line and the fire front ASAP using ground and aerial ignitions</p> <p>Backburning</p> <p>Target backburning operations when the RH rises in late afternoon/early evening</p> <p>Consider restricting backburning operations on downwind control lines when RH<10%</p> <p>Maximise backburning operations with prevailing wind if appropriate</p> <p>Secure fire edge by liming the backburn to minimise the area impacted by a high intensity fire. Consideration should be given to wind speed, direction and RH when planning to implement backburns</p>
Earth moving machinery	<p>Prior to use of earthmoving equipment on lands under the control of the National Parks and Wildlife Service, the approval of the Service is to be obtained.</p> <p>Plant must be guided at night due to safety concerns with steep terrain</p> <p>Plant guides should be briefed on the location of the proposed line & heritage items</p> <p>Control lines constructed by earth moving machinery should avoid rocky ridges, river corridors (200m buffer) and any areas identified to contain aboriginal sites</p> <p>Control lines running along valley areas should be constructed 20-50m from the gully line where possible to avoid severe erosion</p>
Restoration	<p>Fire control lines constructed by earth moving equipment should be stabilised and rehabilitated at the completion of fire operations.</p>
Fire fighting chemicals	<p>The use of foam, wetting agents and retardants is permitted in the reserve away from the water courses</p> <p>Areas treated with aerial applications of foam and retardants should be recorded where possible</p>

FIRE BEHAVIOUR AND VEGETATION MANAGEMENT GUIDELINES

Community	Fire Behaviour Characteristics	Vegetation Management Guidelines
Open	<ul style="list-style-type: none"> Varying grass types give different behaviours Cured grasses dry quickly and will be available before surface fuels 	<ul style="list-style-type: none"> Species decline is predicted if fires occur more often than every 2 years Grassy understorey and surface fuels established very quickly Soils prone to erosion and weed invasion with frequent fire
Dry Forest	<ul style="list-style-type: none"> Fires possible at most times of the year depending on altitude Quick rate of spread due to drier fuels 	<ul style="list-style-type: none"> Species decline predicted if successive fires occur less than 22 years apart or further than 50 years apart
Fenny Sallee Forest	<ul style="list-style-type: none"> Difficult to burn in moist conditions Hot, even fire spread in drier conditions Low risk of crown fires due to little shrubby understorey and low bark fuels, but will occur in drought conditions 	<ul style="list-style-type: none"> Species decline predicted if successive fires occur less than 25 years apart. Decline predicted if fire interval exceeds 150 years. Fenny understorey re-established quickly
Geebung Forest	<ul style="list-style-type: none"> Low to moderate, continuous surface fire fuels give even fire spread May be difficult to burn in moist conditions Hot fire in drier conditions due to high elevated fuels Low bark fuels reduce risk of crown fire but bark type will spot in hot dry conditions 	<ul style="list-style-type: none"> Species decline predicted if successive fires occur less than 12 years apart. Decline predicted if fire interval exceeds 50 years. Regularly burnt areas have higher levels of elevated fuels
Grassy Sallee Forest	<ul style="list-style-type: none"> Even fire spread in short grassy understorey Low risk of crown fires due to little shrubby understorey and low bark fuels, but will occur in drought conditions Backburning may be possible in moist conditions 	<ul style="list-style-type: none"> Species decline predicted if successive fires occur less than 5 years apart. Decline predicted if fire interval exceeds 50 years. Grassy understorey re-established quickly
Ribbon & Mountain Gum Forest	<ul style="list-style-type: none"> Heavy continuous surface fuels Moderate to heavy understorey fuels, flammable in drier conditions Smooth barks reduce crown fires but streamers will spot heavily 	<ul style="list-style-type: none"> Species decline predicted if successive fires occur less than 12 years apart. Decline predicted if fire interval exceeds 50 years.
Stringybark & Peppermint Forest	<ul style="list-style-type: none"> Continuous surface fine fuels give even fire spread Heavy surface fuels, light to heavy elevated fuels and heavy bark fuels give a high risk of crown fires 	<ul style="list-style-type: none"> Species decline predicted if successive fires occur less than 16 years apart. Decline predicted if fire interval exceeds 50 years. Burning often promotes dense regrowth of Cassinia species.
Woodlands	<ul style="list-style-type: none"> Fires possible at most times of the year Quick rate of spread due to drier fuels Lesser risk of crown fires with woodland formation although these will occur in drought conditions given sufficient non-grassy fuels Fire in drought conditions will burn almost-bare grassy fuel areas only in high winds. ROS will be high. 	<ul style="list-style-type: none"> Species decline predicted if successive fires occur less than 12 years apart. Decline predicted if fire interval exceeds 50 years. Grassy understorey re-established quickly

FIRE SEASON INFORMATION

The critical fire season occurs between December and March, when the potential for large fire events is at its highest. Particular care is required during extended periods of negative Southern Oscillation Indices, leading to periods of reduced rainfall.

The end of the critical fire season is marked by cold humid nights and cooler day temperatures with periods of relatively stable atmospheric conditions.

Prescribed burning should be undertaken before late autumn precipitation occurs. Burning may also be undertaken during late winter and early spring, although conditions are often too moist. Burning should be avoided in late spring.