Georges River National Park
Fire Management Strategy
2018

This strategy should be used in conjunction with aerial photography and field reconnaissance during incidents and the development of incident action plans.

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

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For all fires – call "000"

NSW nationalparks.nsw.gov.au

Fire Season Information

Wildfires	• The statutory wildfire season occurs between 1st October and 31st March. This may be extended if weather conditions lead to increased fire danger outside of this period.
Prescribed Burning	• Prescribed burning in this are a is normally undertaken in Spring through to Autumn.

Related Documents

- National Parks and Wildlife Service Fire Management Manual.
- Plan of Management – Georges River National Park – 1994
- Shale-Gravel Transition Forest Endangered Ecological Community Information.

Communications Information

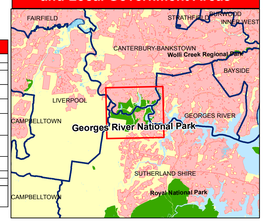
Service	Channel	Location and Comments
NPWS - VHF	030 (wide)	• Good coverage on upper slopes poor on river flats
UHF - CB	1 - 99	• Available in most NSWFB and RFS vehicles • Choose channel on fire-ground with NSWFB and RFS
Mobile Phone - GSM		• Patchy coverage

Contact Information

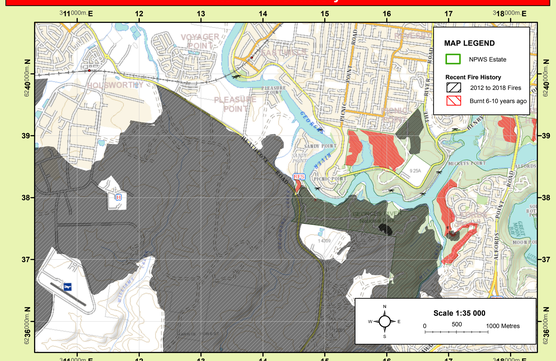
Agency	Position / Location	Phone
National Parks & Wildlife Service	Regional Duty Officer (24 hour)	8579 0609
	Team Leader - Fire	9542 0638
	Regional Office (Royal Area)	0428 248 774 9542 0632 (fax) 9542 1420
Sutherland Zone NSW Rural Fire Service	24 Hours	9520 6022
	Business Hours	9520 4040
SES	Emergency	000
	Sutherland	9548 6355
	Sydney Southern Division	9766 9000
Police	Emergency	000
	Bankstown	97075299
	Revesby	87246994
Ambulance	Emergency	000
	Bookings	131233
Hospital	Sutherland	9540 7111
	St George	9350 1111
Council	Sutherland Shire Council	9710 0333
	Bankstown City Council	9707 9999
	Hurstville City Council	9330 6222

Map Data
Datum: Geocentric Datum of Australia (GDA) 1994
Projection: Map Grid of Australia (MGA) Zone 56
Aerial Photography: Finance and Services) 2015
1:25k Topographic Map: Botany Bay 9103 3S / Liverpool 9020 2S / Port Hacking 9129 4N / Campbelltown 9029 1N

Locality of Reserve and Local Government Areas



Recent Fire History

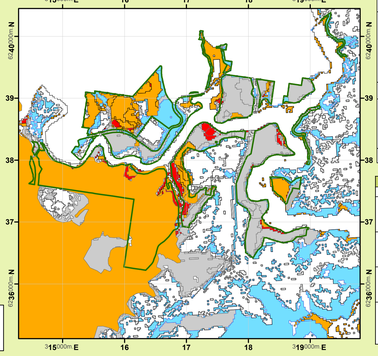


Current Vegetation Status (Fire Thresholds)

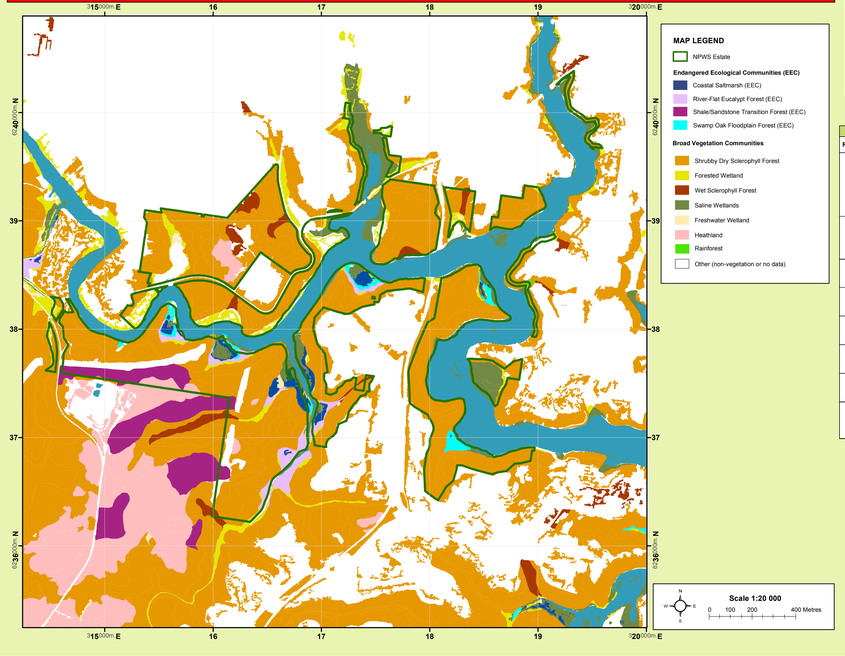
Fire Thresholds

Too Frequently Burnt	Fire thresholds have been exceeded. *- Protect from fire as far as possible.*
Vulnerable	The area will be overburnt if it burns this year. *- Protect from fire as far as possible.*
Within Threshold	Fire history is within the threshold for vegetation in this area. *- A burn is neither required nor should one necessarily be avoided.*
Long Unburnt	Fire frequency is below fire thresholds in the area. *- A prescribed burn may be advantageous. Consider allowing unplanned fires to burn.*
Unknown	Insufficient data to determine fire threshold.

NB: Fire thresholds are defined for vegetation communities to conserve biodiversity



Vegetation



Operational Guidelines

Refer to Strategy for Fire Management 2012 and Fire Management Manual.
Brief all personnel involved in suppression operations on the following issues:

General	Guidelines
Aerial Water Bombing	• The use of bombing aircraft should support containment operations by aggressively attacking hotspots and spot-overs. • The use of bombing aircraft without the support of ground based suppression crews should be limited to very specific circumstances. • Where practicable foam should be used to increase the effectiveness of the water. • Ground crews must be alerted to water bombing operations.
Aerial Ignition	• *Aerial ignition may be used during back-burning or fuel reduction operations where practicable, but only with the prior consent of NPWS Regional Manager or Section 44 delegate.* • Utilise incendiaries to rapidly progress back-burns down slope where required.
Backburning	• Temperature and humidity trends must be monitored carefully to determine the safest times to implement back-burns. Generally, when the FDI is Very High or greater, backburning should commence when the humidity begins to rise in the late afternoon or early evening. With a lower FDI backburning may be safely undertaken during the day. • Where practicable, clear a 1m radius around dead and fibrous barked trees adjacent to containment lines prior to backburning, or wet down these trees as part of the backburn ignition. • Avoid ignition of backburns at the bottom of slopes where a long and intense up slope burn is likely.
Command & Control	• The first combatant agency on site may assume control of the fire, but then must ensure the relevant land management agency is notified promptly. • On the arrival of other combatant agencies, the initial incident controller will consult with regard to the ongoing command, control and incident management team requirements as per the relevant BFMC Plan of Operations.
Containment Lines	• Construction of new containment lines should be avoided, where practicable, except where they can be constructed with minimal environmental impact. New containment lines require the prior consent of a senior NPWS officer. • Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation. • All containment lines not required for other purposes should be closed at the cessation of the incident. • All personal involved in containment line construction should be briefed on both natural and cultural heritage sites in the location.
Earthmoving Equipment	• Earthmoving equipment may only be used with the prior consent of a senior NPWS officer, and then only if the probability of its success is high. • Earthmoving equipment must be always guided and supervised by an experienced officer, and accompanied by a support vehicle. • When engaged in direct or parallel attack this vehicle must be a firefighting vehicle. • Containment lines constructed by earthmoving equipment should consider the protection of drainage features, observe the Threatened Species and Cultural Heritage Operational Guidelines, and be surveyed, where possible, to identify unknown cultural heritage sites. • Earthmoving equipment should be washed down, where practicable, prior to it entering NPWS estate.
Fire Advantage Recording	• All fire advantages used during wildfire suppression operations must be mapped and where relevant added to the database.
Fire Suppression Chemicals	• Wetting and foaming agents (surfactants) are permitted for use in wildfire suppression. • The use of fire retardant is only permitted with the prior consent of the senior NPWS officer, and should be avoided where reasonable alternatives are available. • Exclude the use of surfactants and retardants within 50m of rainforest, watercourses, dams and swamps. • Areas where fire suppression chemicals are used must be mapped and the used product's name recorded. • The Threatened Species Operational Guidelines are to be observed.
Rehabilitation	• Where practicable, containment lines should be stabilised and rehabilitated as part of the wildfire suppression operation.
Smoke Management	• The potential impacts of smoke and possible mitigation tactics must be considered when planning for wildfire suppression and prescribed burning operations. • If smoke becomes a hazard on local roads or highways, the police and relevant media must be notified. • Smoke management must be in accordance with relevant RTA traffic management guidelines.
Visitor Management	• The reserve may be closed to the public during periods of extreme fire danger or during wildfire suppression operations.

Suppression Strategies

Current FDR	Forecast FDR	
Low – Mod	Low – Mod	• As far as possible, undertake indirect, parallel or direct attack along existing control lines. • As far as possible, maximise area burnt without threatening assets, including biodiversity. • Identify and survey backup control lines.
Low – Mod	= > High	• Undertake indirect, parallel or direct attack to minimise the time taken to contain the fire. • Construct new control lines if necessary to minimise the time to contain the fire. • Identify and survey backup control lines.
High	All	• Undertake indirect attack along existing or newly constructed control lines. • Secure and deepen control lines along the next predicted downwind side of the fire. • Identify and survey backup control lines.
All	All	• Ensure there is sufficient time to secure control lines before the fire gets to them. • If there is insufficient time to secure control lines, fall back to the next potential control line. • As far as possible, implement threatened species and cultural heritage management guidelines.

Resource Guidelines

Resource	Guidelines
Aboriginal Cultural Heritage Site Management	
IS1	• As far as possible protect site from fire. • Do not cut down trees. • Use of foams, wetting agents & retardant is acceptable.
IS2	• As far as possible protect site from fire. • Avoid ground disturbance including handtools, dozers. • Avoid water bombing which may cause ground disturbance.
IS3	• Avoid ground disturbance including handtools, dozers. • Avoid water bombing which may cause ground disturbance. • Site may be burnt by wildfire, backburn, prescribed burn.
Historic Heritage Management	• *RCHMS: Regional Cultural Heritage Management Strategy.* • *In areas where the asset may be in or close to a water body, wetland or swamp, no foam or retardant is to be used.* • *Earth-moving machinery is to be used around, rather than over/through assets.*
HS6	• High or low RCHMS* priority. • Heritage site unlikely to be effected by fire. • Avoid use of earth moving machinery.
Threatened Fauna Management	
FA1	• Protect large and hollow bearing trees.
FA2	• Avoid high intensity fires which consume tree canopies and fallen logs. • Protect large and hollow bearing trees. • Avoid interfire intervals of < 10 yrs.
FA3	• Avoid high intensity fires that consume tree canopies and fallen logs. • Avoid interfire intervals of < 10 yrs.
FA6	• Avoid fire, including wildfire, backburning & HR, as far as possible in wetland habitat. • Avoid use of earth moving machinery in wetland habitats. • Avoid use of retardant and foam in wetland habitats.
FA7	• Avoid high intensity fires that consume tree canopies and fallen logs.
FA8	• Avoid fire, including wildfire, backburning & HR, as far as possible. • Avoid use of earth moving machinery.
Threatened Flora Management	
FL1	• Avoid interfire intervals of < 10 yrs. • Avoid the use of earthmoving machinery. • Avoid the use of retardant.
FL2	• Avoid fire, including wildfire, backburn, HR, as far as possible. • Avoid the use of earthmoving machinery. • Avoid the use of retardant.
Threatened Property	• Where possible property owners with assets at risk from a wildfire event should be kept informed regarding the progress of the fire; and asked for an assessment of their current level of asset protection preparedness.

Threatened Fauna Fire Ecology

Label	Name	Fire Ecology
F1	*Hieraaetus morphnoides* Little Eagle (Vulnerable)	• Protect large/hollow bearing trees
F2	*Miniopterus schreibersii oceanensis* Eastern Bent Wing Bat (Vulnerable)	• Protect large/hollow bearing trees • Avoid interfire interval <10 years • Avoid high intensity fires which consume tree canopies and fallen logs
F2	*Melithreptus gularis gularis* Black Chinned Honey Eater (Vulnerable)	• Protect large/hollow bearing trees • Avoid interfire interval <10 years • Avoid high intensity fires which consume tree canopies and fallen logs
F2	*Glossopsitta pusilla* Little Lorikeet (Vulnerable)	• Protect large/hollow bearing trees • Avoid interfire interval <10 years • Avoid high intensity fires which consume tree canopies and fallen logs
F2	*Ninox strenua* Powerful Owl (Vulnerable)	• Protect large/hollow bearing trees • Avoid interfire interval <10 years • Avoid high intensity fires which consume tree canopies and fallen logs
F2	*Tyto tenebricos* Sooty Owl (Vulnerable)	• Protect large/hollow bearing trees • Avoid interfire interval <10 years • Avoid high intensity fires which consume tree canopies and fallen logs
F2	*Petroica rodinogaster* Pink Robin (Vulnerable)	• Avoid frequent, high intensity burns within known/potential habitat. • Protect all known/potential nesting sites from any disturbances.
F6	*Litoria aurea* Green & Golden Bell Frog (Endangered)	• No burning within 50 metres of wetlands and other large water bodies • No slashing, trittering or tree removal
F6	*Pseudophryne australis* Red-crowned Toadlet (Vulnerable)	• No burning adjacent to streams, and no burning in and around ephemeral drainage lines at the headwaters of creeks • No slashing, trittering or tree removal
F7	*Pteropus poliocephalus* Grey-headed Flying Fox (Vulnerable)	• Avoid high intensity fires that consume tree canopies and fallen logs
F7	*Daphoenositta chrysoptera* Varied Sittella (Vulnerable)	• Avoid high intensity fires that consume tree canopies and fallen logs
F7	*Phascolarctos cinereus* - Koala (Endangered)	• Avoid high intensity fires that consume tree canopies and fallen logs

Threatened Flora Fire Ecology

Label	Name	Fire Ecology
F1	*Acacia pubescens* Downy Wattle (Vulnerable)	• No fire more than once every 10 years • No slashing, trittering or tree removal
F1	*Hibbertia stricta* (Endangered)	• No fire more than once every 10 years • No slashing, trittering or tree removal
F1	*Epacris purpurascens* (Endangered)	• No fire more than once every 7 years • No slashing, trittering or tree removal
F2	*Pterostylis saxicola* Sydney Plains Greenhood Orchid (Endangered)	• No fire • No slashing, trittering or tree removal

Vegetation Communities and Biodiversity Thresholds

Regime	Vegetation Community	Biodiversity Thresholds	Year Burnt	Area (Ha)
I	Shrubby Dry Sclerophyll Forest	• Avoid successive fires at intervals of < 7 years. • Avoid fire exclusion for a period of > 30 years.	2009-10 2010-11 2011-12 2012-13 2013-14 2015-16 2016-17	8.54 1.71 19.50 37.55 13.53 4.81 2.62
E	Wet Sclerophyll Forest	• Avoid successive fires at intervals of < 10 years. • Avoid successive fires at intervals of > 50 years. • Avoid fire exclusion for a period of > 200 years.	2011-12 2012-13 2013-14	0.23 0.08 2.99
G	Grassy Woodland	• Avoid successive fires at intervals of < 5 years. • Avoid fire exclusion for a period of > 40 years.	-	-
F	Forested Wetland	• Avoid successive fires at intervals of < 7 years. • Avoid fire exclusion for a period of > 35 years.	2011-12 2012-13 2015-16	0.43 0.07 0.24
C	Saline Wetland	• Avoid any fire occurrence (a limited recovery ability exists).	2010-11 2011-12 2012-13 2015-16	0.23 0.003 0.0007 0.21
N	Freshwater Wetland	• Avoid successive fires at intervals of < 6 years. • Avoid fire exclusion for a period of > 35 years.	2011-12 2012-13	0.007 0.0002
L	Heathland	• Avoid successive fires at intervals of < 7 years. • Avoid fire exclusion for a period of > 30 years.	2012-13	5.17
Nil	Cleared	• Not applicable.	2010-11 2011-12 2012-13 2013-14 2015-16	0.41 0.09 0.02 0.13 0.16
	Sand/Rock/ Bare/Ground/ Water			

INTERNAL USE ONLY

Bushfire Risk Management Strategies

Fire Management Zones

Strategic Fire Advantage Zones (SFAZ)

The objective of **SFAZs** is to reduce fire intensity across larger areas. Maintain Overall Fuel Hazard at High or below, however adherence to guidelines for biodiversity will take precedence where practical. LMZ should be included in SFAZ hazard reduction burn blocks where appropriate.

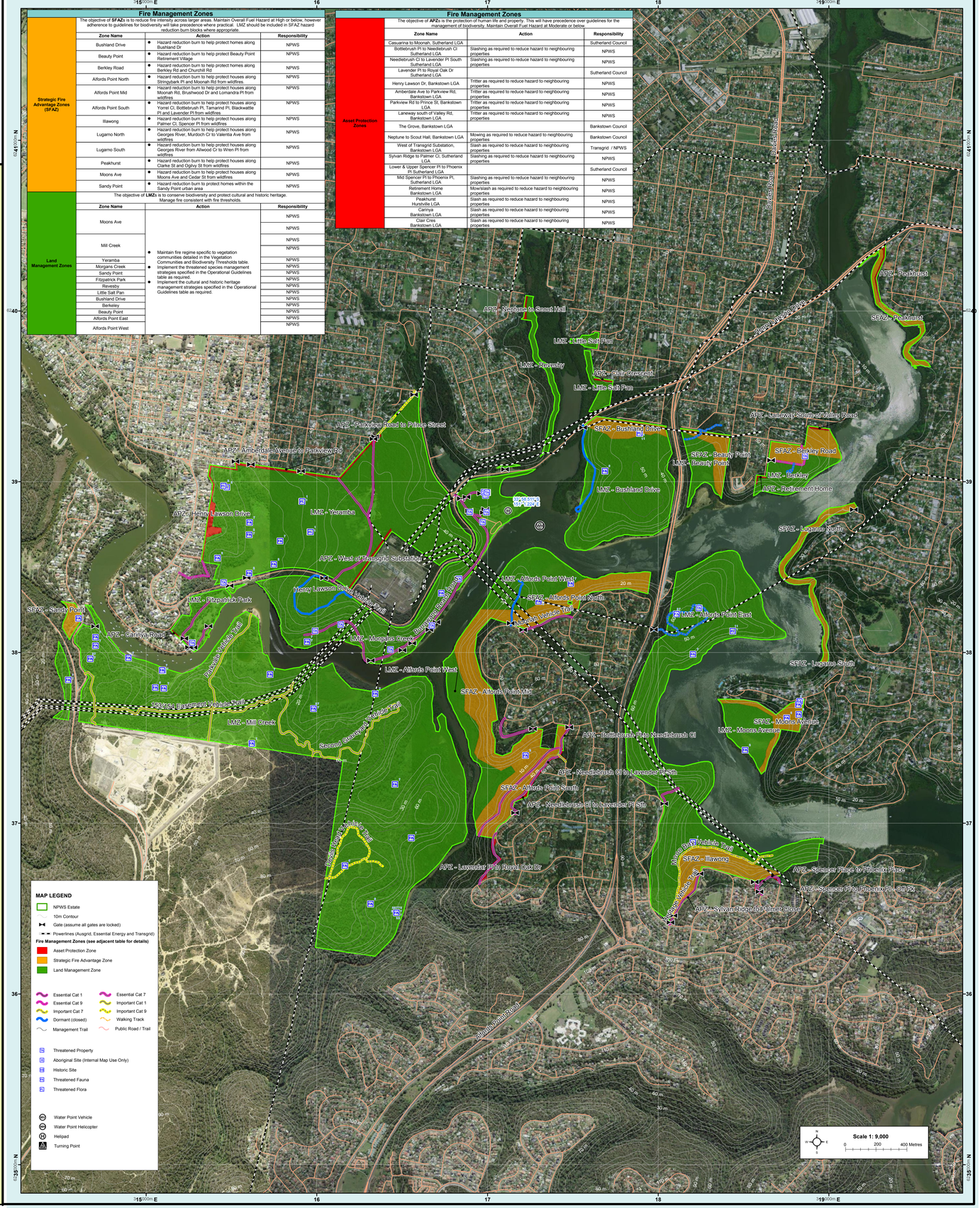
Zone Name	Action	Responsibility
Bushland Drive	• Hazard reduction burn to help protect homes along Bushland Dr	NPWS
Beauty Point	• Hazard reduction burn to help protect Beauty Point Retirement Village	NPWS
Berkley Road	• Hazard reduction burn to help protect homes along Berkley Rd and Churchill Rd	NPWS
Alfords Point North	• Hazard reduction burn to help protect houses along Stringybark Pl and Moonah Rd from wildfires	NPWS
Alfords Point Mid	• Hazard reduction burn to help protect houses along Moonah Rd, Brushwood Dr and Lomandra Pl from wildfires	NPWS
Alfords Point South	• Hazard reduction burn to help protect houses along Yorrel Cl, Bottlebrush Pl, Tamarind Pl, Blackwattle Pl and Lavender Pl from wildfires	NPWS
Illawong	• Hazard reduction burn to help protect houses along Palmer Cl, Spencer Pl from wildfires	NPWS
Lugarno North	• Hazard reduction burn to help protect houses along Georges River, Murdoch Cr to Valentia Ave from wildfires	NPWS
Lugarno South	• Hazard reduction burn to help protect houses along Georges River from Alwood Cr to Wren Pl from wildfires	NPWS
Peakhurst	• Hazard reduction burn to help protect houses along Clarke St and Ogilvy St from wildfires	NPWS
Moons Ave	• Hazard reduction burn to help protect houses along Moons Ave and Cedar St from wildfires	NPWS
Sandy Point	• Hazard reduction burn to protect homes within the Sandy Point urban area	NPWS

Land Management Zones

The objective of **LMZs** is to conserve biodiversity and protect cultural and historic heritage. Manage fire consistent with fire thresholds.

Zone Name	Action	Responsibility
Moons Ave	• Maintain fire regime specific to vegetation communities detailed in the Vegetation Communities and Biodiversity Thresholds table. • Implement the threatened species management strategies specified in the Operational Guidelines table as required. • Implement the cultural and historic heritage management strategies specified in the Operational Guidelines table as required.	NPWS
		NPWS
Mill Creek		NPWS
		NPWS
Yeramba		NPWS
Morgans Creek		NPWS
Sandy Point		NPWS
Fitzpatrick Park		NPWS
Revesby		NPWS
Little Salt Pan		NPWS
Bushland Drive		NPWS
Berkeley		NPWS
Beauty Point		NPWS
Alfords Point East		NPWS
Alfords Point West		NPWS

Asset Protection Zones

The objective of **APZs** is to reduce fire intensity and protect life and property. This will have precedence over guidelines for the management of biodiversity. Maintain Overall Fuel Hazard at Moderate or below.

Zone Name	Action	Responsibility
Casuarina to Moonah, Sutherland LGA	Slashing as required to reduce hazard to neighbouring properties	Sutherland Council
Bottlebrush Pl to Needlebrush Cl Sutherland LGA	Slashing as required to reduce hazard to neighbouring properties	NPWS
Needlebrush Cl to Lavender Pl South Sutherland LGA	Slashing as required to reduce hazard to neighbouring properties	NPWS
Lavender Pl to Royal Oak Dr Sutherland LGA	Slashing as required to reduce hazard to neighbouring properties	Sutherland Council
Henry Lawson Dr, Bankstown LGA	Trittter as required to reduce hazard to neighbouring properties	NPWS
Ambersbe Ave to Parkview Rd, Bankstown LGA	Trittter as required to reduce hazard to neighbouring properties	NPWS
Parkview Rd to Prince St, Bankstown LGA	Trittter as required to reduce hazard to neighbouring properties	NPWS
Laneway south of Valley Rd, Bankstown LGA	Trittter as required to reduce hazard to neighbouring properties	NPWS
The Grove, Bankstown LGA		Bankstown Council
Neptune to Scout Hall, Bankstown LGA	Mowing as required to reduce hazard to neighbouring properties	Bankstown Council
West of Transgrid Substation, Bankstown LGA	Slash as required to reduce hazard to neighbouring properties	Transgrid / NPWS
Sylvan Ridge to Palmer Cl, Sutherland LGA	Slashing as required to reduce hazard to neighbouring properties	NPWS
Lower & Upper Spencer Pl to Phoenix Pl Sutherland LGA		Sutherland Council
Mid Spencer Pl to Phoenix Pl, Sutherland LGA	Slashing as required to reduce hazard to neighbouring properties	NPWS
Retirement Home Bankstown LGA	Mow/slash as required to reduce hazard to neighbouring properties	NPWS
Peakhurst Hurstville LGA	Slash as required to reduce hazard to neighbouring properties	NPWS
Carinya Bankstown LGA	Slash as required to reduce hazard to neighbouring properties	NPWS
Coral Cres Bankstown LGA	Slash as required to reduce hazard to neighbouring properties	NPWS