Warrambool

State Conservation Area Fire Management Strategy (Type 2) 2019 - 2024



This strategy should be used in conjunction with aerial photography and field reconnaissance. These data are not guaranteed to be free from error or omission. The NSW National Parks and Wildlife and its employees disclaim liability for any act done on the information in the data and any consequences of such acts or omissions.

Last Updated: 30/05/2019

This document is copyright. Apart from any fair dealing for the purpose of study, research criticism or review, as permitted under the copyright Act, no part may be reproduced by any process without written permission. The NSW National Parks and Wildlife Service is part of the Office of Environment and Heritage.

> This strategy is a relevant Plan under Section 38 (4) and Section 44 (3) of the Rural Fires Act 1997.

Published by the Office of Environment and Heritage (NSW). Contact: NSW National Parks and Wildlife Service, Northern Inland Branch

ISBN: 978-1-925754-63-6 OEH Number: OEH2019/0169

Office of Environment & Heritage

Locality Map



Datum: D_GDA_1994 Zone_55 Geographic Coordinate System: GCS_GDA_1994 Topographic Map: Dunumbral 8539

Datum: D_GDA_1			graphic Coordinate System: GCS_GDA_1994 Topogra	phic Map: Dunumbral 8539		
Local Governme	ent Area: Walge	tt				
			Contact Information			
A				Dhana		
Ager	-		Position / Location uty Officer (24 hour)	Phone 8275 1742		
National Parks & Wildlife Service			arwon Area Office (bus. hours)	6792 7300		
		-	CC Office	6822 4422		
NSW Rural Fire Service North West Zone			uty Officer Coonamble	0427 178 179		
Coonamb	Coonamble FCC		Zone Office 6822 4422			
NSW Fire	Brigade	F	Fire and Rescue NSW 000			
Emergency	Services	Р	olice, Fire, Ambulance	000		
SE	S			132 500		
Poli	ce		ollarenebri /algett	6756 4999 6828 6899		
Cour	ncil		/algett Shire	6828 1399		
			Communications			
Comico	Channel					
Service NPWS	Channel		Location and Comment	IS		
Repeaters			No NPWS radio is available at Warrambool.			
RFS	WG023		Digital Voting			
UHF - CB			• Small fires channel 10, large fires determined by IMT			
Aviation - CTAF	134.70		NIB frequency unless another frequency is allocated of			
Cellphone			 Telstra 3G coverage is limited across the reserve, par Some reception may be available at Warrinilla windmi 			
			Operational Guidelines			
			ns will be managed by trained and competent personnel.	This includes directing aerial		
Aerial	The use of	boi	aerial ignition operations mbing aircraft without the support of ground based suppres	sion crews should be limited		
Operations			c circumstances. on operations require the consent of a senior NPWS office	r or the Section 44 Appointee.		
			· · ·			
Backburning	Backburnir	ng ir	nust be fully briefed before back burning operations begin. n areas of Low – Moderate OFH will require the use of wind			
	maximise e	ente	ctiveness.			
Command &			atant agency on site may assume control of the fire, but th nent agency is notified promptly.	en must ensure the relevant		
Control	The initial	Incio	dent Controller will liaise with the RFS to ensure that the ac d an Incident Controller is appointed.	jency in command is		
			ent lines require the prior consent of a senior NPWS office of new containment lines should be avoided, where practication of the second second second second second second			
Containment			l with minimal environmental impact. volved in containment line construction should be briefed c	on and must consider both		
Lines	natural and	d cu	Itural heritage sites in the location.			
	All containing the incident		nt lines not required for other purposes should be closed in	imediately at the cessation of		
	Plant may	only	/ be used with the prior consent of a senior NPWS Officer.			
			ays be guided and supervised by an experienced officer a S). When engaged in direct or parallel attack, this vehicle n			
Earthmoving	Graders an	e th	e preferred equipment to maintain fire trails.			
Equipment	to avoid se	ever				
	 Plant must NPWS esta 		washed down, where practicable, prior to it entering NPWS	3 estate and again on exiting		
Fire	The use of	foa	m, wetting agents and retardants will NOT be permitted wi	thin 50 metres of dams and		
Suppression	watercours	ses	holding water. of gels and retardants should be approved by a senior NP			
Chemicals			ardants requires the approval of a senior NPWS officer.			
Rehabilitation			able, containment lines should be stabilised and rehabilitat	ed as part of the wildfire		
	suppression operation.					
Water Points	Consider d	leplo	oyment of a bulk water carrier to support fire operations.			
Smoke Management	Potential s	• Potential smoke impacts and mitigation tactics will be assessed during the planning of fire operations.				
	Implement	the	emergency management plan during Severe + Fire Dange	er.		
Visitor	Ensure the	e clo	sure is advertised on the NPWS visitor website.			
Management	 A risk assessment of any guided activities will be undertaken if the FDI is Very High+, or if there is a fire in the reserve. 					
	Advise api	aris	ts of fire threats, and the restrictions in place for entry to th	e reserve.		
WARNINGS			ng after rain. I holes in black soil.			
			umber of internal fences which may disrupt access.			

Black text – general guidelines Blue text – reserve specific guidelines Red text – important warnings Heritage Guidelines

Aboriginal Cultural Heritage	 Warrambool SCA has had a rich history of Aboriginal usage. It is probable that significantly more heritage sites exist than are depicted on the map. IS 1 – As far as possible protect site from fire. Do not cut down trees. IS 2 – As far as practicable protect the site from fire. Avoid all ground disturbance and driving over sites. Avoid water bombing which may cause ground disturbance. IS 3 – Avoid all ground disturbance. Avoid water bombing. Site may be burnt by fire without damage. Modified trees As far as possible, protect the site from fire, and do not cut trees Use of foams & retardant is acceptable. Habitation sites Exclude control line construction from sites. Consider a buffer zone of about 50 metres from the sites. Cultural Heritage Sites are known to exist in Warrambool SCA. AlIMS databases must be checked as part of planning for fire operations.
Historic Sites	 Warrinilla Homestead Precinct and Woolshed are listed as a heritage sites. It is protected from fire by an asset protection zone. As far as possible, manage the site to prevent fire entering the APZ or damaging structures. Use of foams & retardant is acceptable.
Threatened Fauna & Flora	 The protective actions for threatened fauna have been incorporated into the Operational Guidelines The endangered ecological communities of Carbeen Open Forest and Poplar Box – Coolibah Woodlands exist with the SCA. Avoid removal of mature trees.
Soil Erosion Management	The black soils in Warrambool SCA pose a significant bogging risk when wet.

Suppression Strategies		
Conditions	Guidelines	
All vegetation typ	es	
Fire danger rating LOW - HIGH	 Consider a broad containment strategy using existing roads, allowing long-term management requirements for biodiversity. 	
	 Direct and parallel attack may be applied with earthmoving machinery and fire units. 	
Fire danger rating VERY HIGH - EXTREME	 Close parallel attack, moving around the head only when the fire stops running. Distance between the flank and machinery and fire units should be kept to a minimum. 	

Wildfires The critical wildfire set of negative Southerm to increased grass gra Prescribed Burning Prescribed burning is The exception will be Vegetation Class (keith) Vegetation Management Guidelines Fire Behaviour Vegetation Class (keith) Prescribed low rule of a second due to the second due to the sec				
Burning The exception will be Vegetation Class (Keith) Vegetation Management Guidelines Fire Behaviour Riverine Chenopod Shrublands Five-minute Grass – Spiked Rice Flower. A fire interval of less than 20 years and greater than 50 years should be avoided. A void high intensity fire events. Burdiag may only be conducted during late winter and early spring. Potential rates of spree usually Low due to Low Fire may carry through vegetation class after so understorey. Burdiag – Leopardwood. A fire interval of less than 20 years and greater than 50 years should be avoided. Potential rates of spree and greater than 50 years should be avoided. White Opress Pine – Carbeen. Burdiag rule awinter and early spring. White Opress Pine – Carbeen. North-west Floodplain Woodlands Coolibah – Belah – Lignum. A fire interval of less than 10 years should be avoided. A void high intensity fire events. Burning may only be conducted during late winter and early spring. Potential rates of spree usally Low due to Low inderstorey. Woodlands Weeping Myall. A Veeping Myall. A Weeping Myall. A Weeping Myall. A Weeping Myall. A Weeping Myall. A Void high intensity fire events. Burning may only be conducted during late winter and early spring. Potential rates of spree usally Low due to Low inderstorey. Potential rates of	Wildfi	res	of negativ	ve Southern
(Keith)GuidelinesFire BehaviourRiverine Chenopod Shrublands• Five-minute Grass – Spiked Rice Flower. • A fire interval of less than 20 years and greater than 50 years should be avoided. • Avoid high intensity fire events. • Burdia – Leopardwood. • A fire interval of less than 20 years and greater than 50 years should be avoided. • Avoid high intensity fire events. • Burdia – Leopardwood. • A fire interval of less than 20 years and greater than 50 years should be avoided. • Avoid high intensity fire events. • Burning may only be conducted during late winter and early spring.• Potential rates of spree usually Low due to Lo • Fire may carry through vegetation class after s wet seasons that produ understorey.North-west Alluvial Sand Woodlands• Coolibah – Belah – Lignum. • A fire interval of less than 10 years should be avoided. • No fire thresholds to be applied ecological thresholds are flood based.• Potential rates of spree usually Low due to Lo • Fire may carry through vegetation class after s wet seasons that produ understorey.North-west Floodplain Woodlands• Coolibah – Belah – Lignum. • A fire interval of less than 10 years should be avoided. • Avoid high intensity fire events. • Burning may only be conducted during late winter and early spring.• Potential rates of sprea usually Low due to Lo • Fire may carry through vegetation class after s wet seasons that produ understorey.Riverine Plain Woodlands• Weeping Myall. • A fire interval of less than 10 years should be avoided. • Avoid high intensity fire events. • Burning may only be conducted during late winter and early spring.• Potential rates of sprea usually Low due to Lo <th colspan="2"></th> <th></th> <th>•</th>				•
(Keith)GuidelinesFire BehaviourRiverine Chenopod Shrublands• Five-minute Grass – Spiked Rice Flower. • A fire interval of less than 20 years and greater than 50 years should be avoided. • Avoid high intensity fire events. • Burdia – Leopardwood. • A fire interval of less than 20 years and greater than 50 years should be avoided. • Avoid high intensity fire events. • Burdia – Leopardwood. • A fire interval of less than 20 years and greater than 50 years should be avoided. • Avoid high intensity fire events. • Burning may only be conducted during late winter and early spring.• Potential rates of spree usually Low due to Lo • Fire may carry through vegetation class after s wet seasons that produ understorey.North-west Alluvial Sand Woodlands• Coolibah – Belah – Lignum. • A fire interval of less than 10 years should be avoided. • No fire thresholds to be applied ecological thresholds are flood based.• Potential rates of spree usually Low due to Lo • Fire may carry through vegetation class after s wet seasons that produ understorey.North-west Floodplain Woodlands• Coolibah – Belah – Lignum. • A fire interval of less than 10 years should be avoided. • Avoid high intensity fire events. • Burning may only be conducted during late winter and early spring.• Potential rates of sprea usually Low due to Lo • Fire may carry through vegetation class after s wet seasons that produ understorey.Riverine Plain Woodlands• Weeping Myall. • A fire interval of less than 10 years should be avoided. • Avoid high intensity fire events. • Burning may only be conducted during late winter and early spring.• Potential rates of sprea usually Low due to Lo <th></th> <th></th> <th></th> <th></th>				
(Keith)GuidelinesFire BehaviourRiverine Chenopod Shrublands• Five-minute Grass – Spiked Rice Flower. • A fire interval of less than 20 years and greater than 50 years should be avoided. • Avoid high intensity fire events. • Burdia – Leopardwood. • A fire interval of less than 20 years and greater than 50 years should be avoided. • Avoid high intensity fire events. • Burdia – Leopardwood. • A fire interval of less than 20 years and greater than 50 years should be avoided. • Avoid high intensity fire events. • Burning may only be conducted during late winter and early spring.• Potential rates of spree usually Low due to Lo • Fire may carry through vegetation class after s wet seasons that produ understorey.North-west Alluvial Sand Woodlands• Coolibah – Belah – Lignum. • A fire interval of less than 10 years should be avoided. • No fire thresholds to be applied ecological thresholds are flood based.• Potential rates of spree usually Low due to Lo • Fire may carry through vegetation class after s wet seasons that produ understorey.North-west Floodplain Woodlands• Coolibah – Belah – Lignum. • A fire interval of less than 10 years should be avoided. • Avoid high intensity fire events. • Burning may only be conducted during late winter and early spring.• Potential rates of sprea usually Low due to Lo • Fire may carry through vegetation class after s wet seasons that produ understorey.Riverine Plain Woodlands• Weeping Myall. • A fire interval of less than 10 years should be avoided. • Avoid high intensity fire events. • Burning may only be conducted 				
Riverine Chenopod ShrublandsFlower.usually Low due to LoRiverine Chenopod ShrublandsA fire interval of less than 20 years and greater than 50 years should 	-	-	Nanagement	Fire Behaviour
Gibber Transition Shrublands•A fire interval of less than 20 years and greater than 50 years should be avoided.•usually Low due to Low vegetation class after s wegetation class after s understorey.North-west Alluvial Sand Woodlands••White Cypress Pine – Carbeen. •••Potential rates of sprea usually Low due to Low ourderstorey.North-west Alluvial Sand Woodlands•••Potential rates of sprea usually Low due to Low understorey.North-west Floodplain Woodlands•••Potential rates of sprea usually Low due to Low understorey.North-west Floodplain Woodlands•••<		 Flower. A fire interva and greater be avoided. Avoid high ir Burning may 	al of less than 20 years than 50 years should ntensity fire events. v only be conducted	 usually Low due to Low Fire may carry through vegetation class after s wet seasons that produced
 White Cypress Pine – Carbeen. Avoid prescribed burning and high intensity fires. No fire thresholds to be applied – ecological thresholds are flood based. North-west Floodplain Woodlands Coolibah – Belah – Lignum. A fire interval of less than 10 years should be avoided. Avoid high intensity fire events. Burning may only be conducted during late winter and early spring. Weeping Myall. A fire interval of less than 10 years should be avoided. Weeping Myall. A fire interval of less than 10 years should be avoided. Weeping Myall. A fire interval of less than 10 years should be avoided. Potential rates of sprea usually Low due to Loo Fire may carry through vegetation class after s wet seasons that produ understorey. Potential rates of sprea usually Low due to Loo Fire may carry through vegetation class after s wet seasons that produ understorey. Potential rates of sprea usually Low due to Loo Fire may carry through vegetation class after s wet seasons that produ understorey. Potential rates of sprea usually Low due to Loo Fire may carry through vegetation class after s wet seasons that produ understorey. Potential rates of sprea usually Low due to Loo Fire may carry through vegetation class after s wet seasons that produ understorey. 		 A fire intervation and greater to be avoided. Avoid high in Burning may 	al of less than 20 years than 50 years should ntensity fire events. y only be conducted	 usually Low due to Low Fire may carry through vegetation class after s wet seasons that produced
North-west Floodplain WoodlandsA fire interval of less than 10 years should be avoided.usually Low due to Low Fire may carry through vegetation class after s wet seasons that produ understorey.Riverine Plain Woodlands• Weeping Myall. • A fire interval of less than 10 years should be avoided.• Potential rates of sprea usually Low due to Low • Fire may carry through vegetation class after s wet seasons that produ understorey.Riverine Plain Woodlands• Weeping Myall. • A fire interval of less than 10 years should be avoided. • Avoid high intensity fire events. • Burning may only be conducted during late winter and early spring.• Potential rates of sprea usually Low due to Low • Fire may carry through vegetation class after s wet seasons that produ understorey.Western Peneplain Woodlands• Poplar Box – Budda. • A fire interval of less than 20 years and greater than 50 years should be avoided. • Avoid high intensity fire events. • Burning may only be conducted • Avoid high intensity fire events. • Burning may only be conducted • Fire may carry through vegetation class after s wet seasons that produ understorey.		 White Cypre Avoid prescr intensity fire No fire thres ecological th 	ess Pine – Carbeen. ibed burning and high s. holds to be applied –	 usually Low due to Low Fire may carry through vegetation class after s wet seasons that produced
Riverine Plain Woodlands A fire interval of less than 10 years should be avoided. Avoid high intensity fire events. Burning may only be conducted during late winter and early spring. Poplar Box – Budda. A fire interval of less than 20 years and greater than 50 years should be avoided. A fire intensity fire events. Burning may only be conducted understorey. Poplar Box – Budda. A fire interval of less than 20 years and greater than 50 years should be avoided. Avoid high intensity fire events. Burning may only be conducted understorey.	Floodplain	 A fire interva should be av Avoid high ir Burning may 	al of less than 10 years voided. ntensity fire events. v only be conducted	 usually Low due to Low Fire may carry through vegetation class after s wet seasons that produced
Western Peneplain A fire interval of less than 20 years and greater than 50 years should be avoided. Avoid high intensity fire events. Burning may only be conducted usually Low due to Low vegetation class after swet seasons that produ- understorey. wet seasons that produ- understorey. 		 A fire interva should be av Avoid high ir Burning may 	al of less than 10 years voided. ntensity fire events. v only be conducted	 usually Low due to Low Fire may carry through vegetation class after s wet seasons that produced
		 A fire interva and greater be avoided. Avoid high ir Burning may 	al of less than 20 years than 50 years should ntensity fire events. y only be conducted	 usually Low due to Low Fire may carry through vegetation class after s wet seasons that produced

Vegetation Threshold	Treatment
Too Frequently Burnt	Fire thresholds have been exceeded. Protect f fire as far as possible.
Vulnerable to Frequent Fire	Protect from fire as far as possible.
Within Threshold	Fire history is within the threshold for vegetation this area. A burn is neither required nor should necessarily be avoided.
Long Unburnt	Fire frequency is below fire thresholds in the a prescribed burn may be advantageous. Conside allowing unplanned fires to burn.
Unknown	Insufficient data to determine fire threshold.
No Regime Assigned	Areas which do not have recommended fire in assigned to them eg. cleared land, rock.
NB. Fire thresholds are defined for vegetation communities to conserve biodiversity	

Fire Type	Fire Details
Prescribed Burn	NPWS records indicate hazard reduction bu has not been undertaken in this Reserve. Vegetation types indicate Low OFH in most and a general inability to conduct prescriber burning.
Wildfire	NPWS and Rural Fire Service data have no recorded wildfires in this Reserve.

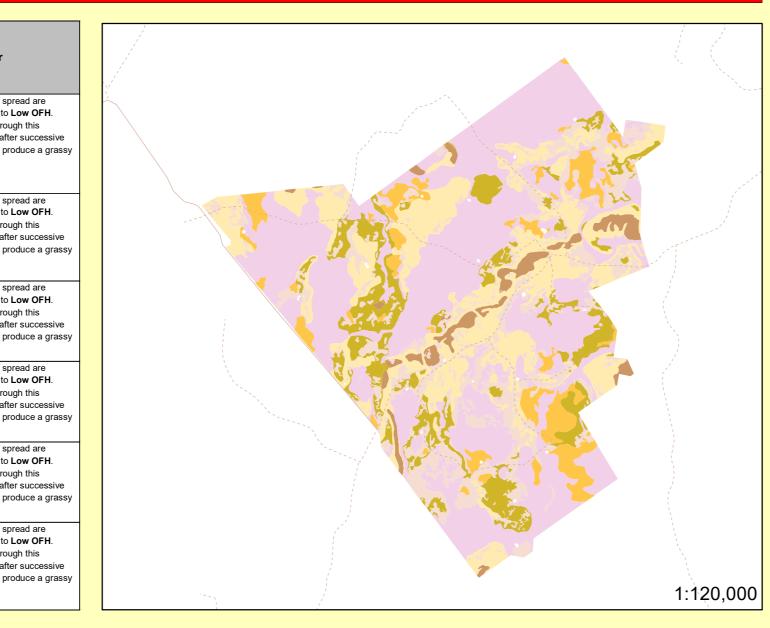
	Ris
Fire Management Zone	Treatment
Asset Protection Zones	The objective of APZ s is the protection of human life and pro This will have precedence over guidelines for the managem biodiversity. Maintain Overall Fuel Hazard at Moderate or be
Strategic Fire Advantage Zones	The objective of SFAZ s is to reduce fire intensity in locati assist containment of wildfires, by maintaining the Overal Hazard less than HIGH.
Land Management Zones	The objective of LMZ s is to conserve biodiversity and p cultural heritage. Manage fire consistent with fire thresholds

Fire Season Information

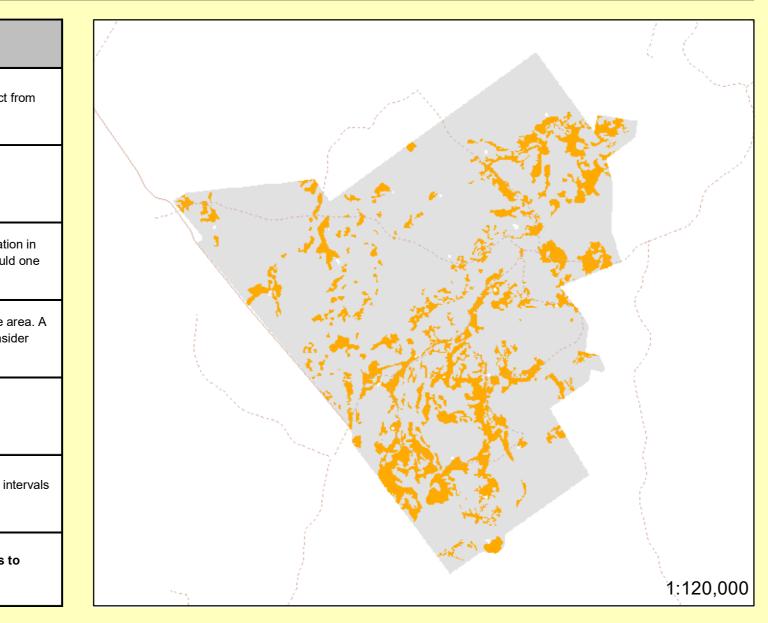
season occurs during November and March. Particular care is required during periods rn Oscillation Indices. Bushfire risk may be elevated after successive wet seasons due growth. The end of the critical fire season is often marked by wet storm activity.

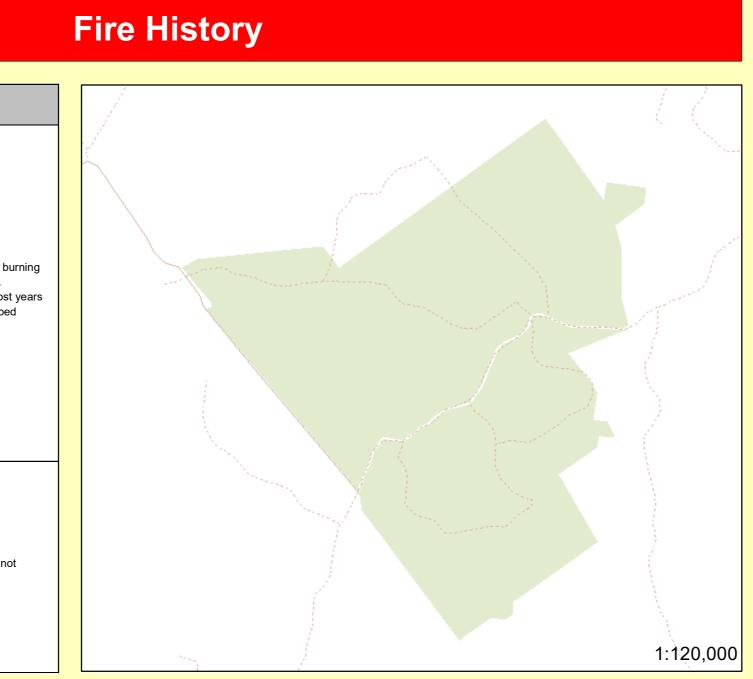
is unlikely to be effective in most years. e after a prolonged period of above average rainfall, leading to prolific grass growth.

Vegetation

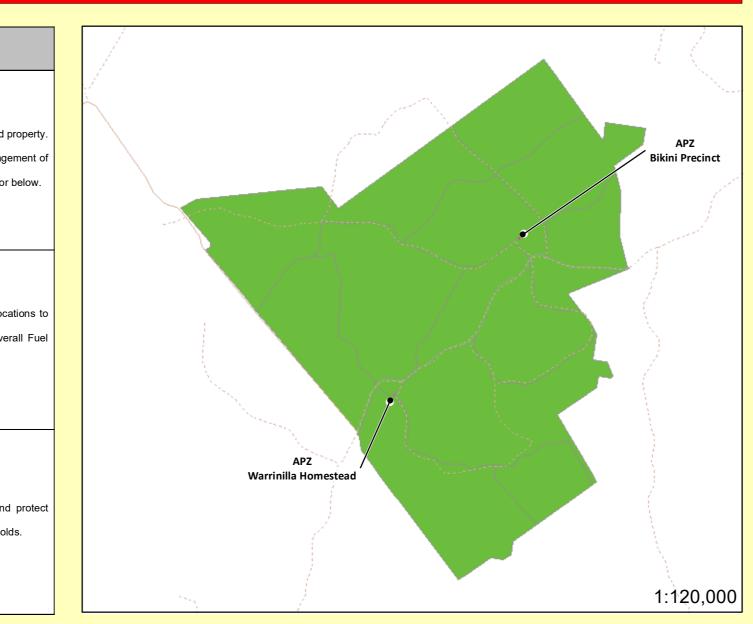


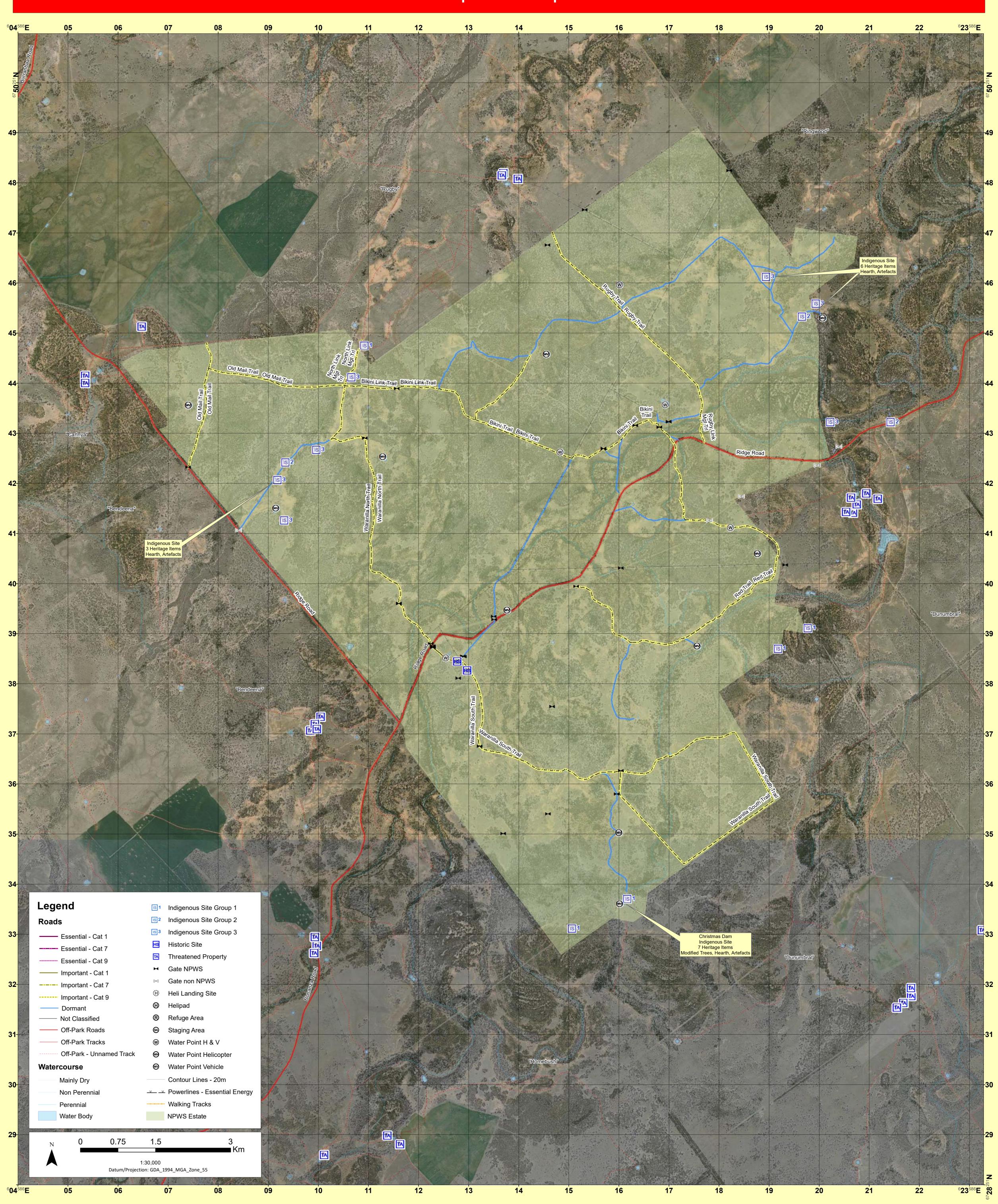
Vegetation Fire Thresholds





isk Management Information





Operations Map