



South Australian
**COUNTRY
FIRE SERVICE**

Bushfire Management Planning in South Australia

Fire Management within Grasslands Ecosystem
Forum 2014
March 13-14 2014



Government of
South Australia

www.cfs.sa.gov.au

PREPARE. ACT. SURVIVE.



Legislative Context

Fire and Emergency Services Act 2005

- Fire prevention authorities
 - State Bushfire Coordination Committee (sn 71)
 - Bushfire Management Committees (sn 72)
- Bushfire Management Area Plans (sn 73, 73A)
- Fire Danger Season (sn 78)
- Total Fire Bans (sn 80)
- Permits to Burn (sn 81)
- Hazard Reduction (sn 105)

Native Vegetation Act, 1991 and Regulations 2003

An Act to provide incentives and assistance to landholders in relation to the preservation and enhancement of native vegetation; to control the clearance of native vegetation etc

- ❑ Clearance of native vegetation (sn 27)
 - May be granted by NVC
 - Fire hazard reduction approval delegated to CFS
- ❑ General exemptions (Reg 5)
- ❑ Fire prevention exemptions (Reg 5A)
- ❑ Changes since 2010

Environment Protection Act

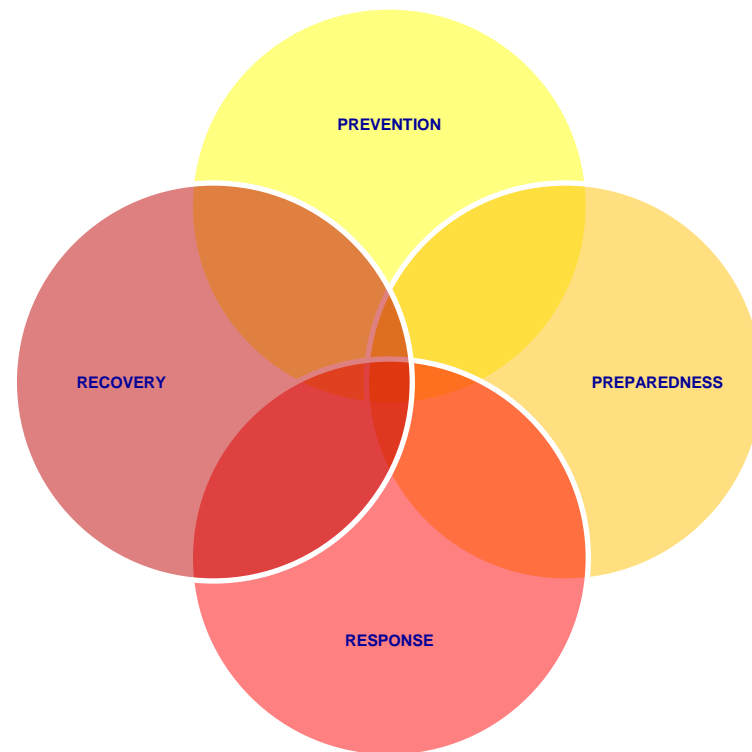
Environment Protection (Burning) Policy 1994

- Control of burning in the open
 - Non-domestic premises
 - Domestic premises
 - exemptions
- Local council authorised officers

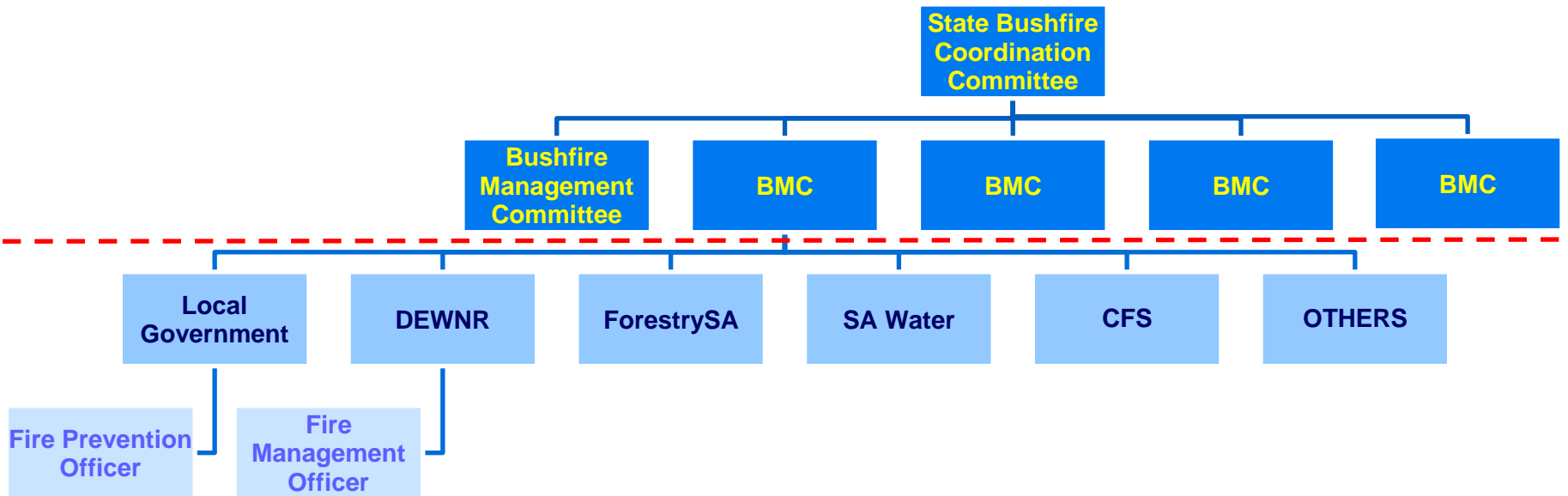
Bushfire Management Planning

“All activities associated with the management of fire prone public and private land to meet public safety and land management objectives”

Bushfire Management
VS
Bushfire Prevention



Bushfire Management Committee Structure



Bushfire Management Plan Framework

STRATEGIC PLANS

State Bushfire
Management
Plan

Bushfire
Management
Area Plan

Local Council
plan

DEWNR plan

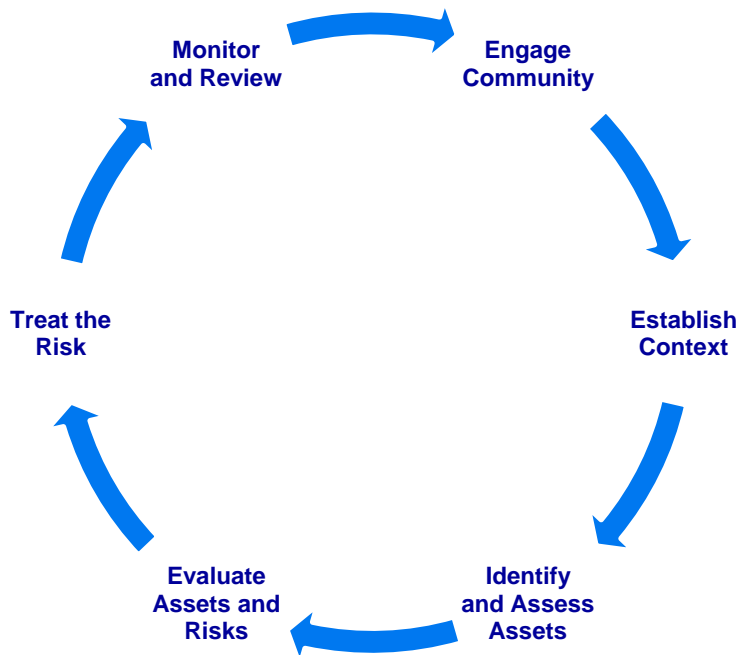
ForestrySA
plan

SAWater plan

Others

OPERATIONS/WORKS PLANS

Planning Framework



- Risk-based (ISO 31000)
- Landscape approach
- Zone approach
- Tenure-blind
- SA Bushfire Risk Register

What is a Bushfire Management Area Plan?

A strategic level document that:

- ❑ identifies the level of bushfire risk in a Bushfire Management Area
- ❑ records risk treatment strategies identified by a Bushfire Management Committee
- ❑ identifies the agencies responsible for implementing risk treatment strategies

SA Bushfire Risk Register

The BMAP is generated using software called the 'SA Bushfire Risk Register';

- ❑ Decision-making tool used to support the planning process
- ❑ Provides for classification of assets
- ❑ Assists with risk classification
- ❑ Assists with the definition of risk treatments
- ❑ Records identified assets and treatments
- ❑ Automated map showing treatments

SA Bushfire Risk Register

Categories of assets at risk from bushfire;

- Human settlement
- Economic
- Environmental
- Cultural heritage

Human settlement

- Residential
 - Urban areas
- Special Fire protection
 - Schools
 - Hospitals
 - Tourist accommodation
 - Retirement villages
- Other
 - Commercial

Economic Assets

- Agriculture
- Commercial/industrial
- Infrastructure
- Tourism/recreation
- Mining
- Forestry
- Water catchment

Environmental Assets

- Protected areas
- Endangered species and communities
- Vulnerable species and communities
- Locally important species and communities

Cultural Assets

- Aboriginal significance
- Non-indigenous
- Other cultural assets

Likelihood, Consequence and Risk

- ❑ Each of the asset types is assessed for Likelihood of fire occurring and reaching the asset and the Consequence of that impact to derive a Risk Rating
- ❑ Each asset type is assessed according to a set of criteria defined for that asset type.
- ❑ Asset types are only compared with similar assets.
- ❑ The level of Risk is used for comparison and to determine priorities for action.

Treatments

Bushfire risk treatments include;

- Community education/engagement
- Fuel reduction strategies
- Building and development control
- CFS response
- Permit management
- Codes of Practice
- Policing and enforcement

Treatment Standards

- All treatment standards are defined at State-level.
- Ecological Technical Reference Group endorsement.
- State Bushfire Coordination Committee approval.

Asset Protection Zone (APZ) standard

The Standard defines depth of APZ for various vegetation types and slopes at a FDI of 100 with BAL of 12.5kW/M² at the asset.

□ Based on Bushfire Attack Level (BAL) process in *AS3959 Building in Bushfire Prone Areas*

- Vegetation classification
- Effective slope
- Fire Danger Index
- Radiant Heat Flux

Vegetation type and Effective Slope	Minimum distance (in metres) required for the construction of an Asset Protection Zone (FDI 100)
Grassland	
0°	19
5°	22
10°	26
15°	29
20°	34
Woodland	
0°	33
5°	40
10°	50
15°	61
20°	74
Forest	
0°	46
5°	56
10°	68
15°	82
20°	99

Governance

- ETRG provides rigor to BMAP process.
- BMAP native veg clearance matters dealt with through DEWNR rep on BMC.
- SBCC approves BMAPs.
- Native veg clearance in BMAPs – approval delegated to SBCC by NVC.
- Auditing:
 - SBCC audits BMAPs
 - BMCs audit agency plans

Burning by landholders

- Government nervous about fire escapes
- 310 fires reported each year outside of FDS
- SBCC FDS working group established
 - Broad Acre Burning Code of Practice
 - Vegetation Pile Burning Code of practice
 - Appliance Use Code of Practice
- There is likely to be an increasing need for burning on private land to meet BMAP objectives – resourcing?

Undertaking a Burn

Legislation compliance

- *Fire and Emergency Services Act*
 - Only applies during FDS – permit required
- *Native Vegetation Act*
 - Ecological burn – NVC approval required
 - Hazard reduction Burn – CFS approval required
- *Environment Protection Act*
 - Non-domestic premises - Permit required from local council

Broad Acre Burning Code of Practice

- Weather conditions – 3 day forecast
- Grassland Fire Danger Index - <15
- Fuel break preparation – 4m bare earth
- Equipment – fire unit + 400ltrs + knapsacks
- People in attendance – 2+ until extinguished
- Communications – CB radio or mobile phone
- Smoke management – forecast + signs
- Inform neighbours
- Safe lighting and burning practices
- Burn plan template

Summary

- ❑ Bushfire Management Area Plans will incorporate Asset Protection Zones around communities and other significant assets.
- ❑ There will need to be discussions regarding the balance between community safety and protection of the environment.
- ❑ Any burning operations need to comply with *FES Act*, *NV Act*, *EPA Act*.
- ❑ Safe burning practices need to be undertaken.
- ❑ How do we resource burning on private land?