

# Mosman North Sydney Lane Cove Willoughby

## Local Emergency Management Committee

## Bushfire Risk Management Committee



## Bushfire Danger Period Public Access Management Plan National Parks, Bushland Reserves & Open Space Parks

### BUSHFIRE SAFETY

Be aware of the current Fire Danger Rating and any bushfire alerts for this area

 To check conditions phone: 1800 679 737 (1800NSWRFS) or go to [www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au)

 This track will be closed when a TOTAL FIRE BAN is in place. Check park closures at: [www.nationalparks.nsw.gov.au](http://www.nationalparks.nsw.gov.au)

 Call 000 to report a bushfire or other emergency

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## 1 Purpose

This document provides a structured multi agency approach managing the public access to National Parks, Bushland Reserves and Open Space Parks during a period where the Bushfire Danger Rating has been identified as Severe or greater.

## 2 Scope and application

This strategy should be used by all Mosman / North Sydney and Lane Cove / Willoughby Local Emergency Management Committee Member Land Owners / Land Managers, who have public access land, identified and mapped as “Bushfire Prone Land” or in the opinion of the Land Owner / Manager, is at risk of Bushfire impact.

When the preceding day Fire Danger Index (FDI) & Fire Danger Rating (FDR) indicates that the FDR within the footprint of Mosman / North Sydney and Lane Cove / Willoughby LEMC areas will be in or above the ‘Severe; rating, FDI > 50, the predetermined actions as stated within the Open Spaces Matrix Relevant Access Management Plan (AMP) should be implemented.

The agency Point of Contact is responsible to implement the actions within the Open Spaces Matrix – Local Access Management Plans and must contact and advise the following as to the LAMPs that have been or will be enacted.

- NSW Police Commander (Mosman / North Sydney and Lane Cove / Willoughby LEMC) LECON
- Fire & Rescue NSW, Zone Commander, Metropolitan East Two

The LAMPs will also be under pinned by the Mosman North Sydney Willoughby and Hunters Hill Lane Cove Parramatta Ryde Bushfire Management Committees Section 52 - Plan of Operations and Bushfire Risk Management Plans.

## 3 Legal and policy framework

### 3.1 Legislation framework

Several Acts and Regulations govern the powers and responsibilities of Public and Local Authorities in respect to fire; risk, management and suppression:

- Coroners Act 2009
- Crimes Act 1900
- National Parks and Wildlife Act 1974 & Regulations 2002
- Environmental Planning and Assessment Act 1979 & Regulations 2000
- Fire Brigades Act 1989
- Rural Fires Act 1997 & Regulations 2013
- Work Health and Safety Act & Regulations 2011
- State Emergency and Rescue Management Act 1989
- Protection of the Environment Operations Act 1997
- Local Government Act 1993
- Crowns Land Act 1989
- Environment Protection & Biodiversity Conservation Act (EPBC Act ) 1999
- Sydney Harbour Federation Trust Act 2001

### **3.2 Policy / guideline framework**

Bush Fire Coordination Committee (BFCC) policies

Relevant Bushfire Management Committees

Section 52 – Bushfire Risk Management Plan

Section 52 – Plan of Operations

Office of Environment & Heritage – Fire Management Manual

Australian Standard AS/NZS ISO 31000 – 2009, Risk Management – Principles & Guidelines.

## **4 Identifying target parks, reserves and open spaces**

Key stakeholders have used the following four pre-existing risk management and/or risk mitigation documents or tools to determine which of their managed National Parks, bush reserves and open spaces would be exposed to the scope of this document.

- Bushfire prone land mapping
- Bushfire risk management plan
- Agency fire management strategy
- Local knowledge and/or fire history

### **4.1 Bushfire prone land mapping**

A bushfire prone area is an area of land that can support a bush fire or is likely to be subject to bush fire attack. Bushfire prone areas are identified on a bushfire prone lands map which have been prepared for most councils across NSW. The map identifies bushfire hazards and associated buffer zones within a local government area. The classification and description of vegetation for the purpose of bushfire prone land assessment has been classified into three main groups;

- Vegetation Group 1 – Forest
- Vegetation Group 2 – Woodlands, heath and wetlands
- Vegetation Group 3- Moist rainforest, shrubland, open woodlands, Mallee and grasslands.

Once vegetation classes have been determined and mapped across a council area, application of bush fire vegetation categories to the vegetation groups must be completed.

The following Vegetation Groups relate to bush fire vegetation categories as follows:

- Vegetation Groups 1 and 2, greater than 1 hectare – Veg. Category 1
- Vegetation Group 3, greater than 1 hectare – Veg. Category 2

Areas of Vegetation Groups 1 and 2, less than 1 hectare that are within, or partially within 100m lateral separations from a bush fire vegetation category 1, or that are within, or partially within 30m lateral separation from a bush fire vegetation category 2 are classed as Bush Fire Vegetation Category 2.

Once areas of vegetation have been defined and appropriate bush fire vegetation categories applied, it is necessary to apply the buffering criteria. Application of buffering will in effect produce the bush fire prone land map.

The methodology for the determination of bush fire vegetation buffering is as follows: -

- Bush Fire Vegetation Category 1 – apply a 100 metre external buffer to each vegetation polygon.
- Bush Fire Vegetation Category 2 – apply a 30 metre external buffer to each vegetation polygon.

#### **4.2 Bushfire risk management plan**

A Bushfire Risk Management Plan (BFRMP) is a comprehensive document that maps and describes the level of bushfire risk across an area. The BFRMP identifies assets within the community at risk from bush fire, assesses the level of risk to those assets and establishes treatment options to deal with the risk and who is responsible for carrying out those treatments. The BFRMP is used to determine such things as where mechanical clearing or hazard reduction burns are conducted, which areas require specialised fire protection, and which areas need to be targeted for community education, or the establishment of Asset Protection Zones (APZs).

#### **4.3 NPWS Reserve fire management strategy (RFMS)**

NPWS primary fire management objectives are to:

- protect life, property and community assets from the adverse impacts of fire
- develop and implement cooperative and coordinated fire management arrangements with other fire authorities, reserve neighbours and the community
- manage fire regimes within reserves to protect and conserve natural and cultural heritage values, and
- assist other fire agencies, land management authorities and landholders in developing fire management practices that contribute to conserving biodiversity and cultural heritage across the landscape.

RFMS are designed to achieve the above objectives. RFMS will be prepared for all parks and reserves.

NPWS fire management strategies for protected areas will be regularly communicated to the relevant fire control officers as relevant plans for the purposes of Section 38 and 44 of the *Rural Fires Act 1997* and to BFMCs for reference within BFMC bushfire risk management plans.

#### **4.4 Local knowledge and/or fire history**

Due to the geographical diversity of the landscape within the Mosman / North Sydney and Lane Cove Willoughby LGA footprints, some areas of National Parks, bush reserves and open spaces don't meet the requirements in the other identification factors for "at risk" reserves. The use of known past fire history impact and confirmed local knowledge of managed reserves needs to be included in the holistic identification process. This will include the interrogation of existing Geographical Information Systems data layers of fire history.

## 5 Risk management process

### 5.1 Risk assessment method

The risk assessment process that will be utilised for this open space matrix aligns to the framework of Australian Standard AS/NZS ISO 31000 – 2009, Risk Management – Principles & Guidelines (figure1).

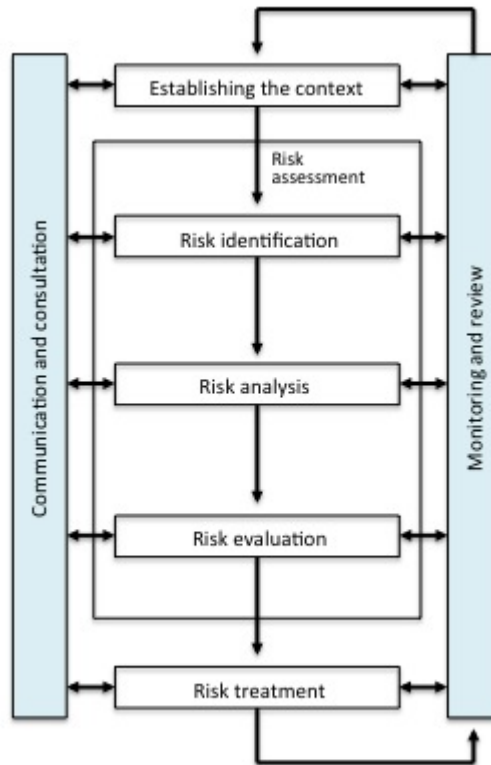


Figure 1 Risk assessment model

### 5.2 Multi-Criteria Decision Analysis

Multi-Criteria Decision Analysis (MCDA), also known as Multi-Criteria Decision Maker (MCDM) is an evaluation process where there are multiple views from stakeholders about an area, particularly about what is important, how importance should be measured and how the various factors should be combined. This method combines information into a model which is applied to make a decision about an environment.

Key stakeholders decided to assess risk using five criteria;

1. **Access / egress** – this identifies the types of site access / egress, be that by walking track, vehicle roads or by water (boat), and also assesses the number of those different entry / exit points.
2. **Track distance** – identifies the length of walking track segments through the site.
3. **Dead-end / isolated tracks** – identifies if there are public access areas within the site that has risk to isolate or cut off one-way access to safety.
4. **Bushfire prone land** – identifies if the site is classed a bushfire prone land and if so what Category, either CAT 1, CAT 2 vegetation type.

5. **Installed / introduced open fire** – identifies if there are potential ignition sources from recreation / cooking fireplaces, BBQ facilities and if the site has signage excluding use of fire.

The five criteria assessed are assigned a risk consequence rating, scaled from;

- Low
- Moderate
- High
- Extreme

Each of the above has been assigned set parameters and has been scaled and weighted for evaluation (table 1).

**Table 1** Assessment parameters, criteria scaling and weighting

Table of details: Criteria, Parameter Scaling & Ratings			
Parameter	Criteria Parameter Scale	Criteria Parameter	Parameter Rating Value
Access/Egress	Low	Multiple A/E Pts/Multiple types	0
	Moderate	Multiple A/E Pts/Limited types	8.79912
	High	Limited A/E Pts/One type	17.59824
	Extreme	Limited A/E Pts	26.664
Track distance	Low	0-50m	0
	Moderate	50-100m	4.40
	High	100-200m	8.78
	Extreme	200m +	13.33
Dead-end/isolated tracks	Low	No	0
	Extreme	Yes	20.00
BFPL	Low	No BFPL	0
	Moderate	Unmapped BFPL	11.00
	High	BFPL Cat 2	21.98
	Extreme	BFPL Cat 1	33.33
Installed or Introduced Open Fire	Low	No Use	0
	Moderate	Fire exclusion signs	2.20
	High	Informal Open Fire	4.42
	Extreme	Yes Installed/In place	6.67
Other Reserve Classification	Commercial operations/Attractions	N/A	N/A
	Higher Exposed Sites/Precincts	N/A	N/A
	Lower Exposed Sites/Precincts	N/A	N/A

The five assessment criteria have been ranked in order of importance's and assigned a calculated weighting value (table 2).

**Table 2** Criteria importance ranking

	Calculations	
	Criteria Rating	Criteria Weighting
Access/Egress	4	26.7
Track distance	2	13.3
Dead-end/isolated tracks	3	20.0
BFPL	5	33.3
Installed/Introduced Open Fire	1	6.7

The other identified factor used in the assessment process, however has no weighting against the risk assessment outcome, is the type of Open Space, Park, or Reserve, these are;

- **Commercial Operational / Attractions** – these are approved and managed businesses or recreational activities operating for the use of members of the

public – e.g. cafes, boat hire, tour groups, and educational interactive attractions.

- **Higher Exposed Sites / Precincts** – has a high volume of patronage for the site and is known for an increase in the population of tourists / visitors.
- **Lower Exposed Sites / Precincts** – has a lower volume of patronage for the site and is not subject to a large population of tourists / visitors.

To assist land managers / owners an Instant Calculator Tool has been designed using the above criteria which provided an overall risk assessment score represented as a percentage of risk (table 3).

**Table 3** Instant calculator tool

PARK / RESERVE NAME	Park Criteria											SCORE (%)
	Access/Egress	Value	Track distance	Value	Dead-end/isolated tracks	Value	BFPL	Value	Installed/introduced Open Fire	Value	Other Reserve Classification	
North Sydney Council												
Balls Head Reserve, Waverton	High	17.60	Extreme	13.33	Extreme	20.00	Extreme	33.33	High	4.42	Higher Exposed Sites/Precincts	88.7
Berry Island Reserve, Wollstonecraft	High	17.60	Extreme	13.33	Low	0.00	Extreme	33.33	High	4.42	Higher Exposed Sites/Precincts	69.7
Gore Cove Res/Smoothey Park W'craft	Moderate	8.00	Extreme	13.33	Extreme	20.00	High	21.98	Low	0.00	Higher Exposed Sites/Precincts	64.1
Badangi Reserve, Wollstonecraft	Moderate	8.00	Extreme	13.33	Low	0.00	Extreme	33.33	Low	0.00	Higher Exposed Sites/Precincts	55.5
Tunks Park (East), Cammeray	High	17.60	Moderate	4.40	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	44.0
Tunks Park (West), Cammeray	High	17.60	Low	0.00	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	39.6

The calculated score percentage range will cause the following management action on an open space, park, or reserve (table 4).

**Table 4** Management action

<b>OPEN</b>	<b>Risk Score</b> < 49%
Reserve can remain open with normal management procedures	
<b>Monitor</b>	50% -64%
Monitor conditions throughout day. Land Manager to monitor local weather condition and current fire activity.	
<b>Decision</b>	65% – 74%
Decision to be made by Land Manager. Land Manager may consult with Emergency Service Agencies - LECON / Zone Commander.	
<b>CLOSED</b>	75% - 100%
Close for public access Restrict all public access to reserve.	

Monitor throughout the day, assessing localised conditions or operational activities which may increase risk and lead to localised open space closures.

Decision on the day is made by the Land Manager in conjunction with advice from emergency service agencies. Considerations outside the control of the Land Manager, such as emergency service operational conditions and resource availability and localised weather conditions will be factored in to the decision.

It is the responsibility of the Land Owner /Manager to implement the required action for their open spaces as determined by the risk assessment matrix. The actions taken will also need to be communicated to the Police Local Emergency Management Controller (LECON) and FRNSW Zone Commander, as the Bushfire Risk Management Committee Executive Officer.



## 6 Risk mitigation recommended strategy matrix

### Mosman Council

Name of Park - Reserve - Precincts	Total Fire Ban		
	Severe FDI 50-74	Extreme FDI 75-99	Catastrophic FDI 100 +
Parriwi Park	DECISION	CLOSE	CLOSE
Quakers Hat Park (Pulpit Rock)	DECISION	CLOSE	CLOSE
Lawry Plunkett	MONITOR	DECISION	CLOSE
Bradley Bushland Reserve	OPEN	MONITOR	DECISION
The Spit Bushland Reserve	OPEN	MONITOR	DECISION
Balmoral	OPEN	MONITOR	DECISION
Harnett Park	OPEN	MONITOR	DECISION
Beauty Point	OPEN	MONITOR	DECISION
Sirius Park East	OPEN	MONITOR	DECISION
Quakers Hat North	OPEN	OPEN	OPEN
Quakers Hat South	OPEN	OPEN	OPEN
Reid Park	OPEN	OPEN	OPEN
Joel's Reserve	OPEN	OPEN	OPEN
Parriwi Point	OPEN	OPEN	OPEN
Clifton Gardens	OPEN	OPEN	OPEN
Morella Road	OPEN	OPEN	OPEN
Wyargine Point	OPEN	OPEN	OPEN
Rosherville	OPEN	OPEN	OPEN
Sirius Park West	OPEN	OPEN	OPEN
Curraghbeena	OPEN	OPEN	OPEN
Mosman Bay Creek	OPEN	OPEN	OPEN
Parriwi Lighthouse	OPEN	OPEN	OPEN
Chinamans Beach	OPEN	OPEN	OPEN

### Sydney Harbour Federation Trust

Name of Park - Reserve - Precincts	Total Fire Ban		
	Severe FDI 50-74	Extreme FDI 75-99	Catastrophic FDI 100 +
North Head Sanctuary- Walking tracks	CLOSE	CLOSE	CLOSE
North Fort Precinct	DECISION	CLOSE	CLOSE
Headland Park - walking tracks /lookouts	OPEN	MONITOR	DECISION
Balmoral - Georges Heights Stairs (Defence)	OPEN	MONITOR	DECISION
North Head Parade Ground Precinct	OPEN	MONITOR	DECISION
Middle Head - Commercial Precinct	OPEN	OPEN	OPEN
Georges Heights - Commercial Precinct	OPEN	OPEN	OPEN
Chowder Bay - Commercial Precinct	OPEN	OPEN	OPEN

## North Sydney Council

Name of Park - Reserve - Precincts	<b>Total Fire Ban</b>		
	Severe FDI 50-74	Extreme FDI 75-99	Catastrophic FDI 100 +
Balls Head Reserve, Waverton	DECISION	CLOSE	CLOSE
Berry Island Reserve, Wollstonecraft	MONITOR	DECISION	CLOSE
Gore Cove Res/Smoothiey Park Wollstonecraft	OPEN	MONITOR	DECISION
Badangi Reserve, Wollstonecraft	OPEN	MONITOR	DECISION
Tunks Park (East), Cammeray	OPEN	OPEN	OPEN
Tunks Park (West), Cammeray	OPEN	OPEN	OPEN
Cremorne Reserve, Cremorne Point	OPEN	OPEN	OPEN
Primrose Park, Cremorne/Cammeray	OPEN	OPEN	OPEN
Brightmore Reserve, Cremorne	OPEN	OPEN	OPEN
Forsyth Park, Neutral Bay	OPEN	OPEN	OPEN
Judith Ambler Reserve, Cammeray	OPEN	OPEN	OPEN
Mortlock Reserve, Cammeray	OPEN	OPEN	OPEN
Wonga Road Reserve, Cremorne	OPEN	OPEN	OPEN
Harry Howard Reserve, Wollstonecraft	OPEN	OPEN	OPEN
Waverton Park, Waverton	OPEN	OPEN	OPEN

## Willoughby City Council

Name of Park - Reserve - Precincts	<b>Total Fire Ban</b>		
	Severe FDI 50-74	Extreme FDI 75-99	Catastrophic FDI 100 +
Harold Reid Reserve	DECISION	CLOSE	CLOSE
Explosives Reserve	DECISION	CLOSE	CLOSE
HC Press Park	DECISION	CLOSE	CLOSE
HD Robb	MONITOR	DECISION	CLOSE
Castlecrag Northern Escarpment	MONITOR	DECISION	CLOSE
Blue Gum Park	MONITOR	MONITOR	DECISION
Coolaroo Park	OPEN	MONITOR	DECISION
North Arm Reserve	OPEN	MONITOR	DECISION
Mowbray Park	OPEN	MONITOR	DECISION
Clive Park	OPEN	MONITOR	DECISION
Watergate Reserve	OPEN	OPEN	OPEN
OH Reid Park	OPEN	OPEN	OPEN
Artarmon Reserve	OPEN	OPEN	OPEN
Castle Cove Park	OPEN	OPEN	OPEN
Ferndale Park	OPEN	OPEN	OPEN
Flat Rock Gully Reserve	OPEN	OPEN	OPEN
Northbridge Park	OPEN	OPEN	OPEN
Sailors Bay Park	OPEN	OPEN	OPEN
Castlecrag Griffin Reserves	OPEN	OPEN	OPEN

**Lane Cove Council**

Name of Park - Reserve - Precincts	Total Fire Ban		
	Severe FDI 50-74	Extreme FDI 75-99	Catastrophic FDI 100 +
Battern Reserve	MONITOR	MONITOR	DECISION
Ventemans Reach	MONITOR	MONITOR	DECISION
Lovetts Reserve	MONITOR	MONITOR	DECISION
Yangoora Reserve	MONITOR	MONITOR	DECISION
Lower Stringybark Creek Reserve	OPEN	MONITOR	DECISION
Greendale Reserve	OPEN	MONITOR	DECISION
Holloway Reserve	OPEN	MONITOR	DECISION
Gore Creek Reserve	OPEN	MONITOR	DECISION
Warraroon Reserve	OPEN	MONITOR	DECISION
Tennyson Park	OPEN	MONITOR	DECISION
Burns Bay Reserve	OPEN	MONITOR	DECISION
Aquatic Park	OPEN	OPEN	OPEN
Lane Cove Bushland Park	OPEN	OPEN	OPEN
Hartman Hill	OPEN	OPEN	OPEN
Upper Stringybark Creek Reserve	OPEN	OPEN	OPEN
Tambourine Bay Reserve	OPEN	OPEN	OPEN
Hands Quarry Reserve	OPEN	OPEN	OPEN
Shell Park Reserve	OPEN	OPEN	OPEN
Woodford Bay	OPEN	OPEN	OPEN
Mann's Point	OPEN	OPEN	OPEN
Linley Point Reserve	OPEN	OPEN	OPEN
Lloyd Rees Park	OPEN	OPEN	OPEN

**OEH - National Park & Wildlife Service**

Name of Park - Reserve - Precincts	Total Fire Ban		
	Severe FDI 50-74	Extreme FDI 75-99	Catastrophic FDI 100 +
North Head Scenic Drive	DECISION	CLOSE	CLOSE
Dobroyed Head / Grotto point	DECISION	CLOSE	CLOSE
Bradleys Head	DECISION	CLOSE	CLOSE
Q Station	MONITOR	DECISION	CLOSE
Middle Head	MONITOR	DECISION	CLOSE
Athol Hall Precinct	MONITOR	DECISION	CLOSE

**NPWS considered actions throughout other areas of the gSa**

Mangement Trails	CLOSE	CLOSE	CLOSE
Remote Tracks	CLOSE	CLOSE	CLOSE
Vistor Precincts	MONITOR	DECISION	CLOSE
Commercial Operations	OPEN	OPEN	CLOSE
Camp Grounds	OPEN	OPEN	CLOSE
Remote Camp Grounds - Camping	OPEN	OPEN	CLOSE

## 7 Risk assessment evolution criteria and Risk Score

### 7.1 Mosman Council

PARK / RESERVE NAME	Park Criteria											SCORE (%)
	Access/Egress	Value	Track distance	Value	Dead-end/isolated tracks	Value	BFPL	Value	Installed/Introduced Open Fire	Value	Other Reserve Classification	
<b>Mosman Council</b>												
Parriwi Park	High	17.60	Extreme	13.33	Extreme	20.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	84.3
Quakers Hat Park (Pulpit Rock)	High	17.60	High	8.78	Extreme	20.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	79.7
Lawry Plunkett	High	17.60	Extreme	13.33	Low	0.00	Extreme	33.33	Moderate	2.20	Higher Exposed Sites/Precincts	66.5
Bradley Bushland Reserve	High	17.60	High	8.78	Low	0.00	Extreme	33.33	Low	0.00	Higher Exposed Sites/Precincts	59.7
The Spit Bushland Reserve	High	17.60	Moderate	4.40	Low	0.00	Extreme	33.33	Moderate	2.20	Higher Exposed Sites/Precincts	57.5
Balmoral	High	17.60	Moderate	4.40	Low	0.00	Extreme	33.33	Low	0.00	Commercial operations/Attractions	55.3
Harnett Park	High	17.60	Extreme	13.33	Low	0.00	High	21.98	Low	0.00	Higher Exposed Sites/Precincts	52.9
Beauty Point	High	17.60	Extreme	13.33	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	52.9
Sirius Park East	High	17.60	Extreme	13.33	Low	0.00	High	21.98	Low	0.00	Higher Exposed Sites/Precincts	52.9
Quakers Hat North	High	17.60	High	8.78	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	48.4
Quakers Hat South	High	17.60	High	8.78	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	48.4
Reid Park	High	17.60	Moderate	4.40	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	44.0
Joel's Reserve	High	17.60	Moderate	4.40	Extreme	20.00	Low	0.00	Low	0.00	Lower Exposed Sites/Precincts	42.0
Parriwi Point	High	17.60	Low	0.00	Low	0.00	High	21.98	Low	0.00	Higher Exposed Sites/Precincts	39.6
Clifton Gardens	Moderate	8.80	Low	0.00	Low	0.00	High	21.98	High	4.42	Commercial operations/Attractions	35.2
Morella Road	Low	0.00	Low	0.00	Low	0.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	33.3
Wyargine Point	High	17.60	High	8.78	Low	0.00	Low	0.00	High	4.42	Higher Exposed Sites/Precincts	30.8
Rosherville	High	17.60	High	8.78	Low	0.00	Low	0.00	Moderate	2.20	Lower Exposed Sites/Precincts	28.6
Sirius Park West	High	17.60	High	8.78	Low	0.00	Low	0.00	Low	0.00	Higher Exposed Sites/Precincts	26.4
Curragheena	Low	0.00	Low	0.00	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	22.0
Mosman Bay Creek	Low	0.00	Low	0.00	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	22.0
Parriwi Lighthouse	High	17.60	Moderate	4.40	Low	0.00	Low	0.00	Low	0.00	Lower Exposed Sites/Precincts	22.0
Chinamans Beach	High	17.60	Low	0.00	Low	0.00	Low	0.00	High	4.42	Higher Exposed Sites/Precincts	22.0

### 7.2 Sydney Harbour Federation Trust

PARK / RESERVE NAME	Park Criteria											SCORE (%)
	Access/Egress	Value	Track distance	Value	Dead-end/isolated tracks	Value	BFPL	Value	Installed/Introduced Open Fire	Value	Other Reserve Classification	
<b>Sydney Harbour Federation Trust</b>												
North Head Sanctuary- Walking tracks	High	17.60	Extreme	13.33	Extreme	20.00	Extreme	33.33	Low	0.00	Higher Exposed Sites/Precincts	84.3
North Fort Precinct	Moderate	8.80	Extreme	13.33	Extreme	20.00	Extreme	33.33	Low	0.00	Higher Exposed Sites/Precincts	75.5
Headland Park - walking tracks /lookouts	High	17.60	Extreme	13.33	Low	0.00	Extreme	33.33	Low	0.00	Higher Exposed Sites/Precincts	64.3
Balmoral - Georges Heights Stairs (Defence)	High	17.60	Extreme	13.33	Low	0.00	Extreme	33.33	Low	0.00	Higher Exposed Sites/Precincts	64.3
North Head Parade Ground Precinct	Moderate	8.80	Low	0.00	Extreme	20.00	Extreme	33.33	Low	0.00	Commercial operations/Attractions	62.1
Middle Head - Commercial Precinct	Moderate	8.80	Low	0.00	Low	0.00	Extreme	33.33	Low	0.00	Commercial operations/Attractions	42.1
Georges Heights - Commercial Precinct	Moderate	8.80	Low	0.00	Low	0.00	Extreme	33.33	Low	0.00	Commercial operations/Attractions	42.1
Chowder Bay - Commercial Precinct	Low	0.00	Low	0.00	Low	0.00	Extreme	33.33	Low	0.00	Commercial operations/Attractions	33.3

### 7.3 North Sydney Council

PARK / RESERVE NAME	Park Criteria											SCORE (%)
	Access/Egress	Value	Track distance	Value	Dead-end/isolated tracks	Value	BFPL	Value	Installed/Introduced Open Fire	Value	Other Reserve Classification	
<b>North Sydney Council</b>												
Balls Head Reserve, Waverton	High	17.60	Extreme	13.33	Extreme	20.00	Extreme	33.33	High	4.42	Higher Exposed Sites/Precincts	88.7
Berry Island Reserve, Wollstonecraft	High	17.60	Extreme	13.33	Low	0.00	Extreme	33.33	High	4.42	Higher Exposed Sites/Precincts	68.7
Gore Cove Res/Smoothey Park W'craft	Moderate	8.80	Extreme	13.33	Extreme	20.00	High	21.98	Low	0.00	Higher Exposed Sites/Precincts	64.1
Badangi Reserve, Wollstonecraft	Moderate	8.80	Extreme	13.33	Low	0.00	Extreme	33.33	Low	0.00	Higher Exposed Sites/Precincts	55.5
Tunks Park (East), Cammeray	High	17.60	Moderate	4.40	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	44.0
Tunks Park (West), Cammeray	High	17.60	Low	0.00	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	39.6
Cremorne Reserve, Cremorne Point	Moderate	8.80	Extreme	13.33	Low	0.00	Moderate	11.00	Low	0.00	Higher Exposed Sites/Precincts	33.1
Primrose Park, Cremorne/Cammeray	Moderate	8.80	Extreme	13.33	Low	0.00	Moderate	11.00	Low	0.00	Lower Exposed Sites/Precincts	33.1
Brightmore Reserve, Cremorne	Moderate	8.80	Extreme	13.33	Low	0.00	Moderate	11.00	Low	0.00	Lower Exposed Sites/Precincts	33.1
Forsyth Park, Neutral Bay	High	17.60	Moderate	4.40	Low	0.00	Moderate	11.00	Low	0.00	Lower Exposed Sites/Precincts	33.0
Judith Ambler Reserve, Cammeray	High	17.60	Moderate	4.40	Low	0.00	Moderate	11.00	Low	0.00	Lower Exposed Sites/Precincts	33.0
Mortlock Reserve, Cammeray	High	17.60	Low	0.00	Low	0.00	Moderate	11.00	Low	0.00	Lower Exposed Sites/Precincts	28.6
Wonga Road Reserve, Cremorne	High	17.60	Low	0.00	Low	0.00	Moderate	11.00	Low	0.00	Lower Exposed Sites/Precincts	28.6
Harry Howard Reserve, Wollstonecraft	Moderate	8.80	Moderate	4.40	Low	0.00	Moderate	11.00	Low	0.00	Lower Exposed Sites/Precincts	24.2
Waverton Park, Waverton	Moderate	8.80	Low	0.00	Low	0.00	Moderate	11.00	Low	0.00	Lower Exposed Sites/Precincts	19.8

### 7.4 Willoughby City Council

PARK / RESERVE NAME	Park Criteria											SCORE (%)
	Access/Egress	Value	Track distance	Value	Dead-end/isolated tracks	Value	BFPL	Value	Installed/Introduced Open Fire	Value	Other Reserve Classification	
Harold Reid Reserve	Moderate	8.80	Extreme	13.33	Extreme	20.00	Extreme	33.33	High	4.42	Higher Exposed Sites/Precincts	79.9
Explosives Reserve	Moderate	8.80	Extreme	13.33	Extreme	20.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	75.5
HC Press Park	High	8.80	Extreme	13.33	Extreme	20.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	75.5
HD Robb	High	17.60	Low	0.00	Extreme	20.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	70.9
Castlecrag Northern Escarpment	Low	0.00	Extreme	13.33	Extreme	20.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	66.7
Blue Gum Park	High	17.60	Extreme	13.33	Low	0.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	64.1
Coolaroo Park	Moderate	8.80	Extreme	13.33	Extreme	20.00	High	21.98	High	0.00	Lower Exposed Sites/Precincts	64.1
North Arm Reserve	Moderate	8.80	Extreme	13.33	Low	0.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	55.5
Mowbray Park	Moderate	8.80	Extreme	13.33	Low	0.00	Extreme	33.33	Low	0.00	Higher Exposed Sites/Precincts	55.5
Clive Park	Moderate	8.80	High	8.78	Low	0.00	Extreme	33.33	Moderate	2.20	Higher Exposed Sites/Precincts	53.1
Watergate Reserve	Moderate	8.80	Extreme	13.33	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	44.1
OH Reid Park	Low	0.00	Extreme	13.33	Low	0.00	High	21.98	Extreme	6.67	Higher Exposed Sites/Precincts	42.0
Artarmon Reserve	Low	0.00	Extreme	13.33	Low	0.00	High	21.98	Moderate	2.20	Higher Exposed Sites/Precincts	37.5
Castle Cove Park	Low	0.00	Extreme	13.33	Low	0.00	High	21.98	Moderate	2.20	Higher Exposed Sites/Precincts	37.5
Ferndale Park	Low	0.00	Extreme	13.33	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	35.3
Fiat Rock Gully Reserve	Low	0.00	Extreme	13.33	Low	0.00	High	21.98	Low	0.00	Commercial operations/Attractions	35.3
Northbridge Park	Low	0.00	Extreme	13.33	Low	0.00	High	21.98	Low	0.00	Commercial operations/Attractions	35.3
Sailors Bay Park	Low	0.00	Extreme	13.33	Low	0.00	High	21.98	Low	0.00	Commercial operations/Attractions	35.3
Castlecrag Griffin Reserves	Low	0.00	Low	13.33	Low	0.00	Low	21.98	Low	0.00	Lower Exposed Sites/Precincts	35.3

## 7.5 Lane Cove Council

PARK / RESERVE NAME	Park Criteria											SCORE (%)
	Access/Egress	Value	Track distance	Value	Dead-end/isolated tracks	Value	BFPL	Value	Installed/Introduced Open Fire	Value	Other Reserve Classification	
Lane Cove Council												
Battern Reserve	High	17.60	Extreme	13.33	Low	0.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	64.3
Ventemans Reach	High	17.60	Extreme	13.33	Low	0.00	Extreme	33.33	Low	0.00	Higher Exposed Sites/Precincts	59.3
Lovetts Reserve	High	17.60	Extreme	13.33	Low	0.00	Extreme	33.33	Low	0.00	Commercial operations/Attractions	66.6
Yangoorra Reserve	High	17.60	Extreme	13.33	Low	0.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	64.3
Lower Stringybark Creek Reserve	High	17.60	High	8.78	Low	0.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	66.7
Greendale Reserve	High	17.60	High	8.78	Low	0.00	High	21.98	Extreme	6.67	Lower Exposed Sites/Precincts	66.6
Holloway Reserve	High	17.60	Extreme	13.33	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	62.9
Gore Creek Reserve	High	17.60	Extreme	13.33	Low	0.00	High	21.98	Low	0.00	Higher Exposed Sites/Precincts	62.0
Warraroon Reserve	High	17.60	Extreme	13.33	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	64.9
Tennyson Park	High	17.60	Extreme	13.33	Low	0.00	High	21.98	Low	0.00	Higher Exposed Sites/Precincts	62.9
Burns Bay Reserve	High	17.60	Extreme	13.33	Extreme	20.00	Low	0.00	Low	0.00	Lower Exposed Sites/Precincts	66.0
Aquatic Park	High	17.60	Moderate	4.40	Extreme	20.00	Low	0.00	Extreme	6.67	Higher Exposed Sites/Precincts	48.7
Lane Cove Bushland Park	High	17.60	High	8.78	Low	0.00	High	21.98	Low	0.00	Commercial operations/Attractions	48.4
Hartman Hill	High	17.60	High	8.78	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	48.4
Upper Stringybark Creek Reserve	High	17.60	High	8.78	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	48.4
Tambourine Bay Reserve	High	17.60	High	8.78	Extreme	20.00	Low	0.00	Low	0.00	Higher Exposed Sites/Precincts	46.4
Hands Quarry Reserve	High	17.60	Moderate	4.40	Low	0.00	High	21.98	Low	0.00	Lower Exposed Sites/Precincts	44.0
Shell Park Reserve	High	17.60	Extreme	13.33	Low	0.00	Low	0.00	Low	0.00	Higher Exposed Sites/Precincts	30.9
Woodford Bay	High	17.60	High	8.78	Low	0.00	Low	0.00	Low	0.00	Lower Exposed Sites/Precincts	26.4
Mann's Point	High	17.60	Moderate	4.40	Low	0.00	Low	0.00	Low	0.00	Higher Exposed Sites/Precincts	22.0
Linley Point Reserve	High	17.60	Moderate	4.40	Low	0.00	Low	0.00	Low	0.00	Lower Exposed Sites/Precincts	22.0
Lloyd Rees Park	High	17.60	Low	0.00	Low	0.00	Low	0.00	Low	0.00	Higher Exposed Sites/Precincts	52.9

## 7.6 Office of Environment and Heritage – National Parks and Wildlife Service

PARK / RESERVE NAME	Park Criteria											SCORE (%)
	Access/Egress	Value	Track distance	Value	Dead-end/isolated tracks	Value	BFPL	Value	Installed/Introduced Open Fire	Value	Other Reserve Classification	
National Parks Wildlife Service												
Bradleys Head	Moderate	8.80	Extreme	13.33	Extreme	20.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	75.5
North Head Scenic Drive	Moderate	8.80	Extreme	13.33	Extreme	20.00	Extreme	33.33	Low	0.00	Higher Exposed Sites/Precincts	75.5
Dobroyed Head / Grotto point	Moderate	8.80	Extreme	13.33	Extreme	20.00	Extreme	33.33	Low	0.00	Higher Exposed Sites/Precincts	75.5
Q Station	Low	0.00	Moderate	4.40	Extreme	20.00	Extreme	33.33	Low	0.00	Commercial operations/Attractions	57.7
Middle Head	Moderate	8.80	High	8.78	Low	0.00	Extreme	33.33	Low	0.00	Lower Exposed Sites/Precincts	50.9
Athol Hall Precinct	Low	0.00	Low	0.00	Low	0.00	Extreme	33.33	Low	0.00	Commercial operations/Attractions	33.3

# 8 Map

## The Mosman North Sydney Lane Cove Willoughby Local Government Area – Bushfire Prone Land Map

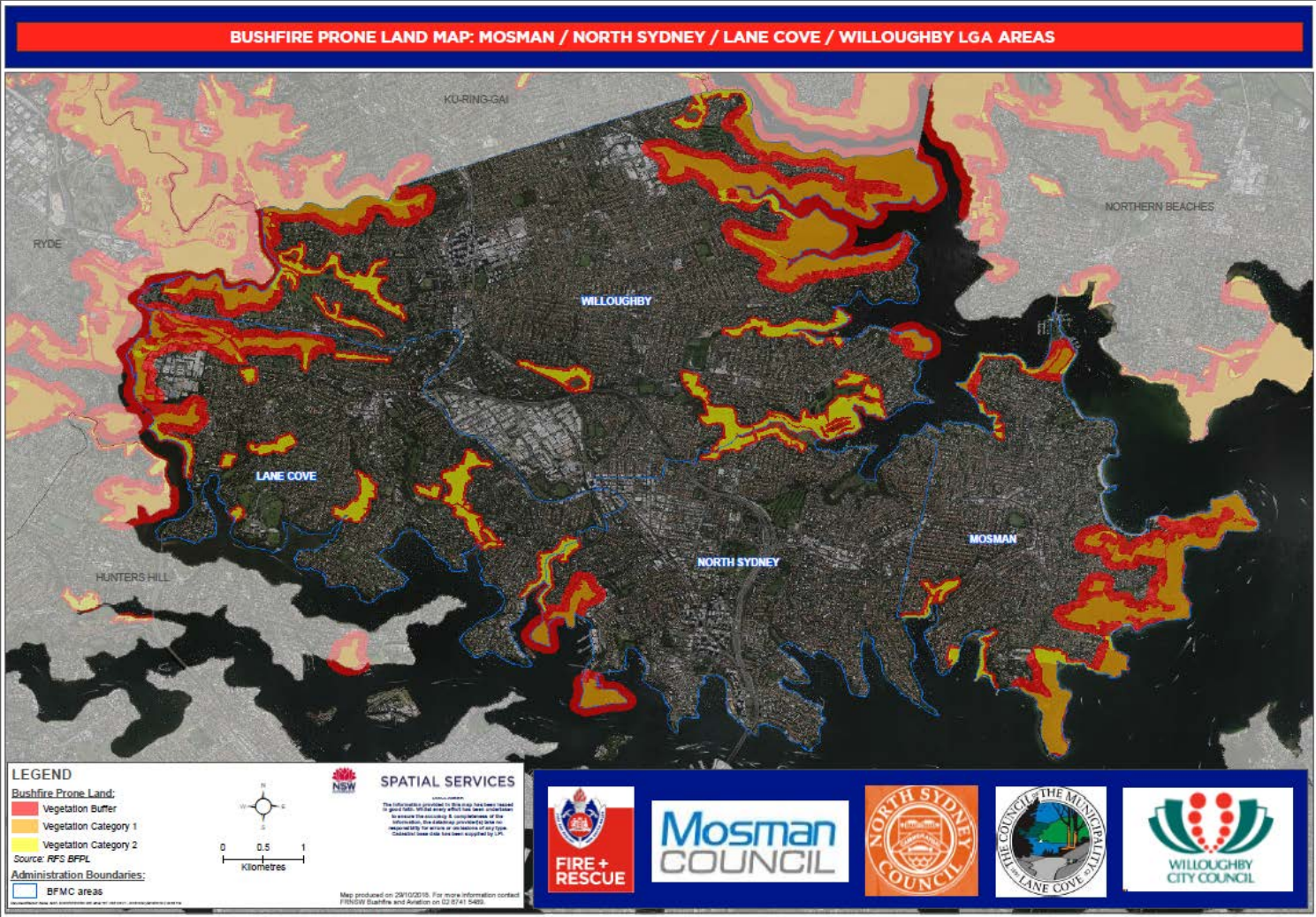


Figure 2 Bushfire Prone Land

## 9 Monitoring and review

This open space management matrix is intended to be a consistent strategy to cover all land owner / managers across all tenure of land. It will be implemented for the 2018-2019 Bushfire Danger Period.

A review of its usability and risk assessment methodology will be review by all key stakeholders at the conclusion of the season.

## 10 Further information

Contact FRNSW Bushfire Officer Metro East - S/F Rob Strauch 0448 587 547 or [Robert.Strauch@fire.nsw.gov.au](mailto:Robert.Strauch@fire.nsw.gov.au)

## 11 Document information

### 11.1 Related documents

List any related documents, such as policies, templates, recommended practices, guidelines or procedures.

### 11.2 Document control

<b>Policy Manager</b>	Mosman / North Sydney and Lane Cove / Willoughby LEMCs
<b>Contact Officer</b>	Bushfire Officer Metro East Command
<b>Contact No</b>	0448 597 547
<b>Document type</b>	Strategy
<b>Applies to</b>	<input checked="" type="checkbox"/> Mosman / North Sydney and Lane Cove / Willoughby LEMC <input checked="" type="checkbox"/> Relevant Bushfire Management Committees <input checked="" type="checkbox"/> NSW Police <input checked="" type="checkbox"/> FRNSW - Operational Command <input checked="" type="checkbox"/> LEMC member Local and Public Authorities
<b>Status</b>	Approved
<b>Security</b>	Unclassified
<b>File Reference</b>	NFB/
<b>Review Date</b>	November 2018
<b>Rescinds</b>	
<b>Copyright</b>	© State of New South Wales through Fire and Rescue NSW

### 11.3 Revision history

Version	Date	Status	TRIM Ref	Details
1A	22/10/2018	Approved		Draft review



## 12 Appendix – Required actions matrix

### Bushfire Danger - Local Access Management Plan

Name of Park - Reserve - Precincts		Risk Score	Total Fire Ban		
			Severe FDI 50-74	Extreme FDI 75-99	Catastrophic FDI 100 +
NSC	Balls Head Reserve, Waverton	88.68	DECISION	CLOSE	CLOSE
MC	Parriwi Park	84.26	DECISION	CLOSE	CLOSE
SHFT	North Head Sanctuary- Walking tracks	84.26	CLOSE	CLOSE	CLOSE
WCC	Harold Reid Reserve	79.88	DECISION	CLOSE	CLOSE
MC	Quakers Hat Park (Pulpit Rock)	79.71	DECISION	CLOSE	CLOSE
WCC	Explosives Reserve	75.48	DECISION	CLOSE	CLOSE
WCC	HC Press Park	75.46	DECISION	CLOSE	CLOSE
NPWS	Bradleys Head	75.46	DECISION	CLOSE	CLOSE
NPWS	North Head Scenic Drive	75.46	DECISION	CLOSE	CLOSE
NPWS	Dobroyed Head / Grotto point	75.46	DECISION	CLOSE	CLOSE
SHFT	North Fort Precinct	75.46	DECISION	CLOSE	CLOSE
WCC	HD Robb	70.93	MONITOR	DECISION	CLOSE
NSC	Berry Island Reserve, Wollstonecraft	68.68	MONITOR	DECISION	CLOSE
WCC	Castlecrag Northern Escarpment	66.66	MONITOR	DECISION	CLOSE
MC	Lawry Plunkett	66.46	MONITOR	DECISION	CLOSE
LCC	Battern Reserve	64.26	MONITOR	MONITOR	DECISION
LCC	Ventemans Reach	64.26	MONITOR	MONITOR	DECISION
LCC	Lovetts Reserve	64.26	MONITOR	MONITOR	DECISION
LCC	Yangoora Reserve	64.26	MONITOR	MONITOR	DECISION
WCC	Blue Gum Park	64.26	MONITOR	MONITOR	DECISION
SHFT	Headland Park - walking tracks /lookouts	64.26	OPEN	MONITOR	DECISION
MC	Balmoral - Georges Heights Stairs (Defence)	64.26	OPEN	MONITOR	DECISION
NSC	Gore Cove Res/Smoothey Park Wollstonecraft	64.11	OPEN	MONITOR	DECISION
WCC	Coolaroo Park	64.11	OPEN	MONITOR	DECISION
SHFT	North Head Parade Ground Precinct	62.13	OPEN	MONITOR	DECISION
MC	Bradley Bushland Reserve	59.71	OPEN	MONITOR	DECISION
LCC	Lower Stringybark Creek Reserve	59.71	OPEN	MONITOR	DECISION
NAPS	Q Station	57.73	MONITOR	DECISION	CLOSE
MC	The Spit Bushland Reserve	57.53	OPEN	MONITOR	DECISION
NSC	Badangi Reserve, Wollstonecraft	55.46	OPEN	MONITOR	DECISION
MC	Balmoral	55.33	OPEN	MONITOR	DECISION
LCC	Greendale Reserve	55.02	OPEN	MONITOR	DECISION
LCC	Holloway Reserve	52.91	OPEN	MONITOR	DECISION
LCC	Gore Creek Reserve	52.91	OPEN	MONITOR	DECISION
LCC	Warraroon Reserve	52.91	OPEN	MONITOR	DECISION
LCC	Tennyson Park	52.91	OPEN	MONITOR	DECISION
MC	Beauty Point	52.91	OPEN	MONITOR	DECISION
MC	Sirius Park East	52.91	OPEN	MONITOR	DECISION
MC	Harnett Park	52.90	OPEN	MONITOR	DECISION
LCC	Burns Bay Reserve	50.93	OPEN	MONITOR	DECISION
NPWS	Middle Head	50.91	MONITOR	DECISION	CLOSE

## 13 Appendix – Local Access Management Plans (LAMPs)