

FESA Submission to the Perth Hills Bushfire February 2011 Review



Government of Western Australia
Fire & Emergency Services Authority



1. Strategic overview	1
1.1 FESA.....	1
1.2 WA Emergency Management Arrangements	15
1.3 FESA as a Statutory Authority	50
1.4 2010/11 Fire Season.....	99
1.4.1 Seasonal Prognosis.....	99
1.4.2 Additional Preparedness Commensurate with Prognosis	100
1.5 <i>Perth Hills Fires</i>	104
1.5.1 Overview	104
1.5.3 Public Information.....	114
1.6 Previous Inquiries.....	137
1.6.1 Overview	137
1.6.2 <i>Victorian Bushfires Royal Commission</i>	157
2. Theme 1 - Structural Reform to achieve a seamless and integrated <i>Bushfire Safe – WA</i>	158
2.1 Nomination of a single agency responsible for bushfire management within WA	159
2.2 Single bushfire management, policy, planning, systems and mitigation activities.....	181
2.3 Clear lines of accountability (and removal of duplication) within bushfire planning, prevention, mitigation, preparedness and response activities	183
2.4 Management of Unallocated Crown Land (UCL) and Unmanaged Reserves (UMR)	185
3. Theme 2 – Strategic Capability Building	188
3.1 Statewide capability model.....	189
3.2 Whole-of-Government resource coordination system.....	200
3.3 Structured recognition and use of local knowledge and structured incident management accreditation system	205
3.4 Enhancing Volunteerism	211
4. THEME 3 – Community Fire Safety Planning	224
4.1 Building engaged and active Fire Safe Communities	225
4.2 Fire Hydrant Ownership	245
4.3 Planning and construction in bushfire prone areas	247
4.4 Critical water infrastructure protection	255
4.5 Clearer understanding and promotion / acceptance of the “primacy of life” in state fire control priorities and mitigation planning/works	260
4.6 Evolution of existing bushfire planning systems to more localised township protection/ community level plans	261
4.7 Bushfire Risk Management in Indigenous Communities	266
4.8 Prescribed Burning / FESA Integrated Bushfire Risk Management System (IBRMS)	268
5. Theme 4 – Unified Control	279
5.1 Integration of agencies within a single <i>State Operations Centre</i>	280
5.2 Strategic intelligence management, including public information and use of social media ..	290
5.3 Clarity in definition around command, control and coordination	294
5.4 Access to incident ground	295
6. Conclusion.....	297
7. Bibliography	298
8. Appendices	299

9. Table and Figures.....	300
10. Acknowledgements	303
11. Summary of FESA Recommendations	304

1. STRATEGIC OVERVIEW

1.1 FESA

FESA is a community centered organisation that is charged with providing a range of fire and emergency service activities to the community of WA. It achieves this through a unique structure consisting of paid staff and dedicated volunteers. FESA's activities also rely heavily on strong stakeholder relationships with Local Government in particular, who play a significant role in bushfire management within the State and the Department of Environment and Conservation (DEC). FESA is proud of its achievements over its short life as an integrated organisation and strongly believes it has the right organisational approach for the management of fires and emergencies within WA.

A fundamental component of FESA's activities is the community centered nature of the organisation and how it delivers its services through an extensive network of staff and volunteers operating within, and as part of, the community. This service delivery model also provides the necessary diversity, skills and experience to deliver fire and emergency services across the State. The model also provides the necessary *surge capacity* to combat major incidents from an *integrated* and *all hazards* perspective.

FESA is very proud of its achievements over its very short life as an integrated organisation and strongly believes it has the right organisational approach for the effective and efficient management of fires and emergencies within WA. The success of the FESA model is clearly demonstrated in the achievements outlined in the *State of the Service 2010* report attached as Appendix 1 of this submission.

Since its inception the FESA integrated organisational model may not publically have been seen to achieved much. However, when analysed with the support of relevant data, the FESA model and organisation has been highly successful across the broad breadth of its responsibilities. As outlined in the "*State of the Service 2010*" document, the current state of FESA's and Western Australian local governments' capacity to respond to emergencies in terms of infrastructure, equipment, appliances and other assets has been significantly enhanced over the history of FESA's existence. The summary outlines the extent of resourcing to FESA and local government emergency services since the 2003-04 financial year and the introduction of the Emergency Services Levy (ESL).

The summary covers all emergency service types regardless of how they are funded. There is a range of funding arrangements for services not resourced through the ESL, such as Volunteer Marine Rescue Services (VMRS) and emergency Aviation Services. Detail on funding for emergency management capacity building is also provided.

Clearly, when considered in this context, FESA has been extremely successful over its relatively young life and demonstrates its capability to take on further responsibility through the stepped change recommended by it throughout this submission.

1.1.1 Enabling Legislation

The *Fire and Emergency Services Authority of Western Australia Act 1998* (known as the FESA Act) established FESA as a statutory government authority with functions relating to the provision and management of emergency services. The FESA Act came into operation on 1 January 1999.

In addition to its own enabling legislation, additional functions and powers relating to the provision and management of fire and emergency services are vested in FESA via the following legislation:

- *Bush Fires Act 1954;*
- *Bush Fires Regulations 1954;*
- *Bush Fires (Infringements) Regulations 1978;*
- *Emergency Management Act 2005;*
- *Emergency Management Regulations 2006;*
- *Emergency Services Levy Act 2002;*
- *Fire Brigades Act 1942; and*
- *Fire Brigades Regulations 1943.*

This future strategic direction of enabling legislation for fire and emergency services is being progressed by FESA in accordance with the recommendation by the *Community Development and Justice Standing Committee* contained in their report to the Legislative Assembly on 19 October 2006. This report has subsequently been approved by Cabinet and will result in a single, integrated and contemporary Fire and Emergency Services Act, thereby alleviating the current dysfunctional arrangement with multiple pieces / sources of applicable legislation. This project is being expedited.

1.1.2 Minister Responsible

The Minister for Police; Emergency Services and Road Safety is the Minister responsible for FESA. The FESA Act empowers the Minister to appoint members to the FESA Board and to its Consultative Committees and to provide performance and operational directions to FESA.

1.1.3 Structure

FESA Board of Management

People from a broad cross-section of volunteers, the general public and local government sector, constitute the 13 member FESA Board, which is also supported by a number of individual consultative committees representing the Bush Fire Service, Fire and Rescue Service, State Emergency Service and Volunteer Marine Rescue Service.

The FESA Chief Executive Officer works with the FESA Board of Management and its Chair to oversee the strategic planning and all operational and administrative functions of the organisation.

The FESA Act establishes a Board of Management that consists of 13 members representing various stakeholders in Western Australia's fire and emergency services. The Board comprises:

- The Chairperson;
- FESA's Chief Executive Officer (ex officio);
- The four Chairpersons of the Consultative Committees;
- Four members who, in the Minister's opinion, represent emergency services volunteers;
- One member who, in the Minister's opinion, represents local governments;
- One member who, in the Minister's opinion, represents members of staff; and
- Not more than one other member.

Board Sub-Committee

FESA's Board has established a Finance and Audit Sub-Committee to provide relevant information to the Board to assist in its information and decision-making processes. The Finance and Audit Committee holds meetings on a quarterly basis.

Consultative Committees

The FESA Act establishes four consultative committees as forums for representatives from the Bush Fire Service, Fire and Rescue Service, State Emergency Service and Volunteer Marine Rescue Service to be consulted on significant issues. These Committees provide a forum for these key stakeholders of FESA's operational portfolio to:

- Be consulted on issues which affect operational programs; and
- Provide advice to the FESA Board and Chief Executive Officer.

Each consultative committee has a Chair appointed by the Minister for Police, Emergency Services and Road Safety. By virtue of their position as Chair, they are members of the FESA Board of Management.

In addition to the Chairperson, each consultative committee consists of at least seven other persons. This typically involves representatives from emergency service volunteers across WA and their volunteer associations, Local Government, employee associations and the respective FESA Executive Director.

Management Structure

Recognising the evolving needs of the community, the dynamic nature of fire and emergency services and its continuing focus on striving to achieve best practice emergency management arrangements, the FESA management structure continues to evolve, remains flexible and is reviewed regularly to ensure it continues to provide efficient and effective services to the community.

FESA is managed by a Chief Executive Officer who provides day to day leadership and direction to the organisation and is charged with implementing Board and Government policy decisions.

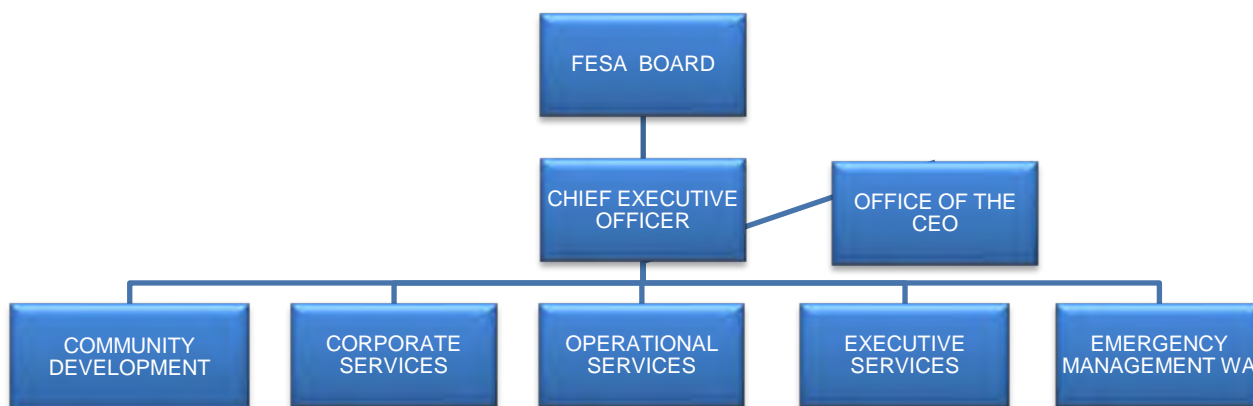
The Chief Executive Officer is supported in the management and direction of the organisation through a series of Portfolios, each led by an Executive Director: These include:

- Community Development, covering the portfolios of:
 - Built Environment

- Bushfire and Environmental Protection
- Risk, Planning and Evaluation
- Community Engagement
- Corporate Services, covering the portfolios of:
 - Business Services
 - Information and Communications Technology
 - People and Organisational Development
- Operations, covering the portfolios of:
 - Metropolitan Fire
 - Country Operations
 - Natural Hazard Planning and Response
 - Operational Coordination
- Emergency Management, covering the portfolios of:
 - Emergency Management, Policy and Coordination
 - Training and Development
 - Community Emergency Management
 - Regulatory and Compliance
 - Grants and Assistance
 - Indigenous Strategy
- Office of CEO, covering the portfolios of:
 - Risk Management
 - Policy, Legal and Legislation
- Executive Services, covering the portfolios of:
 - Bushfire and Local Government Relations
 - Media and Public Affairs
 - Professional Standards
 - Ministerial Services
 - Forums and Events

The following outlines the high level organisational structure.

Figure 1 – FESA Organisation Structure



A more detailed FESA organisational structure is contained in Appendix 2 of this submission. As outlined in detail within section 1.2 of this submission, *WA Emergency Management Arrangements*, FESA has a diverse range of functions. These include, but are not limited to, managing the following hazards:

- Fire (controlling agency);
- Injury or threat to life of persons trapped by the collapse of a structure or landform;
- Cyclone;
- Earthquake;
- Flood;
- Storm;
- Tsunami; and
- Actual or impending spillage, release or escape of a chemical , radiological or other substance that is capable of causing loss of life, injury to a person or damage to the health of a person, property or the environment.

In addition, FESA provides combat and support services, including communications for other incidents including:

- Marine searches and rescues;
- Land searches;
- Air searches and rescues (including emergency casualty transport);
- Urban search and rescues;
- Cliff, cave and confined space rescues;
- Road transport emergencies;
- Rail transport emergencies; and
- Animal disease outbreaks.

FESA undertakes these functions in partnership with primarily Local Government and other key partners involved in WA's emergency management arrangements.

1.1.4 Corporate Direction

FESA aims for best practice and adopts a continuous improvement philosophy across all levels of the organisation. This includes the implementation of a unified and long-term vision for the organisation that is strategically aligned with both the ever changing community safety needs of the WA community and the whole-of-government goals and outcomes contained in the *Better Planning and Better Futures Framework of Government*.

Through this integrated approach to planning and a partnership philosophy, FESA continues to provide efficient and effective services to the community, via a totally integrated fire and emergency services organisation with the dedicated support and involvement of 1,200 staff and over 30,000 volunteers who are highly committed to the safety of the WA community.

The following tables outline the extensive volunteer structure and demographics of FESA:

Table 1 – Volunteer Demographics

Volunteers	Number of Brigades, Groups or Units	Volunteer Numbers as at 30 June 2010		
		Operational	Support	Total
Volunteer Bush Fire Service	593	25,593	599	26,192
Volunteer Fire and Rescue Service	88	2,056	194	2,250
State Emergency Service	65	1,898	16	1,914
Volunteer Marine Rescue Services	33	1,336	24	1,360
Volunteer Emergency Service	16	541	1	542
Volunteer Fire Service	9	353	6	359
FESA Education and Heritage Centre	1	0	18	18
Total		31,777	858	32,635

Cadets and Juniors as at 30 June 2010	
Emergency Services Cadets	1,380
Juniors and Cadets registered with brigades, groups and units	538
Total Cadets and Juniors	1,918
Emergency Services Cadet (ESC) Units	43
Junior Cadet Programs	79

[FESA Annual Report 2009/10]

This resource base and unparalleled organisational infrastructure results on FESA being the only agency capable and with the capacity to be the lead agency for bushfire management within the State. Moreover, FESA has no vested interest, perceived conflict or pecuniary interest in taking on this role within this lead role within the State and has sufficient infrastructure and most importantly state-wide *reach* into all communities and through its regionally based service delivery model to adequately fulfil this task.

1.1.5 FESA 2023 - Shaping Our Future

The principle document which outlines FESA's corporate direction (and adopted by the Board on 29 January 2008) is [FESA 2023 – Shaping our Future](#). The detail of this cornerstone document is outlined below.

FESA 2023 - Shaping Our Future is about shaping the future of the organisation. It is a long term planning approach that encourages the organisation to think about the FESA of tomorrow – and to start taking action today.

FESA 2023 comprises the following four key long-term strategic directions:

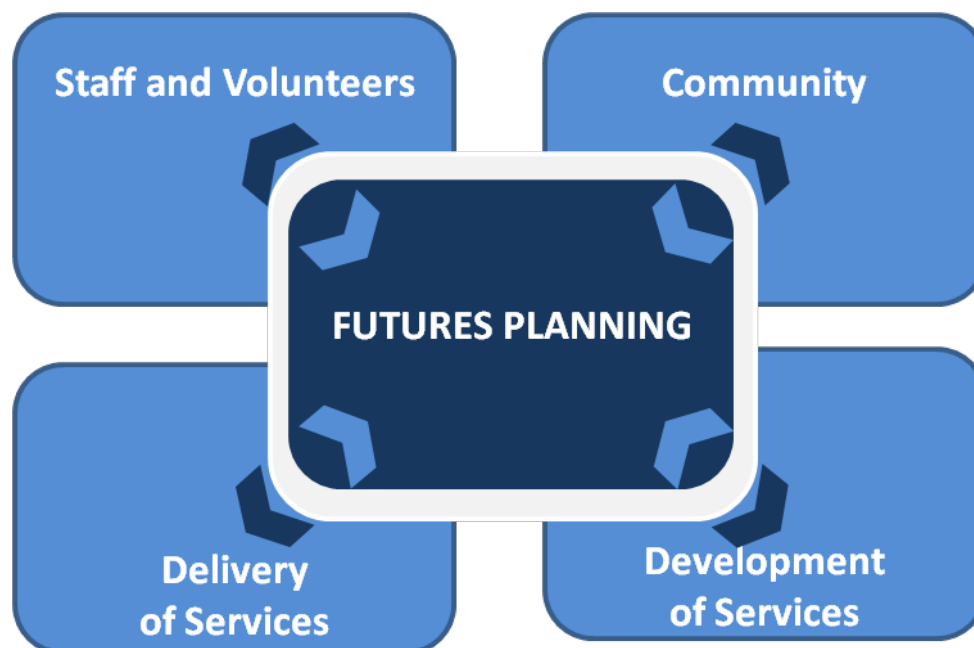
- A leading emergency services organisation;
- A future focused organisation;
- An integrated organisation; and
- Valued and capable people.

It involves looking to four key areas, including our staff and volunteers, the community, the development of services and the delivery of services.

Since its establishment in 1999, FESA has emerged as a holistic emergency services organisation. *FESA 2023* aims to consolidate those achievements and take FESA into a new phase of being a leading emergency services organisation, one that influences national and state policy and achieves its goals through collaboration with stakeholders and a clear and comprehensive legislative framework.

The interfaces within the four key areas of the planning framework are demonstrated in the following diagram:

Figure 2 – Interface of four key areas of planning framework



FESA 2023 recognises the efforts of its 1,200 staff and more than 30,000 volunteers who are committed to the safety of the community. Being an organisation that values and develops its staff and volunteers is a primary focus for FESA. Attraction, retention and development of staff and volunteers through contemporary and flexible strategies are key components of *FESA 2023* as is the promotion of volunteering. The issues associated with enhancing volunteerism are included as a discrete section of this submission, given its direct association with Term of Reference 5.

FESA is improving internal processes and systems and bringing together the groups that operate under the umbrella of FESA to form a truly integrated organisation. Improvements in technology are planned to support the efforts of staff and volunteers both in the field and behind the scenes.

In pursuing the 15 year strategic direction, FESA is contributing to whole-of-government goals as outlined in the WA State Government's *Better Planning: Better Futures Strategic Management Framework*. FESA is also supporting and collaborating with a national network of partners such as the Australasian Fire and Emergency Services Authorities Council and Emergency Management Australia.

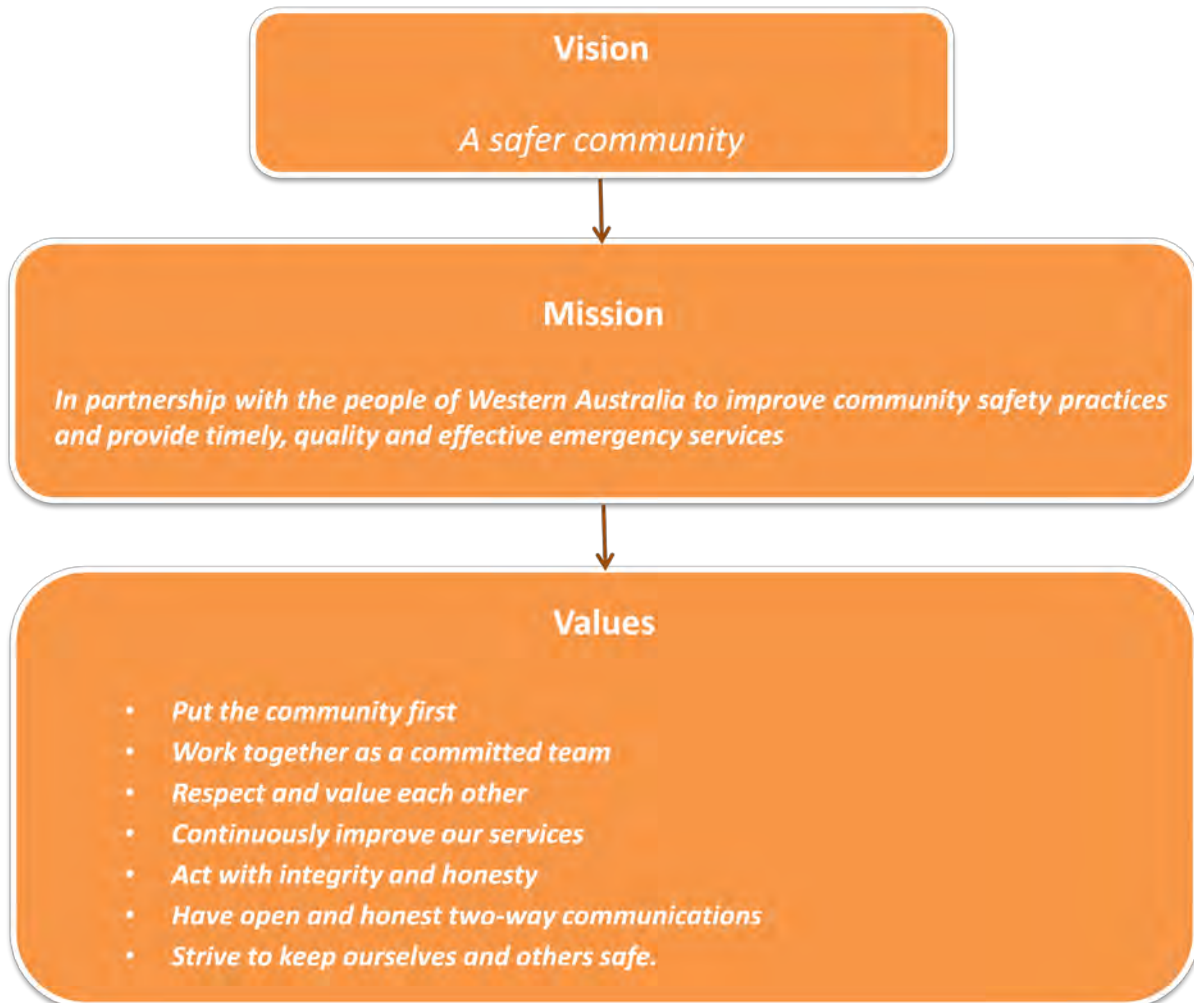
FESA continues to work towards a safer community by working in partnership with the people of WA to improve community safety, practices and to provide timely, quality and effective emergency services.

FESA 2023 outlines the strategic directions for the next 15 years and will be achieved through a three-stage process with each stage taking five years to complete. *FESA 2023* came into effect on 1 July 2008. It lays the foundations for achieving FESA's vision to 2023.

To ensure that *FESA 2023* remains current and that the organisation is prepared and flexible enough to meet a constantly changing environment, ongoing horizon scanning will be an integral part of the way FESA does business and will inform evidence-based decision making and long-term planning.

FESA 2023 establishes the following elements of the corporate planning framework:

Figure 3 – Corporate Planning Framework



[FESA 2023 – Shaping Our Future]

1.1.6 FESA’s Service Delivery Philosophy

Inherent in delivering the outcomes of *FESA 2023 – Shaping Our Future*, is the need for the organisation to continue to evolve a paradigm shift in its service delivery philosophy from one that traditionally exists in emergency service organisation, which is heavily focussed on *response* (i.e. reactive model) to one that is focussed on *community-centred engagement/collaboration* and *proactive mitigation* (i.e. preparedness / prevention model). This long term culture change is essential in managing the broad range of hazards that exist within WA commensurate with risk. This will continue to drive decisions associated with human, physical and financial resource allocation to achieve the desired community safety outcomes expected of FESA as a contemporary fire and emergency services, community based organisation.

The philosophy does not detract from FESA recognising the importance and ongoing need for response based activities. However, these needs are to be considered as one part of the emergency management continuum and organisational deliverables, not the sole or most important aspect.

This approach has been recognised almost universally across the board in Australian and international emergency services after first being documented in the United Kingdom (UK) Audit Commission Report titled '*In the Line of Fire*'. This report clearly outlined that despite ongoing increased funding and resource allocation to the UK Fire Services, primarily focussed at response based activities, the actual number, severity and consequential impact on life, injury and environment continued to rise (UK Audit Commission, 1995). This report was followed by a subsequent review and report by the UK Audit Commission titled '*Out of the Line of Fire*' in 1998, which acknowledged the current standards adopted by fire services, virtually worldwide, have no reference to the current operating environment and require total review (UK Audit Commission, 1998). Therefore the need to adopt an integrated approach to managing risk is clearly required to achieve the most efficient and effective community safety outcome for the community.

More recently, the Australian Government has released its *National Strategy for Disaster Resilience – Building our Nation's Resilience to Disasters* which establishes consistent messages to the outcomes of the UK Audit Commission. The strategy extends to a more holistic focus on community resilience, with the following definition to this:

Community resilience can be defined in many ways. Rather than define disaster resilience, the Strategy focuses on the common characteristics of disaster resilient communities, individuals and organisations. These characteristics are:

- *Functioning well while under stress;*
- *Successful adaptation;*
- *Self-reliance; and*
- *Social capacity.*

Resilient communities also share the importance of social support systems, such as neighbourhoods, family and kinship networks, social cohesion, mutual interest groups, and mutual self-help groups.¹

Acutely aware of this renewed focus, FESA actively practices and adopts these principles within its service delivery model.

¹ National Strategy for Disaster Resilience; p5

In addition, the strategy outlines a comprehensive reason for change, as follows:

To increase disaster resilience, emergency management planning should be based on risk and be integrated with strategic planning of government and communities. It should consider risks and risk treatments across the social, built, economic and natural environments.

Traditional government portfolio areas and service providers, with different and unconnected policy agendas and competing priority interests may be attempting to achieve the outcome of a disaster resilient community individually. This has resulted in gaps and overlaps, which may hamper effective action and coordination at all levels and across all sectors. There is a need for a new focus on shared responsibility; one where political leaders, governments, business and community leaders, and the not-for-profit sector all adopt increased or improved emergency management and advisory roles, and contribute to achieving integrated and coordinated disaster resilience. In turn, communities, individuals and households need to take greater responsibility for their own safety and act on information, advice and other cues provided before, during and after a disaster.

This new focus on resilience calls for an integrated, whole-of-nation effort encompassing enhanced partnerships, shared responsibility, a better understanding of the risk environment and disaster impacts, and an adaptive and empowered community that acts on this understanding.²

FESA supports these reasons for change and strongly believes events such as the *Perth Hills Fire* must create an impetus for change and be leveraged by policy makers and thought leaders, including Governments (State and Local) and FESA.

The Review will clearly establish a direct correlation between this submission and proposals for tangible and sustainable change by FESA, its existing and proposed programs/initiatives/systems with the strategy and associated framework to enhance disaster resilience, outlined below:

Leadership and coordination

Leadership is required to drive change in improving disaster resilience. Responsibility for leadership must be taken by all partners within their sphere of influence in a coordinated manner so as to maximise the benefits from limited resources.

Agents for change from a wide range of government and non-government sectors should be identified to take advantage of a broader set of policy levers in other parts of government. Appropriate support should be provided to them, including tools and information. Disaster resilience outcomes should be delivered through existing programs and activities, by state and territory governments, local governments and non-government organizations (NGOs).

Communications

Communication is required to shape community and organisational expectations and decision-making before disasters. In a disaster resilience context, the focus of communication requires a shift in emphasis from top-down messages to engaging individuals and communities at

² National Strategy for Disaster Resilience; p3

the grass roots level so they can understand disaster risks and share ownership of managing those risks, and take appropriate action in response to warnings that may be issued.

Work to optimise emergency warning systems should continue.

Awareness of the risk environment

An understanding of the disaster risk environment is required by governments and partner organisations to ensure that resources are prioritised. The emergency management sector needs to engage with and work across governments, business, NGOs and scientific communities to develop a firmer evidence base of disaster risk and disaster risk management especially in areas of change and uncertainty, including climate change. The results of this work should be disseminated across a broad range of stakeholders.

Partnerships with those who effect change

Collective effort will produce greater effect than any government or organisation acting alone. The private sector and NGOs have access to relevant and significant resources and capabilities, provide community lifelines, and in many areas represent drivers for change.

NGOs and peak industry bodies have a strong community presence across Australia. Strengthening their existing networks and programs will achieve better community resilience. Better integrating the private sector, particularly community lifeline providers, into comprehensive arrangements, will improve their own organisational resilience and that of the community.

Empowered individuals and communities

Fundamental to the concept of resilience, individuals and communities should be more self-reliant and be prepared to take responsibility for the risks they live with. Individuals, NGOs and businesses requiring uninterrupted supplies or services should be encouraged to make their own contingency arrangements for deployment in the event of a disaster.

Governments at all levels need to facilitate the development of capacity and capabilities of individuals and communities and be ready to assist when the impact of disasters are beyond their capacity.

Individuals need to be empowered to take responsibility for their own risks, by having the relevant knowledge, skills and abilities to make informed decisions and take action. Those who are vulnerable need to be identified and ways of fostering their self-reliance planned for. Specific strategies should assist those more vulnerable, including remote and indigenous communities, to develop their capacity and capability.

Reducing disaster risk through appropriate development in the built environment

The single most effective method to reduce disaster risk in the medium to long term is to consider current and future disaster risk in urban and regional planning. There is a clear need for the emergency management sector to engage with and influence a broader set of policy levers in other parts of government, including climate change policies, land use planning policies, building codes and development standards to contribute to disaster risk reduction.

Flexible, adaptable capabilities for response to and recovery from disasters

Greater flexibility and adaptability to future risks, increases our capacity to deal with disasters. Increased resilience can be achieved through learning, innovating, and developing skills and resources, both at the community and operational level that can be applied to respond to a wider range of disasters.

The highest levels of interoperability of response and recovery capabilities between agencies, jurisdictions and levels of government will support decision makers during disasters. A shared understanding of national and jurisdictional capabilities and limitations is critical.

Capabilities should be maintained at the most effective level.

Regional countries with capacity and resilience

In any disasters involving Australians overseas, there is an expectation from the community that all practical assistance will be offered by government agencies.

Building capacity and resilience in our region will help to reduce costly requests for disaster assistance. Australia can also learn from the experience of other countries by the sharing of experiences, intellectual resources and best practices.

Supporting Plans

This framework will be supported by the following action plans:

- Disaster Resilience Strategy (Attorney-General's Department to lead);
- Climate Change Action Plan (Attorney-General's Department to lead);
- National Partnerships Action Plan (AEMC Taskforce);
- Community Engagement Action Plan (Community Engagement Working Group);
- Regional Engagement Action Plan (Attorney-General's Department to lead);
- Recovery Action Plan (Recovery Working Group);
- Volunteers Action Plan (Attorney-General's Department to lead); and
- National Action Plan to Reduce Bushfire Arson in Australia (Attorney-General's Department to lead).³

For these reasons, FESA has endorsed a paradigm shift in its business philosophy and continues to evolve this approach in what is historically a *response focused* organisational culture. FESA is resolute in its commitment to progressing an integrated approach to emergency management, focusing on balanced activities that improve *a fire safe WA* and more broadly community safety in general, rather than relying solely on an ability to respond to, and suppress fires, once they occur. This involves development and delivery of the most appropriate service mix of strategies to reduce the actual level of risk, the number of events and the requirement for operational response and resources. This approach will actively contribute to a more resilient community, and *shared engagement and responsibility* for managing hazards within the local community.

³ National Strategy for Disaster Resilience; p7-14

Fundamentally, FESA believes its success in achieving this relies heavily on the following:

- Consistent development of single integrated state-wide policy, programs, systems and initiatives for adaptation at the local level (i.e. through FESA);
- Locally developed delivery mechanisms to suit local conditions, capability, needs and delivery strategies, commensurate with risk (i.e. through Local Government);
- Continued state support to Local Government to build capability, capacity and community resilience (i.e. through FESA's Community Emergency Services Managers which is a true partnership with local governments and the Bushland Mitigation Officers programs etc);
- Build on the success of community-centred delivery through local brigades/units, who are members of the community they serve, and therefore hold the credibility and respect of the community which is more likely to generate real and sustainable change; and
- Development and introduction of an appropriate independent audit mechanism to measure compliance and success of strategies.

FESA believes any changes which may arise from this Review should recognise, build upon and enhance existing programs and strong relationships that FESA has already established.

1.1.7 FESA Proposals

The Review should:

- Recognise the FESA resource base and unparalleled organisational infrastructure makes it the only agency capable and with the capacity to be the lead agency for bushfire management within the State;
- Note and support the principle that FESA has no vested interest, perceived conflict or pecuniary interest in taking on the lead role for bushfire management within the State and has sufficient infrastructure and most importantly state-wide reach into all communities and through its regionally based service delivery model to adequately fulfil this task; and
- Support the FESA 2023 plan and its service delivery philosophy with a focus on risk mitigation and community resilience.

1.2 WA Emergency Management Arrangements

1.2.1 Purpose

This section provides the Review with a common understanding of the emergency management arrangements within WA and the key roles and functions identified under the *Emergency Management Act 2005*.

It provides a basic understanding of the principles and concepts of Emergency Management within WA including the Comprehensive, Integrated, Prepared Community and Graduated Response approaches, Prevention/Mitigation, Preparedness, Response and Recovery continuum, and an overview of Recovery planning, management and processes.

1.2.2 FESA's Role in Emergency Management Coordination

FESA plays a key role in coordinating the State's emergency management arrangements through Emergency Management WA (EMWA), a portfolio of FESA. This portfolio provides whole-of-government emergency management coordination services and is working to enhance the resilience of communities across WA through a significantly improved emergency management *system* and *capability*. The strategic direction of EMWA is to develop and improve the State's emergency management arrangements - through capacity building, advisory and support services.

Capacity building consists of activities or services aimed at improving the Emergency Management capability of an individual, organisation or community and include:

- Policy and planning;
- Ongoing engagement of key stakeholders in respect of the *Emergency Management Act 2005* and related matters;
- Training and development;
- Facilitation of *community-centred* Emergency Management, through direct assistance to Local and State Governments and emergency management committees at local and district (region) levels;
- State mitigation initiatives; and
- Natural disaster relief and recovery arrangements.

1.2.3 Brief History of Emergency Management Legislation and Policy

Until the enactment in WA of the *Emergency Management Act 2005*, WA State Emergency Management arrangements operated under the 1985 Cabinet Minute and extrapolated under policy statements issued by the State Emergency Management Committee. The State Emergency Management Committee Policy Statement 7 was the primary policy document providing the overarching emergency management arrangements for the State of WA. The *Emergency Management Act 2005* formalised these arrangements and now there is a well defined framework of legislative, procedural and informative emergency management documentation.

The *Emergency Management Act 2005* (S 41) requires all Local Governments to develop Local Emergency Management Arrangements.

Further details of the Emergency Management Legislation and Policy Framework are provided below in this section of the submission.

1.2.4 Definitions

Emergency or Disaster

The occurrence, or imminent occurrence, of a hazard which is of such a nature or magnitude that it requires a significant and coordinated response.⁴

Within the Australia wide emergency management sector, the terms 'emergency' and 'disaster' are often used, within WA the terms share the same definition.

Emergency Management

The management of the adverse effects of an emergency including:

Prevention The mitigation or prevention of the probability of the occurrence of and the potential adverse effects of an emergency

Preparedness Preparation for response to an emergency

Response The combating of the effects of an emergency, provision of emergency assistance for casualties, reduction of further damage and help to speed recovery

Recovery The support of emergency affected communities in the reconstruction and restoration of physical infrastructure, the environment and community, psychosocial and economic wellbeing.⁵

Hazard

A source of potential harm, or a situation with a potential to cause loss.

- Cyclone, earthquake, flood, storm, tsunami or other natural event;
- Fire;
- Road, rail or air crash;
- Plague or epidemic;
- Terrorist act as defined in the Criminal Code S 100.1 set out in the schedule to the *Criminal Code Act 1995* of the Commonwealth.

Any other event, situation or condition that is capable or causing or resulting in:

- Loss of life, prejudice to the safety or harm to the health of persons or animals; or
- Destruction of or damage to property or any part of the environment and is prescribed by the regulations.⁶

Risk

The effect of uncertainty on objectives.⁷

⁴ *Emergency Management Act 2005 s 3*

⁵ *Emergency Management Act 2005 s 3*

⁶ *Emergency Management Act 2005 s 3*

⁷ ISO 31000:2009

“The chance of something happening that will have an impact upon objectives. It is measured in terms of consequences and likelihood.”⁸

1.2.5 Emergency Management Concepts – Overview

This relates to the underpinning approaches that are used in WA to ensure good Emergency Management practices occur within the broader emergency framework. These approaches are applied in the development of arrangements at all levels to help ensure the effective management of emergencies.

The Emergency Management approaches are:

- Comprehensive approach;
- Integrated approach;
- Prepared community approach; and
- Graduated response.

The Emergency Management approaches are combined to varying degrees in order to achieve a complete Emergency Management solution.

Consistent with other parts of this submission, FESA strongly submits the concepts and management of bushfire as part of the emergency management arrangements must be considered as a *systems approach* with individual elements unable to be separated from the complete system.

Figure 4 – Four Approaches to Emergency Management



1.2.6 Comprehensive Approach (PPRR) Continuum

The comprehensive approach looks at **all hazards** which may affect a community, it does not focus on a specific hazard or current trend because doing so may expose the community to another risk which has not been adequately planned for.

⁸AS/NZS: 4360:2004

This approach to emergency management provides for a comprehensive and systematic way of managing each hazard. It separates the managing aspects of each hazard into four elements:

PREVENTION – PREPAREDNESS – RESPONSE – RECOVERY

Each element represents a dynamic set of actions flowing into the next; together they make up the full scope of a legitimate and valid system of emergency management.

Figure 5 - Comprehensive Approach to Emergency Management Continuum



1.2.7 Element Descriptors of PPRR Continuum

PREVENT

Prevention/Mitigation activities seek to eliminate or reduce the effect of a hazard on a community or to reduce the likelihood of the hazard occurring. They may also aim to increase the resilience of the community to a hazard.



Typical Prevention/Mitigation Program Activities may include:

Building codes	Public education
Insurance	Building-use regulations
Public information	Incentives/disincentives
Legislation	Tax incentives/disincentives
Zoning/land-use management	

[AEMI – Australian Emergency Management Concepts]

PREPARE

Preparedness activities establish arrangements and plans and provide education and information to prepare the community to deal effectively with such emergencies and disasters as may eventuate.



Typical Preparedness Program Activities may include:

Emergency response plans	Mutual aid agreements
Training programs	Warning systems
Public education	Test exercises
Public information	Emergency communications
Refuge shelters	Resource inventories

[AEMI – Australian Emergency Management Concepts]

RESPONSE

Response activities activate preparedness arrangements and plans to put in place effective measures to deal with emergencies and disasters if and when they do occur.



Typical Response Program Activities may include:

Plan implementation	Inform higher authorities
Search and rescue	Emergency declarations
Activate coordination centres	Provide medical support
Warning messages	Evacuation
Institute public health measures	Public Information
Mobilise resources	Provide immediate relief
Registration and tracing	Damage assessment

[AEMI – Australian Emergency Management Concepts]

RECOVER

Recovery activities assist a community affected by an emergency or disaster in reconstruction of the physical infrastructure and restoration of emotional, social, economic and physical well-being.



Typical Recovery Program Activities may include:

Restore essential services	Distribute recovery stores
Restore public assets	Counselling programs
Public information	Economic impact studies
Temporary housing	Long-term medical support
Review development plans	Financial support/assistance
Manage public appeals	Initiate reconstruction tasks

[AEMI – Australian Emergency Management Concepts]

1.2.8 Integrated Approach

Emergencies can affect or require the involvement of many government and non-government agencies at all levels (local, state, national). For the comprehensive approach to be effective there must be common and united co-ordination of PPRR activities between all of these agencies and the establishment of emergency management arrangements needs to involve all of these agencies. This is known as the integrated (or all agencies) approach. This coupled with the all hazards approach is known as taking an *all agencies/all hazards* approach to emergency management. This is a core tenet of the success of emergency management within WA.

Many agencies can be expected to play a role in more than one of the areas of prevention, preparedness, response and recovery, and this will need to be represented in the planning and management structures of their responsibilities.

The key factor in the successful application of the integrated approach is an active partnership between Federal, State and Local levels of Government, statutory bodies, voluntary and community organisations.

Some agencies will have a primary role in only one of the PPRR programs, but most can expect to have a secondary or support role (as distinct from *controlling* agency role) in others and will need to have an understanding of the arrangements that apply.

The integrated approach to emergency management is designed to ensure that the efforts of all relevant organisations, agencies and the community itself can be coordinated effectively in the development of a safer community.

1.2.9 Prepared Community Approach

The importance of effective emergency management arrangements at a **local level** is vital and this concept is known as the prepared community approach.

A prepared community is one that identifies, treats and manages risks. By performing these actions and keeping the community informed the community is more likely to be prepared for and resilient to the effects of the emergency.

Ultimately a prepared community is a resilient community.

A community that has effective local emergency management arrangements results in:

- An alert, informed and active community;
- An active and involved Local Government;
- Agreed and coordinated arrangements for PPRR; and
- An appropriate knowledge of emergency management arrangements.

1.2.10 Graduated Response Arrangements

The process to deal with an emergency in WA is based on the principle of graduated response.

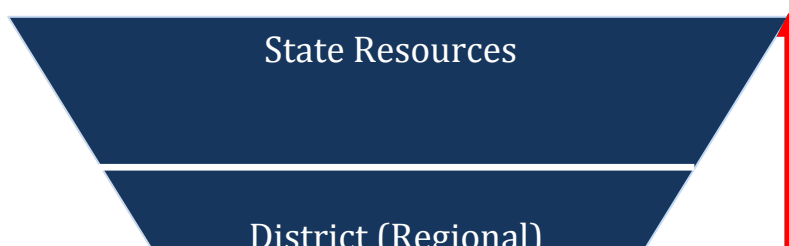
Responsibility for resourcing and responding to an emergency initially rests at the **Local** level.

An emergency beyond the capability of **Local** resources will receive support from **District** (Regional) resources.

State assistance can be provided to supplement **District** resources as required.

The following diagrammatically outlines the relationship between the separate areas that combine to provide the graduated response arrangements within WA.

Figure 6 - Graduated Response Arrangements



1.2.11 Western Australia Emergency Management Framework

The Western Australia Emergency Management Framework describes a range of documents detailing information on emergency management in WA. The framework has been established to assist emergency management agencies in defining how, and at what level, different types of information should be documented.

Figure 7 - Emergency Management Act 2005

<p><u>Emergency Management Act 2005 (WA)</u></p> <p><u>Emergency Management Regulations 2006</u></p> <p><u>State Emergency Management Policies</u></p> <p>State Emergency Management Policies are those developed under s. 17 EM Act (2005) and should be developed when there is a need to prescribe a formal instruction or process as a result of governing legislation or an SEMC resolution. Policy should clearly define the required outcome that is to be achieved, and explain the roles and responsibilities of all parties involved. Policies may be supported by the following documents which form part of the SEMC framework.</p> <p><u>State Emergency Management Plans</u></p> <p>State Emergency Management Plans are those prepared under s 18 EM Act (2005) to outline state arrangements for the emergency management of hazards and support functions.</p>	<p>Legislative</p>
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<p><u>State Emergency Management Procedures</u> State Emergency Management Procedures should be utilised when a process needs to be explained through a step by step process, allowing Emergency Management agencies and personnel to complete tasks in compliance with State Emergency Management Policy. The repository for all State Emergency Management Procedures will be the Emergency Management Procedures Manual.</p>	<p>Procedural</p>
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<p><u>State Emergency Management Guidelines</u> State Emergency Management Guidelines are not formal instructions and exist to assist personnel in conducting their role, by proposing methods for conducting activities.</p> <p><u>State Emergency Management Information Sheets</u> State Emergency Management Information Sheets provide additional information that may not be described within legislation, policy, procedures or guidelines. Information Sheets may depict Frequently Asked Questions (FAQ), a summary of relevant contact details or any other information considered necessary to distribute.</p>	<p>Information</p>
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The *Emergency Management Act 2005* is:

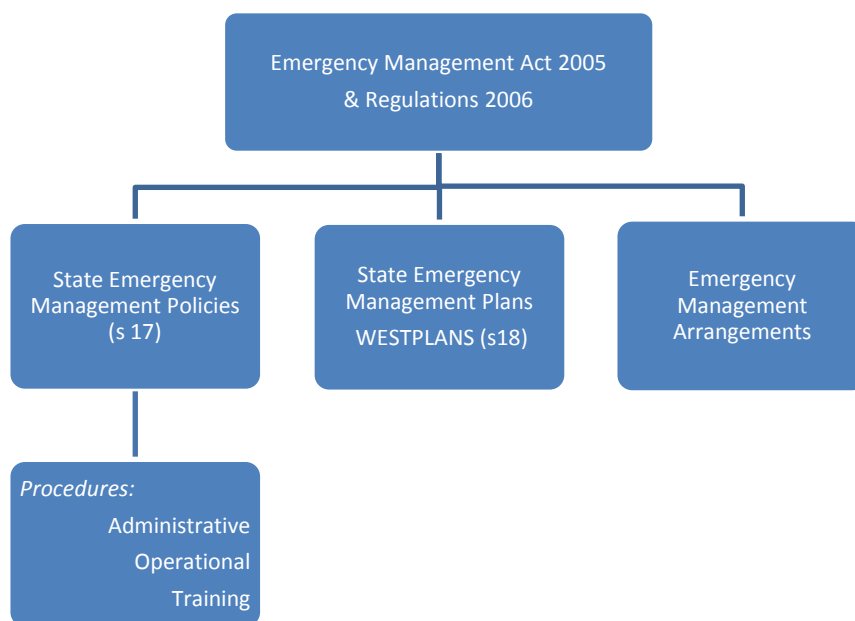
‘An Act to provide for prompt and coordinated organisation of emergency management in the State and for related purposes’

It details the overarching emergency management arrangements for the State providing the necessary infrastructure, functions and powers for emergency services including Local Government and support organisations.

It formalises WA’s ability to mitigate or prevent, prepare for, respond to and recover from incidents of a large scale or catastrophic nature.

The following diagram outlines the interrelationships within the emergency management framework which operates within WA and the head of power associated with each.

Figure 8 - Emergency Management Framework in WA



1.2.12 Emergency Management Structures

The WA Emergency Management framework contains a number of structures that cover the prevention, preparedness, response and recovery continuum. These are the:

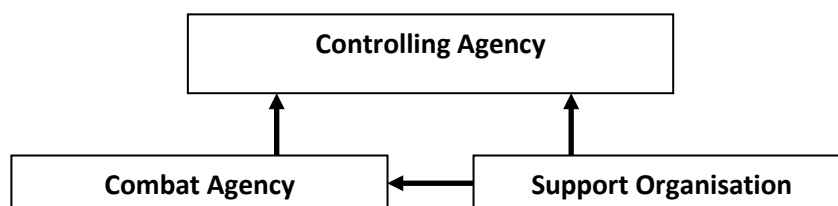
- Hazard Management Structure;
- Committee Structure;
- Operational Management Structure; and
- Recovery Management Structure.

Hazard Management Structure

The hazard management structure consists of:

- Controlling Agency (previously referred to as a HMA and for purposes of legislation is also HMA);
- Combat Agencies; and
- Support Organisations.

Figure 9 - Hazard Management Structure



1.2.13 Definitions

Controlling Agency

An agency nominated to control the response activities to a specified type of emergency.

Hazard Management Agency

An Agency prescribed under the Emergency Management Act, 2005 which is responsible for emergency management, or aspect of (PPRR), of a hazard because of their legislative responsibilities, specialised knowledge, expertise and resources

A Hazard Management Agency (HMA) **will be** a 'Controlling Agency' with the additional functions of:

- Appointment of Hazard Management Officers (s 55 EM Act);
- Declare / Revoke Emergency Situation (ss 50 and 53 EM Act); and
- Coordinate the development of the Westplan for that hazard (SEMP 2.2).

Combat Agency

A public authority, or other person, may be prescribed by the regulations to be a combat agency for the purposes of the *Emergency Management Act 2005*.

There are a number of Combat Agencies that because of their expertise, resources or specific skills may assist the Controlling Agency with dealing with the incident.⁹

Support Organisation

An organisation whose response in an emergency is either to restore essential services (e.g. Western Power, Water Corporation of WA, Main Roads WA, etc) or to provide such support functions as welfare, medical and health, transport, communications, engineering etc.

⁹Emergency Management Act 2005 S 6.1

1.2.14 Hazard Management Agencies prescribed in Emergency Management Arrangements

Table 2 – Prescribed Hazard Management Agencies (as at 1 March 2011)

HAZARD	ASPECT	HMA	STATUS
Collapse	Preparedness	FESA	Gazetted
	Response	FESA	Gazetted
Cyclone	Preparedness	FESA	Gazetted
	Response	FESA	Gazetted
Earthquake	Preparedness	FESA	Gazetted
	Response	FESA	Gazetted
Flood	Preparedness	FESA	Gazetted
	Response	FESA	Gazetted
Storm	Preparedness	FESA	Gazetted
	Response	FESA	Gazetted
Tsunami	Preparedness	FESA	Gazetted
	Response	FESA	Gazetted
Hazmat Chemical, -	Preparedness	FESA	Gazetted
	Response	FESA	Gazetted
Hazmat Radiation -	Prevention	HEALTH	Gazetted
	Preparedness	FESA	Gazetted
	Response	FESA	Gazetted
Hazmat (Biological)	Prevention	HEALTH	Gazetted
	Preparedness	HEALTH	Gazetted
	Response	HEALTH	Gazetted
Air Crash	Preparedness	WAPOL	Gazetted
	Response	WAPOL	Gazetted
Road Crash	Preparedness	WAPOL	Gazetted
	Response	WAPOL	Gazetted
Land Search	Preparedness	WAPOL	Gazetted
	Response	WAPOL	Gazetted
Marine Search	Preparedness	WAPOL	Gazetted
	Response	WAPOL	Gazetted
Radiation NPW	Preparedness	WAPOL	Gazetted
	Response	WAPOL	Gazetted

Space Debris Re-entry	Preparedness	WAPOL	Gazetted
	Response	WAPOL	Gazetted
Terrorism	Prevention	WAPOL	Gazetted
	Preparedness	WAPOL	Gazetted
	Response	WAPOL	Gazetted
Human Epidemic	Prevention	HEALTH	Gazetted
	Preparedness	HEALTH	Gazetted
	Response	HEALTH	Gazetted
Animal and Plant Biosecurity	Preparedness	Agriculture	Gazetted
	Response	Agriculture	Gazetted
Rail Crash – Passenger Network	All	PTA	Gazetted
Rail Crash – Freight Network	All	Westnet Rail	Gazetted
Fire	Response	FESA	Gazetted
Marine Transport Emergency	ALL	Department of Transport	Gazetted
Marine Oil Pollution	ALL	Department of Transport	Gazetted
Energy Supply Shortage (Gas/Liquid Fuel)	Preparedness/Response	Office of Energy	Gazetted

Where an incident occurs and it is unclear as to which agency should be responsible for managing the response, the appropriate Emergency Coordinator shall, through the Support Group, identify the agency most responsible to manage the response.

Figure 10 - Combat Agency (examples, not a comprehensive list)

FESA	WAPOL
Department for Child Protection	St John Ambulance

Table 3 – Support Organisations (examples, not a comprehensive list)

Local Government	Main Roads WA
Department for Child Protection	Water Corp
Western Power	Red Cross
Salvation Army	Department of Education and Training
Department of Health	Country Women’s Association of Australia
Centrelink	Council of Churches

1.2.15 Emergency Management Structure – Overview

The following table outlines the emergency management structure and associated committees at each level of the structure.

Table 4 – Emergency Management Structure Overview (including committees)

	Committee Structure	Recovery Structure
State	<p>State Emergency Management Committee (SEMC)</p> <p>Chair: Appointed by the Minister <i>(currently Commissioner of Police)</i> Dep. Chair: Appointed by the Minister <i>(currently FESA CEO)</i> Executive Officer: Appointed by the Minister <i>(currently Executive Director, EMWA FESA)</i></p> <p>Sub committees:</p> <ul style="list-style-type: none"> • Emergency Services • Health Service • Lifelines Services • Public Information • Recovery Services • State Mitigation 	<p>State Recovery Coordinating Committee</p> <p>Chair: Department of the Premier and Cabinet</p> <p>Dep. Chair: Department for Child Protection</p>
District (Regional)	<p>District Emergency Management Committee (DEMC)</p> <p>Chair: Appointed by the SEMC</p>	<p>Local Recovery Committee</p> <p>Chair: Elected Municipal Head (Local Government)</p> <p>Local Recovery Coordinator: (Appointed by Local Government)</p>
Local	<p>Local Emergency Management Committee (LEMC)</p> <p>Chair: Appointed by the relevant Local Government</p>	
	Prevention Preparedness	Recovery

1.2.16 Committee Structure (LEMC – DEMC – SEMC)

The *Emergency Management Act 2005* establishes a number of committees to conduct **planning** (Prevention and Preparedness) at various levels.

Local Emergency Management Committee

Local governments are required to establish one or more Local Emergency Management Committees for their Local Government District; however local governments may unite for the

purposes of emergency management, and can then establish one or more LEMC for their combined districts.

The *executive* of the Local Emergency Management Committee consists of:

- Chairman: appointed by the relevant Local Government [s. 38(3) of the Act], normally the Shire/Council President or Mayor;
- Local Emergency Coordinator(s): appointed by the State Emergency Coordinator for the Local Government district [s. 37(1) of the Act], when not appointed as the Chairman; and
- Secretariat and administration support to the Local Emergency Management Committee is to be provided by the Local Government.

In order for emergency management to be effective at the local level, Local Emergency Management Committee membership should include:

- Local Government representative: when a Local Government representative is not appointed as the Chairman;
- Representatives from local Emergency Management Agencies in the Local Government district, e.g., FESA, health/medical, Police; and
- Other members may be included as determined by the Local Government, such as community groups, welfare groups, cultural groups, community and major industry representatives and the Local Recovery Coordinator.

The functions of the Local Emergency Management Committee are to:

- Advise and assist the Local Government in ensuring that local emergency management arrangements are established; and
- To liaise with public authorities and others in the development, testing and review of local arrangements.

District Emergency Management Committee

Based on Emergency Management Districts (Regions), currently 14, one District Emergency Management Committee is established for each emergency management district.

The *executive* of the District Emergency Management Committee consists of:

- Chairman - appointed by State Emergency Management Committee – (currently this is the District Police Officer);
- Deputy Chairman – appointed by FESA Chief Executive Officer; and
- Executive Officer – appointed by the FESA Chief Executive Officer (Currently the Community Emergency Management Officer, Emergency Management WA); and
- District Emergency Coordinator - if not the Chair.

The membership of the District Emergency Management Committee includes:

- Local Government representative(s) – either the Chair of each Local Emergency Management Committee (or their representatives) within the District; or
- The Chair of the Local Emergency Management Committee who represents some or all Local Emergency Management Committees in the District;
- A representative from each emergency management agency in the District;
- A representative from relevant Regional Development Commissions, Tropical Cyclone Industrial Liaison Committee, Industry Groups, Advisory Committees, and similar groups;
- Any other representatives as determined by the Chairman District Emergency Management Committee;
- The District Emergency Management Committee may also co-opt other members as required from, for example, Chamber of Commerce, Industry Groups, Farming Federation, etc.

The functions of the District Emergency Management Committee are to:

- Assist in the establishment and maintenance of effective emergency management arrangements for the District; and
- Undertake other functions as prescribed under the regulations.

State Emergency Management Committee

The State Emergency Management Committee is the peak emergency management body in WA. Membership includes representatives appointed by the Minister from those organisations that are essential to the State's emergency management arrangements.

The *Emergency Management Act 2005* makes provision for the Minister for Police and Emergency Services to appoint a chairman, deputy chairman, executive officer, a person representative of local governments, a person representing the Department of Health, a person representing the Department for Community Development and up to five other members.

Current members appointed by the Minister are:

- Chairman - (Commissioner of Police);
- Deputy Chairman - (Chief Executive Officer, FESA);
- Department of Health;
- Department for Child Protection;
- Western Australia Police;
- Bureau of Meteorology;
- Department of the Premier and Cabinet;
- Western Australian Local Government Association;
- Water Corporation;
- Department for Environment and Conservation; and
- Executive Officer - (Executive Director, Emergency Management WA, FESA).

The functions of the State Emergency Management Committee are to:

- Provide advice to the Minister;
- Provide direction, advice and support to public authorities;
- Provide a forum for whole of community coordination;
- Provide a forum to develop community wide information strategies;
- Develop and coordinate risk management strategies;
- Arrange for the preparation of State emergency management policies and plans;
- Prepare an annual report on its activities; and
- Monitor and review the *Emergency Management Act 2005* and its regulations.

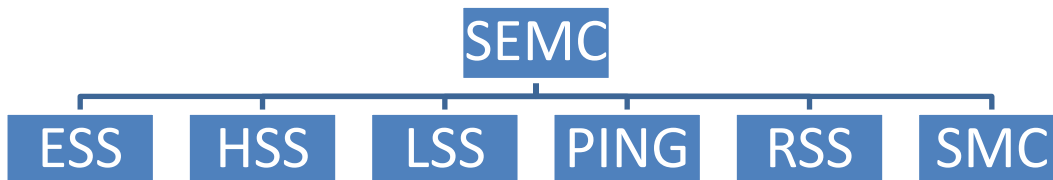
SEMC - Subcommittees

The State Emergency Management Committee may establish such subcommittees as appropriate to advise the State Emergency Management Committee on any aspect of its functions or to assist with any matters relevant to the performance of its functions. The State Emergency Management Committee has established the following subcommittees:

- Emergency Services Subcommittee (ESS);
- Health Services Subcommittee (HSS);
- Lifelines Services Subcommittee (LSS);
- Public Information Group (PING);
- Recovery Services Subcommittee (RSS); and
- State Mitigation Committee (SMC).

The following outlines the existing State Emergency Management Committee sub-committee structure to facilitate the State’s emergency management arrangements.

Figure 11 - SEMS Sub-Committee Structure



The sub-committee structure can consist of either enduring sub-committees to cater for *ongoing* emergency management requirements but may also consist of specific sub-committees with a defined role and life to cater for *specific / fixed term* emergency management requirements which once complete the sub-committee will no longer exist.

1.2.17 Emergency Management Districts (Regions)

The State is currently divided in to 14 Emergency Management Districts (Regions). These districts are determined by the State Emergency Management Committee. The following diagrams outline the Emergency Management Districts (Regions) for both regional WA and metropolitan Perth.

Figure 12 - Emergency Management Districts (Regional)

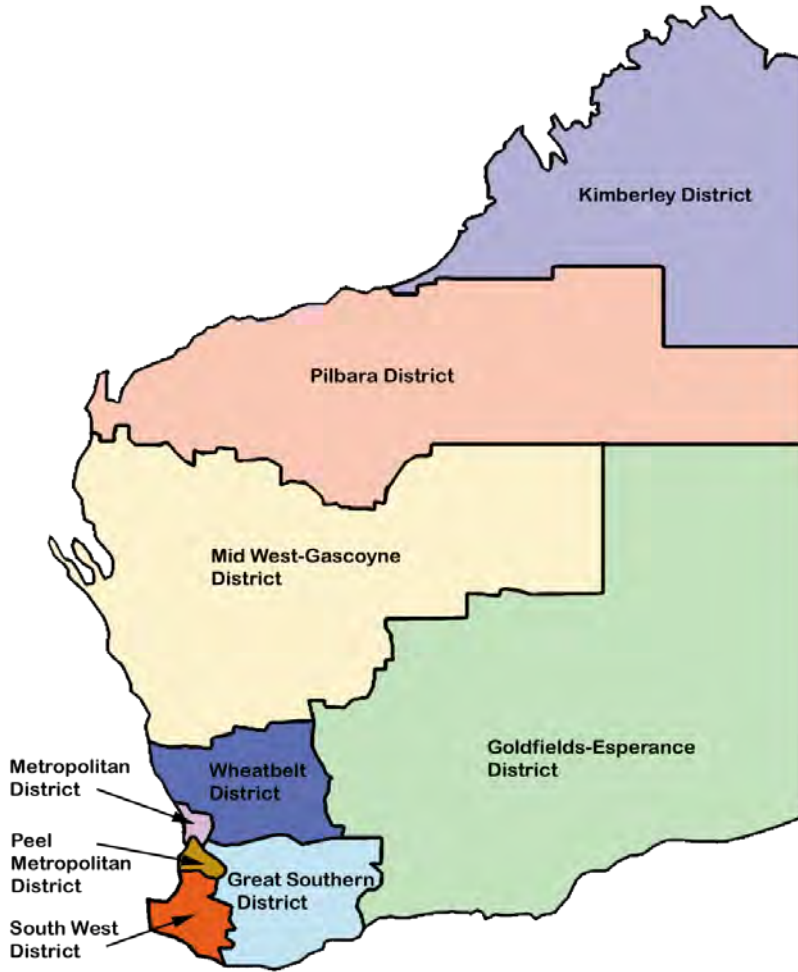


Figure 13 - Emergency Management Districts (Perth)



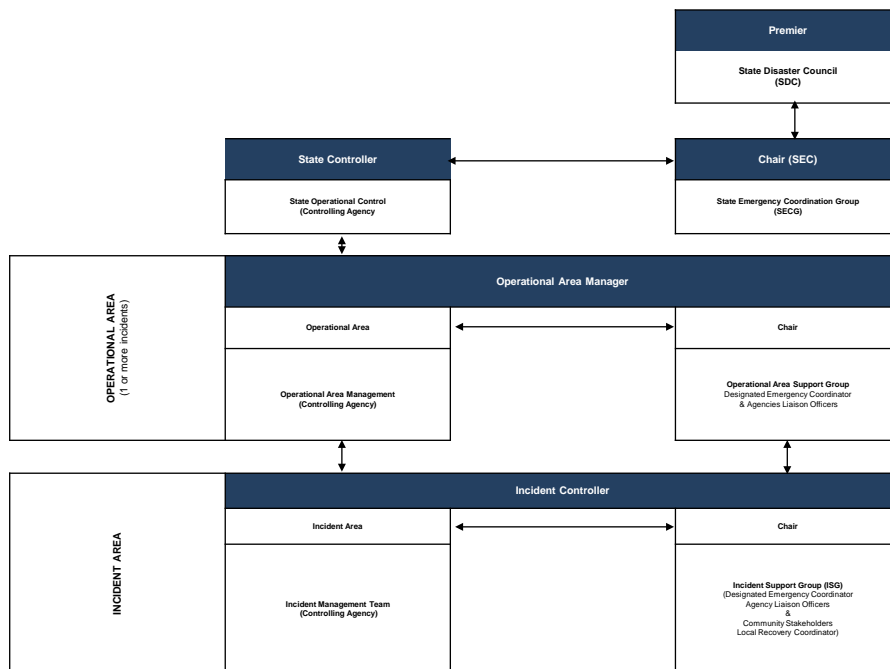
1.2.18 Operational Management Structure

Emergency operations in WA are based on the principle of *Graduated Response* as outlined above. This principle identifies that the responsibility for resourcing and responding to an emergency initially rests at the local level. Where an emergency requires resources beyond the local capability, support from District (Region) then State may be obtained.

Due to the consequences of an emergency there is generally more than one agency involved in the response. When multiple agencies are involved in a major incident there is a need for a suitable multi-agency support structure to ensure a coordinated response is achieved.

Using the combination of the *Hazard Management Structure* and the principle of *Graduated Response* the following operations structure provides for a coordinated approach:

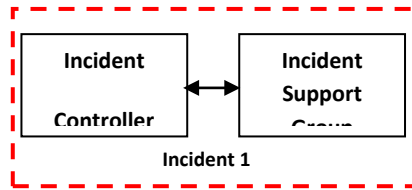
Figure 14 – Operational Management Structure



The Incident Support Group is activated by the Incident Controller when multiple agencies require coordination.

The Incident Support Group consists of the *controlling agency* Incident Controller, the Local Emergency Coordinator and representatives, liaison officers from local organisations and community organisations directly involved in the response and recovery of the incident, to aid potential recovery from the incident.

Figure 15 - Incident Support Group (ISG) Interrelationship to Controlling Agency



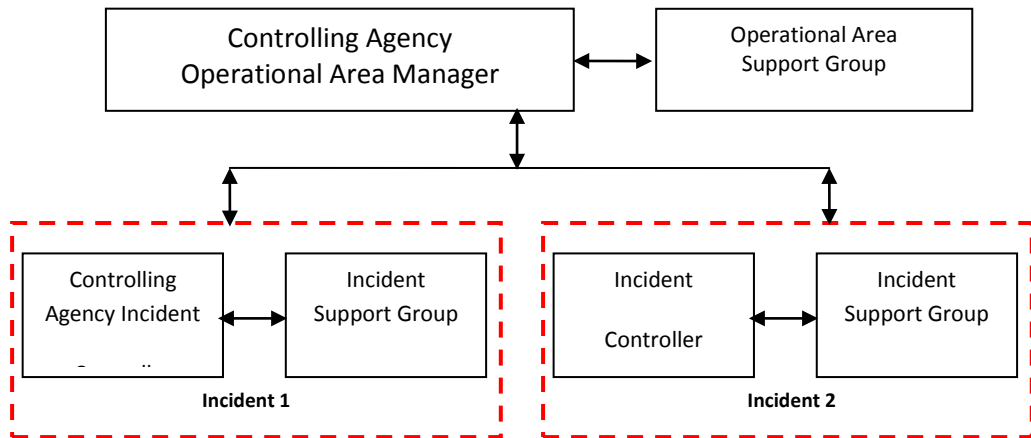
The function of the Incident Support Group is to assist the *controlling agency* Incident Controller by the provision of expert advice, support and resources; it is activated by the *controlling agency* Incident Controller when at least one of the following occurs:

- Where an incident is designated 'Level 2' or higher; or
- Where multiple agencies need to be coordinated.

Operational Area Support Group

Activated and convened by the *controlling agency* Operational Area Manager, the Operational Area Support Group consists of representative of the agencies and organisation involved in the response and recovery of the incident to provide specific information, expert advice and support in relation to the strategic management of the incident.

Figure 16 – Multi-Incident / Multi- Agency Operational Area Support Group Interrelationships



State Emergency Coordination Group

The State Emergency Coordination Group is a group that may be established at State level to assist in the provision of a coordinated multi-agency response to, and recovery from, the emergency.

Composition of the State Emergency Coordination Group should be at State level from key agencies involved in the response and recovery for the emergency. Typically the following representation applies:

- Chair - State Emergency Coordinator;
- Representative of the relevant Controlling Agency;
- Representative of the local governments in the emergency area, or in the area where the emergency is occurring or is imminent, as the case requires;
- Fire and Emergency Services Authority of WA;
- WA Police;
- WA Department of Health;
- Department for Child Protection;
- Department of the Premier and Cabinet; and
- Executive Officer - Executive Director, EMWA, FESA (appointed under the *Emergency Management Act 2005 s 13(2) (c)*).

The functions of the State Emergency Coordination Group include:

- Ensure the provision of coordinated Emergency Management;
- Providing advice and direction to facilitate effective Emergency Management;
- Liaison between Emergency Management agencies and the Minister; and
- Ensuring the provision of a coordinated multi-agency response and recovery.

Activation of a State Emergency Coordination Group is coordinated by the Executive Officer, State Emergency Management Committee, in accordance with State Emergency Management Procedure (OP-11).

Possible triggers for activation may include but are not limited to:

- Multiple or complex level three incidents;
- Major or highly critical infrastructure failure;
- State level resource support required;
- Relocation of a community;
- Actual or potential loss of life or multiple serious injuries; and
- Commonwealth physical assistance considered/required.

The State Emergency Coordination Group may also be activated for an impending incident.

State Disaster Council

The State Disaster Council may be established under the following circumstances:

- If a state of emergency is declared *Emergency Management Act 2005 (s 63(1))*
- As directed by the Premier, e.g.:
 - when there is a terrorist act in another State or Territory and the Commonwealth Government request the establishment of arrangements to facilitate intergovernmental liaison;
 - when there is an impending catastrophic event; and
 - when an emergency is imminent or has occurred and there is no need to use the powers available under a state of emergency.

For each of the two distinct criteria above there are specific establishment procedures.

Composition of the State Disaster Council is specified under the *Emergency Management Act 2005* (ss 63(2), (3), (4), (5)):

- Chairman – Premier;
- Deputy Chairman – Minister for Emergency Services; and
- State Emergency Coordinator.

The Director General, Department of the Premier and Cabinet, is to recommend to the Premier, those members who are to comprise the State Disaster Council. Those are to include:

- Director General, Department of the Premier and Cabinet;
- Director General/Chief Executive officer of the Hazard Management Agency dealing with the emergency;
- Chief Executive Officer, Fire and Emergency Services Authority of WA;
- Minister for Health;
- Director General, Department of Health;
- Treasurer;
- State Solicitor's Office representative;
- Representative of Local Government; and
- Such other members as are appointed by the chairman refer to SEMP OP-6 for further details of those suitable for appointment to this committee.

The Council has the following functions (*Emergency Management Act 2005* (ss 64(2), (3), (4), (5))) to:

- Liaise with the State Government and the State Emergency Coordination Group in relation to the State of Emergency;
- Provide prompt and accurate advice to the Government and the State Emergency Coordination Group in relation to the State of Emergency;
- Liaise with the Australian Government as required; and
- Perform any other function as directed by the Premier.

The composition of the Council for a terrorist act is to be considered separately. (*Refer to SEMP OP-6 (Annex A, S 24, 25).*)

Emergency Coordinators

Coordination in support of the Controlling Agency may be necessary at major incidents when various agencies are involved with the response.

Local Emergency Coordinator

The State Emergency Coordinator has appointed the Senior Police Officer responsible for the police sub-district as being the Local Emergency Coordinator (*SEMP 2.5 (48)*). However before making the appointment the State Emergency Coordinator is to consult the Local Government.

The functions of the Local Emergency Coordinator (*Emergency Management Act 2005 s 37*) are to:

- Provide advice and support to the LEMC in the development and maintenance of local emergency management arrangements;
- Assist Controlling Agencies in providing a coordinated response during an emergency; and
- Carry out other emergency management activities in accordance with the directions of the State Emergency Coordinator.

They will be part of an Incident Support Group if formed.

District Emergency Coordinator

The State Emergency Coordinator appoints a District Emergency Coordinator for each emergency management district; there are 14 in total across the State.

They are a member of the District Emergency Management Committee and provide advice and support in the development and maintenance of local emergency management arrangements for its district.

They assist the Controlling Agency in the provision of a coordinated response during an emergency. These activities may include:

- Providing advice and support to the Controlling Agency in support of effective coordination particularly in multi agency responses;
- Facilitation of meetings if required;
- Active participation in Incident Support Groups or Operational Area Support Groups;
- Assisting in the coordination of resources and information; and
- Facilitating information exchange at a local or district level.

The District Emergency Coordinator carries out other emergency management activities in accordance with the State Emergency Coordinator. This may be a specific direction in relation to a particular matter or may be a general standing direction as to emergency management issues.

They maintain effective communication with all coordinators involved in the emergency and they provide input to the Controlling Agency for a Post Operation Report.

State Emergency Coordinator

The *Emergency Management Act 2005* S 10 designates the Commissioner of Police as the State Emergency Coordinator.

The functions of the State Emergency Coordinator are found in sections 11, 12, 26(2) and 26(4) of the *Emergency Management Act 2005* and are:

- Coordinating the response to an emergency during a State of Emergency;
- Provide advice to the Minister in relation to emergencies;
- Provide advice to the State Disaster Council during a State of Emergency;
- Provide such advice and assistance to Controlling Agency or Hazard Management Agencies as the State Emergency Coordinator considers appropriate;
- Carry out other emergency management activities as directed by the Minister;
- Establish a State Emergency Coordination Group where a State of Emergency is declared or is imminent;

- Establish a State Emergency Coordination Group at the request of the relevant controlling agency or on his own initiative in consultation with the relevant; hazard management agency; and
- Chair the State Emergency Coordination Group.

In addition, where authorised under a State emergency management plan or State emergency management policy, or authorised to do so by the SEMC or the State Disaster Council, the State Emergency Coordinator may:

- Liaise with the Australian Government and other persons, in or outside the State; and
- Enter into agreements and arrangements with those persons to assist the State to manage emergencies.

Activation

The Controlling Agency should ensure the relevant Emergency Coordinator is activated when at least one of the following occurs:

- On the establishment of an Incident Support Group or Operational Support Group;
- The emergency has the potential to escalate to a level 2/3 incident involving multi agency response;
- The incident is a significant threat to community; and
- An Emergency Situation or State of Emergency has been declared.

In these circumstances, if not advised, the Emergency Coordinator is to establish communication with the relevant Controlling Agency and offer assistance in accordance with their operational role.

1.2.19 Emergency Situation / State of Emergency

The declaration of an Emergency Situation or a State of Emergency gives enhanced Emergency Powers to the Controlling Agency's *State Controller* (formerly referred to as the Hazard Management Officer) or Authorised Officer in order to deal effectively with the emergency.

Emergency Situation - Declaration

An Emergency Situation lasts for 3 days unless revoked earlier or renewed, and must be declared and revoked in writing.

A declaration must not be made unless:

- An emergency has occurred, is occurring or is imminent in that area of the State; and
- There is a need to exercise extra powers (*Emergency Management Act 2005, S 6*) to prevent or minimise –
 - Loss of life, prejudice to the safety, or harm to the health, of persons or animals;
 - Destruction of, or damage to, property, or
 - Destruction of, or damage to, any part of the environment.

Before making a declaration the responsible agency must take reasonable steps to undertake consultation with the State Emergency Coordinator and local governments affected by the proposed declaration.

The agency must notify the State Emergency Coordinator, and the district and local emergency coordinators for the Local Government districts to which the declaration applies as soon as possible after the declaration is made.

A declaration of an emergency situation remains in force for a period of three days unless extended or revoked. A revocation may be completed by the HMA however, the State Emergency Coordinator must approve any extension to the declaration (refer S 52 and 53 and SEMC OP-13).

State of Emergency - Declaration

A State of Emergency is declared by the Minister and lasts for three days unless revoked or renewed, and must be declared and revoked in writing.

The State of Emergency may apply to the whole State, or any area, or areas of the State.

The Minister must not make a declaration unless the Minister:

- Has considered the advice of the State Emergency Coordinator
- Is satisfied that an emergency has occurred, is occurring or is imminent; and
- Is satisfied that extraordinary measures are required to prevent or minimise –
 - Loss of life, prejudice to the safety, or harm to the health, of persons or animals;
 - Destruction of, or damage to, property, or
 - Destructions of, or damage to, any part of the environment.

The declaration is to be published for general information and Gazetted as soon as is practicable.

1.1.20 Emergency Powers

Both Emergency Situation and State of Emergency provide enhanced/extended powers to Hazard Management Officers and authorised officers that include:

Powers during a declared Emergency Situation

- Obtaining identifying particulars (enhanced powers);
- Powers concerning movement and evacuation;
 - Direct or prohibit movement of persons, animals and vehicles,
 - Direct evacuation or removal of persons or animals,
 - Close any road, access route or area of water in or leading to the emergency area,
- Use of vehicles;
 - May use a vehicle in any place or circumstances despite any provision of the *Road Traffic Act 1974* that requires a permit for the use of that vehicle,
- Powers to control or use property;
 - May take control of or use any place, vehicle or other thing,
- Powers in relation to persons exposed to hazardous substances;
 - May direct persons exposed to hazardous substances to remain in a specified area,
 - May quarantine people,
 - May direct them to undergo decontamination processes,
- Powers of police to direct closure of places and concerning movement and evacuation;
 - May direct businesses, places of worship or entertainment to close,

- The most senior police officer present may exercise any of the powers of the hazard management officer or authorised officer.

Additional powers during a declared State of Emergency

The State Emergency Coordinator has the power to direct public authorities. During a state of emergency, for the purpose of emergency management, an authorised officer may:

- o Enter or if necessary break into and enter a place or vehicle in the emergency area;
- o Search any place, vehicle and anything in the place or vehicle;
- o Contain, remove or destroy an animal, vegetation or substance in the emergency area;
- o Disconnect or shut off electricity, gas, water or fuel, or drainage facility, or any other service;
- o Open a container or other thing, or dismantle equipment;
- o Excavate land or form tunnels;
- o Build earthworks or temporary structures, or erect barriers;
- o Remove to such place as the authorised officer thinks proper any person who obstructs or threatens to obstruct emergency management activities;
- o Require a person to give reasonable help to exercise the authorised officer's powers; and
- o Enter a place or vehicle without a warrant or the consent of the occupier or owner.

The declaration of either an Emergency Situation or a State of Emergency has significant ramifications, implications and requirements but does provide the authorised officers with a wide range of additional powers that may be necessary to effectively manage the emergency situation.

1.2.21 Recovery Management Structure

Local Recovery Committee

The Local Recovery Committee is one of the most effective means of managing the recovery process.

The **functions** of the Local Recovery Committee include:

- o Preparation and maintenance of a recovery plan;
- o Regular meetings to maintain liaison with other agencies;
- o Establishing arrangements for conduct of post-disaster impact assessments;
- o Review of local plans;
- o Conducting regular exercises and training;
- o Managing the provision of recovery services at a local level;
- o Formalising links with regional/district plans and recovery agencies;
- o Activate and coordinate service delivery; and
- o Identify responsibility for establishing and maintaining contact and resource lists.

Whilst membership of the Local Recovery Committee is strongly focused on Local Government it is important to include representation from:

- o Controlling Agency;
- o State Government departments;

- Department for Child Protection;
- Private and voluntary agencies – e.g. Red Cross, CWA; and
- Community representatives.

The Chair of the Local Recovery Committee should be the elected municipal head (Mayor or President) of the Local Government.

State Recovery Committee

The State Recovery Services Group/State Recovery Coordinating Committee will, after consultation with the Department of Local Government and Regional Development, provide guidance and support and, where required, may supply experienced officer(s) in the establishment and management of a local recovery committee.

In extraordinary circumstances the chair of Recovery Services Subcommittee may recommend to government the appointment of a specialist State Recovery Coordinator.

Local Recovery Coordinator

The Local Recovery Coordinator is nominated in accordance with the requirements of the *Emergency Management Act 2005* (s 41(4)). There should be more than one person appointed and trained to undertake the role of Local Recovery Coordinator in case the primary appointee is unavailable when an emergency occurs.

The role and responsibilities of the Local Recovery Coordinator include:

- For the Local Recovery Committee and with the assistance of the responsible agencies where appropriate, assess the requirements for the restoration of services and facilities;
- Coordinate local recovery activities for a particular event, in accordance with plans, strategies and policies determined by the Local Recovery Committee;
- Liaise with the Chair, State Recovery Coordinating Committee or the State Recovery Committee where appointed, on issues where State level support is required or where there are problems with services from government agencies locally;
- Ensure that regular reports are made to the State Recovery Coordinating Committee on the progress of recovery.

Recovery activities should commence immediately following the impact of an event whilst response activities are still in progress. Key decisions and activities undertaken during the response may directly influence and shape the recovery process.

To ensure that appropriate recovery activities are initiated as soon as possible after the impact of the event, the Incident Controller is to ensure that the Local Recovery Coordinator is notified of the event and is included as a member of the Incident Support Group.

During the response many of the agencies with recovery roles are heavily committed, therefore the inclusion of the Local Recovery Coordinator on the Incident Support Group will ensure:

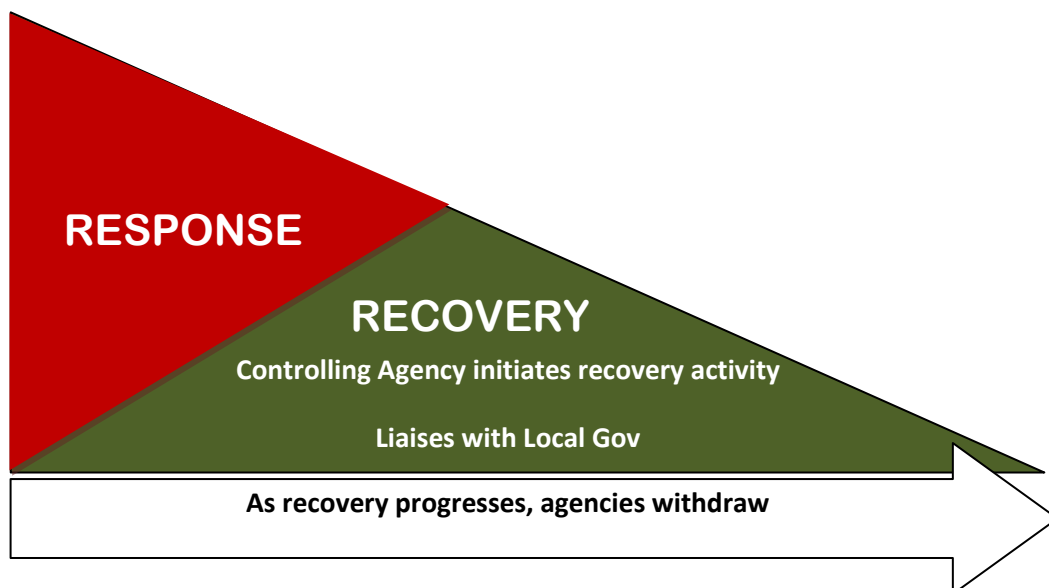
- The alignment of response and recovery priorities;
- Liaison with the key agencies;
- An awareness of the key impacts and tasks; and

- o Identification of the recovery requirements and priorities as early as possible.

When does the Recovery phase begin?

The recovery phase begins during the response phase, with a growing emphasis as the response is completed.

Figure 17 – Concurrent Response / Recovery Phases



The State Emergency Management Policy 4.4 (11) requires “The Controlling Agency with responsibility for the response to an emergency must initiate recovery activity during the response to that emergency.”

The Controlling Agency will then liaise with the emergency affected Local Government to prepare for transition from response to recovery, and at an agreed point will transfer responsibility for the recovery activity to the Local Government. The handover arrangements should be documented.

Recovery management is split at two levels – Local and State. The *Emergency Management Act 2005* (S 36 (b)) appoints Local Government to manage the recovery management process.

Local Government Involvement in Recovery

Local Government is best situated to manage the recovery for its community; this includes coordinating the activities of other groups; Government, NGOs etc., who provide essential services to the community.

Local governments should prepare a local recovery plan that encompasses all the elements of the WESTPLAN Recovery Coordination, adjusted where appropriate to be consistent with local conditions and arrangements. EMWA has produced a “Guide to Developing Your Community’s Recovery Management Plan” which complements the “Local Community Emergency Management Arrangements Guide” also produced by FESA.

1.2.22 Disaster Relief Arrangements

Communities in WA are affected by a range of natural disasters each year. Although significant efforts are undertaken by the emergency services, State and Local Government agencies, communities and individuals to mitigate the impact of such disasters, it is not possible to prevent such disasters from occurring and impacting on WA communities.

Western Australia Natural Disaster Relief and Recovery Arrangements (WANDRRA)

The WA relief and recovery arrangements exist to provide assistance to communities whose social, financial and economic well-being has been severely affected by a natural disaster.

Primary responsibility for restoring public or private assets affected by natural disasters rests with the property owner whether that is a person, company or Government department. It is not the intention of the WANDRRA to provide compensation for losses suffered, or to act as a disincentive to insurance or other mitigation measures. The first point of contact should always be the owner's insurance company.

Activation of WANDRRA

The WANDRRA assistance measures can be activated for a natural disaster event if:

- It is an eligible event - The WANDRRA only apply for those events resulting from any one, or a combination of, the following natural hazards: Bushfire; Cyclone; Earthquake; Flood; Landslide; Meteorite Strike; Storm; Storm Surge; Tornado or Tsunami, and
- The anticipated cost to the State of eligible measures will exceed the small disaster criterion, being the amount of \$240,000.

What is the assistance for?

To provide assistance for the recovery of communities. This assistance is delivered through a range of measures that are offered on a needs basis. The arrangements provide for assistance to:

- Individuals and families;
- Small business;
- Primary producers; and
- Local governments and state government agencies.

Types of Assistance Available under WANDRRA

Personal Hardship and Distress — Emergency assistance to individuals to alleviate their personal hardship or distress arising as a direct result of a natural disaster maybe provided for one or more of the following:

- Accommodation: ranging from short term emergency shelter (e.g. evacuation centre) to medium term overnight accommodation.
- Food: provision of meals in emergency shelters and accommodation or financial assistance to help people buy food.
- Clothing and personal items: e.g. toiletries and pharmaceuticals.
- Personal support: including practical assistance, information, referral, advocacy, counselling, child care and psychological services.
- Financial assistance including personal hardship and distress relief payments where applicable: includes emergency assistance for immediate essential items and

emergency accommodation assistance. Other categories of assistance that may be available are replacement of essential household goods and minor repairs to residences.

- Registration and inquiry: of persons evacuated or affected by the disaster; providing a means for people to locate family members and reunite.

Personal Hardship and Distress grants are administered by the Department for Child Protection.

Counter Disaster Operations

Extraordinary counter disaster operations of direct assistance to an individual (for example, operations to protect a threatened house or render a damaged house safe and habitable).

Extraordinary costs associated with the delivery of any of the above forms of assistance (for example costs of evacuation or establishment and operation of evacuation centres and recovery centres).

Restoration of Essential Public Assets

The restoration or replacement of certain essential local or state assets damaged as a direct result of a natural disaster to pre-disaster standard in accordance with current building and engineering standards.

Restoration or replacement works need to be completed and paid for prior to being eligible to claim.

Main Roads WA is responsible for administering repairs to road infrastructure.

Assistance to Small Business or Primary Producers

Specified subsidies or grants are also made available under these arrangements to alleviate the financial burden of costs incurred by small businesses or primary producers as a direct result of a natural disaster: or

Primary Producers assistance may extend toward freight costs and professional advice grants and interest rate subsidies, which are administered by the Farm Business Development branch within the Department of Agriculture and Food. All requests for WANDRRA assistance will be assessed by the relevant Department for eligibility on a case by case basis.

Administration and Management of the WANDRRA

FESA is responsible for the overall administration and management of the [WANDRRA](#). FESA is assisted by a number of State Government agencies that manage specific components of the WANDRRA (see above).

Lord Mayor's Distress Relief Fund (LMDRF)

In 1961, the *Lord Mayor's Distress Relief Fund (LMDRF)* was established, in conjunction with the State Government, to provide relief of personal hardship and distress for Western Australians.

Funds are distributed in accordance with LMDRF policy and may be provided over and above relief payments available through defined State/Commonwealth government assistance schemes or insurance. Contributions to the relief fund are tax-deductible and any undistributed funds following a Disaster can be rolled over and used for the next one.

The LMDRF is activated by the Chair of the Recovery Services Sub-committee.

Applications for assistance to the LMDRF need to include all details of any other funding assistance provided to allow the Board of the Fund to consider the fair allocation of funds to claimants.

1.2.22 Local Emergency Management Arrangements (LEMA)

Local Emergency Management Arrangements (LEMA) are developed to provide a community focused, coordinated approach to the management of ALL potential emergencies within a Local Government area.

Emergency Management Arrangements differ from Controlling Agency hazard plans in that the Arrangements are an overarching document that links identified risks to the community with preparation for all hazards and concentrates on the Planning, Preparedness and Recovery phases of Emergency Management. Controlling Agency hazard planning is specific to combating (Response) a specific hazard.

The LEMA set out the Local Government and community policies, strategies and priorities for emergency management. They describe emergencies that are likely to occur, define roles and responsibilities within the community and list available resources. They identify any agreements between local governments and local emergency management agencies. In addition to formal documentation LEMA include the implementation of various actions and processes, each of which should subsequently be documented.

LEMA content will vary between different local governments; however the general content should cover areas including:

- Planning;
- Response;
- Recovery;
- Emergency Contacts;
- Resource Register;
- Supporting Plans;
- Risk Register;
- Local Recovery Plan;

- Roles, Responsibilities and Functions of Committees and their members; and
- Exercises and training.

The *Emergency Management Act 2005* requires that all local governments prepare arrangements for their district, however to ensure that arrangements are relevant the Local Emergency Management Committee (LEMC) should be involved in the process.

LEMA should be prepared after an *Emergency Risk Management (ERM)* process has been completed. ERM is a systematic process that allows a community to identify, analyse, evaluate and treat risks within the community. LEMA should provide specific local knowledge to enable localised application to assist control agencies in response and recovery. Additional information to support Local Government in developing Local Emergency Management Arrangements is published in a LEMA Guide. An integral element in integrating emergency management (PPRR) is the FESA Community Emergency Management Officer (CEMO). The CEMO provide direct assistance to the LEMC and the Local Government in undertaking the ERM process and developing their LEMA.

FESA is the *controlling agency* for the largest proportion of Natural Hazards and a key success of the CEMO initiative is their ability to work within the FESA region, where they manage relationships between key decision makers and provide connectivity in natural hazards planning and broad emergency management concepts to building resilience. Arrangements that are developed after the ERM process ensure that LEMA are community focused and relevant to a particular area, and that there is a coordinated approach to all potential emergencies that may occur. LEMA enables a community to react faster and more effectively to any emergencies that may occur. This can save lives and property, reduce damage and expedite a community's recovery.

1.2.23 FESA Proposals

The Review should:

- Recommend the application of the FESA Bushfire Mitigation Portal and associated programs and infrastructure should be the consistent basis upon which LEMA are developed for bushfire across the State. The benefits of such an approach are:
- Consistent analysis and planning from a Whole-of-Local Government area perspective, using consistent and proven methodology which is land and agency tenure blind and is supported through FESA's IT infrastructure;
- Built off state-wide standards and policy framework which can be tailored to local environments;
- Provides an integrated state-wide picture which can support state-wide risk and capability analysis in a standard reporting framework;
- Integrates into the FESA Bushfire Mitigation Officers and Community Emergency Services Managers work plan to support the process at the local level;
- Provides seamless integration of plans and associated data between Prevention and Preparedness phases into the Response Phase under the auspices of FESA as the *Controlling Agency* for bushfire; and
- FESA also submits a similar integrated approach be taken from an all hazards/all agencies perspective to ensure each individual Local Government and the State as a whole is adequately prepared for any potential emergency which may exist across the State commensurate with risk.

Table 5 - Acronyms

AIIMS	Australasian Inter-Service Incident Management System
AEMI	Australian Emergency Management Institute
CWA	Country Women's Association of Australia
DCP	Department for Child Protection
DEC	District Emergency Coordinator
DEMC	District Emergency Management Committee
EM	Emergency Management
EMWA	Emergency Management Western Australia
ERM	Emergency Risk Management
FESA	Fire and Emergency Services Authority of Western Australia
HMA	Hazard Management Agency
ICV	Incident Control Vehicle
IMT	Incident Management Team
ISG	Incident Support Group
LEC	Local Emergency Coordinator
LEMA	Local Emergency Management Arrangements
LEMC	Local Emergency Management Committee
LRC	Local Recovery Committee
LMDRF	Lord Mayor's Disaster Relief Fund
OASG	Operational Area Support Group
PPRR	Prevention/Preparedness/Response/Recovery
SDC	State Disaster Council
SECG	State Emergency Coordination Group
SEC	State Emergency Coordinator

SEMC	State Emergency Management Committee
ESS	Emergency Services Subcommittee (SEMC subcommittee)
HSS	Health Services Subcommittee (SEMC subcommittee)
LSS	Lifeline Services Subcommittee (SEMC subcommittee)
PING	Public Information Group (SEMC subcommittee)
RSS	Recovery Services Subcommittee (SEMC subcommittee)
SMC	State Mitigation Committee (SEMC subcommittee)
SEMP	State Emergency Management Policy
SRC	State Recovery Committee
WANDRRA	Western Australia Natural Disaster Relief and Recovery Arrangements
WAPOL	Western Australia Police
WestPlan	State Emergency Management Plans

1.3 FESA as a Statutory Authority

FESA is a body corporate with perpetual succession established by the *Fire and Emergency Services Authority of Western Australia Act 1998* (the FESA Act). It has a Board of Management which is the governing body of FESA (ss 4 and 6 of the FESA Act). FESA is the successor to the State Emergency Service and both the Bush Fires Board and the Fire Brigades Board, which were dissolved when the FESA Act commenced on 1 January 1999 (Schedule 2 the FESA Act).

While FESA is subject to direction from the Minister for Emergency Services, it operates independently with its functions and powers defined by legislation (ss 11, 12 and 17 of the FESA Act).

FESA administers the *Bush Fires Act 1954* (the BF Act), the *Fire Brigades Act 1942* (the FB Act) and the FESA Act on behalf of the Minister for Emergency Services. Each of the Acts provides FESA with powers or functions relating to the management of fires and other emergencies that require a response from FESA.

FESA is an agent of the Crown and enjoys the status, immunities and privileges of the Crown; however it may have proceedings taken against it in its corporate name. A person does not incur civil liability for a performance or purported performance of a function done in good faith under the emergency services Acts. The Crown, FESA, a Local Government and any other person are also relieved of liability for the actions of a person performing such a function.

In October 2006, the Legislative Assembly published the *Community Development and Justice Standing Committee Inquiry into Fire and Emergency Services Legislation*. Recommendations 1 and 2 of the *Community Development and Justice Standing Committee Inquiry* were that the BF Act, FB Act and the FESA Act should be repealed and a comprehensive Emergency Services Act be developed. These recommendations are currently being progressed by the Emergency Services Act team within FESA. It is anticipated a Bill regarding this matter will be introduced into the Legislative Assembly in late 2011.

Recommendation 48 of the *Community Development and Justice Standing Committee* was that:

The current fire control arrangements are to be retained, with the following exceptions:

- *FESA is to be empowered to take control of a fire from Local Government or CALM in specific circumstances, as defined in legislation.*
- *CALM is to be in control of a fire when it is burning on CALM-managed land. The provision enabling CALM to be in control of a fire when it is "near" CALM managed land is to be removed.*

The power for FESA to take control of a fire from Local Government or CALM is to be restricted to when the fire:

- *Is a multi-agency incident and State- level control is required; and/or*
- *Has escalated to a pre-determined, critical level; and/or*
- *Has moved from CALM- managed land and into FESA's legislative jurisdiction; and/or*
- *Is threatening life and property.*

Amendments to the BF Act commenced in December 2009 to allow FESA to authorise a person to assume control of a fire burning on Local Government or conservation (DEC managed) land. This

amendment was progressed at the same time as a new provision allowing a total fire ban to be declared for an area of the state when conditions were conducive to the outbreak of a bushfire.

Two regular issues that arise with respect to bushfire management are:

- Clarification regarding *duty of care*; and
- Who holds ultimate *responsibility* given the mixture of players involved in bushfire management and the interrelationships of the various pieces of legislation.

Accordingly, the following response to these pertinent issues, which may or may not arise in the case of the Review, outlines FESA's position in this regard.

1.3.1 Duty of Care

The following provides an extract from correspondence between the former Bush Fires Board and Local Government CEOs and Chief Bush Fire Control Officers dated February 1995:

Summary note on Duty of Care

There have been many requests by local authorities and volunteer brigades, to the Board, for a more formal opinion and an explanation on a "duty of care". The Board, in conjunction with the Crown Solicitor's Office, Ministry of Justice, is now able to provide that information as requested. The advice offered is as follows:

Duty to take reasonable Care

Firefighting is a dangerous activity. No one can deny that all reasonable steps that can be taken, ought to be taken, to minimise the risk of injury to firefighters and to members of the public who may be affected by firefighting activities.

That self evident, common sense principle is reflected in the legal principle that if a person or organisation engages in activities which have the potential to cause or increase injury or property damage, the person and organisation fall under an obligation (a breach of which will entitle a victim to damages) to take reasonable care to eliminate or minimise foreseeable risks of harm. A failure to take reasonable care is characterised as negligence. Broadly, the legal position may be summarised as follows:

Where a person suffers harm as a consequence of the negligence of another in circumstances where that other owes a duty of care to the person harmed, the victim will ordinarily have a right of action in damages against the person or body whose negligence caused the harm.

Whether, in a particular case, a duty of care can be established will essentially be a question of fact requiring consideration of all the circumstances. However, two principles are clear.

Firstly, where a person or body has by positive acts created a dangerous or potentially dangerous situation, that person or body falls under a duty to take all reasonable care to eliminate or minimise the relevant dangers.

Secondly, where the relevant harm occurred not as a result of positive acts but as a consequence of a failure to act, a duty of care will arise if all the circumstances establish a relationship of proximity sufficient to give rise to a duty to act. In this

context, employer/employee, teacher/pupil and other such well recognised relationships aside, the significant issue ordinarily will be whether the relationship of the parties operated to cause one party to act or to refrain from acting in a particular (and ultimately harmful) way in the reasonable expectation of particular conduct by the other.

In the event, in any particular case, of a duty of care being held to exist, the person suffering harm will be entitled to damages if he can establish that the person or body owing him a duty of care was negligent, i.e. failed to take reasonable care. This issue, again, will require a consideration of all the facts to determine whether the acts or omissions complained of fell below the standard of reasonableness.

The duty of care principle is not a new principle - an obligation to take reasonable care has been recognised now for over 60 years. Furthermore, the legal responsibility which the law imposes is one which most would accept as a proper and appropriate one. What has changed over the years, and what appears to be the source of much misunderstanding and concern, is that conduct, including in particular safety measures, which even a decade ago the community (and accordingly the courts) would have accepted as reasonable, no longer necessarily is so accepted. There is far greater emphasis on safety, on the necessity to provide appropriate training and equipment to minimise i.e. risk of injury, and on the reality that people need to be reminded constantly of their obligations, even to themselves, to take care.

In the bushfire context, i.e. responsibilities of bush fire brigades and their members, of local authorities, and of the Bush Fires Board can of course only properly be understood against the background of the Bush Fires Act 1954. That Act recognises that the brunt of rural firefighting in this state falls on volunteers. To maximise the effectiveness of volunteers, the Act sets up a flexible structure by which each local authority is empowered to appoint bush fire control officers (section 38 of the Act) and to establish and maintain bush fire brigades (sections 36 and 41). Section 36(d) specifically provides that brigades are "a part of [the Shire's] organisation". Bush fire control officers and specified brigade officers are given specific powers by the Act to assist them in the prevention and control of fires.

The general administration of the Bush Fires Act is vested in the Bush Fires Board (section 10), and the Board may appoint bush fire liaison officers, who have the same powers as bush fire control officers (section 13).

It will be seen that while of course the Bush Fires Board and its employees must take reasonable care in the provision of advice in relation to bush fire prevention and control and that bush fire liaison officers must take care in the exercise of their powers, the primary "hands on" responsibility for bush fire control and prevention rests with the brigades and with the local authorities of which, by law, brigades are administratively a part.

The local authorities' role under the Bush Fires Act carries with it, when the ordinary common law duty of care principles are applied, a legal responsibility to take reasonable care for the safety and property interests of both brigade members and members of the public. Accordingly, local authorities are obliged to make reasonable efforts to keep abreast of, and as far as practicable to implement, the latest firefighting techniques and safety measures and, in any event to take reasonable steps:

- *to ensure that brigades are provided with adequate equipment;*
- *to ensure that equipment is appropriately maintained and that an equipment replacement strategy is in place;*
- *to ensure that firefighting vehicles are suitable for their purpose and are appropriately maintained;*
- *to ensure that volunteers who, by reason of age or health ought not be involved in firefighting, are excluded from fighting fires;*
- *to ensure that volunteers are adequately trained in firefighting techniques.*

In addition, of course, local authorities and bush fire control officers are obliged to take reasonable care in the exercise of their powers and in the course of firefighting.

It is to be emphasised that a local authority's legal obligation is to take reasonable steps to implement proper safety strategies. What is reasonably to be expected of a shire will vary from shire to shire and also from time to time according to a shire's resources, other commitments on the shire's budget, the nature and extent of the fire risk in a particular municipality, the size and number of brigades for which a shire is responsible and, of great significance, the readiness of brigades themselves to accept their and their Shire's obligation to ensure that reasonable care is taken to minimise the risks associated with firefighting.

In the end, the real issue is the professionalism of the approach taken by shires and brigades to their task of fire prevention and control. That professionalism is not to be measured simply by their ability effectively to control and extinguish fires. Rather, the proper criteria is their ability to prevent and extinguish fires while at the same time, to the extent that their resources allow, keeping to a minimum the risks to people and property which are associated with firefighting.

Whilst there is numerous case law relevant to duty of care, and without trying to interpret these, it is important to reflect on one of the most relevant in the context of bushfire management, this being the case *Pyrenees Shire Council v Day* (1998) 192 CLR 330. The following provides an outline brief of this case.

In *Pyrenees Shire Council v Day* (supra) the local authority's building inspector, following an inspection of a fish and chip shop in a Victorian country town, alerted the tenants of the shop to defects in the chimney and warned that no fires should be lit. A letter was subsequently sent to the tenants stressing that the fireplace was unsafe for use and stating that the fireplace "should not be used under any circumstances" until the defect was repaired. The local authority had the statutory power to compel repair of the defect, but did not exercise that power. Notwithstanding that, no action, other than the inspection and the letter, was taken and, in particular, the shop's owner was not advised of the chimney defect.

There was subsequently a change in tenants of the shop. The new tenants were not advised, either by the previous tenants or by the local authority, of the chimney defects. When a fire was lit in the fireplace, a serious fire occurred and substantial property damage was caused both to the fish and chip shop and to the adjoining premises. The Pyrenees Shire Council was found liable for damages in negligence both to the new tenants and to the owners of the adjoining shops.

The significance of the *Pyrenees* case is that the Shire was found liable for the damage caused to the adjoining shops notwithstanding that it did not itself create the danger (i.e. the defective chimney) and was not in any specific way relied upon by the tenants and owners to eliminate that danger. The

High Court emphasised that for a duty of care to arise there must be in existence some element beyond foreseeability of the relevant loss. The Court held that a mere failure by a government body to exercise its statutory powers to eliminate or minimise that loss did not of itself provide that element, but on the facts of *Pyrenees* found that element when combined with a number of factors – the extreme danger presented by the chimney; the Shire’s knowledge of that danger; the neighbouring shop owners’ legal inability to examine the fireplace; the vulnerability of the plaintiffs; the powers available to the Shire; the ease with which Shire officers could have accomplished removal of the danger through the exercise of their powers; and the fact that the Shire, by warning the previous tenants of the fish and chip shop of the defects, had commenced to embark upon eliminating the hazard.

1.3.2 Responsibility

The BF Act is the primary legislation regarding the prevention, control and extinguishment of bush fires across WA. The BF Act generally recognises three tenures of land which will cause persons to have obligations placed on them under the BF Act. These are land contained within a Local Government district, conservation land and private land. Fire districts which are created under the BF Act are also recognised, however this is only in relation to the exercise of certain powers by bush fire brigade members and bush fire control officers in relation to structural fires.

Powers and functions or obligations under the BF Act relating to the above land tenures are primarily given to local governments, FESA, authorised CALM Act officers and occupiers of land (which includes the owner of the land). Local governments and FESA have the ability to appoint persons to carry out functions under the BF Act.

The primary obligation for fire prevention under the BF Act is cast upon occupiers of land who can be directed by local governments to carry out measures to reduce the risk of the outbreak of a bushfire. If an occupier of land does not carry out a direction, the Local Government may carry out the work and recover the cost of such work from the occupier. Where a Local Government fails to give an occupier a direction after being required to by the Minister, then FESA may carry out the duties of the Local Government and recover any costs from the occupier.

Given that the specific provisions cast the primary obligation for fire prevention upon owners and occupiers and allow Local Government to recover costs of undertaking necessary fire prevention measures where the owner or occupier will not, and then allows FESA to step in if either or both of these other parties does not act, FESA submits it would be strange (to say the least), and indeed may undermine the scheme of the BF Act, for the Act to be interpreted as requiring FESA to enter land to undertake all fire prevention measures it thinks fit.

This literal legislative obligation does not of course alter FESA’s primary position of partnering and supporting local governments in undertaking their bushfire management, particularly prevention and mitigation works utilising FESA’s *Bushfire Threat Analysis* and mitigation programs (including the portal) outlined elsewhere in this submission. These are all tools that proactively support Local Government to undertake their primary responsibilities in this regard.

Moreover, FESA’s proposed extension of these types of programs to community level planning is aimed to provide those parties with primary responsibility with the necessary tools and support to create a ‘joined-up’ and ‘end-to-end’ approach to creating a *Bushfire Safe – WA*.

1.3.3 Summary of *Bush Fires Act 1954*

As FESA is responsible for managing the BF Act on behalf of Government, it believes it is important to contextualise the Act, as the principal head of power, as part of the Review. The following provides an overview of the Act for the information of the Review.

The objectives of the *Bush Fires Act 1954* are defined as:

...to make better provision for diminishing the dangers resulting from bush fires, for the prevention, control and extinguishment of bush fires.

To achieve the above objectives, the Act:

- Provides the Fire and Emergency Services Authority of Western Australia (FESA), local governments and the authorised CALM Act officers with the functions and powers considered necessary to combat fire incidents and fire related incidents.
- Assists FESA and local governments to prevent bush fires by providing for:
 - The establishment of a system of enforceable restrictions on the lighting of fires. These restrictions vary depending upon the time of year and the resultant fire danger threat. The capacity to declare and enforce a ‘total fire ban’ was added in 2009;
 - Prescribed penalties for breaches of such restrictions. In many instances the offending person or organisation has the option of either paying an amount specified in an Infringement Notice issued by the Local Government concerned, or allowing the matter to proceed to court;
 - Provisions relating to the issue of permits, exemptions and suspensions to allow people or organisations to undertake activities relating to the use of fire which would otherwise be prohibited under the Act; and
 - local governments to require owners or occupiers of land to install fire-breaks and / or undertake hazard reduction works.
- Establishes an infrastructure to control and extinguish bush fires. This includes:
 - Enabling local governments to establish, equip and maintain volunteer bush fire brigades;
 - Providing local governments, appointed bush fire control officers and members of volunteer bush fire brigades with the powers necessary to enable them to perform their functions. FESA officers appointed as bush fire liaison officers may exercise all of the powers of a bush fire control officer.
 - 2009 amendments to the Act clarified the ‘control’ arrangements for major fires in WA, empowering persons authorised by FESA to take control of fire operations from a Local Government or DEC (either at their request, or if because of the nature or extent of the bush fire, FESA considers it appropriate to do so); and
 - Requiring local governments to insure volunteer bush firefighters for injury they sustain while they are engaged in normal brigade activities.

The *Bush Fires Act 1954* works in conjunction with the *Fire and Emergency Services Authority of Western Australia Act 1998*, the *Fire Brigades Act 1942* and the *Emergency Management Act 2005*.

The provisions of the *Bush Fires Act 1954* are supplemented by the Bush Fires Regulations 1954, Bush Fires (Infringements) Regulations 1978 and any Local Government local laws made under the Act.

The following tables outline an overview summary of the provisions of the BF Act and associated regulations framework, including enforcement regimes and penalties (obviously the actual provisions of the Act prevail). As outlined above, these are extremely important to contextualise as part of the Review and also relevant to the Terms of Reference.

Table 6 - Schedule of provisions of *Bush Fires Act 1954* that provide responsibilities / powers; create offences; prescribe penalties

Glossary

BFCO = bush fire control officer
CBFCO = chief bush fire control officer

BFIR = *Bush Fires (Infringements) Regulations 1978*
PBT = Prohibited Burning Times

BFLO = bush fire liaison officer
RBT = Restricted Burning Times
FESA = FESA Board

<u>Section</u>	<u>What</u>	<u>Details</u>	<u>Who</u>	<u>Comments / History / BFIR</u>
N/A	Administration of Act	Responsibility for administration of Act rests with the Minister for Police; Emergency Services; Road Safety – refer s 12 of <i>Interpretation Act 1984</i> , and <i>Government Gazette</i> No. 1 dated 4/1/11, ‘Administration of Departments, Authorities, Statutes and Votes’ (page 10).	Minister	
10	Powers of FESA	“(1) The Authority shall — report to the Minister as often as it thinks expedient so to do on the best means to be taken for preventing or extinguishing bush fires; perform and undertake such powers and duties as may be entrusted to it by the Minister; subject to the general control of and direction by the Minister, be responsible for the administration of this Act; recommend to the Minister the prohibited burning times to be declared for the whole or any part of the State; carry out such fire prevention measures as it considers	FESA (formally delegated by FESA Board to FESA CEO on 4 January 1999)	

		<p>necessary;</p> <p>carry out research in connection with fire prevention and control and matters pertaining to fire prevention and control;</p> <p>conduct publicity campaigns for the purpose of improving fire prevention measures.</p> <p>(2) The Authority may —</p> <p>recommend that the Chief Executive Officer appoint and employ such persons as the Authority considers necessary for carrying out the provisions of this Act;</p> <p>organise and conduct bush fire brigade demonstrations and competitions and provide prizes and certificates for presentation to bush fire brigades and competitors;</p> <p>pay the expenses of bush fire brigades attending bush fire brigade demonstrations.”</p>		
12	Appointment of bush fire liaison officers	<p>FESA CEO may appoint BFLOs, on the recommendation of the Authority, and with the approval of the Minister.</p> <p>There is also a ‘savings’ provision – persons who were bush fire wardens immediately before 1 June 1978 are BFLOs.</p>	<p>FESA CEO (formally delegated by FESA Board to FESA CEO on 28 January 2003) Minister</p>	
13	Duties and powers of bush fire liaison officers	<p>“(1) A bush fire liaison officer shall exercise such powers and perform such duties as the Authority may</p>	<p>BFLOs FESA</p>	

		<p>direct and may, in addition, exercise all the powers that may be exercised by a bush fire control officer under this Act.</p> <p>(2) A bush fire liaison officer shall exercise his powers and perform his duties —</p> <p>subject to such directions as may be given by the Authority;</p> <p>in such part or parts of the State as the Authority may direct.</p> <p>(3) Subject to subsection (6), in the exercise or performance of any of the powers or duties conferred or imposed on a bush fire liaison officer he shall co-operate with, and act in an advisory capacity to a bush fire control officer.</p> <p>(4) If a bush fire is burning in the district of a Local Government on land other than conservation land, the Authority may, in writing, authorise a bush fire liaison officer or another person to take control of all operations in relation to that fire —</p> <p>at the request of the local government; or</p> <p>if, because of the nature or extent of the bush fire, the Authority considers that it is appropriate to do so.”</p>	<p>FESA</p> <p>FESA</p> <p>FESA (formally delegated by FESA Board to FESA CEO on 25 January 2010 and can subsequently be delegated to Chief Operations Officer but this has not been executed) BFLO, or another person authorised by FESA</p>	
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13	Duties and powers of bush fire liaison officers	<p>“(5) If a bush fire is burning on conservation land, the Authority may, in writing, authorise a bush fire liaison officer or another person to take control of all operations in relation to that fire -</p> <p>at the request of the CALM Act CEO; or</p> <p>if, because of the nature or extent of the bush fire, the Authority considers that it is appropriate to do so.</p> <p>If, under subsection (4) or (5), a bush fire liaison officer or another person (an authorised person) is authorised to take control of all operations in relation to a fire, all—</p> <ul style="list-style-type: none"> bush fire control officers; and bush fire liaison officers; and authorised CALM Act officers; and officers and members of a bush fire brigade, <p>who are present at the fire are in all respects subject to, and are to act under, the authorised person’s orders and directions.</p> <p>(7) If a person other than a bush fire liaison officer is authorised under subsection (4) or (5), the person is to be taken to be a bush fire liaison officer during the period that the authorisation has effect.”</p>	<p>FESA (formally delegated by FESA Board to FESA CEO on 25 January 2010, and can be delegated to Chief Operations Officer but this has not been executed) BFLO, or another person authorised by FESA</p> <p>BFCOs BFLOs Authorised CALM Act officers Officers and members of bush fire brigades</p>	
14A	Powers and duties under section 13 not	Clarifies that no provisions of the EM Act override the powers provided under s 13 of the <i>Bush Fires Act</i>		Came into operation on 1 December 2009.

	affected by certain powers under <i>Emergency Management Act 2005</i>	1954.		
14B	Powers of authorised persons during authorised periods	Authorised person may: s 14B(2) – direct or prohibit movement of persons, animals and vehicles; direction the evacuation and removal of persons and animals; close roads or access routes or areas of water; s 14B(3) – use vehicles (in specified circumstances) contrary to some provisions of <i>Road Traffic Act 1974</i> .	Authorised persons, i.e. under s 13(6)	Came into operation on 1 December 2009.
14C	Failure to comply with directions	OFFENCE: Failure to comply with a direction under s 14B(2). PENALTY: A fine of \$25,000.		Offence created, and Penalty set, from 1 December 2009
14	Members of FESA and other persons may enter land or buildings for purposes of Act	Specified persons may enter land for purposes specified in s 14(1)(a)to(h). There are specified limits upon the extent of access provided to members of the Police Force – s 14(1A). BFLOs or Police using the access provisions of s 14(1)(e), “investigate the cause and origin of a fire which has been burning on the land or building” “may remove from the land or building, and keep possession of, anything which may tend to prove the origin of the fire.”.	Specified under s 14(1): A member of FESA An officer who is authorised by FESA to do so BFLO BFCO Member of Police Force, but see s 14(1A)	These ‘access’ powers are supplemented by s 50(1) of the <i>Interpretation Act 1984</i> , “Where a written law confers upon a person power to do or enforce the doing of any act or thing, all such powers shall also be deemed to be conferred on the person as are reasonably necessary to enable him to do or to enforce the doing of the act or thing.”
17	Prohibited burning times may be declared by Minister	(1) – declaration of PBT (4) – suspension of operation of 17(1) declaration (5) – authorisation of a person to regulate, permit or define burning under 17(4) (6) – seasonal variation of PBT by Authority (7) - seasonal variation of PBT by local government (8)(b) – the local government’s variation under s 17(7) may be rescinded by the Minister upon advice from the Authority.	(1) – Minister and delegated to FESA on 27 December 2002. 17(4) – FESA - delegated by Board to FESA CEO on 4 January 1999 (5) - FESA (6) – FESA - delegated by Board to FESA CEO on 4 January 1999 (7) – Local Government (which may delegate to its mayor, president or	Infringement notice penalty under the BFIR, s 17(12) - \$250 from 10 January 2003. s 17(12) Penalty was increased <i>from</i> “\$2,000 or 6 months” <i>to</i>

		(12) OFFENCE: Lighting fire to bush during PBT. PENALTY: \$10,000 or six months' imprisonment or both.	CBFCO, after consultation with authorised CALM Act officer if forest land is situated in the district). (8)(b) FESA's role delegated to FESA CEO 28 January 2003	"\$10,000 or 12 months" from 30 November 2002.
18	Restricted burning times may be declared by FESA	(2) – declaration of RBT (4a) - seasonal variation of RBT by Authority (5) - seasonal variation of RBT by local government (6) – setting fire to the bush during the RBT	(2) – FESA- delegated by Board to FESA CEO on 4 January 1999 (4a) – FESA (5) – Local Government (which may delegate to its mayor, president or CBFCO, after consultation with authorised CALM Act officer if forest land is situated in the district). (6) – a person who has obtained a permit from the respective local government	Infringement notice penalty under the BFIR, s 18 - \$250 from 10 January 2003.
18	Restricted burning times may be declared by FESA	(10A) – resolution by Local Government that bush may only be burnt on such dates and by such person as are prescribed by a schedule adopted by the local government. (10B) – application to be made to Local Government for permission to light fire under 18(10A). (11) – recouping of a local government's fire suppression expenses (up to \$10,000) if a fire is out of control or escapes from the land. (12) OFFENCE: Breach of provisions of s 18(1) to (10). PENALTY: 1 st offence \$4,500; 2 nd or subsequent offence \$10,000.	(10A) – local government (10) – local government (11) – local government	s 18(11) recouping amount increased from \$100 to \$10,000 effective 30 November 2002. s 18(12) Penalty increased from '\$1,000 or 6 months' imprisonment or both for 1 st offence; \$4,000 or 6 months' imprisonment or both for any subsequent offence' to '\$4,500 for 1 st offence; \$10,000 for 2 nd or subsequent offence' from 30 November 2002.
20	Regulations as to restricted burning times	The Governor may make regulations prescribing the conditions under which bush may be burnt under s 18.	Governor	

22A	Minister may declare total fire ban	Subject to specified conditions, the Minister may declare a total fire ban, and may subsequently amend or revoke the ban.	Minister – delegated on 6 December 2010 (delegation 3/2010) to FESA, and authorised FESA to subdelegate. Subdelegated by FESA to FESA CEO and six other FESA positions on 16 December 2010 (Subdelegation 5/2010)	s 22A, 22B and 22C came into operation from 1 December 2009.
22B	Lighting of fires prohibited during total fire ban	s 22B prescribes the actions that are prohibited during a total fire ban. s 22B(2) OFFENCE: Lighting, maintaining or using a fire in the open air; or carrying out an activity in the open air that causes, or is likely to cause, a fire. PENALTY: A fine of \$25,000 or imprisonment for 12 months, or both. s 22B(3)(c) provides that further activities may be constituted as offences under s 22B by prescription in the regulations		Offence created, and Penalty set, from 1 December 2009. reg 24A prescribes further prohibited activities for purposes of s 22B(3)(c).
22C	Power of Minister to exempt from provisions of section 22B	Exemptions can be issued under s 22C to allow the lighting of fires or the undertaking of specified activities during a total fire ban that would otherwise be prohibited. s 22C(5) OFFENCE: Failure to observe and carry out any conditions specified in the exemption. PENALTY: \$25,000 or imprisonment for 12 months, or both.	Minister – delegated on 6 December 2010 (Delegation 3/2010) to FESA, and authorised FESA to subdelegate. Subdelegated by FESA to FESA CEO and six other FESA positions on 16 December 2010 (Subdelegation 5/2010)	Offence created, and Penalty set, from 1 December 2009.
22	Burning on exempt land and land adjoining exempt land	Authorises, subject to certain specified conditions, burning operations on land adjoining land for which a PBT suspension has been issued under s 17(4).		Infringement notice penalty under the BFIR, s 22(3)(a) and (b) - \$250 from 10 January 2003. (failure to notify local government, and failure to prepare a fire-break)
23	Burning during	During the PBT the owner or occupier of land may:	Owner or occupier of land	

	prohibited burning times	At any time, burn the bush on his land to protect a dwelling house or other building, or a stack of hay, wheat or other produce, from damage by fire; Within a period specified by the Local Government after the start of the PBT, burn bush on road reserve adjoining his land; burn grass land on his land subject to obtaining a permit from the local government, and to compliance with conditions specified in s 23(2).	Local government Local government	
24	Burning on land growing subterranean clover may be conducted during prohibited burning times	Subterranean clover may be burnt during the PBT provided that a permit to burn is obtained from the local government, and other conditions specified in s 24 are complied with.	Owner or occupier of land Local government	
24A	Bush on land in prescribed irrigation areas may be burnt during prohibited times for purpose of germinating clover	s 24A covers the burning of land in irrigation areas prescribed in reg 22A. Subject to conditions prescribed in s 24 and in the regulations, an owner or occupier of land may burn the bush during the PBT “for the purpose of conducting to the early germination of subterranean clover on the land”.	Owner or occupier of land Local government	reg 22A provides that: Irrigation areas to which the provisions of s 24A apply are the Local Government districts of Dardanup, Harvey and Waroona. Provisions of reg 18, 19, 20, 21, 21A and 22 apply to all permits issued under s 24A. Plus, see reg 22B.
24B	Production of permit to burn may be required	A person who has set fire to bush may be required to: Produce the permit to burn, or if permit is not produced immediately; Identify the person by whom such permit was issued. s 24B(3) OFFENCE : Failure to comply with either of the above requirements. PENALTY : \$500.	An officer of FESA (authorised) BFLO BFCO Officer of bush fire brigade Member of the Police Force Local Government officer (authorised)	Infringement notice penalty under the BFIR, s 24B(3)(a) and (b) - \$100 from 10 January 2003.
24C	Terms used	Terms used in s 24D to 24G are defined in s 24C.		s 24C to s 24G came into operation on 30 November

				2002; updated and replaced s 25B.
24D	Burning garden refuse prohibited if fire danger very high or more	It is prohibited to burn garden refuse if the fire danger forecast is 'catastrophic', 'extreme', 'severe' or 'very high'. PENALTY: \$3,000.		Penalty set from 30 November 2002. Infringement notice penalty under the BFIR, s 24D - \$250 from 10 January 2003.
24E	Burning of garden refuse at rubbish tips	s 24E(1) Unless authorised under s 24E(2), it is prohibited to burn garden refuse <u>at a rubbish tip</u> during the RBT or PBT or on a day when if the fire danger forecast is 'catastrophic', 'extreme', 'severe' or 'very high'. PENALTY: \$10,000. s 24E(2) Burning may be authorised by a notice published in the <i>Government Gazette</i> . Authorisation may be varied or cancelled by the issue of a further notice – s 24E(4).	Minister, delegated to FESA CEO on 28 January 2003	Penalty set from 30 November 2002. Infringement notice penalty under the BFIR, s 24E - \$1,000 from 10 January 2003. See comment on s 10
24F	Burning garden refuse during limited burning times	s 24F(1) During the RBT or PBT or on a day when if the fire danger forecast is 'catastrophic', 'extreme', 'severe' or 'very high', prohibits the burning of garden refuse <u>at a place other than a rubbish tip</u> , unless certain specified conditions are met. PENALTY: \$3,000.	(Local Government – s 24F(2)(b)(ii) and s 24F(4))	Penalty set from 30 November 2002. Infringement notice penalty under the BFIR, s 24F - \$250 from 10 January 2003.
24G	Minister or Local Government may further restrict burning of garden refuse	The arrangements under s 24F that allow the burning of garden refuse in certain specified conditions may be varied or prohibited by a notice published in the <i>Government Gazette</i> by the Minister or by the respective local government/s. PENALTY for non-compliance with provisions of s 24G: \$3,000.	Minister, delegated to FESA on 27/12/02. Local government	Penalty set from 30 November 2002. Infringement notice penalty under the BFIR, s 24G - \$250 from 10 January 2003. See s 10 comments.
25	No fire to be lit in open air unless certain precautions taken	During the RBT or PBT it is prohibited to light or use a fire in the open air unless complying with s 25(1aa) 'gas BBQs' or s 25A 'exemptions' or the specified conditions in respect of the following: (1)(a) – cooking or camping fires;	(1)(b) – BFCO or authorised CALM Act	Infringement notice penalty under the BFIR, s 25 - \$250 from 10 January 2003. reg 23 prescribes the

		<p>(1)(b) – conversion of bush into charcoal, or in or about a lime kiln for production of lime;</p> <p>(1)(c) – disposing of the carcass of a dead animal or a part of the carcass;</p> <p>(1)(f) – any fire lit under s 25(1) must be completely extinguished before it is left unattended;</p> <p>(1)(g) – fire on the premises of a sawmill to consume or dispose of sawdust or waste timber;</p> <p>(1)(h) – burning and producing bricks in a brick kiln</p> <p>(1aa) – use of gas appliance for camping/cooking;</p> <p>(1a) to (1d) – Cooking / camping fires may be prohibited during PBT by local government.</p> <p>(2) OFFENCE: Contravening a provision of s 25. PENALTY: \$3,000.</p>	<p>officer may give directions</p> <p>s 25(1)(g) and (h) - BFCO or BFLO or authorised CALM Act officer may give directions</p> <p>Local government</p>	<p>conditions that must be met to comply with s 25(1)(b). s 25(1)(d) and (e) – deleted.</p> <p>Penalty increased from \$1,000 to \$3,000 effective 30 November 2002.</p>
25A	Power of Minister to exempt from provisions of section 25	<p>(1),(2) and (3) – the Minister may issue an exemption from the provisions of s 25 - to allow a person to light a fire during the RBT or PBT, subject to: Minister receiving written advice from FESA CEO; compliance with prescribed/specified conditions.</p> <p>(4) PENALTY for non-compliance \$10,000.</p> <p>(5) and (6) Local Government may prohibit the lighting of a fire under the exemption for a specified period.</p> <p>(7) OFFENCE. PENALTY \$10,000.</p>	<p>Minister, delegated to FESA on 27/12/02.</p> <p>Local government</p>	<p>s 25A(4) and (7) Penalties increased from \$1,000 to \$10,000 effective 30 November 2002. See s 10 comments</p> <p>Infringement notice penalty under the BFIR, s 25A(4) and (7) - \$250 from 10 January 2003.</p>
25B	(deleted)			
26	Burning of plants to eradicate disease during prohibited burning times	<p>Governor may, by proclamation, authorise the burning of plants or refuse of plants during the PBT. s 26(3) provides that burning is to be carried out in accordance with the regulations. (See reg 24 to reg 36 inclusive.)</p> <p>s 26(4) OFFENCE. PENALTY A fine not exceeding \$2,000.</p>	<p>Governor, on the recommendation of the Minister</p>	<p>s 26(4) Penalty increased from \$400 to \$2,000 effective 30 November 2002. Infringement notice penalty under the BFIR, s 26 - \$250 from 10 January 2003.</p>

26A	Burning of declared plants during prohibited burning times	Plants declared under the <i>Agricultural and Related Resources Protection Act 1976</i> may be burnt during the PBT, subject to and in accordance with the regulations (see regs 24 to 36 inclusive and reg 36A). s 26A(2) OFFENCE. PENALTY A fine not exceeding \$2,000.		s 26A(2) Penalty increased from \$400 to \$2,000 effective 30 November 2002. Infringement notice penalty under the BFIR, s 26A - \$250 from 10 January 2003.
27	Prohibition on use of tractors or engines except under certain conditions	This section sets out the conditions under which a tractor or self-propelled harvester may be used during the RBT and PBT. Local governments may allow the use in orchards of tractors with exhaust pipes that are not vertical, subject to certain other conditions. PENALTY \$5,000 - (s 27(1) and (5) and (7)(d). reg 37(1) and (2) prescribe details of the spark arresters that must be fitted to tractors under s 27(1)(a)(iii); and fire extinguisher to be carried under s 27(5).	Local government	s 27(1) and (5) and (7)(d) Penalty increased from \$500 to \$5,000 effective 30 November 2002. Infringement notice penalty under the BFIR, s 27(1) and (5) - \$250 from 10 January 2003.
27A	Regulation of blasting and matters likely to create bush fire danger	The Governor may make regulations regulating: the use of any materials for the purpose of blasting, including explosives and fuses; the carrying out in the open air of any process or operation specified in the regulations as being a process or operation likely to create a bush fire danger; prescribing as the penalty for a breach of any regulation so made a maximum penalty of \$10,000. The following Regulations specify operations or processes likely to create a bush fire danger: reg 39BA - the operation in the open air of welding apparatus or power operated abrasive cutting discs; reg 39CA – the operation of bee smoker devices; reg 39E – fireworks on land and in the open air.	Governor BFCO or officer of bush fire brigade or authorised CALM Act officer may provide directions that must be complied with.	s 27A(1)(b) Penalty increased from \$500 to \$10,000 effective 30 November 2002.
27B	False alarms	It is an OFFENCE to give a false alarm (knowing it to be false) to a member, employee or agent of FESA, or of a local government; or member of a bush fire brigade;		s 27B(1) Penalty increased from \$500 to \$5,000 effective 30 November 2002.

		or BFLO or BFCO; or authorised CALM Act officer. PENALTY \$5,000, plus a court may direct that any person convicted of the above offence be required to meet expenses incurred.		Infringement notice penalty under the BFIR, s 27B(1) - \$250 from 10 January 2003.
27C	Vandalism	It is an OFFENCE to give a false alarm (knowing it to be false) to a member, employee or agent of FESA or a local government; or member of a bush fire brigade; or BFLO or BFCO; or authorised CALM Act officer. PENALTY \$5,000, plus a court may direct that any person convicted of the above offence be required to meet the repair/restoration expenses incurred.		s 27C(1) Penalty increased from \$500 to \$5,000 effective 30 November 2002. Infringement notice penalty under the BFIR, s 27C(1) - \$250 from 10 January 2003.
27D	Requirements for carriage and deposit of incendiary material	Sets out the conditions under which incendiary materials may be carried in a motor vehicle, and subsequently deposited on land. PENALTY \$1,000 for failing to comply with requirements regarding carriage of (s 27(D)(2)) or depositing (s 27D(3)) incendiary material.	Local Government or BFCO or BFLO or authorised CALM Act officer may provide directions that must be complied with.	Infringement notice penalty under the BFIR, s 27D(2) and (3) - \$250 from 10 January 2003.
28	Occupier of land to extinguish bush fire occurring on own land	If a bush fire is burning on land during the RBT or PBT, and is not part of burning activities in accordance with this Act, the occupier of the land is to - take all possible measures at his own expense to extinguish the fire (s 28(1)), informing the nearest BFCO or bush fire brigade officer if assistance is required (s 28(1B)). s 28(2) PENALTY \$10,000 If occupier of land doesn't extinguish the fire, a BFLO or BFCO or authorised CALM Act officer (if the fire is within 3kms of forest land) may enter upon the land and take all proper measures to extinguish fire (s 28(3)). Any expenses incurred as a result of the failure of the occupier to comply with s 28(1) may be recovered via the courts – s 28(4).	Occupier of land BFLO or BFCO or authorised CALM Act officer FESA - delegated by Board to FESA CEO on 4 January 1999, Local Government or DEC	s 28(2) Penalty increased from \$1,000 to \$10,000 effective 30 November 2002. Infringement notice penalty under the BFIR, s 28(1) - \$250 from 10 January 2003.
29	(deleted)			
30	Disposal of burning	During the RBT or PBT, it is prohibited to dispose of		s 30 Penalty increased from

	cigarettes etc	burning tobacco or a burning cigarette, cigar or match: “in circumstances that are likely to set fire to the bush; or by throwing it from a vehicle under any circumstances whatsoever. PENALTY \$5,000		\$500 to \$5,000 effective 30 November 2002. Infringement notice penalty under the BFIR, s 30 - \$100 from 10 January 2003.
32	Offences of lighting or attempting to light fire likely to injure	This is the section that covers ARSON. It is a CRIME to: wilfully light or cause to be lit or attempt to light a fire; or place a match or other inflammable or combustible substance, matter or thing in a position so that it may directly or indirectly be ignited by the rays of the sun or by friction or other means, or be exploded or set on fire, or whereby a fire may be lit or caused and with the intent to light a fire, under such circumstances as to be likely to injure or damage a person or property, whether the fire be caused or not. PENALTY Imprisonment for 20 years		This section was updated effective 1 December 2009 to ensure that it is clear that ‘property’ includes “personal or real property, including Crown land, and includes the bush and fauna”. The Penalty was increased from “\$250,000 or 14 years’ imprisonment or both” to “Imprisonment for 20 years”, effective 19 December 2009 – <i>Arson Legislation Amendment Act 2009</i> .
33	Local Government may require occupier of land to plough or clear fire-break	Local Government may require an owner or occupier of land to establish fire-breaks or undertake hazard reduction works, through: the issue of notices to individual owners or occupiers, or to all owners or occupiers of land (<i>Government Gazette</i> and newspaper circulating in the district) – s 33(1); and/or local laws made in accordance with the <i>Local Government Act 1995</i> . s 33(3) OFFENCE PENALTY \$5,000. Where an owner or occupier fails to comply with the requirements, the Local Government may arrange for the necessary works to be undertaken, and for	Local government Local government	s 33(3) Penalty increased from \$1,000 to \$5,000 effective 30 November 2002. Infringement notice penalty under the BFIR, s 33(3) - \$250 from 10 January 2003.

		relevant costs/expenses to be recovered via the courts.		
34	Burning on Crown lands	<p>The owner or occupier of land adjoining specified categories of land (Crown land [other than land set apart for roads or land comprised in closed roads], reserve or other land unoccupied by abandonment except forest land) may enter upon that land and establish fire-breaks – including by setting fire to the bush (subject to compliance with specified conditions, including obtaining a permit to burn from a BFCO). A BFCO may enter upon Crown land or reserve except forest land and burn the bush – in order to reduce or abate a fire hazard which cannot practicably be reduced or abated other than by burning. Neither of the above provisions apply if FESA: is satisfied with that the entity responsible for the Crown land etc has plans in place for the prevention, control and extinguishment of bush fires on the land; and by notice published in the <i>Government Gazette</i>, orders that the powers available to owners / occupiers of land and BFCOs shall not be exercised.</p>	<p>Owner or occupier of land</p> <p>BFCO</p> <p>FESA (delegated by FESA Board to FESA CEO on 4 January 1999)</p>	See reg 44, at least 4 days notice of proposed entry is to be given.
35	Powers of FESA on default by Local Government	<p>The Minister may request a Local Government to issue a land owner or occupier a fire-break or hazard reduction notice under s 33(1). If the Local Government fails to do so, FESA may issue such a notice, and the powers etc available under s 33(3), prosecution of offence, and s 33(4), undertaking of works, are available to FESA. FESA can recover costs/expenses incurred – either from the owner / occupier or Local Government (FESA may choose). If FESA believes that a Local Government has failed or neglected to carry out its duties, exercise its powers or</p>	<p>Minister</p> <p>FESA (delegated by FESA Board to FESA CEO on 4 January 1999)</p> <p>FESA (Delegated by FESA Board to FESA CEO on 4 January 1999)</p>	

		perform its functions under the provisions of Part III of the Act, 'Prevention of bush fires' (i.e. s 17 to s 35 inclusive), FESA may, if it deems necessary: instruct a BFLO to "take such action as he considers necessary to remedy the default or neglect"; and recover the relevant expenses via the courts.		
35A	Terms used	Defines terms used in sections 36 to 41 inclusive.		
36	Local Government may expend moneys in connection with control and extinguishment of bush fires	Specifies a range of activities that a Local Government may undertake, despite the provisions of any other Act, in relation to the control and extinguishment of bush fires. Focusses on matters / activities that require the expenditure of moneys.	Local government	
37	Local Government to insure certain persons	Requires the insurance of 'volunteer fire fighters' while undertaking 'normal brigade activities', as though they were workers for the purposes of the <i>Workers' Compensation and Injury Management Act 1981</i> . Also provides that if a 'specified injury' is involved, the State Government will provide a 'top up' payment so that the total received is 2.36 times the 'prescribed amount' under s 5(1) of the WCIM Act. s 37(1)(b) also requires the Local Government to hold a policy of insurance over appliances, equipment and apparatus of bush fire brigades and any privately owned appliances, equipment and apparatus (subject to minimum financial limits specified in s 37(10)) used under the direction of a BFCO or an officer or member of a bush fire brigade.	Local government State Government Local government	
38	Local Government may appoint bush fire control officer	s 38(1) and (2A) - Local Government may appoint BFCOs, and of those BFCOs is to appoint a Chief BFCO and a Deputy Chief BFCO, is to advertise the appointments, and issue a certificate of appointment - s 38(2E). s 38(2C) - Vacancies in the offices of Chief BFCO or	Local government FESA	

		Deputy Chief BFCO are to be filled within one month. If the Local Government doesn't do that, FESA may issue a notice requiring the Local Government to appoint a person to the vacant office within a month of the service of the notice. If the Local Government doesn't comply, FESA may appoint a person (but not a FESA employee) to the vacant office – s 38(2E).	Local government FESA	
38	Local Government may appoint bush fire control officer - <i>continued</i>	<p>s 38(4) - BFCO shall, subject to directions of local government, take such measures as appear necessary or expedient and practicable to:</p> <ul style="list-style-type: none"> carry out 'normal brigade activities'; complying with requirements upon him under Part III, 'Prevention of bush fires'; and ensuring compliance of others to Part III. <p>A Local Government approved by FESA under s 38(7) may appoint 'fire weather officers' (s 38(8)) and may appoint a committee to assist and advise (s 38(14)).</p> <p>The only legislated function of a fire weather officer is that under s 38(17) he/she can override other provisions of the Act and authorise a person issued a permit under s 18(6)(a) (RBT) to burn the bush on a day for which the fire danger forecast is 'catastrophic', 'extreme', 'severe' or 'very high'.</p>	<p>BFCO Local government</p> <p>Local Government s 38(7) FESA - delegated by Board to FESA CEO on 22 November 2010 (Delegation 1/2010), and authorised FESA CEO to subdelegate.</p> <p>Fire weather officer</p>	If not for s 38(17) - reg 15B(7), made under s 20(2)(c), prohibits lighting of a fire under an s 18(6)(a) permit on days when the fire danger forecast is 'catastrophic', 'extreme', 'severe' or 'very high'.
38A	FESA may appoint Chief Bush Fire Control Officer	When requested by a local government, FESA may appoint a member of FESA staff to be Chief BFCO for that local government. In such circumstances the Chief BFCO 'reports' directly to FESA, and must comply with directions of FESA, not those of the local government.	Local government FESA (delegated by FESA Board to FESA CEO on 27 October 2003)	
39	Special powers of bush	This section sets out the various powers that a BFCO	BFCO and BFLO	

	fire control officers	may exercise in the exercise of his functions and the performance of his duties under the Act. By virtue of s 13(1), these powers are also available to BFLOs appointed by FESA.		
39A	Duties of bush fire authorities on outbreak of fire	On the outbreak of a bush fire, BFCOs, bush fire brigade officers or members may take charge of fire suppression operations. (If they aren't available, the equivalent personnel from the adjoining Local Government may take charge.)		
40	Local governments may join in appointing and employing bush fire control officers	Two or more local governments may jointly appoint BFCOs, who may exercise their powers and authorities and perform their duties in the respective districts of the local governments.	Local government BFCOs	
41	Bush fire brigades	Local governments may establish, equip and maintain bush fire brigades, and is to keep a register of brigades and members. Brigades' registration may be cancelled.	Local government	Local Governments can make local laws for the establishment and maintenance of Bush Fire Brigades. Not all Local Governments have done this. A search of the Local Laws Register indicates that 43 out of a total of 122 Local governments with bushfire brigades have local laws relating to bush fire control. City of Armadale adopted their current laws on 5 July 2002 (copy of Gazette attached).
42	Local governments may join in establishing bush fire brigades	Two or more local governments may jointly establish, equip and maintain bush fire brigades	Local government	
42A	Constitution of bush fire brigade	"Any group of persons, however constituted and whether incorporated or not, may be established as a		Provides recognition that bush fire brigades may be

		bush fire brigade under section 41(1) or 42(1).”		incorporated - to ensure that incorporated bush fire brigades (which are separate legal entities, and are therefore potentially subject to prosecution) receive the protection from liability provided under s 37 of FESA Act.
43	Election and duties of officers of bush fire brigade	Local governments’ local laws are to “provide for the appointment or election of a captain, a first lieutenant, a second lieutenant, and such additional lieutenants as may be necessary as officers of the bush fire brigade, and prescribe their respective duties”.	Local government	See s 41 comments.
44	Powers and authorities of officers of bush fire brigades	This section sets out the various powers that the officers and members of bush fire brigades may exercise for the purpose of controlling and extinguishing a bush fire.		These powers only apply to controlling and extinguishing fires. There are times when the exercise of a power may not be possible once a fire is extinguished, i.e. if you wish to keep people out of an area to “mop-up” other powers may have to be used.
45A	Requests to authorised CALM Act officers to take control of bush fires	A BFCO or an officer or member of a bush fire brigade who is in charge of a bush fire may request that an authorised CALM Act officer (who is present at the fire) take control of all operations in relation to the fire. The authorised CALM Act officer must inform FESA.	BFCO or brigade member or officer Authorised CALM Act officer	reg 45A prescribes the information to be provided to FESA by an authorised CALM Act officer when taking control of fire operations under s 45A.
45	Powers and authorities exercisable by authorised CALM Act officers	An authorised CALM Act officer may exercise the powers and authorities of a BFCO on: conservation land (as defined in s 45(1) and reg 45); and	Authorised CALM Act officer	

		<p>land other than conservation land where a bush fire is not being controlled by a BFCO or a bush fire brigade officer or member - until such time as such person/s arrive and take control – s 45(5).</p> <p>The authorised CALM Act officer may request a BFCO or a bush fire brigade officer or member to take control of all operations in relation to the fire – s 45(4).</p> <p>A BFCO or a bush fire brigade officer or member who takes control of all operations in relation to a fire under s 45(4) or (5) must inform FESA as per reg 45B.</p>		<p>reg 45B prescribes the information to be provided to FESA when a BFCO or a bush fire brigade officer or member takes control of fire operations under s 45.</p>
46	<p>Bush fire control officer or forest officer may postpone lighting a fire</p>	<p>Despite any other provisions of this Act, a BFCO or Local Government may:</p> <p>prohibit or postpone the lighting of a fire – if in his or its opinion the fire (if lit) would be or become a source of danger by escaping from the land on which it is proposed to be lit. (An authorised CALM Act officer may also exercise this power if it is proposed to light the fire within 3 kms of the boundary of forest land.); and</p> <p>direct that all reasonable steps be taken by the owner or occupier of land to extinguish a fire burning on that land – if he or it is of the opinion that the fire is in danger of escaping from that land.</p> <p>s 46(2) OFFENCE. Failure to comply with directions re the above. PENALTY \$10,000</p> <p>If a person has paid a fee to a Local Government for a ‘permit to burn’, but is subsequently precluded from using that permit, the Local Government is to meet a request for repayment of the permit fee.</p>	<p>BFCO or local government</p> <p>Authorised CALM Act officer</p> <p>Local government</p>	<p>s 46(2) Penalty increased from \$1,000 to \$10,000 effective 30 November 2002.</p> <p>Infringement notice penalty under the BFIR, s 46(2) - \$250 from 10 January 2003.</p>
47	<p>Fire-break not to be lit when bush fire burning</p>	<p>If a bush fire is burning on land, a fire-break is not to be lit on adjoining or adjacent land unless as directed by a BFCO – or if no BFCO is present, by a captain or member of a bush fire brigade present at the fire.</p>		<p>Infringement notice penalty under the BFIR, s 47 - \$250 from 10 January 2003.</p>

48	Delegation by local governments	s 48(1) "A Local Government may, in writing, delegate to its chief executive officer the performance of any of its functions under this Act." Although this does not include the power to subdelegate, the Local Government is not limited in its ability to 'act through' its council, members of staff or agents in the normal course of business.	Local government	This provision was added in 2002, as the delegation provisions in the <i>Local Government Act 1995</i> do not cover the delegation of matters under the <i>Bush Fires Act 1954</i> .
49	(deleted)			
50	Records to be maintained by local governments	(1) sets out the information that local governments are required to maintain in respect of BFCOs and bush fire brigade officers. (2) empowers the Governor to make regulations concerning certain specified matters.	Local government Governor	s 50(2)(d) Penalty increased from \$200 to \$1,000 effective 30 November 2002.
51	Saving of remedies	Includes the provision that unless otherwise provided in this Act, no conviction, payment of penalty or proceeding taken under the Act takes away or affects any right of action or other remedy at common law.		There is also an interaction with the 'protection from liability' provisions of s 37 of the FESA Act.
52	Approved area may be declared	If a bush fire brigade is established in a Local Government district, the Local Government may seek the Minister's approval to have the district or a part of it declared as an 'approved area' (for the purposes of s 53). Before making such a declaration, the Minister may obtain a report on the standard of efficiency of the bush fire brigade/s.	Local government Minister	Note: 'approved areas' were last declared some 50 or so years ago. It is being contemplated by the ES Act Review team to repeal this section and s 53.
53	Reduction in insurance premium of crops in approved area	The rates of premiums charged by insurers for crop insurance in an 'approved area' under s 52 is not to exceed 75% of the premium charged for such insurance in an area that is not an 'approved area'. OFFENCE. PENALTY \$10,000	Insurance companies	s 53(2) Penalty increased from \$200 to \$10,000 effective 30 November 2002. See s 52 comment.
54	Approved area may be cancelled	If in the opinion of FESA, "the organisation for the prevention or control of fire in the district of a Local Government is at any time not of a reasonable standard of efficiency", the Minister may cancel the	FESA Minister	See s 52 comment.

		'approved area' status of the district or part-district.		
55	Application of penalties	Any pecuniary penalties recovered in respect of offences against the Act are to be paid: to local government, if the offence was prosecuted by or at the direction of local government; or otherwise to FESA.		FESA are not aware of this having ever occurred. Police have charged persons under s 32 with wilfully lighting a fire and any monetary penalties for this should come to FESA.
56	Duties of police officers, bush fire control officers etc.	It is the duty of persons listed under 'who' who find a person committing an offence under this Act to: demand from the person his name and place of abode; and require him to produce a permit or authorisation under the authority of which it is claimed a fire is lit. It is the duty of a BFCO to report the details of the person and the offence committed to the respective local government. If a person refuses to state his name and place of abode when requested by a person listed under 'who', he may be apprehended and detained until he can be dealt with according to the law. OFFENCE A person refusing to state his name and place of abode, or stating a false name or a false place of abode. PENALTY \$1,000	Member of Police Force FESA board or staff member BFCO Authorised CALM Act officer BFCO Member of Police Force FESA board or staff member BFCO Authorised CALM Act officer	s 56(3) Penalty increased from \$500 to \$1,000 effective 30 November 2002. Infringement notice penalty under the BFIR, s 56(3) - \$100 from 10 January 2003.
57	Obstructing officers	OFFENCE Obstructing, hindering, resisting or in any way opposing: a FESA (board) member or officer; a BFCO; an authorised CALM Act officer; an officer or member of a bush fire brigade; or other person acting with authority under this Act; in the performance or doing of anything which he is empowered or required to do by this Act. PENALTY \$5,000		s 57 Penalty increased from \$1,000 to \$5,000 effective 30 November 2002. Infringement notice penalty under the BFIR, s 57 - \$250 from 10 January 2003.
58	General penalty and	PENALTY \$2,000. s 58(1) specifies that "A person who		s 58(1) Penalty increased from

	recovery of expenses incurred	<p>contravenes any of the provisions of this Act is guilty of an offence against this Act and is liable, if no other penalty is prescribed, to a fine of \$2,000.”</p> <p>s 58(3) “Where, as a result of an offence against this Act, any expense is incurred by an authorised CALM Act officer, BFCO, any officer or member of a bush fire brigade, or by any other person acting under the provisions of this Act, in the performance of a duty imposed, or the doing of anything which he is empowered or required to do, the relevant body may”</p> <p>–</p> <p>recover the expenses from offender “as a debt due in a court of competent jurisdiction”; or</p> <p>apply to the court convicting the offender, if the amount does not exceed \$1,000.</p>	<p>DEC</p> <p>Local government</p> <p>FESA</p> <p>(delegated by FESA Board to FESA CEO on 4 January 1999) (see s 58(3A))</p>	<p>\$200 to \$2,000 effective 30 November 2002.</p> <p>s 58(3)(b) increased from \$400 to \$1,000 effective 30 November 2002.</p>
59	Prosecution of offences	<p>The <i>Bush Fires Act 1954</i> provides that penalties for offences can be applied in two ways:</p> <p>via the courts – s 59; or</p> <p>by the issue of infringement notices - s 59A.</p> <p>s 59(1) Proceedings against a person for an offence alleged to be committed against this Act may be initiated by certain specified persons.</p> <p>s 59(2) The respective Local Government <u>shall</u> meet the costs and expenses incurred by the person instituting and carrying out the proceedings against the alleged offender.</p> <p>s 59(3) and (4) set out the arrangements by which a Local Government may authorise / delegate someone to act on its behalf – or it may itself exercise the authority (s 59(5)).</p>	<p>Person authorised by the Minister</p> <p>FESA (board) member or officer</p> <p>Authorised CALM Act officer</p> <p>Member of the Police Force</p> <p>Local government</p> <p>Local government</p> <p>Local government</p>	<p>A prosecution for all offences (other than Wilfully Lighting a Fire (s 32), which is a crime) under the <i>Bush Fires Act 1954</i> must commence within 12 months of the offence being committed.</p>
59A	Alternative procedure – infringement notices	<p>(1) and (2) A person authorised under s 59 to initiate and carry on proceedings may instead serve an</p>	<p>Person authorised by the Minister</p> <p>FESA (board) member or officer</p>	<p>BFIR reg 3 specifies that the offences and penalties</p>

		<p>infringement notice, in the prescribed form, by the means set out in s 59A(3). This offers the person being served the opportunity to pay a (reduced) prescribed penalty via the infringement notice rather than having the matter dealt with via the courts.</p> <p>The notice may be withdrawn by a prescribed officer, using the prescribed form, within 60 days after its service, regardless of whether or not the prescribed penalty has been paid – s 59A(5).</p> <p>If a person either fails to pay the penalty specified in an infringement notice, or elects not to, the matter may then be prosecuted via the courts – s 59A(4).</p> <p>s 59A(7) The payment of a penalty via infringement notice shall “constitute a conviction of an offence, but shall not be regarded as an admission of liability for the purpose of, nor in any way affect or prejudice, any civil claim, action or proceeding arising out of the occurrence by reason of which the infringement notice was given.”</p> <p>s 59A(8) empowers the Governor to make regulations prescribing offences for the purposes of s 59A, and penalties for those offences – with the maximum penalty that can be imposed a fine not exceeding \$1,000.</p>	<p>Authorised CALM Act officer Member of the Police Force Local government</p> <p>Governor</p>	<p>prescribed for the purpose of issuing infringement notices under s 59A are those set out in the First Schedule of the BFIR.</p> <p>BFIR reg 5 specifies that the prescribed forms referred to in s 59A are those in the Second Schedule of the BFIR</p> <p>BFIR reg 4 prescribes the prescribed officers in respect of <i>the withdrawal of</i> infringement notices.</p> <p>This is the ‘head of power’ for the BFIR.</p> <p>s 59A(8)(b) Penalty increased from \$200 to \$1,000 effective 30 November 2002.</p>
60	Assisting to commit an offence	Any prohibitions under the Act include the prohibition to do anything to assist in or aid or abet the committing of the offence.		
61	Regulations	Empowers the Governor to make regulations under the Act, including those which may impose a penalty not exceeding \$5,000 for a breach of a regulation.	Governor	<p>This is the ‘head of power’ for the <i>Bush Fires Regulations 1954</i>.</p> <p>s 61(2) Maximum penalty increased from \$500 to \$5,000 effective 30 November 2002.</p>
62	Local Government may	Empowers local governments to make local laws (in	Local government	Local Governments can make

	make local laws	accordance with the relevant provisions of the <i>Local Government Act 1995</i>) in relation to: BFCOs; bush fire brigades; matters relating to their powers or duties under the Act. If there is any inconsistency between the provisions of the Regulations and those of local laws, the provisions of the Regulations prevail.		local laws for the establishment and maintenance of Bush Fire Brigades. Not all Local Governments have done this. A search of the Local Laws Register indicates that 43 Local Governments have local laws relating to bush fire control. City of Armadale adopted their current laws on 5 July 2002 (copy of Gazette attached).
62A	Governor may amend or repeal local laws	Any local laws made by a Local Government under s 62 of this Act may be amended or repealed by the Governor. If this happens, the Minister is to advise the Local Government in writing.	Governor Minister	
64	Prohibitions excluded by certain circumstances	The prohibition or regulation of certain specified activities do not apply to such activities when undertaken for the 'Control and extinguishment of bush fires' under Part IV of this Act.		
65	Proof of certain matters	Specifies what constitutes proof of certain matters in a prosecution or legal proceeding under this Act.		
66	Proof of ownership or occupancy	Specifies what constitutes proof of ownership or occupancy in a prosecution or legal proceeding under this Act.		
67	Advisory committees	Sets out the arrangements for the establishment and operation of bush fire advisory committees for the purpose of advising a Local Government on matters relating to its powers and responsibilities under this Act.	Local government	
68	Regional advisory committees	Empowers two or more local governments to join together in the establishment of regional bush fire	Local government	

		advisory committees to assist them in the performance of their functions under this Act.		
69	(deleted)			

Table 7 - Schedule of provisions of *Bush Fires Regulations 1954* that provide responsibilities / powers; create offences; prescribe penalties

Glossary

BFCO = bush fire control officer

BFIR = *Bush Fires (Infringements) Regulations 1978*

CBFCO = chief bush fire control officer

PBT = Prohibited Burning Times

RBT = Restricted Burning Times

FESA = FESA Board

<u>Regulation</u>	<u>What</u>	<u>Details</u>	<u>Who</u>	<u>Comments / History / BFIR</u>
15	Permits to burn under s 18	reg 15(1) A permit to burn is to be as per Form 3 in the Appendix to the Regulations. reg 15(2) If a person has been declined a permit to burn, or issued one subject to special conditions, he/she: is not to apply to another BFCO for a permit; but may apply to the Local Government or CBFCO for a permit or for a variation of the permit already issued.	Local Government or BFCO Local Government or CBFCO	Infringement notice penalty under the BFIR, reg 15(2) - \$250 from 10 January 2003.
15A	Bush fire control officer to comply with directions of local government	Where a Local Government issues directions to a BFCO in respect of conditions to be applied to permits to burn, the BFCO is to comply with those directions.	Local government BFCO	
15B	Obligations of permit holder	Holder of a permit is: reg 15B(1) to comply with conditions set out in the permit. reg 15B(2)to(5) to give notice of intention to burn under permit. reg 15B(6) to arrange for at least three able-bodied persons to be present at the fire while it is alight. reg 15B(7) not to set light to the bush on a day when the fire danger forecast is 'catastrophic', 'extreme', 'severe' or 'very high'. reg 15B(8) and (9) not to light the fire on a Sunday or on a public holiday if the respective Local Government has prohibited the burning of	Holder of permit to burn	Infringement notice penalty under the BFIR, reg 15B(1) - \$250 from 10 January 2003, for failure to comply with conditions in Regulation 15B.

		the bush on those days.		
15C	Local Government may prohibit burning on certain days	Local Government may prohibit the burning of the bush on Sundays or public holidays during the RBT.	Local government	reg 46 provides for the general penalty for breaches of regulations for which a penalty is not expressly provided. This would apply where a matter is prosecuted in court instead of by way of an infringement.
16	Term used: authorised officer	In Part IV, <i>Burning during restricted times and prohibited times</i> , of these Regulations (reg 16 to reg 23 incl.), the term 'authorised officer' means the local government's CEO or a person appointed by the Local Government to grant a permit to burn clover.		
18	Application for permit to burn clover	An application for a permit to burn clover during the PBT (to facilitate the collection of clover burr) shall be made: in accordance with Form 4 in the Appendix to these Regulations; or in a letter, provided that the full information required in Form 4 is included in the letter.	Applicant for a permit to burn clover, plus an implicit obligation upon Local Government – to only accept an application in either of the prescribed forms.	
19	Lodgement of application and issue of permit	reg 19(1), (2) and (3) set out conditions of lodgement, processing and issue of application for permit to burn clover. reg 19(4) "The Authority may, by notice in the <i>Government Gazette</i> authorise the issue of permits for the burning of clover, in any district or part of a district, at a time prior to 4 p.m. and, in that event a permit may, subject to the directions	Applicant for a permit to burn clover Local Government 'authorised officer' – see Regulation 16. FESA	

		of the Local Government for that district or that part of a district, specify a time prior to 4 p.m. for the commencement of burning.”	Local government	
19A	Obligations of permit holder	Permit holder is to: reg 19A(1) give notice of intention to burn under permit. reg 19A(2) comply with the conditions of the permit. reg 19A(3) arrange for at least three able-bodied persons to be present at the fire while it is alight.	Permit holder under reg 19	Infringement notice penalty under the BFIR, reg 19(1), (2) and (3) - \$250 from 10 January 2003.
20	Local Government may prohibit issue of permits	Local Government may prohibit issue of permits by authorised officers.	Local government Local government’s authorised officer (see reg 16) to comply	Only relates to reg 19 permits.
21	Refusal or cancellation of permit, and imposition of permit conditions	The authorised officer may: refuse to issue or grant a permit; or cancel a permit issued; or issue a permit subject to conditions or requisitions (specified in the permit). Permit holder must comply with conditions/requisitions specified in the permit.	Local government’s authorised officer (see reg 16) Permit holder to comply	Relates to reg 19 permits. Infringement notice penalty under the BFIR, reg 21 - \$250 from 10 January 2003.
21A	Permit holder may be required to advertise burning	Local Government may require a permit holder to advertise particulars of the proposed burning in a manner specified in the permit.	Local government Permit holder to comply	Relates to reg 19 permits reg 46 provides for the general penalty for breaches of regulations for which a penalty is not expressly provided. This would apply where a matter is prosecuted in court instead of by way of an infringement.
21B	Bush fire control officer	reg 21B(1) BFCO may prohibit the burning of	BFCO	

	may postpone burning	clover (even if a permit has been issued) on days or parts of days for which a fire danger forecast of 'catastrophic' or 'extreme' applies. reg 21B(2) Permit holder must comply with prohibition.	Permit holder to comply	Infringement notice penalty under the BFIR, reg 21B(2) - \$250 from 10 January 2003.
22	Permit holder to report escape of fire	The permit holder is to: immediately report the escape of fire beyond the boundaries specified in the permit; and report in full (within 24 hours of the suppression of the fire) on the circumstances causing the escape of the fire.	Permit holder to report to: BFCO or Local Government authorised officer; Local Government authorised officer who issued the permit.	Infringement notice penalty under the BFIR, reg 22 - \$250 from 10 January 2003.
22A	Burning in areas of irrigation	The areas of irrigation to which the provisions of s 24A apply are the Local Government districts of Dardanup, Harvey and Waroona. The provisions of reg 18, 19, 20, 21, 21A and 22 apply to all permits issued pursuant to the provisions of s 24A.		
22B	Bush not to be burned unless irrigation available	reg 22B(1) prohibits the burning of the bush under an s 24A permit unless it is on land to which a method of irrigation is available. reg 22B(2) requisitions of BFCO must be complied with.	Permit holder BFCO	Infringement notice penalty under the BFIR, reg 22B(1) and (2) - \$250 from 10 January 2003.
23	Charcoal burning	reg 23(1) Person proposing to light a fire under s 25(1)(b) for conversion of bush to charcoal must give at least 7 days' notice in writing to local government, and to a forest officer if the site is less than 3 kms from a State forest. reg 23(2) Notice must specify the land on which burning is to take place, and the timeframe. reg 23(3) The Local Government (through BFCO) or forest officer direct the measures or precautions that are to be complied with	Person proposing to light fire Local Government (through BFCO) or forest officer	Infringement notice penalty under the BFIR, reg 23(1) and (3) - \$250 from 10 January 2003.
24A	Prohibited activities in open air during total	reg 24A(2) prescribes activities (for the purposes of s 22B(3)(c)) that are likely to cause a fire, and		

	fire ban	are therefore prohibited under s 22B(2)(b) during total fire bans. reg 24A(3), (4) and (5) Clarifies the circumstances that reg 24A(2) does not apply.		
24B	Prescribed activity to which section 22B(2) of Act does not apply	reg 24B Prescribes activities (for the purposes of s 22B(4)) that are not prohibited under s 22B(2)(b) during total fire bans.		
24C	Vehicle movement bans for the purposes of r.24A(5A)	BFCO may impose a vehicle movement ban for purposes of reg 24A(5A), and must impose one if the bush fire danger index for the area is or exceeds 35.	BFCO	
24	Term used: authorised officer	In Part V, <i>Permit to burn proclaimed or declared plants during prohibited burning times</i> , of these Regulations (reg 24 to reg 36A incl.), the term 'authorised officer' means the local government's CEO or a person appointed by the Local Government to grant permits for the purposes of this Part.		
26	Application for permit (<i>refuse of proclaimed plant</i>)	reg 26(1) and (2) and (3) If a person wishes to burn <i>the refuse of</i> a plant proclaimed by the Governor for the purposes of s 26, the person must lodge a permit to burn application (incl. stat dec) with an authorised officer: in accordance with Form 6 in the Appendix to these Regulations; or in a letter, provided that the full information required in Form 6 is included in the letter.	Governor Person who wishes to burn <u>refuse of proclaimed plant</u> Local government's authorised officer (see reg 24)	
27	Issue of permit	reg 27 If the authorised officer is satisfied that a permit to burn can be issued, he/she is to: issue the permit in Form 7 in the Appendix; incorporate any requirements and directions that he / she considers necessary (and the permit holder shall comply); ensure that he / she complies with any directions	Local government's authorised officer (see reg 24) Permit holder	

		from the local government.		
28	Ground to be cleared before burning	The ground upon which the plants / refuse is to be burned shall be so cleared that the fire cannot run along the ground.	Permit holder	
29	Plant refuse to be burned in heaps	Prescribes the physical arrangements (size and layout of heaps) for the burning of plant refuse.	Permit holder	
30	Heaps not to be near brush fence or land boundary	Prescribes the distance that the heaps referred to in reg 29 are to be separated from brush fences and external boundaries of land.	Permit holder	
31	Obligations of permit holder	Permit holder is to: give at least 4 days' written notice to owners/occupiers of adjoining land, Local Government CEO and BFCO, forest officer (if site is less than 3 kms from forest land) and notifiable authority/ies (see definition in reg 3); provide a fire extinguisher, plus at least 200 litres of water, plus such other fire fighting equipment as may be specified by the authorised officer; arrange for at least three able-bodied persons to be present at the fire while it is alight; carry out burning operations only between the hours of 8 p.m. and midnight; and by 10 a.m. the following day, cover all ash with earth or sand.	Permit holder (Local government's authorised officer (see reg 24))	
32	Permit holder to report fire	The permit holder is to: immediately report the escape of fire beyond the boundaries specified in the permit; and report in full (within 24 hours of the suppression of the fire) on the circumstances causing the escape of the fire.	Permit holder to report to: BFCO or Local Government authorised officer; Local Government authorised officer who issued the permit.	
33	Permit to burn proclaimed plants	reg 33(1) and (2) and (3) If a person wishes to burn a plant proclaimed by the Governor for the purposes of s 26, the person must lodge a permit	Governor Person who wishes to burn proclaimed plant	

		<p>to burn application (incl. stat dec) with an authorised officer: in accordance with Form 8 in the Appendix to these Regulations; or in a letter, provided that the full information required in Form 8 is included in the letter. The authorised officer: may incorporate any requirements and directions that he / she considers necessary (and the permit holder shall comply) – reg 33(4); ensure that he / she complies with any directions from the Local Government – reg 33(5); is satisfied with the physical aspects of the proposed burn (e.g. size of land to be burned existence of appropriate firebreaks etc) – reg 33(6); may enter upon the land to inspect the area to be burnt – reg 33(11); is to ensure that any permit to burn is in Form 9 in the Appendix, and specifies the date/s and time/s that the burning may take place – reg 33(8) and (9). “The Authority may, by notice in the <i>Government Gazette</i> authorise the issue of permits for the burning of proclaimed plants in any district or part of a district, at a time prior to 2 p.m., and, in that event a permit may, subject to the directions of the Local Government for that district or that part of a district, specify a time prior to 2 p.m. for the commencement of such burning” (reg 33(12).) The permit holder is: to give written notice to owners/occupiers of adjoining land, Local Government CEO and BFCO,</p>	<p>Local government’s authorised officer (see reg 24) (Permit holder)</p> <p>FESA</p> <p>Permit holder</p>	
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		<p>forest officer (if site is less than 3 kms from forest land) and (relevant) government departments or statutory bodies - reg 33(7);</p> <p>not to light the fire on a day when the fire danger forecast is 'catastrophic', 'extreme', 'severe' or 'very high' – reg 33(13); and</p> <p>to provide at least three able-bodied persons to be present at the fire while it is alight – reg 33(14).</p>		
34	Permit not to be granted if Local Government objects	The Local Government may issue a direction in writing to the local government's authorised officer that he / she is not to issue a permit for the burning of a proclaimed plant.	Local government Local government's authorised officer (see reg 24)	
35	Permit may be refused if danger of escape	The authorised officer may refuse to issue or grant a permit to burn if he / she believes that the proposed burning may be or become a source of danger by escaping from the land upon which the burning is to take place.	Local government's authorised officer (see reg 24)	
36	Permit holder to report escape of fire	The permit holder is to: immediately report the escape of fire beyond the boundaries specified in the permit; and report in full (within 24 hours of the suppression of the fire) on the circumstances causing the escape of the fire.	Permit holder to report to: BFCO or Local Government authorised officer; Local Government authorised officer who issued the permit.	
36A	Permit to burn declared plants or plant refuse	reg 36A(1) and (2) Person wishing to burn declared plants under the <i>Agriculture and Related Resources Protection Act 1976</i> must lodge an application in Form 10 in the Appendix or in a letter - provided that the full information required in Form 10 is included in the letter. The authorised officer: is to ensure that any permit to burn is in Form 11 in the Appendix – reg 36A(3); may incorporate any requirements and directions	Person wishing to burn declared plants. Local government's authorised officer (see reg 24) (permit holder)	

		that he / she considers necessary (and the permit holder shall comply) – reg 36A(4); ensure that he / she complies with any directions from the Local Government – reg 36A(5).	(local government)	
37	Tractors	reg 37(1) and (2) prescribe details of the: spark arresters that must be fitted to tractors under s 27(1)(a)(iii); and fire extinguisher to be carried under s 27(5).		
37A	Bulldozers and graders	It is prohibited to operate bulldozers and road- graders during the RBT or PBT unless specified conditions are met relating to fire extinguishers, exhaust systems and spark arresters.		Infringement notice penalty under the BFIR, reg 37A - \$250 from 10 January 2003.
38	Harvesting machines and headers	A harvesting machine or header must only be used on crops in the RBT or PBT if a fire extinguisher is carried on it.		Infringement notice penalty under the BFIR, reg 38 - \$250 from 10 January 2003.
38A	Use of engines, vehicles, plant or machinery likely to cause bush fire	reg 38A(1) Issue of notice or direction prohibiting or regulating the carrying out of any activity or operation of any engines, vehicles, plant or machinery – either absolutely or except in accordance with conditions specified in notice or direction or without consent of Local Government or bush fire control officer. reg 38A(3) OFFENCE: Operating or using any engines, vehicles, plant or machinery contrary to a notice or direction issued under reg 38A(1). PENALTY: \$5,000. reg 38A(4) empowers local governments to require persons to have a plough or other specified machine, appliance or firefighting equipment <i>in situ</i> where harvesting operations are being carried on.	BFCO Local Government or BFCO Local government	OFFENCE created 28 December 1979. PENALTY set at \$5,000 from 10 January 2003. Infringement notice penalties under the BFIR reg 38A(3) - \$500 reg 38A(4) - \$250 both from 10 January 2003.
38B	Use of plant or equipment activated by internal combustion	reg 38B(1) Issue of notice or direction prohibiting the operation of any power saw, bag loader or other plant or equipment under certain	BFCO, subject to any direction given by local government	OFFENCE created 26 February 1965. PENALTY set at \$5,000 from 10 January 2003.

	engine	<p>conditions are met. reg 38B(3) OFFENCE: Operating a power saw, bag loader or other plant or equipment activated by an internal combustion engine: contrary to a prohibition given under reg 38B(1); or not having a spark arrester of suitable design fitted, and maintained in a clean, sound and efficient condition. PENALTY: \$5,000.</p>		<p>Infringement notice penalties under the BFIR reg 38B(3)(a) - \$500 reg 38B(3)(b) - \$250 both from 10 January 2003.</p>
38C	Prohibition of use of harvest machinery on certain days	<p>reg 38C(1) Local Government may prohibit the use of harvest machinery on Sundays or public holidays – unless the written consent of a bush fire control officer of the Local Government is held. reg 38C(3) OFFENCE: Contravening a declaration under reg 38C(1) PENALTY: \$5,000.</p>	<p>Local government BFCO</p>	<p>OFFENCE created 27 October 1989. PENALTY set at \$5,000 from 10 January 2003. Infringement notice penalty under the BFIR, reg 38C(3) - \$500 from 10 January 2003.</p>
38D	Relationship of certain prohibitions to total fire bans	<p>Sets out how the matters covered in reg 38A, 38B and 38C sit in respect of the total fire ban declaration under s 21 and exemptions issued under s 22C.</p>		
39	Use of chaff cutting machinery	<p>reg 39(1) Use of chaff cutting machinery during RBT or PBT is prohibited unless a fire extinguisher is <i>in situ</i>, plus not less than 150 litres of water in a suitable container. reg 39(2) Requisitions of BFCO or forest officer must be complied with.</p>	<p>BFCO or forest officer</p>	<p>Infringement notice penalty under the BFIR, reg 39 - \$250 from 10 January 2003.</p>
39A	Use of motor vehicles	<p>reg 39A(1) Use of motor vehicle on land under crop or pasture or stubble is prohibited if: the exhaust pipes of the vehicle are not clean, sound and free from gas leaks; the vehicle emits any smoke, carbon, sparks or oily substance the emission of which could be prevented by the fitting of any available</p>	<p>Local Government or BFCO</p>	<p>Infringement notice penalty under the BFIR, reg 39A - \$250 from 10 January 2003.</p>

		appliance designed to prevent that emission. reg 39A(2) Requisitions of Local Government or BFCO must be complied with.		
39B	Use of aeroplanes	reg 39B(1) Use of aeroplanes for crop dusting, spraying, spreading of fertiliser or other agricultural purposes during RBT or PBT is prohibited unless a fire extinguisher is available at the landing site, plus not less than 150 litres of water in a suitable container. reg 39B(2) The owner or occupier of the landing site for the aeroplane is to establish a firebreak around the landing site. reg 39B(3) Directions of BFCO must be complied with.	BFCO	Infringement notice penalty under the BFIR, reg 39B - \$250 from 10 January 2003.
39BA	Operations likely to cause bush fires	reg 39BA specifies that the operation in the open air of welding apparatus or power operated abrasive cutting discs are operations likely to create a bush fire danger, generally and at all times.		
39C	Welding and cutting apparatus	reg 39C(1) The use in the open air of welding apparatus of any kind or power operated abrasive cutting discs of any kind is prohibited unless a fire extinguisher is provided and a 5 metre firebreak is established. reg 39C(3) Directions of BFCO must be complied with.	BFCO	Infringement notice penalty under the BFIR, reg 39C - \$250 from 10 January 2003.
39CA	Operation of bee smoker devices	reg 39CA(3) The use of bee smoker devices in the open air is prohibited RBT or PBT or during a fire danger forecast of 'catastrophic', 'extreme', 'severe' or 'very high' unless: at least one fire extinguisher is provided; inflammable material on the ground within a radius of 3 metres has been sufficiently removed, or sufficiently damped-down, to prevent the		Infringement notice penalty under the BFIR, reg 39CA(3), (4), (5) - \$250 from 10 January 2003.

		<p>escape of fire; during RBT and PBT, not less than 24 hours' notice is given to BFCO (and a forest officer if the site is less than 3 kms from forest land. reg 39CA(4) Person using bee smoker must ensure that a fire isn't started outside the device; place device in a fire resistant container when not in use; extinguish the fire in the device when bee smoking has been completed. reg 39CA(5) Directions of BFCO must be complied with.</p>	BFCO	
39D	Explosives	<p>reg 39D(1) The use of explosives is prohibited unless: all inflammable material on the ground within a radius of 3 metres has been removed; at least one fire extinguisher is provided; during RBT and PBT, not less than 24 hours' notice is given to BFCO (and a forest officer if the site is less than 3 kms from forest land). reg 39D(2) Directions of BFCO must be complied with.</p>	BFCO	Infringement notice penalty under the BFIR, reg 39D(1) and (2) - \$250 from 10 January 2003.
39E	Fireworks	<p>Fireworks are prescribed as a process likely to create a bush fire danger. reg 39E(2) The use of fireworks on land and in open air is prohibited unless: all inflammable material on the ground within a radius of 3 metres has been removed; at least one fire extinguisher is provided; during RBT and PBT, not less than 24 hours' notice is given to BFCO (and a forest officer if the site is less than 3 kms from forest land). reg 39E(3) Directions of BFCO must be complied with.</p>	BFCO	Infringement notice penalty under the BFIR, reg 39E(2) and (3) - \$250 from 10 January 2003.
40	Apportionments of	reg 40 prescribes how the payments due under	Local Government – for payment	

	amounts under section 37 of the Act	s 37(2) and (5) are to be distributed in the event that there is more than one person entitled to such payments.	due under s 37(2); and State Government, via FESA – for payment due under s 37(5).	
41	Register of bush fire brigades	Local Government must keep a register of bush fire brigades established by it in the form of Form 12 in the Appendix to the Regulations.	Local government	This requirement commenced on 10 March 1978.
43	Notification of bush fires and losses caused	reg 43(1) Owner or occupier of land to provide written notice to Local Government of a fire occurring on land, within 7 days of fire. reg 43(2) Local Government to provide Authority in June each year particulars of losses caused by bush fires in preceding 12 months; or reg 43(3) Local Government may provide Authority with each notice received under reg 43(1).	Owner or occupier of land Local government Local government	Infringement notice penalty under the BFIR, reg 43(1) - \$100 from 10 January 2003.
44	Entry onto Crown land	Where an owner or occupier, or a BFCO, proposes to enter Crown land under s 34 (to undertake fire prevention measures), at least 4 days' notice is to be given to the person / entity responsible for the land.	Owner or occupier of land; or BFCO	Infringement notice penalty under the BFIR, reg 44(a) - \$250 from 10 January 2003.
45A	Information to be given when authorised CALM Act officer takes control of operations in relation to bush fire under section 45A of Act	Specifies the information that an authorised CALM Act officer must provide to the Authority when taking control of a fire.	Authorised CALM Act officer (FESA should ensure that its records are noted accordingly)	
45B	Information to be given when bush fire officer takes control of operations in relation to bush fire under section 45 of Act	Specifies the information that a BFCO must provide to the Authority when taking control of a fire.	BFCO (FESA should ensure that its records are noted accordingly)	

46	Breach of regulations an offence	OFFENCE: Committing a breach of any regulation for which a penalty is not expressly provided; or failing to comply with any condition on which a permit to burn is granted. PENALTY: \$1,000.		OFFENCE created, and PENALTY set, from 10 January 2003.
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Table 8- Schedule of provisions of *Bush Fires (Infringements) Regulations 1978* that provide responsibilities / powers; create offences; prescribe penaltiesGlossaryBFIR = *Bush Fires (Infringements) Regulations 1978* DEC = Dept of Environment and Conservation

<u>Regulation</u>	<u>What</u>	<u>Details</u>	<u>Who</u>	<u>Comments / History / BFIR</u>
3	Offences and penalties	The <i>Bush Fires Act 1954</i> provides that penalties for offences can be applied in two ways: via the courts – s 59; or by the issue of infringement notices - s 59A (in the prescribed form - s 59A(2)). reg 3 specifies that the offences and penalties prescribed for the purpose of issuing infringement notices under s 59A are those set out in the First Schedule of the BFIR.		
4	Prescribed officers	s 59A(5) provides that an infringement notice may be withdrawn at any time up to 60 days after its issue (regardless of whether or not it has been paid) by a prescribed officer , using the prescribed form . reg 4 prescribes that a prescribed officer in respect of <i>the withdrawal of</i> infringement notices issued by: Local Government – is the local government’s CEO, mayor or president “a person authorised by the Minister or the chief executive officer or board of management of the Authority” – is the Authority’s CEO or an officer of the Authority authorised by the CEO; the police force – is any commissioned officer of Police; a forest officer – is the Executive Director of the Department of Conservation and Land Management.	Local government FESA Police DEC	

5	Forms	reg 5 specifies that the prescribed forms referred to in s 59A are those in the Second Schedule		
-	First Schedule	As specified under reg 3, prescribes offences and penalties applying to infringement notices issued under s 59A.		Last updated in 2003
-	Second Schedule	The prescribed forms : Form 1 – Bush Fires Infringement Notice Form 2 – Withdrawal of Bush Fires Infringement Notice		

1.3.4 FESA Proposals

The Review should:

- Note the ongoing concerns of key stakeholders, particularly volunteers, with respect to *Duty of Care* and *Responsibility* provisions;
- Note FESA's position, which is supported by legal advice received from the State Solicitors Office, with respect to *Duty of Care* and *Responsibility*;
- Strongly support the retention of appropriate protections for volunteers from personal liability for actions taken to prevent, mitigate and/or control a bushfire;
- Support the retention of the current hierarchy of *Responsibility* which is posited on primary responsibility residing with the land occupier and/or owner;
- Note the complexities associated with the current legislative regime affecting bushfire management across WA;
- Support the Cabinet approval of the recommendations of the *Community Development and Justice Standing Committee Inquiry into Fire and Emergency Services Legislation* and note the action being taken to develop a single consolidated emergency services act and associated facilitative provisions that allow transfer of Bush Fire Brigades administration and operations from Local Government to FESA;
- Consider the relevance of the existing enforcement and penalty regimes that operate within WA commensurate with risk and potential consequence;
- Note the general absence of Local Government adopting local laws relevant to bushfire management with only forty-three out of a potential one-hundred and twenty-two Local Governments with local laws in place;
- Note the City of Armadale had local laws in place at the time of the *Perth Hills Fires*;
- Strongly recommend that all Local Governments that have a bushfire risk, promulgate local laws relevant to their area; and
- Note the absence of any formal audit regime to audit compliance with Permit Conditions under reg 15B and recommend that non-compliance should be viewed seriously and attract the more serious level of any enforcement and penalty regime.

1.4 2010/11 Fire Season

1.4.1 Seasonal Prognosis

Leading into the 2010/11 fire season, Perth recorded its second driest winter on record, with total rainfall in 2010 of approximately 454.2mm compared to the long term average of 852.6mm. As a result of the year's very poor winter rainfall, the Minister for Water announced water restrictions would apply to water users in the Perth, Mandurah and the southwest¹⁰.

Harvey Water has also announced that as a result of the winter months' evaporation level exceeding the rainfall amount, growers' water allocations were slashed from 85 to 34%.¹¹ This, coupled with verbal reports to FESA from its stakeholders, suggested water supplies in many farm dams were dramatically lower than normal, the ramification being the 2010 southern bushfire season faced a very real threat that water supplies normally available for fire fighting purposes may not be as reliable compared to previous years.

Based on a review of climate data from the Bureau of Meteorology (BoM), including weather patterns, winter rainfall and the Soil Dryness Index based on the Keetch – Byram Drought Index (KBDI), the 2010/11 fire season was six weeks in advance of previous years¹².

The average KBDI for October is normally a rating of 5. The KBDIs for Perth Metro, Bickley, RAAF Pearce, Pemberton, Manjimup, Mundaring and Mandurah was at 40 or above in October 2010, which was well above the five year average and the 2008 and 2009 season.

In accord with the KBDI, the resultant fire behavior in dry fuel could therefore be expected as follows:

Below 25	Litter likely to be too wet to burn and soil will be at field capacity or close to it.
Between 25 – 50	During the day moisture evaporates off the surface leaving it dry. At night the moisture dampens the litter and the fire self extinguishes.
Greater than 60	Heavy material partially ignites and generally requires suppression.

Data provided from the Bushfire Cooperative Research Council (Bushfire CRC) supported a view that the 2010/2011 fire season was potentially one of the worst on record for WA. The Bushfire CRC stated:

Across southern Australia, above-normal fire potential is expected over the remaining drought affected parts of the southeast, including much of Victoria, and west coast areas of South Australia. Much of the Southwest Land Division of Western Australia still has above normal potential as does an area of central Australia and smaller areas in Queensland. Conditions in Tasmania and New South Wales indicate normal fire potential.¹³

¹⁰ Dept of Water 2010 spring water sprinkler restriction from www.water.wa.gov.au

¹¹ Media item posted via email dated 5 October 2010

¹² BOM Data KBDIs for Perth Metro, Bickley, RAAF Pearce, Pemberton, Manjimup, Mundaring and Mandurah and National Climate Centre mapping

¹³ Bushfire CRC Fire Note Issue 67 October 2010

The ramifications of this for WA are a significantly higher potential for the chance of a fire or number of fires occurring of such size, complexity or impact that requires resources (from both a pre-emptive management and suppression capability) beyond the area of fire origin.

This clearly supports the view that the Southwest Land Division was facing an above normal fire potential due to the increased scrub and perennial grasses associated with the forest, woodland and mulga vegetation over storey types and the lack of winter rainfall.

The above research also supports the theory that the combination of climate change and drought are expected to have extensive impact on the emergency response sector, especially as these factors lead to changes in the frequency and duration of bushfires and also impact on water availability for fire fighting purposes.

In the urban environment, particularly the *peri-urban* interface (commonly referred to as urban/rural interface), the lack of availability of firefighting water has to be considered and may in fact lead to the need to change the way fires are traditionally managed. This also has a direct impact on the manner FESA manages its UCL/UMR mitigation programs. Fire in the landscape is already a key element in the management of water resources, and climate change will only make this a more important element.¹⁴

Mapping obtained from BoM on the current and predicted climate trend also showed the average temperatures to be above average with a 60% chance of continuing to exceed the median maximum temperature.

1.4.2 Additional Preparedness Commensurate with Prognosis

Given the 2010/11 fire season was six weeks in advance of previous years, preparedness initiatives needed to be initiated earlier than normally planned and, given the prognosis for the season, as a matter of priority.

The additional preparedness activities undertaken by FESA in this regard included:

- Community education was focussed on identified high risk areas across the State.
- The approval to procure an additional Type 1 (S 61) aircraft in to the State's base fleet was a significant outcome in preparation for the season.
- Heavy machinery arrangements were reviewed and additional standby contracts put in place.
- Significant progress was made on recommendations from previous reviews and the *Victorian Bushfires Royal Commission* final report. This included:
 - The IBMC agreeing to existing agency IMT accreditation arrangements applying for the season;
 - Air Operations directed to analyse aircraft availability and put in place procedures for rapid 'on-call' procurement;
 - Agreement on key IMT positions and preformed teams established in each identified high risk teams;

¹⁴ http://www.bushfirecrc.com/rebid_section/drivers-of-change.html

- Formation of a dedicated project team to oversee and progress key recommendations from the *Toodyay Major Incident Review* and IBMC projects;
 - The conduct of major exercises at State and Regional level to test new procedures for major fires, including legislative appointments, alerts, multiple tenure fires, pre-formed incident management teams and interagency operations;
 - The commencement of a regional 'road show' involving FESA and DEC senior officers to explain and ensure a thorough understanding of the new arrangements in the field;
 - The COO having convened a meeting of WA power utilities (Western Power and Horizon Power) to confirm arrangements for the fire season and clarifying legislative arrangements and actions to be taken during identified high risk days.
- Various briefings were conducted, including:
 - *Community*

Community briefings and information dissemination occurred through the Bushfire Ready Groups and targeted communities in high risk areas.
 - *Stakeholders*

FESA conducted a pre-season briefing at the Challenge Stadium on 5 November 2010. The briefing was attended by key agencies, regional staff, CFBCOs, WAPOL, DEC, Department of Education, BoM, Defence, State utilities, Government departments, Telstra and representatives of the Premier's and Minister's office. Presentations were provided by the Federal Attorney General's Office, EMA, BoM, FESA COO, FESA LG and Bushland and Local Government and FESA Media for Public Information. The briefing provided information on the predictions for the coming season and inter alia; key changes, details on resourcing availability, community warnings and procurement processes.
 - *Organisational*

FESA conducts weekly briefings on preparedness levels and when operational activity increases these are scheduled more frequently. Board presentations and papers were provided.
 - *Political*

Briefings to Government were made in the form of Ministerial Briefing Notes as well as Ministerial Statements, Cabinet Briefings and a personal letter and information packs were sent to every Member of Parliament.
 - Engaging alternative water supplies, including the repositioning of resources on a required basis, for example, during 'Extreme' or 'Catastrophic' fire weather conditions. This was achieved by initiating contracted water carriers and activating alternative water supply plans where firefighting operations may have been compromised by limited water availability.
 - Media briefings and interviews conducted by the COO and regional staff.

- Interstate planning liaison established in January with Victoria in preparedness for the season.

The above demonstrates FESA's appreciation of the potentially extreme fire season and additional proactive measures taken to prepare for this. In addition to the pre-season preparedness, additional measures were taken in the lead-up to and during severe weather periods such as the weekend of 5 and 6 February 2011, the time of the *Perth Hills Fires*. This activity is outlined in the specific section relating to the *Perth Hills Fires*.

1.4.3 Specific *Perth Hills* Arrangements

FESA can confirm the City of Armadale has a draft LEMA. This is different to their Bushfire Management Arrangements, which covers PPRR. Their Bushfire Management Arrangements were approved in December 2009, and won a High Commendation in the Australian Community Safety Awards.

The additional preparedness activities undertaken by FESA in this regard included:

- Operational Preparedness teleconferences (in accordance with FESA Major Emergency Management Coordination Guidelines);
- Emergency Services Briefings with Bureau of Meteorology;
- In accordance with the *FESA Major Emergency Coordination Guidelines* (a copy of these guidelines are available if required) which reference the procedures for key actions and processes to be undertaken at the various preparedness levels, escalated Regional Preparedness Levels where adopted over this period, as follows:
 - Thursday 3 February – High Metropolitan Region / High State,
 - Friday 4 February – High Metropolitan Region / High State,
 - Saturday 5 February – High Metropolitan / High State,
 - Sunday 6 February – High Metropolitan / High State;
- Total Fire Ban Declarations (Saturday 5 February at the request to the BoM by FESA, Sunday 6 February and Monday 7 February);
- Escalated response protocols enacted with automatic two-station mobilisation to confirmed bushfires. In addition, the area is within the Zone 2 mobilisation area which requires automatic joint agency (FRS, BFS and DEC) response;
- Additional Light Tankers were pre-positioned at a number of Fire and Rescue stations;
- Activation of the Metropolitan Regional Operations Centre (MROC) upon advice of the *Red Hill fire*;
- Activation of the State Operations Centre upon advice of *Red Hill fire*; and
- Given resource commitment to *Red Hill fire*, additional appliances were identified and made operational at the Forrestfield Training Centre and Workshops prior to the commencement of the Roleystone Fire Off-duty firefighter recalls were initiated as a consequence of the resource commitment across the organisation.

1.4.4 Identified Issues for Improvement

Although none of these issues adversely affected the outcome of the *Perth Hills Fires*, in hindsight and upon reflection of the above, FESA has identified the following issues that it will integrate into its operational doctrine ahead of the next fire season:

- The need for the State Operations Centre to be operational and fully staffed 24/7 during peak seasons (severe weather periods/operational activity);
- The need for Regional Operations Centres to remain at a heightened level of preparedness and remain activated for the duration of an incident, rather than activate and close down and reactivate during these periods;
- Timing and activation of OASG meetings;
- Pre-positioned integrated Incident Management Teams (IMT) available for deployment and used during periods of heightened preparedness;
- A review and pre-plan for contingent capacity and how this will occur in a structured manner;
- Pre-planning arrangements for strike teams and task forces;
- Ongoing review of vehicle typology;
- More structured and enduring contract arrangements for heavy machinery, water carriers and available 'on-call aircraft; and
- Single desk aircraft management and coordination arrangements.

A number of the issues identified above have already been integrated into other sections of this submission, particularly:

- Structural reform to achieve a seamless and integrated *Bushfire Safe – WA*;
- Strategic capability building; and
- Unified Control.

1.4.5 FESA Proposals

The Review should:

- Note the seasonal prognosis leading into the 2010/11 fire season and the additional preparedness activities undertaken by FESA;
- Note the prognosis for the weekend of 5 and 6 February 2011 and the additional preparedness activities undertaken by FESA in preparation for the weekend;
- Note the identification of a number of issues for improvement that will be pursued by FESA prior to the next fire season; and
- Note the alignment between the issues identified and synergy with FESA's submission.

1.5 *Perth Hills Fires*

1.5.1 Overview

The purpose of this section is to provide a contextual overview of the *Perth Hills Fires* and associated arrangements. It is not intended as a consolidated chronology nor a component of the Major Incident Review being undertaken separately by Mr Ellis, a copy of which will subsequently be provided to the Review.

The *Perth Hills Fires* which are the subject of this Review relate primarily to the Roleystone fire, which occurred on the 6 February 2011 in the backdrop of another major fire still burning at Red Hill, which started at 2115 hours on 5 February 2011, about 30 km north at Red Hill near Middle Swan. The *Red Hill fire* was travelling towards property and houses at the foothills of the Darling Escarpment during the day of 6 February 2011.

Roleystone is located 30 minutes south east of the Perth CBD in the City of Armadale. The area is categorised as ESL3¹⁵ which attracts operating arrangements that are supported by a Volunteer Fire and Rescue Service Brigade and/or a Bush Fire Brigade, a network of Career Fire and Rescue Stations and the SES. It is also in the Zone 2 and 2A Special Response Area, which due to the identified risk attracts additional response resources including multiple crew response, DEC response and aerial (aircraft) response.

As a consequence of the forecast weather conditions and the significant *Red Hill fire* already in the landscape, a Total Fire Ban was declared for 6 February 2011 in accordance with s 22A of the *Bush Fires Act 1954*.

During the late morning of 6 February, a fire was ignited in the vicinity of 395 Brookton Highway, Mt Nasura by a person operating an angle grinder while undertaking metalwork at his home. The formal cause of the fire was investigated by FESA and determined as 'accidental'. Sparks from a grinder ignited nearby vegetation. Fire Investigation reports have been prepared by both FESA and WA Police. A member of the local community has been formally charged under s 22B(2b) of the *Bush Fires Act 1954*, wherein "a person must not carry out an activity in the open air that cause, or is likely to cause, a fire".

The fire was reported via 000 at 1142 hours and in accordance with the elevated response zone, attracted an Initial response by the Armadale Fire and Rescue Service (career staff), Roleystone Volunteer Fire and Rescue Service, Roleystone Bush Fire Service and Bedforddale Bush Fire Service. Initial fire crews arrived at the incident scene in 11 minutes and after a further 7 minutes reported the fire as "contained" (1203 hours) with advice to the Communications Centre (Comcen) to "stand down" the aerial support.

At 1211 hours a spot over was identified rising out of lower ground previously unsighted by attending crews and heading to the northwest. As a consequence, at 1213 hours a request to upgrade the incident to a 3rd Alarm was made along with a request for aerial support and additional appliances.

¹⁵ ESL – Manual of Operating Procedures 2010-11 Version p5

A FESA District Manager responded to the fire and at approximately 1215 hours assumed control as Incident Controller. After an initial size-up the incident control point relocated to the Roleystone Fire Station and the incident was upgraded to a 4th Alarm. Traffic management points, Incident Control Vehicle (ICV) and supporting State coordination arrangements were subsequently established in support of fire operations.

The lack of air intelligence and limited reporting from the field meant that the Incident Management Team (IMT) had poor situational awareness until the arrival of air intelligence aircraft sometime after 1430 hours. A section 13 appointment under the *Bush Fires Act 1954* was made at 1415 hours, which provides FESA with the additional powers.

The Incident Control role transitioned to a more senior officer upon his arrival at the fire, with the IMT limited in size to less than 10 personnel, and local bushfire volunteers acting as scribes for the principal officers within the IMT.

As a consequence of the pending risk to residents, available resourcing and the likelihood of not containing the fire, the Incident Controller assessed that evacuation was the only viable option to minimising life risk.

The Roleystone Fire Station was a planned ICC but was not specifically set up to house an IMT. There were limited communication facilities and access was open, allowing media and others to wander through the ICC. The operations function of the IMT established itself in the ICV located outside the Fire Station but other facilities were limited as officers had deployed to the fire with limited support equipment such as computers. Communications to the fireground proved satisfactory with the support of SES Communications Support. Local knowledge was limited due to only partial availability of the CBCO.

The issue involving the need to consider further the issue of pre-determined ICC's and appropriate standards is accepted by FESA and outlined elsewhere in this submission.

While there was a DEC liaison officer in location, subsequent shift support for the IMT came from IMT crews deployed from Victoria, who arrived on Monday, 7 February 2011.

The following provides a resource summary for this fire:

Table 9 – Resource Summary

Appliance Commitments at Roleystone and Redhill Fires.

Roleystone Appliances						
Time line	Pumps	Light Tankers	2.4/3.4 Tankers	Water Carriers	Specialist	Total appliances
Start - 1200	1	1	2			4
1230	2	4	2			8
1300	2	5	4	1		12
1330	7	11	6	1	1	26
*1400	8	15	6	1	2	32
1430	11	20	9	1	2	43
1500	11	21	10	1	2	45
1530	12	22	10	1	2	47
1600	13	23	11	1	2	50
1630	14	24	12	1	3	54
1700	14	24	12	1	3	54
1730	14	25	12	1	3	55
1800	14	25	12	1	3	55
1830	14	26	12	1	3	56

Pump	Light Tankers	2.4/3.4 Tankers	Water Carrier	Incident Control Vehicle	Helitac	District Manager	Community Fire Manager	Air Intel
7	35	7	2	2	6	6	2	1

Notes:

- When Roleystone started there were 53 fire appliances committed to the *Red Hill fire*. In addition to these appliances there were 4 x Type 3 and 2 x Type 1 helitacs on site at Red Hill.
- Within 2 hours of Roleystone starting there were 32 appliances committed at the incident.
- *By 1400hrs on Sunday 6 February 2011 there were 88 fire appliances committed to the fires at *Roleystone* and *Red Hill fires*. In addition the complete Helitac fleet was committed at both fires. Fixed wing water bombers were grounded due to safety issues regarding the winds.
- DEC appliances are in addition to the above numbers.

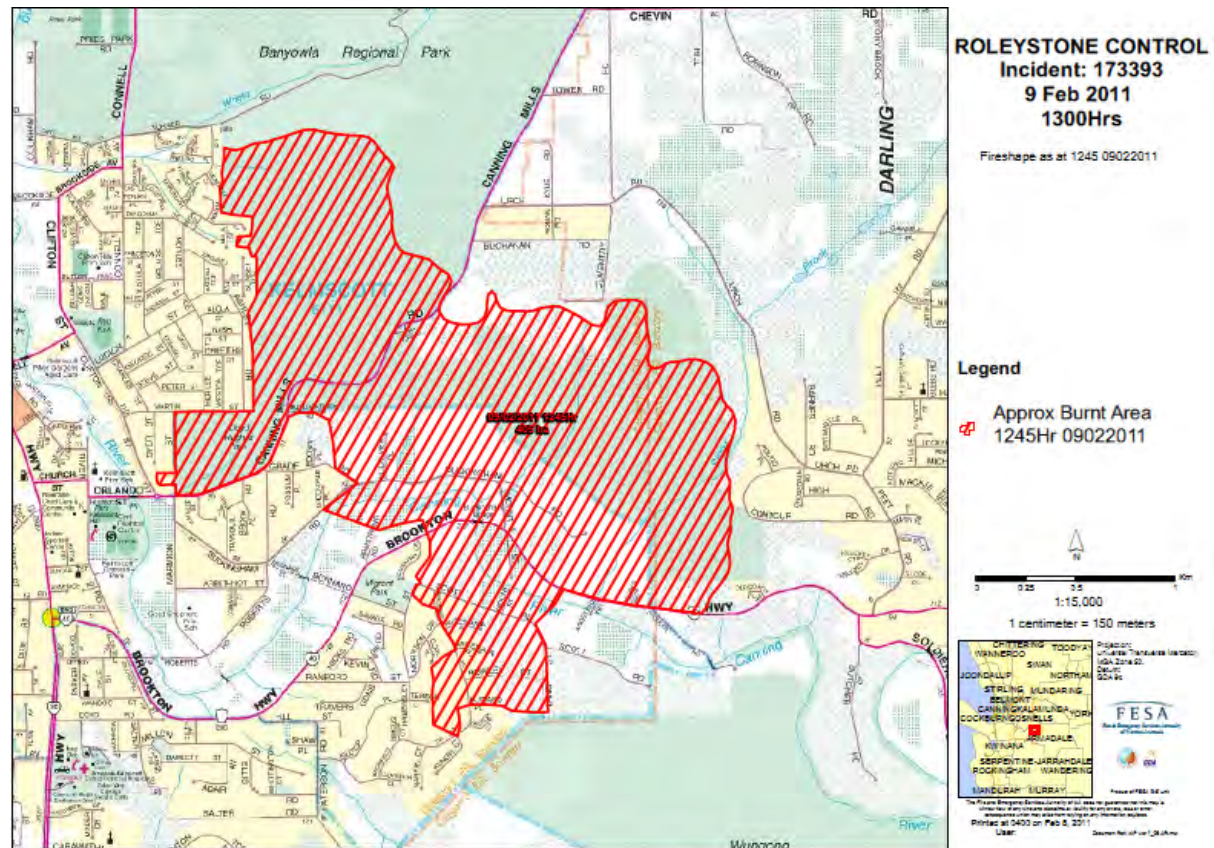
The area impacted by the fire was approximately 413 ha, in a typical *peri-urban* environment with steep escarpment and difficult access for fire crews.

During the hearing with the Review conducted on 29 March 2011, the Review requested information on when the first fire map was generated. In responding to this question it is important for the Review to appreciate the rapid onset of the fire and the reliance in the initial stages of any bushfire on local intelligence and existing maps. This is not unusual and it takes time to generate a specific fire map in any scenario. The generation of a fire map is normally a combination of intelligence gathered by ground and air operations through the IMT, generally with a reliance on air observation to plot the point of origin, head and flank location and to give indication of fire intensity and rate of spread.

In response to this specific question, FESA can confirm that Air Operations provided a fire shape at 1441 hours which was mapped in the Metropolitan Regional Coordination Centre (MROC). Copies of this map were printed and distributed to members of MROC and a digital file was sent to the Roleystone IMT and copies printed out at the ICC for local use. Concurrent with this activity, FESA can confirm that rudimentary maps were being developed in the Incident Control Vehicle (ICV) upon the arrival of the Incident Controller at Roleystone Fire Station (ICC). This is consistent with the normal process FESA would expect in the circumstances.

The following provides an overview of the fire affected area:

Figure 18 – Roleystone Fire Overview



The developing fire fanned, by gusting winds, channelled by valleys and gullies and hastened by often burning uphill through the escarpment, travelled up to approximately 1.5 km per hour, effectively completing its main run from east to west by 1500 hours, a total of 3 hours and 18 minutes from time of call.

This swift moving fire was a *rapid onset/high consequence emergency*, as a result of which FESA had very limited time to deploy resources, including redeploying resources from Red Hill to inhibit the progress of the fire.

As a consequence, decisions were made consistent with the *primacy of life* principle, which may have resulted in property (asset) protection that was not related to life risk, being secondary to protection of life.

The fire was managed through sectoring the perimeter and operating four sectors. Responding fire appliances were directed through the Comcen to report to the Roleystone Fire Station, some being confronted by burning buildings enroute and being required to manage these incidents prior to formal fireground briefings.

The Buckingham Bridge was identified as key infrastructure, but was subsequently lost, not as a result of firefighters not knowing of its presence, or because it was not related to protection of life, but due to the fact that an assessment was undertaken noting there was significant vegetation in

the Canning River, and the wooden bridge structure was treated with highly flammable creosote to avoid termite attack so its defence was not possible without endangering the lives of firefighters.

FESA first became aware this was under threat at 1500 hours. Two crews were tasked with the role to protect the bridge but unfortunately at 1517 hours confirmed it was too dangerous to extinguish and other access routes would be required.

Based on the conditions (weather and fire), a defensive posture was adopted across all sectors, focusing on extracting residents from the multiple paths of the fire area.

It may be suggested that the strategy adopted by the IMT and/or attending firefighters was overly defensive and should have been more offensive. However, given the rapid onset and travel of the fire within an area interdispersed with residential structures, finite number of resources and the fact that the Incident Management Team was incrementally arriving on scene and setting up during this time, the strategy adopted is considered sound in the circumstance.

The fact that no lives were lost, despite the unfortunate property loss, indicates that this strategy certainly aligned with the *primacy of life* principle.

Local Government Brigades generally operated in the northern Sectors with DEC crews and heavy machinery, establishing a mineral earth break and securing the northern flank of the fire in preparation for any south westerly wind change should it occur. Such wind change failed to eventuate and the northern flank was assessed as contained by 2300 hours on 6 February.

Fire and Rescue Service crews generally operated in Sectors to the south and west, within the urban areas and after the initial run of the fire and its intrusion into urban areas generally through spotting, these crews were able to hold the fire to the urban edge. Initial indications are that house loss was largely a result of ember attack. Where fire crews and aircraft were present, houses were able to be saved.

Aircraft operations were limited due to the gusty conditions. Fixed wing aircraft were grounded and rotary wing aircraft at times operated with lower payloads due to the flying conditions. This in turn impacted effectiveness on the ground, as drop accuracy was more challenging and the winds dissipated the drop.

A slight delay in deployment of aircraft resulted from a refuelling requirement due to operations at the Red Hill fire but this is not considered pertinent to any significant preventable loss or damage.

Road closures were implemented by police on direction of the Incident Controller. After the initial run of the fire, traffic management points became contentious as some residents who had remained with their houses when the evacuation occurred, were permitted to move about within the declared 'unsafe' area, while those who evacuated were not permitted back to their homes. This inconsistency was problematic and FESA accepts requires review, which is outlined in detail within the Access to Incident Ground section of this submission.

The initial *Incident Support Group* was held at 1930 hours on 6 February 2011 at City of Armadale building and subsequent meeting was held at the Armadale Community Hall at 1000 hours on 7 February 2011.

The initial *Operations Area Support Group* meeting was held on 6 February 2011 at 1600 hours in the FESA State Operations Centre. Representatives from FESA, DEC, WALGA, WA Police, Main Roads, Western Power, Department of Health, Department of Education and the Department of Child Protection provided agency updates and discussed both the incidents running at Roleystone and Red Hill. Subsequent OASG meetings were held on 6, 7 and 8 February 2011.

Evacuation of residents from the fire area was through self-relocation, as well as directed and assisted evacuation by Police and Fire crews. Some residents chose to remain with their properties and this was accepted. As outlined elsewhere within this submission, the complete system of evacuation (including nomination of safe shelters, process and execution of evacuation plans and the principles of re-entry/access to the incident ground) requires significant examination and further consideration by fire agencies and Police.

Unfortunately, a total of 72 houses were severely damaged and effectively lost as a consequence of the fire. A similar number 37 were assessed as partially damaged but are repairable.

This resulted in a number of people displaced as a consequence of the *Roleystone Fire* and the *Red Hill Fire*. The Department of Child Protection takes a lead role in recording and supporting displaced people as part of the recovery and relief process.

'Confidential Information' (in the form of raw data) relating to the cause of this loss is contained within Appendix 3 of this submission.

Initial assessment teams were deployed into these areas immediately after the fire was extinguished on 6 February 2011 to gain information on house loss and identify points of danger. Concurrently, Western Power deployed crews to assess damage, isolate exposures and, where possible, commence repairs and reconnections.

FESA is acutely aware of some criticism from residents regarding media being given access to the fireground ahead of them. This issue was also raised by the Review during the hearing held on 29 March 2011, when the Review requested further information on the timing of controlled entries to the fireground – for media and the residents.

FESA can now confirm the following:

- The re-entry and return of residents was carried out on a staged basis commencing with the Clifton Hills residents allowed access on the evening of 7 February 2011, the day following the fire (day 2), residents from the south west corner of the incident around Roberts Road and Marmion Street by midday on 8 February 2011 (day 3), and the residents from the north eastern area around Scott Road, Buckingham Road and Grade Road at approx 1700 on 9 February 2011.

With respect to the media, they were given access as follows. On Monday, 7 February 2011 (day 2) the following media arrangements occurred:

- Late morning – escorted a small media convoy to Bromfield Drive, Kelmscott where several homes were destroyed.

- Late afternoon – supervised media live outside broadcast transmission vehicle and personnel at the edge of Clifton Hills, Kelmscott burnt area.
- Arranged for Seven News team to gain access with a family who was returning to their home in Clifton Hills, Kelmscott.
- Note: selected media accompanied the Premier in the middle of the day and pooled vision.

On Tuesday, 8 February 2011 (Day 3) the following media arrangements occurred:

- Early morning – escorted a large media convoy through the control area along Canning Mills Road between two road blocks in Roleystone and Kelmscott.
- Mid afternoon – escorted medium media convoy to areas in Kelmscott that were still closed off including Bromfield Drive, Scott Street, Brookton Hwy (collapsed bridge) and Buckingham Road. Media permitted to talk to residents accompanied by FESA that were just returning to view their destroyed homes.
- Late afternoon – escorted small media convoy to Bromfield Drive, Kelmscott and other streets where several homes were destroyed.
- Late afternoon – supervised access to Clifton Hills, Kelmscott for media live outside broadcast in Sunset Terrace where MLO Rick Tyers was interviewed.

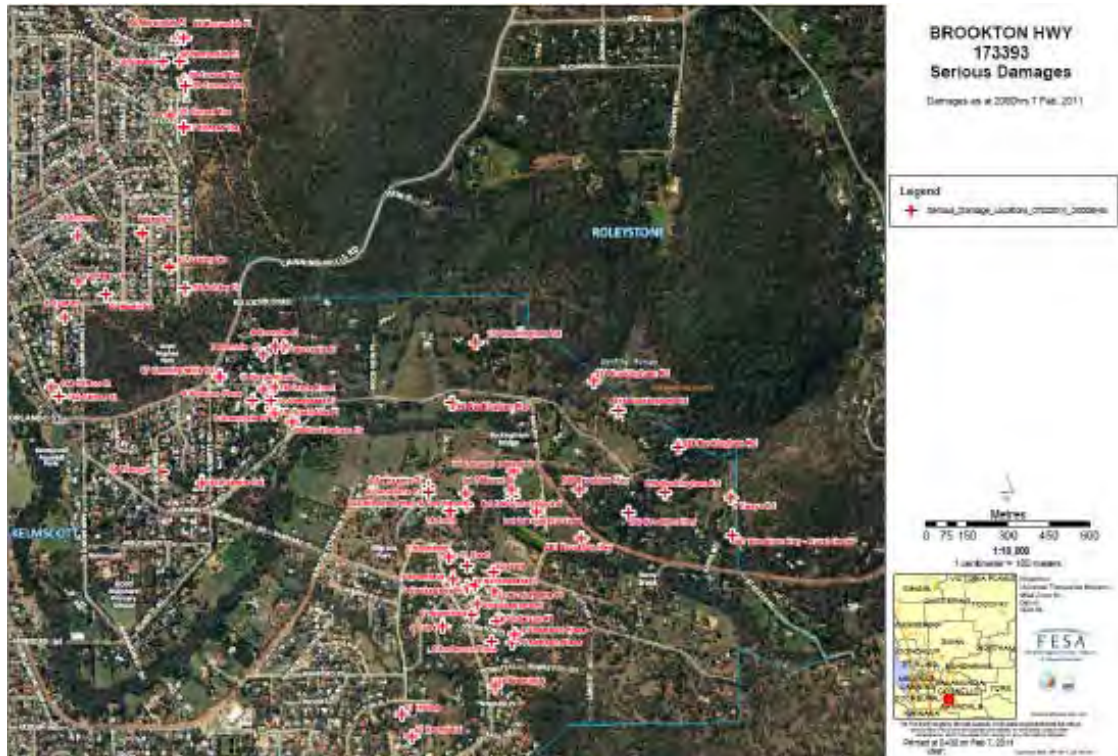
The above clearly supports some of the residents' criticism that the media were in fact given access to the fireground ahead of themselves and it is probable that they discovered the extent of damage to their property, including footage, via the media. FESA acknowledges the unfortunate impact that this may have had on some residents and is committed to reviewing the procedures relevant to the very personal and potentially distressing situations and how it applies in the future. However, FESA does try and give priority to residents in these circumstances and on this occasion it appears this did not occur.

As outlined elsewhere in this submission, access (re-entry) to the incident ground is an extremely complex issue and will be subject of focused attention by FESA, in partnership with Police, ahead of the next fire season. This Review will include an assessment of the Victorian "wrist-tag" system implemented as part of a holistic review of traffic management/access and egress to emergency areas. The prioritisation of access to place residents ahead of media will form part of this review. However, it should be noted that regardless of what procedural arrangements FESA puts in place, safety will be the number one priority. It needs to be recognised that the media are extremely innovative in gaining footage and material for their stories, including the use of media aircraft, and it may not be possible on all occasions to prevent this preceding residents' access. It is also not FESA's role to censor the media, who are key partners to emergency management and it is finding the right balance and practical approach which needs to be considered in this context.

As outlined elsewhere in this submission, FESA and the Bushfire CRC are conducting detailed research into the house losses, although these findings were not available at the time the Major Incident Review was completed.

The following map provides an overview of the houses lost within the fire area:

Figure 19 – Overview of houses lost



The following map provides an overview of the partial damage within the fire area:

Figure 20 – Overview of partial damage



Subsequent crew deployments centred on blackening out the fire, maintaining a secure perimeter and ensuring the affected areas were safe.

Recovery arrangements were arranged through the Incident Support Group established at Armadale Council.

During the hearing with the Review on 29 March 2011, a specific request was made for a chronology of the Roleystone Fire. A more detailed chronology will be provided to the Review in the final Major Incident Review Report and it is therefore not appropriate to duplicate this information. However, a higher level chronology capturing the pertinent information outlined above in this section is attached as Appendix 4.

1.5.2 FESA Proposals

The Review should:

- Recognise the efforts of FESA staff and volunteers, Career and Volunteer Fire and Rescue, Volunteer Bush Fire Brigades, DEC, Local Government and all attending combat and support agencies at the Roleystone Fire;
- Support the adoption of the *primacy of life* principle as the overarching strategy and the rationale for adopting this approach;
- Consistent with the (national) issues existing in other States, note FESA's intention to continue to research and opportunistically adopt improved strategies, after further underpinning research, to identify defensible properties in a more effective manner;
- Note the information with respect to Buckingham Bridge awareness and strategies adopted;
- Note the issues associated with the need to further explore:
 - Pre-determination of Incident Control Centres;
 - Evacuation system (including access to incident ground / re-entry issues); and
- Maintain confidentiality over the data associated with cause of loss/damage provided to the Review.

1.5.3 Public Information

1.5.3.1 Background

The demand for timely, accurate and specific information by the community in times of emergency is at an unprecedented (and some would suggest unsustainable) level. The transition to Smartphones, enhanced by the increased use of social media as a primary information tool places significant emphasis and demands on emergency services. This necessitates a complete rethink on the way emergency services collect, validate and disseminate information. No longer is it acceptable to hold back information until it is specifically validated by the normal emergency services *chain of command* as this will not keep pace with the demand for and self initiation of information dissemination by the public.

Recent examples of this outside of the fire sector are the Christchurch and Japanese earth, Queensland floods, Cyclone Yasi and the social turmoil in the Middle East. Such is the strength of social media and rapid information dissemination, which in extreme circumstances can and will continue to create significant community unrest and, as was the case in Egypt, successfully overthrow a Government. This places a completely different context on public information in the emergency services setting.

Providing key information to the public during an incident is vital to protecting the safety of the community. FESA ensures that during emergencies, critical information is collected and released to the community, media and other stakeholders in a timely, consistent and accurate way. Information is gathered from the Incident Controller in the field and distributed by the *Public Information Unit* in the *State Operations Centre*. The management of this unit is undertaken by the FESA Media and Public Affairs Branch.

The importance of this issue was subject of significant review during the recent *Victorian Bushfires Royal Commission* which led to recommendations regarding elevating the importance of the public information function within incident management structures. The following recommendation resulted from this:

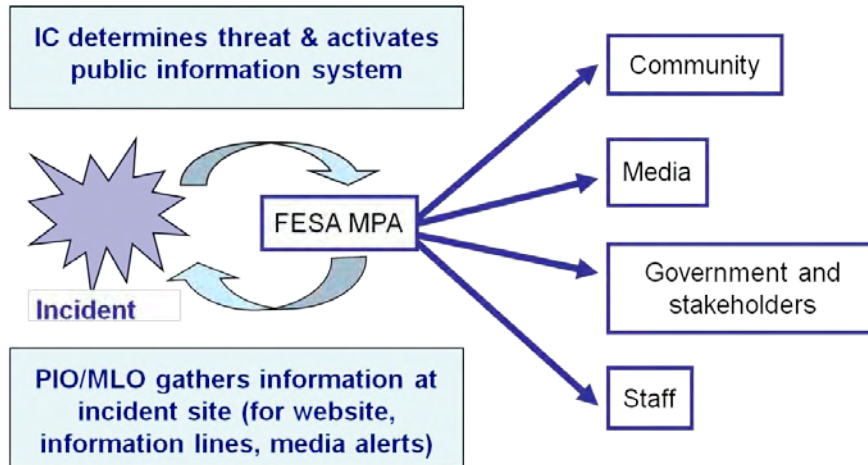
The Victorian fire agencies amend the AIIMS framework before the 2010-11 fire season in order to do the following:

- *Designate the Information Unit as a separate section reporting directly to the Incident Controller and require that the Information Unit contain a dedicated Public Information Officer whenever a full incident management team is required...*¹⁶

Within FESA, talking points about the operational response are completed by the Public Information Officer (PIO) or Media Liaison Officer (MLO) and approved by the Incident Controller or his/her delegate. These talking points are used to complete existing authorised alert templates which are then distributed. Consistent with FESA's all hazards responsibilities, the system has been designed to be adaptable for an all hazards approach. The diagram below illustrates the process.

¹⁶Recommendation 14

Figure 21 – Public Information Process



At times media outlets want to hear specifically from the Incident Controller. Whilst this will be facilitated by FESA if the Incident Controller is available, it is an unrealistic expectation given the broader responsibilities of the Incident Controller. This is an important education point for media and the community, who at the end of the day would want their Incident Controller to be ‘controlling’ and as ‘uninterrupted’ as much as is possible, rather than standing in front of a camera and/or conducting a radio interview or convening a support/ancillary meeting when these activities can be conducted competently by another designated member of the Incident Management Team.

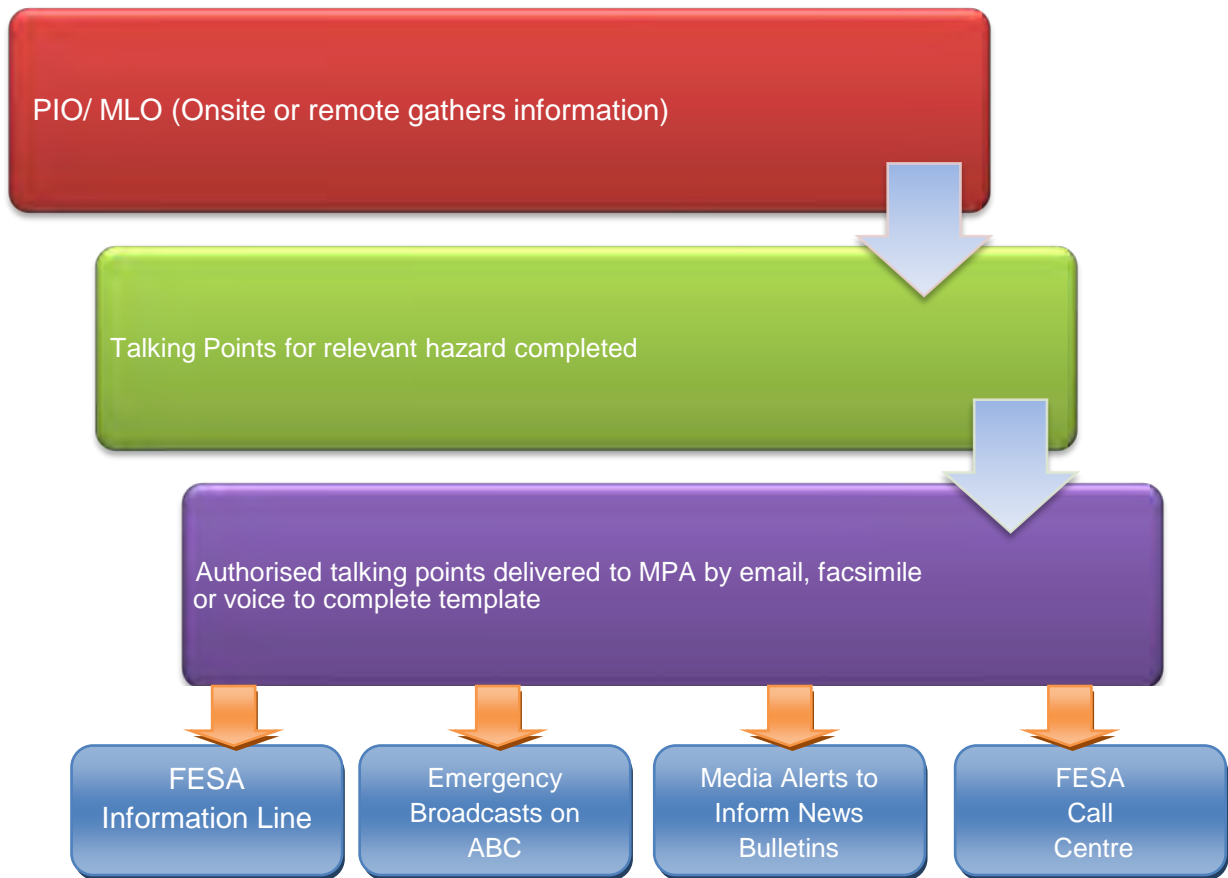
1.5.3.2 Consistency of information

FESA uses core information from the incident scene to inform its warnings which are disseminated through multiple channels to various stakeholders. This core information is documented and authorised on hazard specific talking points that include preapproved key messages and use a Common Alerting Protocol approach.

Information captured on the talking points is then used to complete preapproved alert templates with sections to include or delete depending on the specific circumstances.

The use of the template system means the Incident Controller only needs to approve one document – the talking points. This takes up less of the Incident Controller’s time and makes it faster and easier for *Public Information Unit* staff to release critical information through concurrent communication channels. The flow chart below illustrates the process.

Figure 22 – Public Information Dissemination Process



FESA's streamlined approach to public information has proved both effective and practical during the last four years both in the field and in the community. It has been tested during a number of major incidents. Positive feedback has been received from the general public, operational services and the media. It provides multiple channels for the media, community and other stakeholders to access information easily in a time of need.

In addition, new policy and procedures implemented as a consequence of new legislation (Section 13) and *Victorian Bushfires Royal Commission* recommendations means FESA's public information system is used by all WA fire management agencies, which includes DEC and Local Government. A significant amount of work has been done to ensure consistency of bushfire safety messages across all fire agencies. Information for fires managed by other agencies is also included on FESA's website and information line providing a single entry point for bushfire information.

The ability to achieve this consistency and efficiency in public information will only be enhanced by FESA's submissions with respect to:

- Structural Reform to achieve a seamless and integrated *Bushfire Safe – WA*;
- Strategic Capability Building;
- Community Fire Safety Planning; and
- Unified Control.

1.5.3.3 Bushfire Warning System

FESA implemented the national bushfire warning system for the 2009-10 bushfire season in line with the recommendation from the *Victorian Bushfires Royal Commission*. There are three levels of warning that change to reflect the increasing risk to life and the decreasing amount of time until the fire arrives. The levels of alert are:

Advice	A fire has started but there is no immediate danger, this is general information to keep you informed and up to date with developments.
Watch and Act	A fire is approaching and conditions are changing, you need to leave or prepare to actively defend to protect you and your family.
Emergency Warning	You are in danger and you need to take immediate action to survive as you will be impacted by fire. This message may start with a siren sound called the Standard Emergency Warning Signal (SEWS).

The key messages under each level of warning were developed and agreed upon by a group of communication experts who represented all the states and territories. It was imperative that the key messages were consistent nationally. The national system was further enhanced for the 2010-11 bushfire season through the provision of timeframes of when warnings would be updated. This is the second year the system has been applied in WA.

FESA's warnings meet the guidelines of the *Emergency Warnings - Choosing Your Words* booklet produced by the Commonwealth Attorney-General's Department. This booklet was recognised by

the *Victorian Bushfires Royal Commission* as best practice. The warnings are clear and concise, and include additional information that the Commission identified that communities want to know.

This additional information includes:

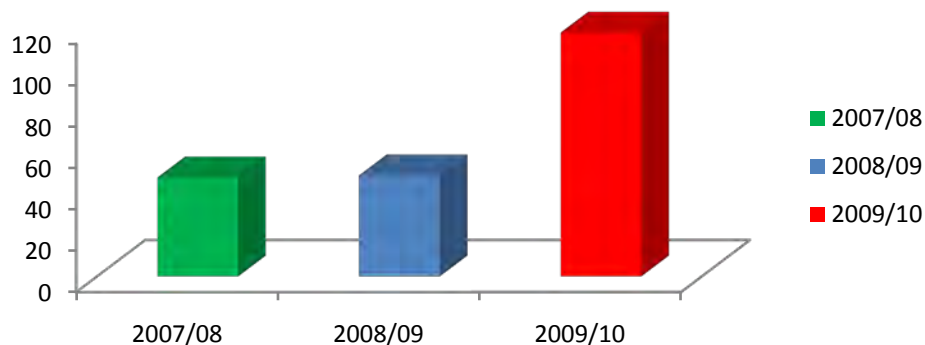
- Relocation routes;
- Bushfire behavior;
- What firefighters are doing;
- Road closures; and
- Agency responsible and how to keep up to date with information.

Feedback from emergency broadcaster ABC was that the relocation information provided during the *Toodyay Fire* was the best they had received from any jurisdiction. This detailed information goes beyond that which is provided by other jurisdictions.

1.5.3.4 Increasing Demand

There was an expectation, following the Victorian bushfires in February 2009, of more effective community information and warnings. People have become more demanding for information and this was particularly evident during the 2009-10 bushfire season when FESA disseminated more material than ever before in response to public demand. FESA's public information system was activated for 118 bushfires during the 2009-10 season, which is an increase of 140% from the previous season. The nature of the information has also changed, with people demanding more detailed information in different ways, and they want it faster. The following diagram clearly demonstrates the increases in demand:

Figure 23 – Increased Demand for Information

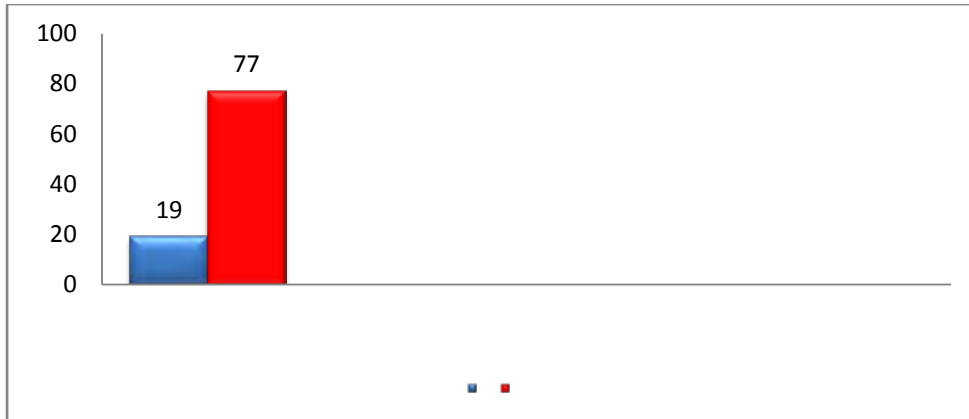


Early indications for the 2010-11 bushfire season was that this demand by the public for more information has continued to increase with the public information system activated for bushfire more than 140 times up to 18 March 2011. This was a significant increase on the previous year, and this number is expected to increase further as the season continues for another four to six weeks.

FESA can be activated by DEC and Local Government to disseminate or provide public information on their behalf. During the 2009-10 season, FESA distributed information for DEC and local governments for 77 bushfire incidents, an increase of 305% from 2008-09 where support was

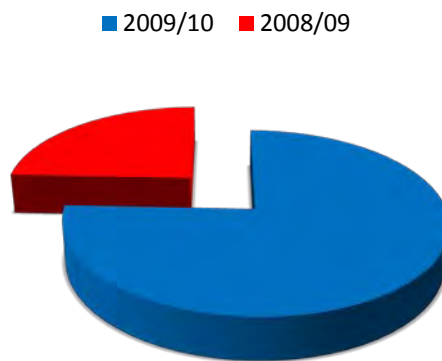
provided for 19 bushfires. The following diagram outlines the increased reliance on FESA to distribute information on behalf of DEC and Local Government.

Figure 24 – Increases in FESA distributing information on behalf of DEC and Local Government



The number of bushfire alerts and warnings distributed by FESA more than quadrupled in the 2009-10 bushfire season, with 744 items distributed compared to 177 the previous season, an increase of more than 320%. The following graph outlines the comparative distribution of bushfire information over the past two years.

Figure 25 – Distribution of Bushfire Information



These trends are expected to continue with even more activations of the public information system for bushfires during the 2010-11 season.

1.5.3.5 Fire Weather Advice

Bushfires can start suddenly so people need to be provided with fire weather advice as a key catalyst/trigger for them to start their own preparedness activities ahead of forecast fire weather. FESA advises that finding out tomorrow’s Fire Danger Rating (FDR) is the best trigger and should be the first step in people activating their bushfire survival plan.

The FDR is based on the forecast weather conditions and gives people advice about the level of bushfire threat on a particular day. The overriding message is that the safest option is for people not to be in high bushfire risk areas if a fire starts. FESA distribute FDR information the day before forecast conditions are expected, for days of severe or above, giving people early warning of potentially bad fire weather. When the FDR is below severe it means if a fire starts it is likely to be controlled and homes can practically be considered to provide an appropriate level of safety.

FESA issued severe FDR warnings for the Perth metropolitan area, Perth Hills, Central West, Central Wheatbelt, Gascoyne and Goldfields from 5 to 7 February 2011. These warnings outlined how a fire would behave if it started and the actions people should take to stay safe.

This information was available via:

- FESA website;
- FESA information line;
- Via RSS feed to subscribers;
- Broadcast on ABC local radio;
- Included in Bureau of Meteorology fire weather warnings posted on their website and information line and sent to local media;
- Roadside FDR signs; and
- Media alert sent to stakeholders and all local media outlets including print, online, radio and TV to inform news bulletins. There are 150 email addresses for journalists and media outlets targeted in FESA's distribution list.

When extreme weather conditions result in a Total Fire Ban being declared, this information is also distributed by FESA, in a similar manner as the above. As radio is the most immediate tool, the FESA Media Liaison Officer also contacts all stations and provides interview 'voice grabs' for news bulletins.

The decision to declare a TFB is based on a combination of consultation with BoM, defined weather forecasts, fire danger ratings and local conditions. It is ultimately the decision of FESA, based on the level of risk and preparedness required, to mitigate the ignition of a fire.

Total Fire Ban advices are issued between 5pm and 7pm the day before they will be in place. They advise that between 12.01am until 11.59pm on that day, any activity that could start a fire is banned. They detail what actions must be avoided when a Total Fire Ban is in place and the penalties that are applicable if the ban is ignored.

Total Fire Bans were issued on:

- 4 February 2011 at 5.40pm;
- 5 February 2011 at 5.30pm;
- 6 February 2011 at 6.25pm; and
- 7 February 2011 at 6.50pm.

These pre-emptive measures undertaken by FESA are mandatory to communicate when severe fire weather is expected and alert people that if a fire starts and takes hold in these conditions it may be

difficult for firefighters to control. It encourages the public on these forecast hot dry days, when bushfires are possible, to be prepared and put their preparations into action.

The communication of the FDR forecast is an outcome from the *Victorian Bushfires Royal Commission* and the messages are in line with the nationally endorsed FDR framework. This is the second year that FDR warnings have been issued and TFBs have been in place in WA.

1.5.3.6 Public Information Activity

FESA's public information system was activated on 5 February 2011 at 9.30pm for the bushfire at Red Hill. By the morning of 6 February 2011 the *Public Information Unit* was fully operational.

There were more than 200 incidents the day the *Roleystone fire* started and the *Public Information Unit* was providing warnings for six bushfire incidents, including two major fires, two large fires and support for two DEC fires.

These included the following:

- Red Hill bushfire;
- Roleystone bushfire;
- Ferndale bushfire;
- Upper Chittering bushfire;
- Lesueur National Park bushfire (DEC); and
- Jarrahdale bushfire (DEC).

The *Public Information Unit* provided multiple warnings through a range of channels over an extended period of time. In addition to the pre-emptive measures of communicating the severe fire weather forecast for these days, it was also providing people with an early warning of possible bushfires. This follows an ongoing media and communications campaign before the bushfire season to help people prepare, act and survive.

The *Public Information Unit* was active for 10 days and operational 24 hours for the first four days at the height of the incidents. At this time there were 28 people in the Unit responsible for communicating the warnings and it issued more than 125 alerts for the bushfires over these days.

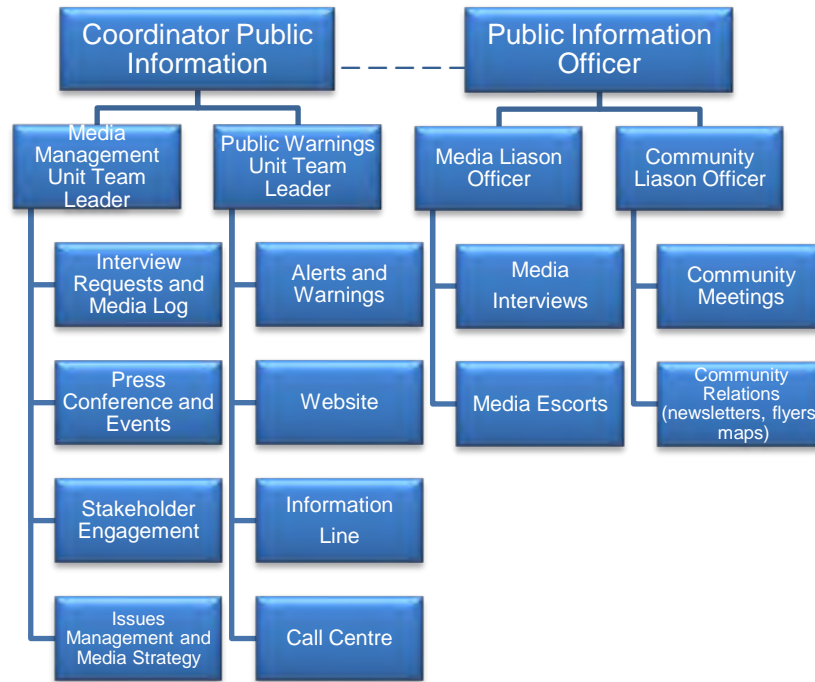
There were three Public Information Officers (PIO) and four Media Liaison Officers (MLO) active in the field supported by two MLOs operating from the *State Operations Centre* (SOC). This was an unprecedented number of PIOs and MLOs in the field for the agency and meant that out of the 11 officers available, nine were active. A PIO was present at each of the major fires continuously, while the alert was at an *Emergency Warning* or *Watch and Act* level, liaising with *Public Information Unit* staff in the SOC. Their key responsibilities were to gather information from the fire ground to inform the warnings, conduct media interviews and escort media onsite, and to provide communication support for the community meetings.

Ten *Public Information Unit* staff were operating from the SOC, including supplementation from other government agency communications staff that were called in to provide support. This team was responsible for writing and distributing the warnings via multiple channels including the website, information line and media, along with managing media enquiries and facilitating

interview requests. In addition, there was nine staff in the FESA Call Centre answering queries and providing advice to people in the affected areas.

The diagram below illustrates the structure of the *Public Information Unit* and each of the functions that was allocated to a staff member within the Unit. The Coordinator Public Information and support functions on the left of the diagram operate from the SOC. The PIO and support functions on the right of the diagram operate in the field.

Figure 26 – Public Information Unit Structure



1.5.3.7 Stakeholder engagement

These bushfires resulted in intense demands from both the media and the public for information on a scale that had never been experienced by FESA. This was not only about the bushfires, but their impact in terms of road closures, school closures, utility supplies, health issues, transport disruptions, critical infrastructure damage, and relocation and recovery information.

In order to ensure a coordinated public information approach across government and that all agencies were supporting the key messages and providing information on their relevant area of responsibility, the *Public Information Unit* was also liaising with the support agencies involved and keeping them informed of FESA’s planned activities.

Support agencies were encouraged to provide essential information to FESA, the media and public in a timely manner, provide spokespersons for media interviews, and advise of any planned press conferences and conflicting information. They were also reminded to speak only on issues within their areas of responsibility, as per *Westplan – Public Information*.

Suggested key messages were to include information about the effects of the fires and what the public can expect, including safety advice and what people should or should not do in regards to the various areas outlined above. In addition, FESA consistently provided information in their warnings

on behalf of stakeholders to help people affected to find all the bushfire information they needed in one place.

1.5.3.8 Public Warnings

a) Roleystone

The first alert for the *Roleystone Fire* was issued at 12.45pm; this was within half an hour of the Incident Controller determining life or property was under threat and asking for a warning to be issued. The next alert, an *Emergency Warning* with SEWS, was issued at 1.25pm.

The first alert was an *Advice*, as per standard procedure in the initial stages of an incident, where an Incident Management Team is being established and detailed information is not available.

This initial alert confirms FESA is on the way, or has arrived at the scene, and any other confirmed details such as location and time of call out. This ensures FESA, as the designated *controlling agency*, is a voice of authority and reassures the public FESA is responding. The initial media alert does not need the Incident Controller's approval. It tells people that there is a fire in the area, to be alert, look for information, turn-off evaporative air conditioners and to start taking action.

In total 45 alerts were issued for the *Roleystone Fire* including:

- 22 *Emergency Warnings* with SEWS;
- 6 *Watch and Acts*;
- 16 *Advices*; and
- final *All Clear*.

These were published on the alerts page of the FESA website, recorded on the FESA information line, and sent to stakeholders and all local media outlets to inform news bulletins along with interviews from MLOs in the field. In addition, the ABC local radio broke into programming every half an hour and 6PR provided regular updates. This was achieved through an automated web based system to ensure there is one source and one message being delivered in a coordinated way that informs all tools and ensures information is available concurrently. As highlighted above, there are 150 email addresses for journalists and media outlets targeted in MPA's distribution list.

Recovery information was then provided to help people who had been impacted by the fire. The information was released through the days and weeks following the fire and covered information from residents returning home to looking after their wellbeing.

In addition, five StateAlerts were issued, sending a total of 17,214 messages to residents in the communities being targeted. These were disseminated via SMS, phone calls, email and fax.

The StateAlert messages informed people the streets that were affected and the risk that they would be impacted by fire. The messages requested residents to leave immediately for a safer place if the way was clear, how to shelter if they could not leave, where the relocation point was and what direction the bushfire was moving. In addition, information was also provided on the dangers of embers being blown around their homes and where to get more information.

StateAlert is only used for life threatening emergencies in a specific location and is only one of the many tools used to warn communities. It is activated when authorities are aware that there is an emergency and when there is time to issue a warning. The message is sent using web based technology direct to people's homes.

FESA advises that individuals should always look after their own safety by monitoring local conditions and taking preventative action where possible. There may be no warning for some incidents – for example if a bushfire is moving very quickly and ignites near homes.

The details of the StateAlerts were:

- Bushfire Emergency Warning for Roleystone at 1.50pm;
- Bushfire Emergency Warning for parts of Roleystone, Kelmscott and Mt Nasura at 3.47pm;
- Bushfire Emergency Warning for parts of Roleystone, Kelmscott and Mt Nasura at 3.53pm;
- Bushfire Emergency Warning for parts of Roleystone, Kelmscott and Mt Nasura at 3.59pm; and
- Bushfire Emergency Warning for Roleystone at 6.06pm.

The following table outlines the specific timing and supported processes associated with the use of StateAlert at the *Roleystone Fire*.

Figure 27 – StateAlert Statistics

	MESSAGES	TIME SENT	TIME
MESSAGE 1			
VOICE	199	13:50	0.43
- Retry 1	167	13:55	1.53
- Retry 2	149	14:02	1.29
- Retry 3	146	14:09	1.45
SMS	500	13:50:20	0.41
MESSAGE 2			
VOICE	1,822	15:47	3.21
- Retry 1	1,702	15:55	22.18
- Retry 2	1,640	16:54	18.59
- Retry 3	1,585	17:43	17.36
SMS	4,459	15:46	7.12
MESSAGE 3			
VOICE	2,177	15:53	4.15
- Retry 1	1,989	16:19	22.32
- Retry 2	1,876	17:13	20.12
- Retry 3	1,816	18:01	22.15
SMS	2,303	15:56	3.10
MESSAGE 4			
VOICE	1,439	15:59	3.19
- Retry 1	1,143	16:41	12.22
- Retry 2	972	17:34	9.36
- Retry 3	895	18:23	9.37
SMS	3,248	16:02	10.34
MESSAGE 5			
VOICE	266	18:06	0.36
- Retry 1	247	18:33	4.04
- Retry 2	239	18:40	2.13
- Retry 3	233	18:47	2.30
SMS	585	18:08	2.18

These statistics demonstrate the effectiveness of the StateAlert system, the number of messages and precise delivery details. Statistics show that 83% of SMS messages were received in five minutes.

The detailed statistical performance reports for StateAlert during the *Roleystone Fire* are attached as Appendix 5 (voice) and Appendix 6 (SMS).

In comparison, the following outlines the alert arrangements for the *Red Hill* and *Lake Clifton* fires.

b) Red Hill Fire

The first alert for the *Red Hill Fire* was issued at 9.50pm; this was within 15 minutes of the Incident Controller determining life or property was potentially under threat. Again the first alert was an *Advice* warning people that there was a fire in the area. This was followed by an *Emergency Warning* with SEWS issued at 10.30pm.

In total 58 alerts were issued for the *Red Hill Fire* including:

- 39 *Emergency Warnings* with SEWS;
- 1 *Watch and Act*;
- 17 *Advices*; and
- final *All Clear*.

Recovery information was then provided to help people who had been impacted by the fire. The information was released in the days and weeks following the fire and covered information from residents returning home to looking after their wellbeing.

In addition, six StateAlerts were issued, sending out a total of 4,981 messages. These were disseminated via SMS, phone calls, email and fax.

The details of the StateAlerts were:

- Bushfire Emergency Warning for Brigadoon and Millendon at 2.14am;
- Bushfire Emergency Warning for Brigadoon and Millendon at 2.20am;
- Bushfire Emergency Warning for Brigadoon and Millendon at 2.31am;
- Bushfire Emergency Warning for Brigadoon and Millendon at 3.19am;
- Bushfire Emergency Warning for Millendon at 3.38am; and
- Bushfire Emergency Warning for Baskerville at 3.54am.

c) Lake Clifton Fire

The public information system was activated on 10 January for the *Lake Clifton fire* by a FESA officer after receiving a call from the public. This was shortly before a pager message was sent to the major incident group at 12.37pm to alert staff to the large fire developing.

The first alert for the *Lake Clifton Fire*, an *Emergency Warning* with SEWS, was issued at 1.10pm. This was just over half an hour after the Incident Controller determined life or property was under threat. The next *Emergency Warning* alert was issued at 2.15pm.

In total 30 alerts were issued for the *Lake Clifton fire* including:

- 16 *Emergency Warnings* with SEWS;
- 3 *Watch and Acts*;
- 10 *Advices*; and
- final *All Clear*.

Recovery information was then provided to help people who had been impacted by the fire. The information was released in the days and weeks following the fire and covered information from returning home to looking after their wellbeing.

In addition, three StateAlerts were issued, sending out a total of 1,117 messages. These were disseminated via SMS, phone calls, email and fax.

The details of the StateAlerts were:

- Bushfire Emergency Warning for Lake Clifton at 4.00pm;
- Bushfire Emergency Warning for Lake Clifton at 5.03pm; and
- Bushfire Emergency Warning for Lake Clifton at 11.46pm.

1.5.3.9 Communications Tools

FESA uses multiple channels to get alerts and warnings to the community during an incident. The FESA website and information line are two critical tools in communicating with people in the area affected by a bushfire, complemented by emergency broadcasts on ABC local radio and media news bulletins.

1.5.3.10 Information line and call centre

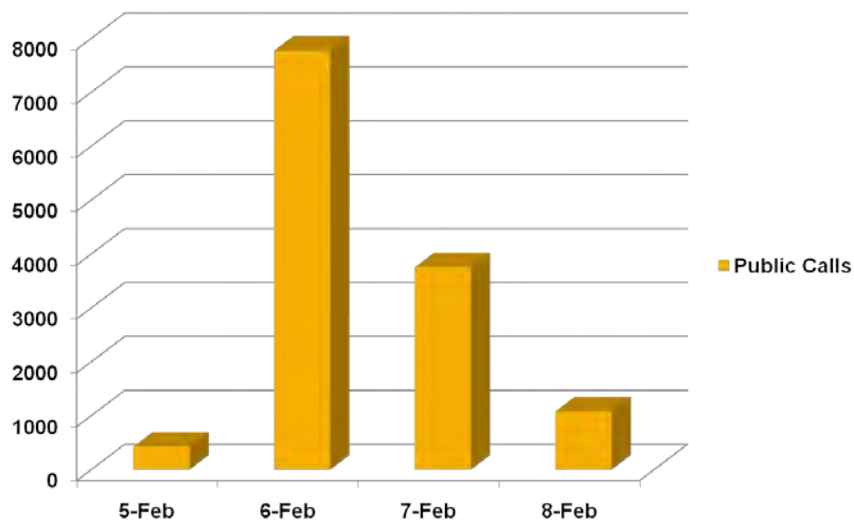
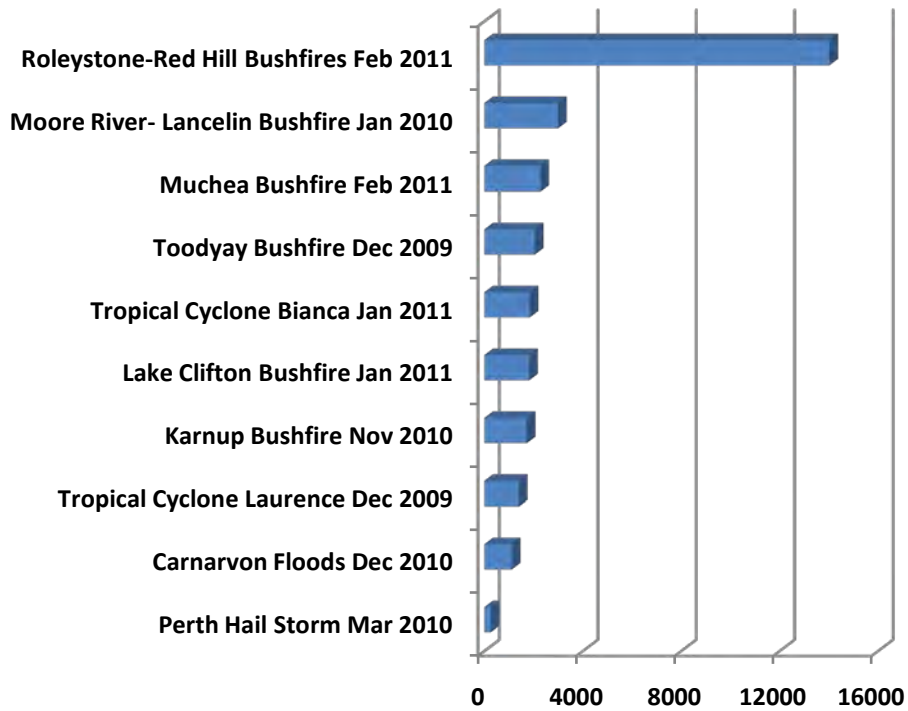
FESA's information line received more than 14,000 calls, including 7,775 calls on 6 February 2011 and 3,756 on 7 February 2011. This is the highest number of calls ever received and more than double the previous highest number of calls of 2,997 for the *Moore River-Lancelin bushfire*. The recorded information line advertises the FESA Call Centre number for people who require further detailed information or advice. It is intended that by providing detailed information via the website and recorded information line that traffic to the call centre will be concentrated to those who need it most.

The call centre, staffed by FESA volunteer employees, was activated on 5 February 2011 for the *Red Hill Fire* and operational 24 hours until 9pm on 9 February 2011 to provide information on all the fires. There were eight call takers supported by one Call Taker Coordinator at the height of the incidents. The call centre received more than 1,550 calls, the majority of which were taken between 5am and 11pm on 7 February 2011.

There were:

- 1,501 calls for Roleystone;
- 42 calls for Red Hill; and
- 21 calls for other fires.

Figure 28 – Call Centre Statistics

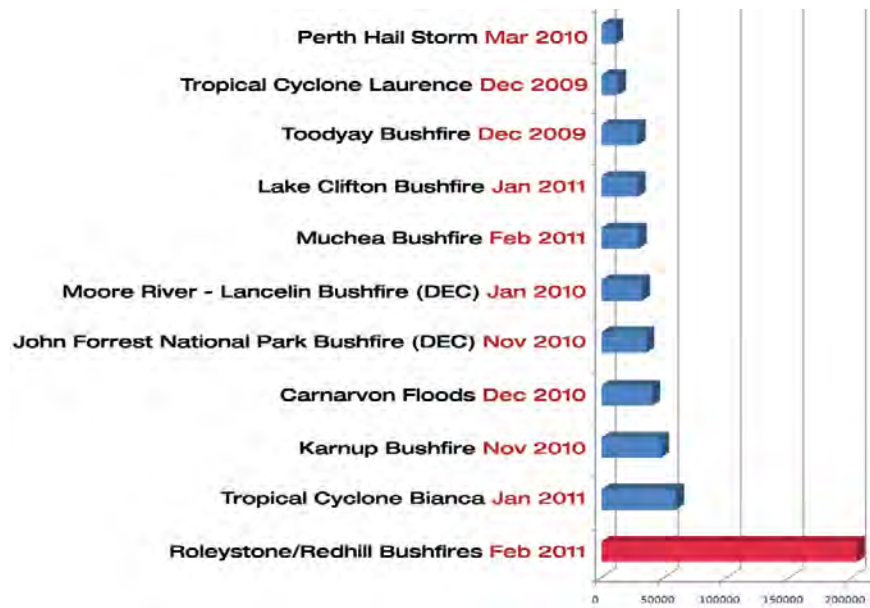


The majority of questions to the call centre focused on the exact fire direction, what to do about the fire threat, if residents needed to evacuate, if someone will tell them when to evacuate, about the safety of friends or families (from WA, Australia and the UK) and what to do if their house has been destroyed or damaged.

1.5.3.11 Website (www.fesa.wa.gov.au)

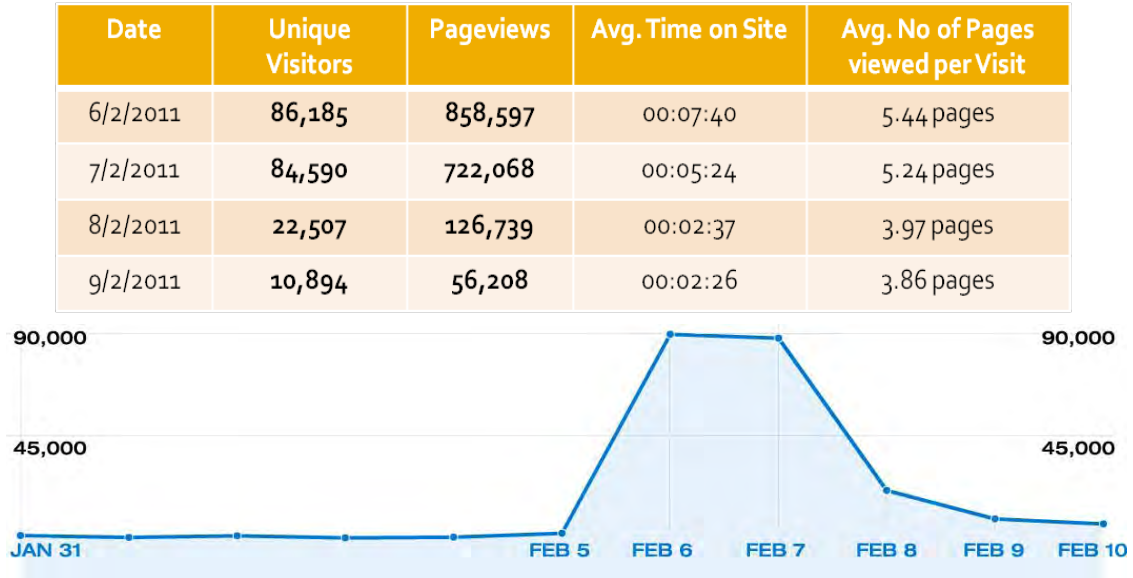
There were 86,185 unique visitors to the FESA website on 6 February 2011 which more than tripled the previous highest website traffic of 28,400 unique visitors for *Cyclone Bianca*. The below diagram illustrates this by ranking website traffic for major incidents.

Figure 29 – Global Website Traffic Statistics



More than a third of visitors accessed the site with a mobile device – this equates to 24,685 users and two thirds of these used an iPhone to access the information – this equates to 15,649 users. Users spent an average of seven minutes 40 seconds on the website and there were 223 alert referrals to a friend. The top three referring sites were www.fesa.wa.gov.au, Google search and Facebook.

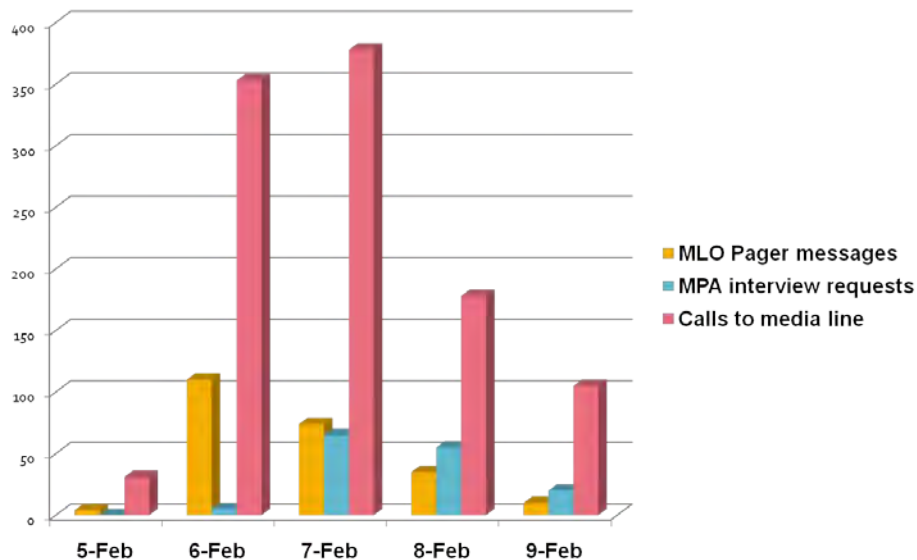
Figure 30 – Perth Hills Fires Website Traffic Statistics



1.5.3.12 Media Management

a) Demand

The *Public Information Unit* is responsible for media management including answering media enquiries and facilitating interview requests. The unit received more than 1,400 calls from media over four days at the height of the incidents and this included international, national, local and specialist media interest. There were almost 400 requests for interviews, including 233 interview requests direct to the MLO pager and 145 through the Unit.

Figure 31 – Media Demand

In order to coordinate the media response, meet demand and provide key messages to people who had been affected by the bushfire, press conferences were held daily at the incident site and SOC. There were morning and afternoon press conferences at the scene that provided media with information about the operational response and what people who had been affected should do. There was one press conference held at the SOC each day to provide updates on the State level coordination and address any issues that had been raised during the day.

Onsite, the MLOs would answer media enquiries, provide radio interview ‘voice grabs’ and facilitate TV interviews wherever possible outside the realms of the press conferences. They escorted media on to the fire ground to get the vision they needed. This facilitation ensured media did not try to access areas that had been cordoned off and kept them safe. Media largely heeded the MLO advice which is attributed to the strong relationships that have been forged over many years by the MLOs with local media. Media were aware of the demands they were placing on MLOs in the field and were appreciative of their ability to meet these increasing demands in the majority of situations in a timely manner.

b) Coverage

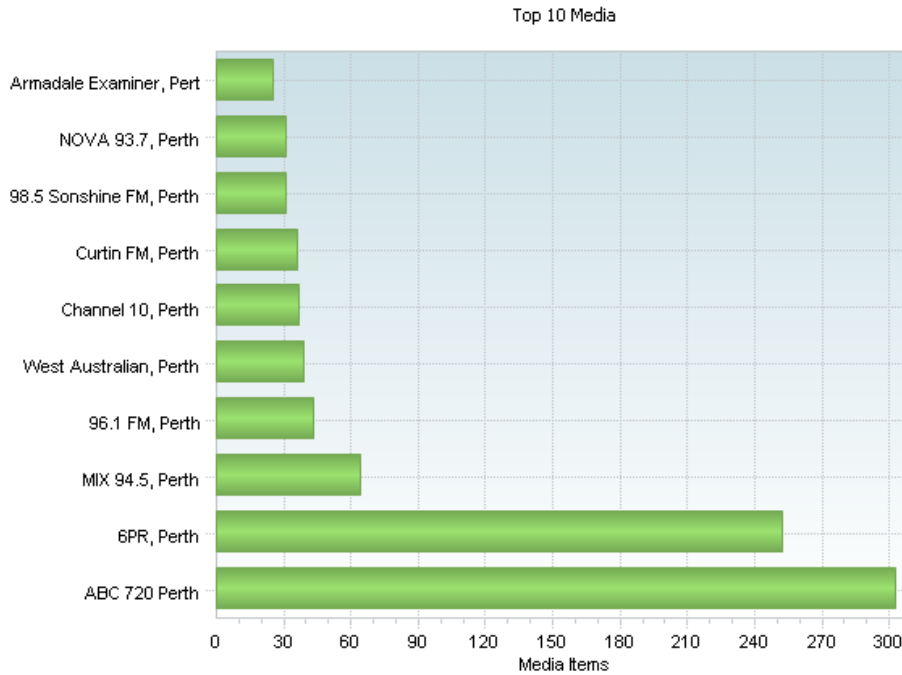
There was widespread media coverage during the February 2011 bushfires across all media with more than 30 million views over four days during the height of the incidents from 6 February 2011 to 9 February 2011 (this does not include some media items where circulation or audience members are not available, including ABC and online).

In the 48 hours from midday 6 February 2011 to midday 8 February 2011 there were 278 based news items on print, radio and television for the *Roleystone Fire* which generated more than 835 stories across WA news networks, which were viewed literally millions of times by WA audiences

(this does not include interstate, international or online media, any social media or the 62 *Emergency Warnings* broadcast on ABC local radio).

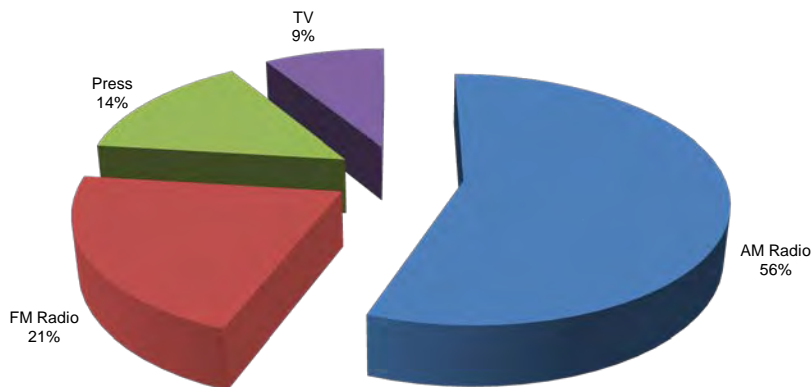
In total there were 1,068 based news items on the February 2011 bushfires that featured across print, radio and television that would have generated thousands of stories locally, nationally and internationally. The chart below indicates the top ten media outlets which covered the February 2011 bushfires. ABC local radio and 6PR continue to be leading news sources during incidents.

Figure 32 – Media Coverage (by station)



The chart below shows the breakdown of volume by media with the majority of coverage on AM radio.

Figure 33 – Media Coverage (by type)



1.5.3.13 Issues and Trends

The *Roleystone Fire* was the worst bushfire to be experienced in WA in 50 years, and the biggest test of the new bushfire warning system, StateAlert and the functionality of the *Public Information Unit*. FESA continues to meet the increasing demand and expectations for delivering critical and timely public information to local communities which are being impacted by an emergency.

1.5.3.14 Public Information Key achievements

FESA's public information system and unit performed extremely well under considerable pressure in dealing with multiple incidents (more than 200 incidents occurred Statewide during this period) which impacted on highly populated areas. The Unit was able to meet the increasing public and media demands for information.

The key achievements included:

- The ability for the *Public Information Unit* to provide timely, accurate and detailed information to the public through concurrent channels to ensure people could take preventative and/or evasive action and look after their own safety;
- The quality and quantity of information provided was well received;
- The Incident Controller or his/her delegate provided critical information to the *Public Information Unit* in a timely manner, including detail of the bushfire behaviour and what firefighters are doing. This is key information which the public want to receive;
- All stakeholders provided regular information and updates about their area of responsibility to ensure consistent messages across all agencies;
- The *Public Information Unit* was well resourced and functioned efficiently to meet the intense media and public demand that had never before been experienced on this scale; and
- There was strong media cooperation on the timing and delivery of key information about the fires and the impact of the damage to homes and properties.

However, there are a number of areas where FESA can see coordination can be improved and lessons learnt including:

- Expectations and misconceptions –
 - These expectations and misconceptions exist despite consistent and targeted media, communication and education campaigns that focus on key messages about the purpose of StateAlert and the need for the people to look after their own safety;
 - Community belief that StateAlert is a 'silver bullet' and people do not need to take action until they get a StateAlert;
 - Media and community expectations that the Incident Controller will make themselves available to be the spokesperson on all occasions;
 - The need for people to actively seek information, to be aware of their surroundings and watch for signs of bushfire, especially smoke and flames;
 - There is a lack of responsibility by some people towards their own safety – these people are waiting for a knock on the door before they take the appropriate action;
 - People who live in bushfire risk areas continue to think it won't happen to them and

- do not comprehend they are at risk; and
- Limited understanding that it is not always possible to provide accurate and timely warnings to the community through all the different mediums due to the uncertainty that surrounds a major fire.
- o Criticisms over the process clearly demonstrates people –
 - do not know how to access messages;
 - do not seek information;
 - do not know to refresh website;
 - do not know a cordless phone will not work when the power goes out; and
 - are confused over stay and actively defend versus being forced to leave.

FESA is committed to continuing its ongoing public awareness campaigns to educate people in bushfire risk areas of the importance of preparing for bushfires and what to do during a bushfire. This is in addition to promoting and educating people about the bushfire warning system, StateAlert, Fire Danger Ratings and Total Fire Bans. These campaigns regularly target people in bushfire prone areas before and during the season by implementing a number of strategies that use multiple communication channels to reach a vast range of audiences. A greater focus may be needed on the purpose, utility and functionality of these tools.

1.5.3.15 Media demands

There are a number of things the media could do to help ease the pressure on the *Public Information Unit* during an emergency:

- o Media agencies need to better coordinate their enquiries between their own programs, for example in the space of 10 minutes the *Public Information Unit* would receive five calls from five different arms of one media agency;
- o The number of news programs has increased dramatically with more channels and more public demand for current affairs programs exponentially increasing media demand, for example various television channels have up to five dedicated news programs all pushing for different news angles;
- o Journalists do not read or absorb the information that has been released. FESA wastes a great deal of time in repeating the key messages to journalists on what has already been sent out. All the latest information is included in the warning and the questioning by journalists indicates a lack of trust that they have been provided all the information available;
- o With the increased presence of online media, the 'fame to blame cycle' following the initial shock of an emergency incident has significantly increased. The different media outlets are quickly looking for controversial angles or detailed current affairs stories while the incident is still occurring;
- o The conflicting interests of the community and media in reporting the impact of a fire. This is particularly prevalent in regard to the media's demand for access to homes that have been destroyed by fire and their desire to 'get in' before residents have been informed they have lost their family home; and
- o There needs to be a higher priority given to the broadcast and promotion of Total Fire Ban information. The media need to focus specifically on conveying the importance of a

TFB and not confusing the message with packages about bad fire weather conditions expected and the Fire Danger Rating.

FESA is committed to continuing to work closely with WA media to develop mutually beneficial relationships that will help to enhance the public information service provided by the media and FESA to the community during an emergency.

1.5.3.16 Social media

FESA is currently investigating social networking technologies and will look at adopting them in the near future. However, there are a number of key objectives that FESA want to address before deploying them:

- Users should be able to provide/share relevant information and not just receive public information;
- The information flow should be two-way facilitating an exchange of information; and
- There are advantages during an emergency if social media tools can be used to gather intelligence.

FESA continues to investigate and progress the use of social media during an emergency, including the development of a detailed social media implementation plan.

1.5.3.17 Information demands and conflicts

There are a number of challenges to providing public information in a dynamically changing environment such as a major bushfire emergency. In particular, there are pressures where the fire agency is focused on making community safety the highest priority, but the community demand ignores that sentiment in preference to information about damage that is not yet possible to provide.

Some of the other information demands and conflict include the following:

- Community belief that StateAlert is a 'silver bullet' and people do not need to take action until they get a StateAlert message;
- The changeability and multi-agency implementation of road closures presents challenges in providing accurate information to the people affected;
- The lack of real time mapping of the bushfire to provide a visual reference of the information being provided from the fire ground;
- The time it takes for the agency to be able to confirm damage to the homes of residents; and
- The need for community patience before they can return to their homes as the bushfire is still out of control and the area unsafe.

FESA continues to refine areas where information gathering processes can be streamlined to further enhance the delivery of critical information that FESA provides to communities during an emergency. A number of debriefs have already been completed between FESA Media and Public Affairs and key stakeholders, with actions identified and to be implemented over the coming months.

1.5.3.18 FESA Proposals

The Review should:

- Note the increasing demand and significant advancements in public information management made by FESA over recent years;
- Recognise the efforts of all involved in the gathering and dissemination of public information during the *Perth Hills Fires*;
- Note the role of FESA in providing public information services to support DEC and Local Government in recent years and the pivotal role FESA plays in this regard as the overarching *controlling agency* for bushfire; and
- Note the intention of FESA to continue to improve on public information activities, particularly the appropriate use of social media and a further integrated approach as a unit within the *State Operations Centre*.

1.6 Previous Inquiries

1.6.1 Overview

In the past there have been many reviews and inquiries in response to major bushfires in Australia. These include Parliamentary reports, Coronial Inquiries, major incident reviews and Royal Commissions. FESA proposes to review the more recent reports and explore the common themes that have arisen.

The Review will note a direct alignment between a number of the topics/recommendations raised through several of these Inquiries and the proposed changes submitted by FESA as being necessary to significantly improve bushfire management within WA.

The Major reviews and inquiries since 2004 are set out in the following table:

Table 10 - Major Reviews and Inquiries Since 2004

Date	Inquiry / Review	Author	Primary Issues
September 2010	Review of the Ability of DEC to Manage Major Fires	Euan Ferguson	<ul style="list-style-type: none"> • Agency integration and coordination • Information and communications • Training and succession planning
August 2010	Incidence and Severity of Bushfires across Australia	Senate Select Committee on Agricultural and Related Issues	<ul style="list-style-type: none"> • Agency integration and coordination • Training and succession planning • Community engagement • Fuel management
July 2010	<i>2009 Victorian Bushfires Royal Commission</i>	Royal Commission	<ul style="list-style-type: none"> • Agency integration and coordination • Fuel management • Building and planning controls • Community engagement • Information and communications
December 2009	Toodyay Major Incident Review	FESA	<ul style="list-style-type: none"> • Agency integration and coordination • Information and communications
October 2009	Inquest into the deaths of Trevor George Murley, Lewis Kenneth Bedford and Robert Wayne Taylor (Boorabbin Inquest)	Alastair Hope	<ul style="list-style-type: none"> • Agency integration and coordination • Information and communications
April 2009	Review of Western Australia’s Bushfire Preparedness	Government of Western Australia Review Committee	<ul style="list-style-type: none"> • Agency integration and coordination • Community engagement

			<ul style="list-style-type: none"> • Fuel management • Information and communications • Building and planning controls
2009	2009 Victorian Bushfires Royal Commission Interim Report 2: Priorities for building in bushfire prone areas	Royal Commission	<ul style="list-style-type: none"> • Building and planning controls
2009	2009 Victorian Bushfires Royal Commission Interim Report	Royal Commission	
May 2008	Inquest into the death of James Martin Regan	Evelyn Felicia Vicker	<ul style="list-style-type: none"> • Training and succession planning
2006	Inquests and Inquiry into Four Deaths and Four Fires between 8 and 18 January 2003	ACT Coroner	<ul style="list-style-type: none"> • Agency integration and coordination • Training and succession planning • Information and communications
October 2006	Inquiry into Fire and Emergency Services Legislation	Community Development and Justice Standing Committee	<ul style="list-style-type: none"> • Agency integration and coordination • Information and communications • Fuel management
October 2004	Responding to Major Bushfires	Auditor General WA	<ul style="list-style-type: none"> • Agency integration and coordination • Fuel Management • Information and communications • Training and succession planning
May 2004	Inquest into the death of Craig Sandy	Alastair Hope	<ul style="list-style-type: none"> • Information and communications
April 2004	National Inquiry on Bushfire Mitigation and Management	Stuart Ellis, Peter Kanowski, Rob Whelan	<ul style="list-style-type: none"> • Community engagement • Building and planning controls • Information and communications • Training and succession planning • Fuel management

The findings and recommendations of these reports are set out in Appendix 7.

A number of common themes arise throughout the bushfire reviews cited above. These include identified problems or issues relating to:

- Training and succession planning;
- Agency integration and co-ordination;
- Information and communications;
- Community engagement;
- Building and planning controls; and
- Fuel management.

Each of these topics is discussed in detail below.

1.6.1.1 Training and succession planning

Training and succession planning are issues which have arisen in a number of past inquiries.

In the 2006 *Inquests and Inquiry into Four Deaths and Four Fires between 8 and 18 January 2003*, the ACT Coroner recognised shortcomings in fire management skills, recommending that “training of all personnel involved with emergency services be under constant review”, and “courses and programs be conducted to increase the level of Incident Control System training and augment the expertise of people who are likely to perform functions in an incident management team”. The Coroner also noted the level of funding required for the provision of adequate training, and recommended that “the ACT Government allocate sufficient funds to enable full-time and volunteer firefighters to participate in relevant courses and programs”.¹⁷

In May 2008, the Deputy Coroner of WA noted the difficulties relating to the provision and adequate SES volunteer qualifications and training, particularly in rural and remote areas.¹⁸

The Auditor General of WA also recognised this issue in his October 2004 report, *Responding to Major Bushfires*. He said, “there are barriers to the take-up of training by volunteers which impacts on volunteer safety during major bushfires”.¹⁹

Earlier, in April 2004, the Council of Australian Governments in the *National Inquiry on Bushfire Mitigation and Management* had already recognised this issue, saying:

*The Inquiry is conscious of the demands on volunteers’ time if they are to meet training requirements ... and is particularly concerned about the impact on volunteers’ willingness to undertake further training... Given the considerable training demands already imposed on volunteers, any further changes in competency requirements in the short term are likely to have a detrimental impact on volunteer training and retention.*²⁰

Another related issue raised in previous inquiries is that of succession planning. The September 2010 *Review of the Ability of DEC to Manage Major Fires* suggested that “a fire management staff succession plan would minimise the loss of core fire management skills and experience in the future and provide a planned approach to development of prospective fire management staff”. This

¹⁷ 2006 Inquests and Inquiry into Four Deaths and Four Fires between 8 and 18 January 2003 [P 217]

¹⁸ May 2008 Coronial Report – James Martin Regan p 26-27

¹⁹ October 2004 Responding to Major Bushfires, p 5

²⁰ National inquiry on Bushfire Mitigation and Management p 201-202, S Ellis et al

recommendation was made in response to the DEC's submission that the future challenge for their agency is to replace the loss of experienced bushfire managers through impending retirements.²¹

The Senate Committee which produced, *Incidence and severity of bushfires across Australia* in August 2010, heard similar evidence that Incident Controllers with bushfire expertise "are declining due to changes in land tenure and deficiencies in training arrangements".²²

The October 2004 report *Responding to Major Bushfires* also recognised the need for succession planning for DEC's ageing fire crews, noting that "CALM [renamed the Department of Environment and Conservation on 1 July 2006] faces challenges in maintaining its current level of trained staff".²³

In the April 2004 *National Inquiry on Bushfire Mitigation and Management*, the Council of Australian Governments also noted (p.206):

...many people who are responsible for bushfire mitigation and management in land management agencies are concerned about the consequences of an ageing workforce and about the substantial diminution in capacity as a result of downsizing and an increasingly commercial focus.

1.6.1.2 Agency integration and coordination

The *Victorian Bushfires Royal Commission* recognised the problems with control and command when separate organisations are responsible for fire management, finding "serious deficiencies in top-level leadership as a result of divided responsibilities, and the operational response was hindered by differences between agencies' systems, processes and procedures". The *Victorian Bushfires Royal Commission* noted that "many of the concerns identified related to operational matters such as control, interoperability and interagency standards, leading the Commission to conclude that a focus on improving operational capability is required... For many of the operational problems the Commission identified, previous attempts to improve coordination had failed. Typically progress has been slow or incomplete or has not achieved the level of interoperability required".²⁴

The Commission said:

*The absolute priority is to improve operational performance. In support of this, the Commission recommends modest and targeted organisational reform as a catalyst for change. This would involve improvements to common operation policy and standards, stronger coordination and unambiguous command and control, greater interoperability, and a strengthened capacity to provide integrated response.*²⁵

The ACT Coroner in the 2006 report *Inquests and Inquiry into Four Deaths and Four Fires between 8 and 18 January 2003* also noted these issues, and recommended "gradually integrating the ACT Rural Fire Service with the ACT Fire Brigade and establishing a single ACT fire service under a single management and command and control structure".

²¹ September 2010 Review of the Ability of DEC to Manage Major Fires p 25

²² August 2010 Incidence and Severity of Bushfires across Australia p 122

²³ October 2004 Responding to major bushfires, page 5

²⁴ 2009 *Victorian Bushfires Royal Commission*, p 8

²⁵ 2009 Royal Commission Victorian Bushfires p 8

In the October 2004 report *Responding to Major Bushfires*, the WA Auditor General noted:

The authority for fighting bushfires is shared across each of the 122 local governments in regional Western Australia, the Fire and Emergency Services Authority (FESA), and the Department of Conservation and Land Management (CALM) [renamed the Department of Environment and Conservation on 1 July 2006]. Authority is based on land tenure, according to the geographical jurisdiction of each organisation. While fire fighting organisations generally work well together, major bushfires have exposed weaknesses in these arrangements. Changes are needed to establish a more cohesive fire fighting structure and a sound authoritative basis for managing bushfire emergencies.

The WA Auditor General went on to recommend that the Government:

...establish a State-wide command structure across volunteer Bush Fire Brigades for fighting major bushfires, to more effectively manage the coordination of personnel and resources [and] establish emergency management legislation which clarifies State and Local Government responsibilities...²⁶

The WA Auditor General said there are too many organisations sharing authority for fighting major bushfires, and the arrangements across organisations need to be better coordinated. The report noted that there was no command structure to ensure that a more experienced person would take over control if a fire developed beyond the expertise of local firefighting personnel. The report also noted that no single agency had the legislative authority to prioritise how resources would be used at a local, regional or State level when there are multiple bushfires. The WA Auditor General recommended that WESTPLAN – BUSHFIRE be endorsed by individual local governments to encourage better cooperating during major incidents.

He also said that uniform adoption of AIIMS was needed, noting the Linton Inquest finding that many local governments do not have an AIIMS trained fire control officer. The absence of a compatible telecommunications system across emergency services was also noted.

The CDJSC *ommunity Development and Justice Standing Committee* recorded in their October 2006 *Inquiry into Fire and Emergency Services Legislation*:

After comprehensive, wide-spread and inclusive investigation, it was clear to the Community Development and Justice Standing Committee that stakeholder opinion in relation to fire control will never align. The committee identified that control arrangements of multi-agency incidents would be contentious. However, in making these recommendations, the committee stated that:

Several significant State and Commonwealth Government reports including two coronials have highlighted community safety issues inherent in the authority for control being dispersed across a number of agencies in multi-agency incidents. The Committee acknowledged that in many instances a high degree of cooperation has been engendered at the local level to address this issue. However, it views that to ensure consistency in approach, such arrangements need to be legislatively

²⁶ Responding to Major Bushfires, pages 5 and 6

*mandated. The Committee has therefore recommended that one agency, the Fire and Emergency Services Authority of Western Australia, be empowered to assume control in these circumstances.*²⁷

However, the Committee also noted (at page 6):

*The Committee has ensured a check on the use of this power by FESA by proposing that it may only be exercised under prescribed circumstances and that the decision to assume control is made at the Executive, not local, level.*²⁸

The Senate Committee for *Incidence and severity of bushfires across Australia* in August 2010 noted the:

*...continuing debate about the distribution of decision-making authority once a bushfire escapes the control of local fire fighters. The committee received considerable complaint about the negative consequences of restrictions on local decision-making and local action once control of a bushfire suppression effort had passed to a centralised incident control structure. The basis for this complaint was that the inability of locals on the ground to exercise their local knowledge and respond quickly to changing circumstances hampers bushfire suppression.*²⁹

The WA Coroner, in the October 2009 Boorabbin Coronial Inquiry into the deaths of three people, was quite scathing in his criticism of DEC's rejection of offers of assistance made by FESA, and the failure by DEC to take advantage of available resources offered by FESA, amongst other matters. The Coroner indicated that DEC's ability to manage major fires came into question from the evidence at the Inquest, and recommended that "a review be conducted of DEC's ability to manage major fires and consideration be given to increased direct involvement by FESA in fire management role in the case of major fires on reserves or on unallocated Crown lands".

As a result of this recommendation, in March 2010 the Minister for Environment commissioned the Chief Officer of the South Australian Country Fire Service, Euan Ferguson, to conduct a review of the ability of DEC to manage major fires, and Mr Ferguson finalised his report in September 2010.

The September 2010 *Review of the Ability of the DEC to Manage Major Fires* concluded that the DEC "has a sound capability and capacity for managing fire on its estate in Western Australia." The Review did however identify the need to develop and strengthen "future joint bushfire strategies and common systems of work between bushfire management agencies in Western Australia", and suggested the Interagency Bushfire Management Committee should be the central platform for this. It recommended that pre-formed Incident Management Teams within DEC should include a FESA officer, and that additional teams be established with FESA. This view was endorsed by FESA in the *Toodyay Major Incident Review*, which said "pre-formed multi-agency IMTs should be developed to ensure proper structures are in place early in the incident". This statement was made in the context of the recognition by FESA that the IMT at Toodyay was insufficiently staffed for an incident of such magnitude.

²⁷ Inquiry into Fire and Emergency Services Legislation, October 2006

²⁸ Ibid, p xxx

²⁹ Incidence and severity of bushfires across Australia, p 112-113

The development of a Memorandum of Understanding signed by the Chief Executive Officers of DEC and FESA was advocated by the Review as “a valuable statement of joint commitment between the two agencies”. The review noted that a MOU between the agencies had been prepared in 2005, prior to the Boorabbin fire, but had not been signed by the agencies’ Chief Executives.

The Review said:

Whilst the relationship between DEC and FESA will continue to grow, FESA’s role and its organisational capabilities are subtly yet distinctly different to that of DEC. Therefore the maintenance of fire management capability in DEC must continue and be developed into the future. As noted in numerous submissions, the core to DEC’s fire management capability is found within the people in DEC.

With regard to the new DEC operations centre in Kensington and FESA’s new facility and operations centre at Cockburn Central, the review questioned whether this might be “a missed opportunity to collocate two important bushfire management agencies”.

Subsequent to the Boorabbin bushfire, the *Bush Fires Act 1954* was amended to provide FESA with the power to take control of bushfire from both the DEC and from local government. The amendments came into effect on ... However, the *Review of the ability of the DEC to Manage Major Fires* (in September 2010) noted that triggers for when FESA could exercise this power had not been prescribed. The review suggested that “triggers and a process for transfer of command and control from DEC to FESA should be developed and documented”.

The Review noted that the *WA Emergency Management Act 2005* and associated regulations allow for a “Hazard Management Agency”, but one had not yet been prescribed. This has since been rectified and FESA is now the prescribed Hazard Management Agency for fire. This is only a recent occurrence as there was a lengthy consultation process with FESA, DEC and local governments. The Explanatory Memorandum to the Emergency Management Amendment Regulations (No. 3) 2010 states that:

This proposal has been a contentious issue with some individuals due to the incorrect perception the prescription of a HMA for fire would reduce current operational fire fighting responsibilities. This issues required considerable consultation with the Department of Environment and Conservation (DEC) and the Western Australian Local Government Association (WALGA). A HMA operates in a decision making role at a State level and does not affect the legislative responsibilities of other groups, unless there is an incident of such a nature that it requires a prompt and coordinated emergency management response by the State.

In April 2009, in the *Review of Western Australia’s Bushfire Preparedness*, the Committee recommended that the critical amendments to the *Bush Fires Act 1954* which were recommended by the *Community Development and Justice Standing Committee* in relation to fire management, namely FESA’s ability to assume control of a fire in particular circumstances and providing authority to FESA to declare total fire bans, be adopted.

The amendments were contained in the *Bush Fires Amendment Bill 2009*. The Bill was declared an Urgent Bill on 17 September 2009 and was assented on 17 November 2009.

During the *Toodyay fire*, the handover of control to FESA was able to be mutually agreed because of the strong personal relationships between the people on the fireground. In the July 2009 *Toodyay Major Incident Review*, FESA recommended that inter-agency arrangements need to be strengthened through joint training and exercising to establish more effective inter-agency co-operation, resulting in less reliance on the strong personal relationships of personnel. The Review said:

Different layers of command amongst FESA and Local Government creates a potential source of friction and in the case of the Toodyay fires, strong personal relationships between personnel in different agencies and Local Government ensured this was not the case. Effective public administration and emergency management is based on arrangements that are simple, coherent, as 'flat' as possible, consistent and comprehensive, so that they can be easily implemented in times of stress or uncertainty. The Review does not believe that Western Australia's arrangements best align with these principles. Inconsistent local emergency management arrangements (highlighted as a key driver for recent legislative amendments) and varying levels of competency across shires (consistently raised by stakeholders) creates a potential risk to future operations. The legislative change has provided FESA with the power to take control of an incident, however, the Review Team believes this does not provide Western Australia with optimum emergency management arrangements. Additionally, the current arrangements are not consistent with public administration principles such as having a single agency responsible for a single function.

...

A whole of capability approach needs to be taken when assessing FESA and DEC interoperability. This means developing interoperability through command and control arrangements, joint-doctrine, equipment procedures and training (both individual and collective). Joint command and control arrangements are already documented in WESTPLAN – BUSHFIRE, and joint procedures, training and exercising exists, however, there is no document that provides a philosophical understanding of the way in which the agencies operate (individually and jointly). Doctrine seeks to provide a common and articulated understanding of the bigger picture through documenting roles and responsibilities, resources and capabilities. Joint doctrine between FESA and DEC would provide both agencies a common and articulated way of thinking and operating in joint-operation scenarios. Importantly, doctrine publications are authoritative, but not prescriptive in how operations are to be conducted. Such a document would provide the basis for the development of interoperability in the other capability elements.

Recommendation 2: *FESA and DEC take a whole of capability approach to joint operations, including developing joint doctrine that provides a common and articulated understanding of roles and responsibilities, resources and capabilities.*³⁰

³⁰Toodyay Review, pages 11-12

1.6.1.3 Information and communications

The May 2004 *Inquest into the death of Craig Sandy* suggested the Incident Controller should maintain a log of events or running sheet, particularly during significant fires. This would assist handover arrangements at the fire, and would also be useful at later reviews.

The Coroner noted there were problems with radio communications when the main designated channel failed during the incident. The Coroner recommended that a backup plan be put in place in the event this occurred in the future, and that everyone be made aware of the alternative channels.

In the April 2004 *National Inquiry on Bushfire Mitigation and Management*, the Council of Australian Governments said:

*Effective operational communications are an important element of rural firefighting. They are vital for delivering information promptly, having a direct impact on firefighter and community safety as well as on operational performance. Shortcomings in communications systems have been a recurrent theme in past coronial inquests and independent inquiries.*³¹

In the Auditor General's October 2004 report *Responding to Major Bushfires* the following issues were raised in relation to telecommunications:

- The overloading of radio and mobile networks;
- Failure to follow protocols for radio communications; and
- Telecommunications systems across emergency services are not all compatible.

Later, in 2006, the communications issues between the different services during the Canberra firestorm led to the ACT Coroner making the following recommendation:

*...that the Emergency Services Agency review the communications systems used by the four services (the ACT Ambulance Service, the ACT Rural Fire Service, the ACT State Emergency Service and the ACT Fire Brigade), by the Australian Federal Police, by NSW emergency services and by aircraft and ensure the systems are compatible.*³²

The October 2006 *Inquiry into Fire and Emergency Services Legislation* noted that:

*...concerns expressed by stakeholders regarding the incompatibility of radio communications and/or deficiencies in communications' infrastructure which are currently being addressed via the Government's Emergency Services Communications Strategy.*³³

In July 2010 the *Victorian Bushfires Royal Commission* heard evidence which:

...highlighted a number of communication difficulties encountered by CFA personnel and Victoria Police on 7 February. These include paging performance (as discussed above), radio black spots, radio channel congestion, insufficient channel availability, radio transmission

³¹ April 2004 COAG National Inquiry on Bushfire Mitigation and Management [p 137]

³² 2006 Inquests and Inquiry into Four Deaths and Four Fires between 8 and 18 January 2003 [p 217]

³³ October 2006 Inquiry into Fire and Emergency Services Legislation [p6]

*failures attributed to smoke effects, and fire-damaged or destroyed radio communications infrastructure.*³⁴

The WA Farmer's Federation and Bush Fire Front to the September 2010 *Review of the Ability of DEC to Manage Major Fires* had similar concerns, submitting:

The WA Farmer's Federation is of the view that DEC's communication hardware is "generally adequate" but "...the effectiveness of its use is another matter". They reinforce that "communication between all parties at an event has to improve".

*The Bush Fire Front say that in some of the more remote areas there are problems with communications systems and vegetation mapping is less sophisticated. They are of the view that beyond the south west of the state DEC is more reliant on hiring equipment from local government, mining companies and contractors.*³⁵

In relation to radio communications interoperability, the *Review of Western Australia's Bushfire Preparedness* said:

*Two major recent initiatives have sought to enhance the quality and interoperability of emergency services communications. FESA is in the process of implementing the WA Emergency Radio Network (WAERN) which is using innovative dual-band analogue radios. Concurrently, FESA is using Commonwealth funding ... to implement Radio Over Internet Protocol technology to provide better internal radio communications which, in the long term, should enhance interoperability with DEC, WAPOL and other emergency service organisations, particularly in regional areas. WAPOL has meanwhile completed the rollout of the digital Police Metropolitan Radio Network (PMRN) and are currently extending the same technology into regional Western Australia.*³⁶

The Review noted that although these projects will significantly improve communications, they do not in themselves provide a long-term strategic direction for emergency services communications. The review noted that "the Emergency Services Communications Strategy, which has the endorsement of emergency services agencies, will be submitted in the near future to Cabinet".³⁷

The October 2009 *Boorabbin Coronial Inquest* recorded the Incident Controller's failure to send spot forecast information to operational personnel and his failure to appreciate the importance of monitoring wind changes at uncontrolled bushfires, even after the Inquest. The Coroner said:

The failure to take adequate note of reliable weather forecast information provided by the Bureau of Meteorology compromised the safety of all involved in fire suppression activities on 30 December 2007. It was fundamental to hazard reduction on that day that the Incident Management Team should be alert to all of the spot forecast information and be well aware of any significant wind changes which might take place during the course of the day.

The importance of up-to-date and accurate information and intelligence was recognised in the *Review of Western Australia's Bushfire Preparedness* in April 2009, which noted that:

³⁴ July 2010 Victorian Bushfires Royal Commission [Volume 2, p 128]

³⁵ see page 24 of the Review into the DEC

³⁶ Review of Western Australia's Bushfire Preparedness [p 44]

³⁷ April 2009 Review of Western Australia's Bushfire Preparedness [p 45]

*Bureau of Meteorology (BoM) forecasts provide essential data in support of bushfire incident management. Effective use of this intelligence requires the most effective interpretation of BoM forecasts by fire agencies. Enhanced interpretive services between BoM and agencies would ensure that the best possible intelligence supports response efforts.*³⁸

The Review noted that:

*FESA and DEC will consider options and funding issues for the provision of BoM forecasters to ensure more effective interpretation of BoM forecasts by fire agencies and report to their Ministers before 1 October 2009.*³⁹

The Major incident review on the *Toodyay bushfires* found there was “poor information flow to and from a variety of levels included in the fireground” and poor passage of information through the chain of command, resulting in decision makers not always having accurate and up-to-date information.

The Major Incident Review recognised that the intelligence function in IMTs needs to be developed to help build “a system to analyse the level of threat posed by the current situation and future conditions”. This need became apparent during the *Toodyay fire* from the “lack of situational awareness” that showed “FESA did not take a whole of capacity approach to intelligence (i.e. people, organisational structures, equipment, training, systems etc.)”.

FESA in the *Toodyay* review noted that no reports of “near misses” had been made by volunteers or personnel, and recommended that the reporting of “near misses” be encouraged to help reveal any systemic issues.

The *Victorian Bushfires Royal Commission* commented on the AIIMS structure, saying:

Management of information by means of the AIIMS structure proved unsatisfactory on 7 February. The Information Unit deals not only with collection of information from the fireground and from media and state and regional levels of emergency management but also with dissemination of information to fireground personnel, other agencies and the community (via agency websites and the media).

*The existing AIIMS structure, which positions the Information Unit as a sub-function of Planning, fails to reflect the quantity, demands and priority surrounding information management in the 21st Century. These demands are particularly heavy during a fast-moving multi-agency emergency event. On days such as 7 February, when the prevailing conditions might render first attack ineffective, the information function becomes as important as, if not more important than, that of operations.*⁴⁰

The Commission recorded that:

The early and precise detection of fires enables firefighters and Incident Controllers to rapidly mobilise resources, inform the community, and mount a significant initial attack. In addition, effective firefighting requires ongoing timely and accurate intelligence. This allows fire

³⁸ April 2009 Review of Western Australia’s Bushfire Preparedness [p 43]

³⁹ Review of Western Australia’s Bushfire Preparedness [p 44]

⁴⁰ July 2010 Victorian Bushfires Royal Commission [Volume 2, p 88]

*managers to allocate resources and minimise the risk to human life. Fires pose unique and dynamic challenges for those collecting intelligence.*⁴¹

The Commission also noted that:

The benefits of incorporating local knowledge in an incident management team cannot be overstated. An understanding of local geography, infrastructure and community concerns can help the IMT identify priorities for both asset protection and community warnings. Local knowledge was used to good advantage in the Bunyip fire, where a local CFA captain was assigned to help the team preparing the operational plan by 'providing local knowledge of the area'. In contrast, a greater appreciation of local conditions could have been of benefit in the Churchill IMT. The importance of local knowledge was also highlighted by Mr Ewan Waller, who noted that the issuing of warnings requires not only accurate predictions of the run of a fire but is also dependent on 'local knowledge'.

*The existing AIMS structure does not specify that an IMT include people with knowledge of the area in which the incident is occurring. Indeed, in a level 3 fire it is likely that personnel will have been drawn from across a region or even from elsewhere in the state. The Commission considers local knowledge to be invaluable to IMTs in relation to both operations and community warnings.*⁴²

The Royal Commission identified information sharing issues during the Victorian bushfires, saying:

*...the fires of 7 February revealed deficiencies in the sharing of information between the integrated Emergency Coordination Centre and incident control centres, within some IMTs, between some IMTs and the fireground, and between some IMTs and municipal emergency coordination centres.*⁴³

The Commission made the following recommendation:

Recommendation 14

The Victorian fire agencies amend the AIMS framework before the 2010–11 fire season in order to do the following:

- designate the Information Unit as a separate section reporting directly to the Incident Controller and require that the Information Unit contain a dedicated Public Information Officer whenever a full incident management team is required;
- specify a set of functions in relation to which the Deputy Incident Controller for a level 3 incident will have oversight, which may be adjustable for a particular incident by agreement between the Incident Controller and the Deputy Incident Controller; and
- ensure that an individual with local knowledge is incorporated in an incident management team.⁴⁴

⁴¹ July 2010 Victorian Bushfires Royal Commission [Volume 2, Ch 3 p 119]

⁴² July 2010 Victorian Bushfires Royal Commission [Volume 2, p 90]

⁴³ July 2010 Victorian Bushfires Royal Commission [Volume 2, p x]

⁴⁴ July 2010 Victorian Bushfires Royal Commission [Volume 2, p 91]

AFAC is currently reviewing AIIMS in partnership with Police and FESA is actively involved with this process.

1.6.1.4 Community engagement

Emergency services in Australia have long recognised the importance of community engagement in the prevention and management of bushfires. In April 2004 the Council of Australian Governments said:

*A comprehensive program of community education and public information is needed in all areas that are subject to the risk of bushfire. This education and information should focus on awareness of the nature and risk of bushfires, measures for preparing and protecting lives, property and the environment, and the timely provision of operational and safety information to the public in the event of a bushfire.*⁴⁵

They found that:

*The community information and engagement programs conducted by the states and territories are generally comprehensive. Their effectiveness depends on community uptake and commitment. Community surveying needs to be done regularly to ensure that programs retain their relevance and are being delivered in ways that maximise community participation and understanding.*⁴⁶

As recently as August 2010, in the report on *the Incidence and Severity of Bushfires across Australia*, the Senate Select Committee on Agricultural and Related Issues suggested that communities need to accept shared responsibility, and strategies should be put in place to enable communities to be more resistant to the effects of catastrophic bushfires. The report suggested that the following strategies could be employed to increase community resilience:

- *Improving communities' understanding of their bushfire risk.*
- *The appropriate imposition of planning controls to protect communities from bushfires.*
- *Insurance arrangements that provide appropriate risk management incentives to households.*⁴⁷

In WA, the *Toodyay Major Incident Review* recognised the need for community members to be more aware of their role in fire mitigation around their properties.

The *Victorian Bushfires Royal Commission* quoted the following extract from Boin, A and t'Hart, P "Organising for Effective Emergency Management: Lessons from Research" (2010):

Crisis planning should involve more than just making sure that the government sector knows what to do in the event of crises and disasters. Enhancing community resilience and planning the interface between government, business and community sectors in crisis response should be part and parcel of the planning process. This presupposes levels of cross-sectoral involvement and dialogue that are neither self-generating nor self-sustaining. It requires

⁴⁵ April 2004 COAG National Inquiry on Bushfire Mitigation and Management [p 131]

⁴⁶ April 2004 COAG National Inquiry on Bushfire Mitigation and Management [p 134]

⁴⁷ August 2010 Incidence and Severity of Bushfires across Australia [Incidence and Severity of Bushfires across Australia, p 88]

community participation in crisis planning, particularly within high-salience, 'at risk' communities.

The Victorian Bushfires Royal Commission said:

Communities that have a large number of informed individuals who work together will be safer and stronger. Individual members of these communities can make themselves safer by drawing on the support and resources of others.

Evidence the Commission received suggests that some of the best prepared people on 7 February were those who were involved with their communities in forming community 'fireguard' groups and 'phone trees'. The Commission observed, however, that being well prepared is no guarantee of survival: the extreme conditions of the day overwhelmed many, and some well prepared people died because the fire was savage and their home was not defensible. The entire community must come to understand the difference between this type of fire and a 'normal' bushfire and plan accordingly.

The Commission also made the following recommendation:

Recommendation 5

The State introduce a comprehensive approach to evacuation, so that this option is planned, considered and implemented when it is likely to offer a higher level of protection than other contingency options. The approach should:

- encourage individuals – especially vulnerable people – to relocate early
- include consideration of plans for assisted evacuation of vulnerable people
- recommend 'emergency evacuation'⁴⁸

The importance of disseminating information efficiently has also been identified. In the April 2004 *National Inquiry on Bushfire Mitigation and Management* the Council of Australian Governments COAG said:

The electronic and print media have an important role in informing the community about bushfire mitigation and management in preparation for each bushfire season and in providing up-to-date information during bushfire events. As demonstrated during the 2003 fires, the role of radio, in particular, is crucial, especially when power fails and television and world wide web services are unattainable.⁴⁹

They continued:

The Inquiry recommends that each state and territory formalise non-exclusive agreements with the Australian Broadcasting Commission as the official emergency broadcaster, providing an assured standing arrangement. Similar protocols with commercial networks and local media should also be established.⁵⁰

⁴⁸ [Victorian Bushfires Royal Commission 2009, p 24]

⁴⁹ April 2004 COAG National Inquiry on Bushfire Mitigation and Management [p 135]

⁵⁰ April 2004 COAG National Inquiry on Bushfire Mitigation and Management [p 136]

However, the Inquiry also noted the following:

The media are not the only means whereby fire authorities can communicate with the public, both during a fire event and more generally. Other channels that are of great value during major fires are call centres and the worldwide web, both of which were used very successfully during the Canberra fires. Public meetings and briefings are another form of communication used very successfully during the Victorian fires. This latter approach is discussed further in the report into the Victorian fires.

Community awareness and education programs should be developed for general and specific audiences and be accessible via the internet, school curricula and fire service volunteers trained as education facilitators, as well as through a range of promotional activities.⁵¹

Feedback provided to FESA during the *Toodyay Major Incident Review* suggested that “the quality and quantity of information provided to the public during the Toodyay fires was unevenly received”. FESA noted the need to make information to the public as clear as possible and to “ensure audiences most at risk receive key messages” (p 18).

The Senate Committee for *Incidence and Severity of Bushfires in Australia* identified in August 2010 that the public could find terminology used by agencies during major incidents confusing. The committee recommended that when communicating with the public, terminology should be used consistently nationwide to avoid any such confusion.

The April 2009 *Review of Western Australia’s Bushfire Preparedness* noted:

The ability to deliver potentially life-saving information to a community under threat in an emergency is a valuable tool for emergency service organisations.

FESA and WAPOL have been working with a number of agencies in developing a new system for sending warning and alerts direct to affected communities to warn of imminent danger as a result of an emergency. Known as StateAlert, the system is capable of sending voice and/or SMS message via landline and mobile telephones, email, fax and RSS news feed subscriptions.

StateAlert is one of suite of public information tools that include website information, recorded information lines, call centres, emergency broadcasts on ABC local radio and media.

The *Telecommunications Act 1997* (Cth) had to be amended to allow emergency warnings to be deemed a permitted use of the Integrated Public Number Database. The *Telecommunications Amendment (Integrated Public Number Database) Bill 2009* received royal assent on 26 March 2009, and a telephone-based emergency warning system has since been implemented.

The *Review of Western Australia’s Bushfire Preparedness* noted that:

WESTPLAN – PUBLIC INFORMATION provides the framework for Hazard Management Agencies in the provision of public information and outlines their roles and responsibilities. The Plan also details additional resources that would be made available during a large scale

⁵¹ April 2004 COAG National Inquiry on Bushfire Mitigation and Management [p 136]

*or protracted event. These include a call centre, media monitoring services, access to additional media or public affairs staff and overall coordination of the public information response at a State level where required.*⁵²

1.6.1.5 Building standards and planning controls

In the April 2004 *National Inquiry on Bushfire Mitigation and Management*, the Council of Australian Governments said that “land use planning, development controls and building standards have a central role in reducing the risk to people and property from bushfire.” This would require “planning processes that ensure that built assets are not placed in areas of high fire risk and that structures meet standards of construction that reduce their vulnerability”.⁵³ They said:

*The Inquiry supports the view, expressed in *Natural Disasters in Australia*, that land use planning that takes into account natural hazard risks is the single most important mitigation measure for preventing future disaster losses (including from bushfires) in areas of new development. Planning and development controls must be effective, to ensure that inappropriate developments do not occur.*⁵⁴

The Inquiry also recognised that:

*In relation to bushfire, the context is changing in two main ways. First, the landscape in which fires burn is being modified by increased urban expansion, increasing rural–residential areas beyond urban fringes, and changing land tenure (for example, from state forest to national park). As a result, the relative proportions and the spatial arrangement of assets in the landscape are changing. Second, climate, which is a major determinant of vegetation and of fire behaviour, is changing. Hence, the frequency of ignitions and the characteristics of fire regimes in particular areas will be altered. Strategies for risk modification will need to adapt in order to take account of these changes.*⁵⁵

Subsequently, in April 2009, the *Review of Western Australia’s Bushfire Preparedness* also noted the importance of land use planning in bushfire mitigation, saying:

*Issues relating to land use planning in Western Australia as it relates to natural hazard mitigation (including bushfire) will continue to be progressed through the State Mitigation Committee’s Land Use Planning Working Group reporting to SEMC by December 2009.*⁵⁶

The *Victorian Bushfires Royal Commission* explored the issue of building and planning controls. They said:

The unpredictable nature of fire and extreme weather conditions means it is not possible to guarantee that any building will survive a bushfire. Nevertheless, the construction of buildings and their siting relative to surrounding fuel loads are central to their defendability. Maximising a house’s ability to withstand bushfire is important, both for people who choose

⁵² April 2009 Review of Western Australia’s Bushfire Preparedness [p 46]

⁵³ April 2004 COAG National Inquiry on Bushfire Mitigation and Management [P xiv]

⁵⁴ [p xxiv] April 2004 COAG National Inquiry on Bushfire Mitigation and Management

⁵⁵ April 2004 COAG National Inquiry on Bushfire Mitigation and Management [p 89]

⁵⁶ [Review of WA’s bushfire preparedness p 3]

to stay and defend and for those unexpectedly caught in their home during a fire. It can also help minimise the personal, social and economic costs of the widespread destruction of homes.

Land-use planning and regulation of building standards in bushfire-prone areas are two of several measures available for improving people's chances of surviving a bushfire. Individual planning and response are also essential. As lay witnesses Mr Rainier Verlaan of Callignee noted, 'Building regulations and bushfire plans need to go hand-in-hand together. There is no point in having these bushfire building regulations without the need for some form of bushfire survival plan as well. Applying land-use planning and building controls to minimise or reduce bushfire risk does, however, present challenges. In particular, the planning and building systems, which seek to reduce risk to communities in the long term, operate prospectively and have little capacity to deal with past decisions in relation to existing settlements or buildings in bushfire-prone areas.

Many have argued that planning regulation is crucial; for example, the 2004 report of the National Inquiry on Bushfire Mitigation and Management cited land-use planning as 'the single most important mitigation measure in preventing future disaster losses in areas of new development'. Good planning offers the potential to help people who choose to leave their property in the face of a fire by allowing for the development of evacuation routes. It can also make it easier for firefighters to gain access to and defend a property by imposing entry, exit and water supply requirements. Additionally, planning decisions in relation to settlement matters, land use and development, and the location of individual buildings on a property can potentially reduce bushfire risk by, among other things, restricting development in the areas of highest risk, where people's lives may be gravely endangered in the event of extreme bushfire.⁵⁷

The Commission also made the following recommendations:

Recommendation 3

The State establish mechanisms for helping municipal councils to undertake local planning that tailors bushfire safety options to the need of individual communities. In doing this planning, councils should:

- urgently develop for communities at risk of bushfire local plans that contain contingency options such as evacuation and shelter;*
- document in municipal emergency management plans and other relevant plans facilities where vulnerable people are likely to be situated – for example, aged care facilities, hospitals, schools and child care centres; and*
- compile and maintain a list of vulnerable residents who need tailored advice of a recommendation to evacuate and provide this list to local police and anyone with pre-arranged responsibility for helping vulnerable people.*

Recommendation 4

⁵⁷ Victorian Bushfires Royal Commission p 214

The State introduce a comprehensive approach to shelter options that includes the following:

- *developing standards for community refuges as a matter of priority and replacing the 2005 Fire Refuges in Victoria Policy and Practice;*
- *designating community refuges – particularly in areas of very high risk – where other bushfire safety options are limited;*
- *working with municipal councils to ensure that appropriate criteria are used for bushfire shelters, so that people are not discouraged from using a bushfire shelter if there is no better option available; and*
- *acknowledging personal shelters around their homes as a fallback for individuals⁵⁸*

1.6.1.6 Fuel management

The April 2004 National Inquiry on Bushfire Mitigation and Management noted that:

Bushfire in the Australian landscape poses a threat to many assets, and an important element of risk reduction is therefore modifying elements of the landscape in such a way as to reduce the probability of a fire starting, slow a fire's spread and limit its intensity such that it might be able to be controlled.⁵⁹

The Inquiry made the following finding:

There needs to be a shared understanding and valuing of assets in relation to bushfire mitigation and management. There also needs to be better recognition of the fact that prescribed burning is a complex matter—ecologically and operationally—and that a variety of prescribed fire regimes might be necessary to meet a range of objectives.⁶⁰

The October 2004 report *Responding to Major Bushfires* discussed fuel levels in the southwest of WA. The WA Auditor General said that prescribed burns and clearing were needed, but extended drought experienced in the region had impacted on the ability to do this.

Later, in October 2006, the *Inquiry into Fire and Emergency Services Legislation* noted that:

Currently under the Bush Fires Act 1954 the State is exempt from having to undertake fire-break and/or other fire mitigation works on its land. The main comment by stakeholders was the lack of equity or accountability of the State in this regard and the resultant impact on neighbouring properties. The Department of Conservation and Land Management (CALM) [renamed the Department of Environment and Conservation on 1 July 2006] and Main Roads Western Australia highlighted concerns about the potential financial, practical and environmental implications of fire-break and hazard reduction notices on their land. CALM were also worried about the impact on their prescribed burning program of existing provisions which prevent the lighting, or enforce the extinguishment, of a fire.

The Committee supports the emergency services Act binding the Crown for reasons of equity and consistency, however is aware that if, for instance, the Bush Fires Act 1954 is amended

⁵⁸ [Royal Commission p 24]

⁵⁹ April 2004 COAG National Inquiry on Bushfire Mitigation and Management [p 97]

⁶⁰ April 2004 COAG National Inquiry on Bushfire Mitigation and Management [p 98]

*to bind the Crown, there would be a risk of it becoming unworkable. It is suggested however that the Acts be repealed and re-drafted, allowing the State the opportunity to develop flexible legislation that enables land owners and land managers to use fire prevention tools in addition to, or as an alternative to, fire-breaks.*⁶¹

In the April 2009 *Review of Western Australia's Bushfire Preparedness*, the Review Committee explored bushfire prevention measures in detail, including prescribed burning, power line maintenance, land use planning policies (declaration of bushfire prone areas), adequacy of preventative measure and penalties for arson, and science and research. The Committee noted (at p 22) that "prescribed burning is an inherently complex and contentious issue because it impacts on a wide range of environmental and economic values".

The *Victorian Bushfires Royal Commission* also explored the issue of fuel management in some detail, and concluded their discussion of this by saying:

In summary, the effectiveness of prescribed burning is determined by the following characteristics and limitations:

- *Fuel age and weather interact, and both are important in influencing fire severity. Extreme weather is the predominant influence on the likelihood that a crown fire will develop, followed by forest type and then fuel age. In contrast, in more moderate and low weather conditions fuel age has a significant effect on whether the fire is confined to the understorey, where it is more easily suppressed.*
- *A well-conducted prescribed burn, if large enough, might stop a fire in the first one to two years after it is conducted. The expert panel considered that size does matter in relation to this question. Mr Cheney told the Commission that the placement of the prescribed burn block is also important: 'The key to a burning program for wide-scale protection is to have the blocks strategically located across the landscape in a pattern that, when repeated, large fires are going to sooner or later run into one of these low fuels and be checked ...'.*
- *Prescribed burning reduces the number of bushfires because the take-up rate of fire in more recently fuel-reduced areas is low to zero, whether the ignition source is lightning or embers.*
- *Prescribed burning reduces fuel load and consequently reduces fire intensity. The intensity of bushfires and the average intensity of all fires will decrease as a function of the prescribed burning treatment rate, although overall fire frequency will increase.*
- *Reduction in the rate of spread of fire will persist as a consequence of prescribed burning for five to eight years. Reduction in flame height, firebrand prevention, and less spotting downwind of the fire are effects of prescribed burning that last longer than five to eight years. There is congruence among the studies of vegetation for eucalypt forests suggesting that 'the period of five years matters'.*
- *The slowing down of fire, reduced spotting, and reduced intensity of fire improve firefighter safety because they provide a strategic advantage for firefighting. Mr Cheney*

⁶¹ October 2006 Inquiry into Fire and Emergency Services Legislation [p 1-2]

*stated he did not believe there could be effective fire suppression without adequate prescribed burning.*⁶²

However, in the August 2010 report on the *Incidence and Severity of Bushfires in Australia*, the Senate Select Committee on Agricultural and Related Issues questioned the cost effectiveness of prescribed burning as a mitigation strategy, and suggested the establishment of a new permanent Bushfire Research Institute to conduct further research into fuel reduction programs.

1.6.1.7 FESA Proposals

The Review should:

- Note the consistencies in subject matter between Inquiries/Reviews conducted nationally and more importantly within WA; and
- Note the synergies between the findings and recommendations of several Inquiries/Reviews and the contents and submissions made by FESA in relation to significantly improving bushfire management within WA.

⁶² July 2010 Victorian Bushfires Royal Commission [Volume 2, p 284]

1.6.2 Victorian Bushfires Royal Commission

Consistent with its commitment to continuous improvement, FESA established a specific project team to track and review the outcomes of the recent *Victorian Bushfires Royal Commission*, recognising the far reaching effects this Commission would have on bushfire management nationally.

FESA implemented a comprehensive review system to ensure the outcomes of the Commission's findings, comments and importantly recommendations were considered and where appropriate implemented by FESA. In establishing this approach, FESA has provided regular briefs to Government on these issues and recognises that some of the issues will take a longer time to properly implement. Some of these more complex issues have been highlighted elsewhere in this submission (e.g. evacuation).

Attached as Appendix 8 of this submission is a comprehensive status report which outlines whether or not the recommendations of the Commission (both Interim and Final Reports) are relevant to WA, and the current status of these issues as at 10 March 2011. This is a dynamic document that continues to be used to inform decision making within FESA and also track the status of these issues within FESA.

This is a further example whereby such an important issue is being administered at a single agency level, where it clearly has application across agencies.

1.6.2.1 FESA Proposals

The Review should:

- Note the establishment of a system by FESA to assess the relevance and the status of the *Victorian Bushfires Royal Commission* outcomes in FESA; and
- Note the status of the *Victorian Bushfires Royal Commission* outcomes and considers this status in evaluating the outcomes and recommendations arising from the Review.

2. THEME 1 - STRUCTURAL REFORM TO ACHIEVE A SEAMLESS AND INTEGRATED *BUSHFIRE SAFE – WA*

2.1 Nomination of a single agency responsible for bushfire management within WA

The existing system of shared responsibility and resultant duplication in the responsibility and management of bushfire policy, planning and mitigation activities continues to cause inconsistencies, duplication and shared accountability for bushfire management. These arrangements are historically based and cause confusion, and FESA believes any improvements that can be made through collaborative relationships have already been achieved to the greatest degree possible without more robust structural change. There is sufficient evidence through several other Inquiries, both intra- and inter-state, particularly regarding the need for greater clarity and line of sight accountability and control for bushfire management, that FESA believes the State's arrangements have now matured to a point where further change and improvements can be facilitated. The recent *Victorian Bushfires Royal Commission* and other Inquiries have all explored this issue and made findings in this regard, which share FESA's view that further structural reform is now necessary to continue to enhance the State's bushfire management arrangements. This position is validated by the findings of the *Community Development and Justice Standing Committee* contained in their report to the Legislative Assembly on 19 October 2006, which concluded:

*After comprehensive, wide-spread and inclusive investigation, it was clear to the Community Development and Justice Standing Committee that **stakeholder opinion in relation to fire control will never align. The Committee identified that control arrangements of multi-agency incidents would be contentious** [emphasis added]. However, in making these recommendations, the Committee stated that:*

*"Several significant State and Commonwealth Government reports including two coronials have highlighted community safety issues inherent in the authority for control being dispersed across a number of agencies in multi-agency incidents. The Committee acknowledged that in many instances a high degree of cooperation has been engendered at the local level to address this issue. However, it views **that to ensure consistency in approach, such arrangements need to be legislatively mandated** [emphasis added]. The Committee has therefore recommended that one agency, the Fire and Emergency Services Authority of Western Australia, be empowered to assume control in these circumstances."⁶³*

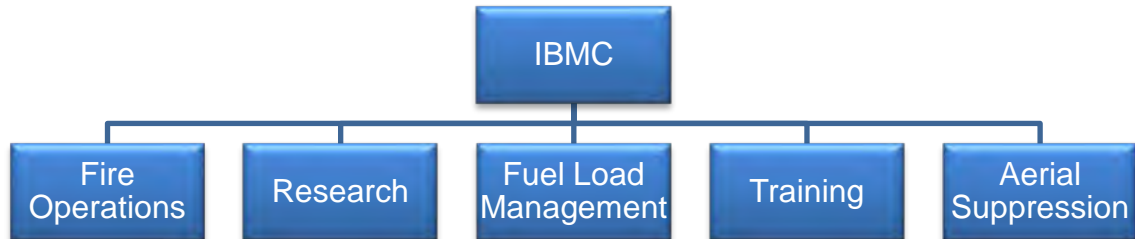
FESA submits that given the Inquiry by the *Community Development and Justice Standing Committee* involved "comprehensive, wide-spread and inclusive investigation" (p 116) and that these issues have been debated and approved by Cabinet, the recommendations should stand and form the underlying basis from which this Review considers its findings and recommendations.

Attempts to improve the existing arrangements through the *Interagency Bushfire Management Committee* established by the Minister for Emergency Services in 2009, have been a major step forward in improving interagency communication and cooperation. Chaired by FESA and involving senior representation from FESA, DEC, Local Government and the Bushfire Consultative Committee, the IBMC has established five sub-committees encompassing fire operations, research, fuel load management, training and aerial suppression. This committee structure was instrumental in the implementation of key operational recommendations arising from the *Victorian Bushfires Royal*

⁶³ October 2006, Inquiry into Fire and Emergency Services Legislation [Page xi]

Commission. Whilst this initiative has significantly helped to create a more collaborative approach, FESA believes this should now be more fully incorporated into structural reform and taken to the next step. The following diagram outlines the structural arrangements of the IBMC:

Figure 34 – IBMC Structure



Other considerations that should also underpin matters for the Review with respect to structural reform are the recommendations of the *Community Development and Justice Standing Committee* contained in their report to the Legislative Assembly on 19 October 2006 and subsequently approved by Cabinet. These include:

Recommendation 55

The emergency services legislation is to provide for FESA and Local Government to enter into an agreement for the purpose of Local Government transferring the following responsibilities to FESA on a permanent basis:

- *emergency incident control;*
- *Bushfire Brigade operations and administration; and the*
- *Determination and administration of the ESL, in relation to the capital and recurring costs associated with the Bushfire Brigades.*

Recommendation 57

Local Government is to retain emergency prevention functions as prescribed under the existing legislation

In essence, the above was recognition of the complex current operating environment which operates within the fire service jurisdiction in WA, which is effectively a combination of approximately 124 individual fire authorities consisting of 122 local governments (with Bush Fire Brigades), FESA and DEC. These provisions which will be included in the new consolidated Emergency Services Legislation provide a mechanism to facilitate a more streamlined structural arrangement through a collaborative approach between FESA and Local Government.

The recent *Victorian Bushfires Royal Commission* also examined these types of issues in significant detail and found “serious deficiencies in top-level leadership as a result of divided responsibilities, and the operational response was hindered by differences between agencies’ systems, processes

and procedures". It went on to state "the problems illustrate systemic failings" and "many of the concerns identified related to operational matters such as control, interoperability and interagency standards, leading the Commission to conclude that a focus on improving operational capability is required". The Commission also found that "For many of the operational problems the Commission identified, previous attempts to improve coordination had failed. Typically progress has been slow or incomplete or has not achieved the level of interoperability required".⁶⁴

The context of the above findings of the Commission is aligned to what FESA submits are some of the inherent underlying problems that prevent step change and improvement in bushfire management in WA. The issues of *interoperability* and *capability* have been addressed within *Theme 2* of this submission. Whilst potentially these themes are intrinsically linked, FESA submits consideration of the broader structural arrangements should be complimentary to and not solely focused on these sub-issues.

The most recent fire service structural reform arose from the findings of the *Victorian Bushfires Royal Commission* in recommending organisational change and the establishment of a Fire Services Commissioner, whereby the Commission stated:

*The absolute priority is to improve operational performance. In support of this, the Commission recommends modest and targeted organisational reform as a catalyst for change. This would involve improvements to common operational policy and standards, stronger coordination and unambiguous command and control, greater interoperability, and a strengthened capacity to provide integrated response.*⁶⁵

In reaching its conclusion, the Commission considered carefully how its proposed arrangements would accommodate the potential for future change. It stated that:

*operational improvement is a precursor and precondition to any consideration of radical structural reform. Major structural change, particularly amalgamation, would necessitate significant commitment, planning, resources and change management over time to be successful, as demonstrated by the Tasmanian experience. Attempting operational reforms and major structural reforms simultaneously would risk diluting the focus, and potentially the speed and effectiveness, of the essential operational changes required. The Commission was not persuaded that a merger is warranted at this stage, but it sees merit in moving to greater integration over time, and there is obviously a trend toward this. The enhanced baseline and level 3 fire capacity and improved interoperability would better position the agencies to take the next step towards integration if further change is seen as desirable in the future. It would also allow the inherent strengths and specialisations of each agency to be supported and provide time for the consultation necessary in view of the different cultures of the fire agencies. Consideration of further reform could occur following a review—say, in three years—of the extent and effectiveness of the operational reform agenda.*⁶⁶

It should be noted that comparisons between the Victorian model and WA circumstances are quite different. WA comes from a completely different starting position in having already commenced a

⁶⁴ [2009 Victorian Bushfires Royal Commission; p8]

⁶⁵ [2009 Victorian Bushfires Royal Commission; p8]

⁶⁶ 2009 Victorian Bushfires Royal Commission [s 10.5.3]

structural reform program (albeit with an understanding that more is required) and with FESA as an amalgamated service, the only element sitting outside of this service is DEC. This is truly appropriate; however, consistent with the Commission's findings, operational improvement is certainly warranted.

The IBMC has gone some way to achieving this but still relies on collaboration and lacks the authority to mandate reform and operational improvements in the manner FESA considers necessary for the future of bushfire management in WA. It is on this basis that FESA is recommending structural reform. Absent of authority, any proposed structure will continue to rely on relationships and collaboration, but can never achieve compliance to the level necessary in today's operating environment.

FESA supports the position espoused in the Commission where "both Professors Leonard and 't Hart urged caution before embarking on a merger or amalgamation. The 'virtues of mergers are way overrated ... that is particularly true when the different kinds of organisations that you are merging are actually quite different from each other'".⁶⁷

This position clearly recognises the strengths and benefits in the existing FESA integrated model of like organisations versus an amalgamation with DEC which is unlike FESA because of its land management focus and unique skills set and culture. It is for this reason that DEC is not a fire service and FESA is not a land manager.

*The Commission proposes the introduction of a new position of Fire Commissioner to lead the fire services and to undertake a program aimed at improving integration and interoperability between the different fire agencies. The occupant of the new position would also perform the role of State Controller under Victoria's emergency management framework.*⁶⁸

Professor 't Hart, an expert in management and organisational change, emphasised the risks associated with 'overstretching the lessons from Black Saturday':

Redesigning emergency management systems or organisations often happens as a result of the sheer momentum for change created by the occurrence of a recent high impact tragedy. Unfortunately, there is plenty of research to suggest that such crisis-induced reforms may create as many vulnerabilities as they seek to eliminate—particularly when they are too narrowly focussed on 'winning the most recent war'.

Whilst the Review may be tempted to use the Victorian outcomes, FESA submits that the following clearly demonstrates guiding principles that are most relevant for the Review to consider in the context of WA and its future structural arrangements:

- WA is coming from a different starting base, with FESA already well established as an integrated model;
- FESA and DEC are uniquely different and have different roles, and there is no suggestion from FESA that it should amalgamate, although operational improvements do need to occur;
- Disaster prevention, preparedness and response is an un-conflicted core business for FESA;

⁶⁷ Ibid [s 10.3.2]

⁶⁸ 2009 Victorian Bushfires Royal Commission; s 10

- The IBMC has been a useful avenue to facilitate a greater level of collaboration however this approach continues to rely on relationship and collaboration and lacks an appropriate level of authority to mandate change;
- Proposed legislative change will facilitate the transition of Bush Fire Brigades administration and operational activities from Local Government to FESA in a collaborative manner;
- The size and diversity of WA results in clearly two discrete 'seasons' (north and south) with resultant potential for concurrent major emergencies across an all hazards perspective, which is what FESA manages through its integrated structure; and
- Time and distance considerations are very prominent in establishing weight of attack and surge capacity requirements of agencies.

FESA submits these are all relevant considerations in the WA context.

2.1.2 The need to build upon existing collaboration programs to support Local Government, Bushfire Mitigation and Community

2.1.2.1 Bushfire Mitigation Program

In addition to its responsibilities as the *controlling agency* for bushfire response, FESA has undertaken significant work in establishing an integrated *Bushfire Mitigation Planning Model* which is focused clearly on engagement with Local Government, Bush Fire Control Officers, Bush Fire Brigades and other stakeholders to undertake a comprehensive analysis of local bushfire conditions. This model uses a scientifically backed methodology that undertakes a bushfire threat analysis which establishes the basis for a risk assessment and mitigation plan. This information is gathered by FESA Bushland Mitigation Officers working in partnership with regional staff, Local Government representatives, Fire Control Officers, local DEC staff and other stakeholders, and is recorded electronically in a 'web based portal' which is accessible to both FESA and Local Government. This program, which was initiated by FESA in 2010, is already proving to be extremely successful and has elevated the level of sophistication around analysing, developing, executing, monitoring and reporting bushfire threat, risk and mitigation activities. The outputs of the model include spatial maps which can also be used as key inputs into operational response incident management, allowing decisions to be made based on factual data associated with fuel management and other mitigation activities undertaken at a local level.

This model has only been in operation for a short period of time but FESA has established an ambitious target that will see a combination of FESA Bushland Mitigation Officers being appointed into each region and a comprehensive mitigation plan developed for all very high and high bushfire risk municipalities by the end of 2011.

Unfortunately, this program is not formally integrated between FESA and DEC, which clearly demonstrates the need for formal structures to be established that result in an integrated plan, standards and systems to drive consistent bushfire management activities, based on the priority of *primacy of life*, whilst still having regard for other considerations including cultural heritage, indigenous sites and biodiversity interrelationships.

2.1.2.2 A True Partnership - Community Emergency Services Managers (CESM) Program

In addition to the above successful mitigation program, and as part of its overall operating philosophy, FESA prides itself on working collaboratively with and supporting Local Government, Bushfire Control Officers and Bush Fire Brigades. It achieves this through its diverse organisational structure and supporting infrastructure.

The recent introduction of the Community Emergency Services Managers (CESM) network which is a partnership between FESA and Local Government, including cost sharing arrangements, is a tangible success in this regard.

Administered through a Memorandum of Understanding between FESA and individual local governments, this program is increasing in momentum and provides a key on-the-ground resource to support Bush Fire Brigade administration, maintenance and enhancement of local capacity, capability and stakeholder management. The key responsibilities of these positions are:

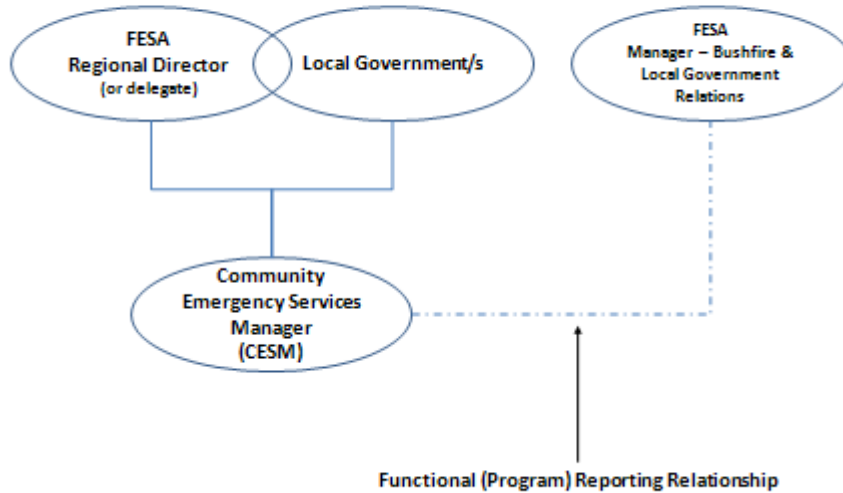
- Contributes to the strategic direction and management of volunteer fire services as part of the District Management Team and implements agreed programs within Local Government(s);
- Implements and supervises the delivery of preparedness, prevention, response and recovery services at an operational level within Local Government(s);
- Facilitates the mitigation of fire impact on the community through the coordination of a range of strategies in partnership with the community, Local Government(s) and Bush Fire Brigade volunteers; and
- Fosters effective and professional working relationships between FESA, Local Government(s), other agencies and stakeholders.

The program currently has 20 CESMs servicing 24 local governments across the state, with an expansion plan established. The reporting relationship for CESMs includes a line management relationship between the regional FESA representative and Local Government, and a 'functional' reporting relationship to the responsible FESA manager who is responsible for managing the program on a statewide basis. The business plan relevant to each CESM is also a jointly agreed plan between FESA and the Local Government, which is also included within the MoU arrangements applicable for these positions.

In recognition of the cost burden for the smaller remote / rural municipalities, the funding model was modified from an original straight 50/50 split to a scalable funding split which is now based upon the ratable income of an individual Local Government.

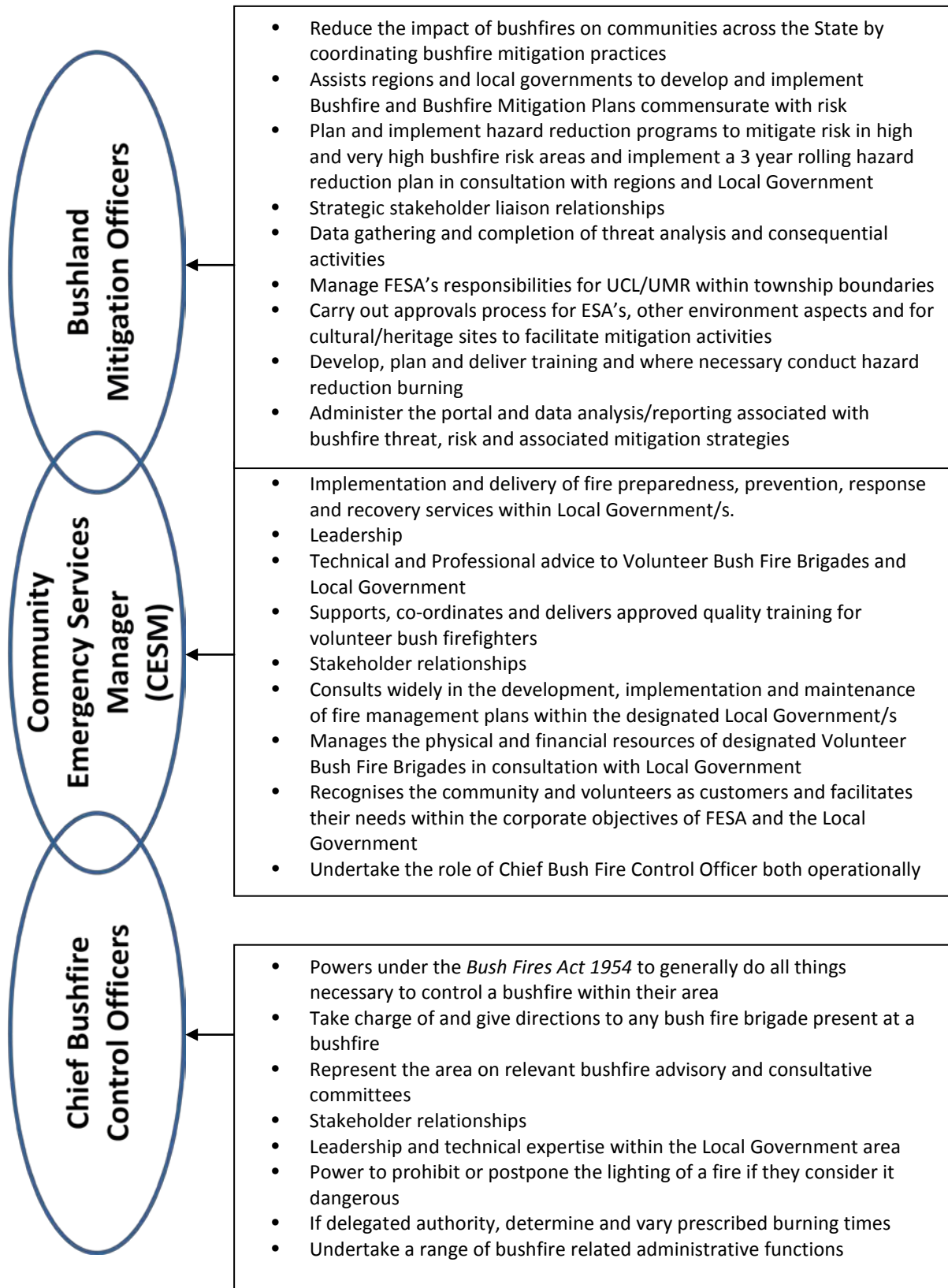
The reporting relationship for CESM is outlined below.

Figure 35 – Community Emergency Services Manager (CESM) reporting relationships



The introduction of CESMs into the bushfire management system has been positively received by all parties involved. FESA has been very careful to maintain ownership and responsibility at the local level and as such has ensured that there is no duplication within roles at the local level, with clear synergies between the respective positions operating at that level. This is outlined below and becomes even more important when you consider the proposed future state of resourcing associated with achieving FESA’s corporate objectives with respect to the bushfire management system operating within WA.

Figure 36 – Local inter-relationships to achieving a Bushfire Safe - WA



The above arrangements are administered by a dedicated *Bushfire and Local Government Relations Branch* within the FESA structure, which provides program oversight of the interrelated programs as well as technical expertise across these important activities. It also means local governments have a 'one-stop-shop' to support them in these program areas and the FESA regional structures also integrate in the same way. This consolidated approach to managing these arrangements provides efficient and effective governance.

These changes and proactive initiatives also indicate FESA recognised more needed to be done in these areas, have sought resources and implemented a solution which has started to reduce the risk of bushfire in partnership with Local Government and the community. This should be recognised and supported by the Review.

Attached as Appendix 9 of this submission, is a map which articulates FESA's bushfire mitigation strategic resource distribution, outlining the locations of Bushfire Mitigation Officers and Community Emergency Services Managers against the other FESA capabilities across Local Government areas and FESA Regions. As demonstrated by this map, the strategic distribution of this important capability under existing programs provides a significant basis upon which any future structural reform needs to occur.

FESA strongly submits that any structural reform options considered by the Inquiry must not only have regard for these successful programs but also build upon them for the future. Any diminishment or division of these will be a fundamental step backwards and should not be considered.

2.1.3 Structural Reform Options Analysis

FESA supports the positions outlined above by both Professors Leonard and 't Hart and does not propose an amalgamation of the services. FESA respects and appreciates DEC's role as public land managers and that this inherently involves the use of fire as a core element of land management. FESA also supports the role of Local Government and believes any issues associated with this can be adequately addressed through the proposed recommendation and consequential legislative amendments arising from the *Community Development and Justice Standing Committee*.

Further, FESA believes the Review in considering this issue must put significant weight on the complexities and unique ethos of volunteers and their ability to sustain greater change than what has already occurred since the establishment of FESA in 1999 and that which is currently before them.

However, FESA believes an incremental enhancement through structural change will facilitate greater integration between the agencies and a 'joined-up' approach to service delivery through all aspects of the established Emergency Management Continuum of Prevention, Preparedness, Response and Recovery (PPRR).






FESA submits this type of reform is only necessary for *bushfire*, as all other hazards within the State's emergency management arrangements only have a single *controlling agency*, whereas for bushfire, save for any s 13 declaration under the *Bush Fires Act 1954*, this is spread between Local Government, FESA and DEC purely on a land tenure basis.

To assist consideration of the most appropriate structural outcome, FESA has developed the following ‘design principles’ and evaluated each option against these principles:

Figure 37 – Structural Reform Design Principles

Design Principle
Integration of strategic direction with WA Emergency Management arrangements
1. Maintain integrity of FESA integrated <i>umbrella</i> organisational structure and philosophy
2. Single line of ministerial reporting maintained
3. Able to resonate the discrete cultures of all agencies (including staff and volunteers)
4. Able to sustain evolutionary transition of Bush Fire Brigades operations and administration from Local Government to FESA
Increased <i>Line of Sight</i> Accountability and Authority
5. Has authority to oblige compliance by agencies with reform program, standards and capability requirements
6. Has overarching operational <i>control</i> powers for major fires over existing agencies
Efficient and Effective Service Delivery to Community
7. Facilitates and promotes adaptable, scalable and seamless tenure/agency blind statewide service delivery.
8. A simplified Chain of Control and Coordination with streamlined reporting structures and accountability

Figure 38 – Structural Reform Design Principles Evaluation Criteria

Design Principle	Symbol
1. Full achievement	
2. Majority achievement	
3. Partial achievement	
4. Minimal achievement	
5. Does not achieve	

On the basis of the above, FESA submits the following structural reform options are available to the Review to consider and recommend to Government:

2.1.3.1 Option 1 – Appointment of FESA as the State Bushfire Authority

Building upon its comprehensive statewide capacity, capability, existing programs and strong links with Local Government in particular, in addition to its already established designation as the *controlling agency* for bushfire response, FESA submits its establishment as the single statewide bushfire management authority is both logical and sound public policy and will address the identified issues and overcome the current situation, ambiguity and lack of integration through the separation of responsibilities between agencies that currently exists within WA.

FESA further submits that the issue of *control* during emergencies cannot be separated from the broader whole-of-system authority (as opposed to responsibility to deliver) to determine standards, policy and systems relevant to prevention and preparedness planning and associated activities. As such, this option proposes to establish FESA as the single statewide bushfire management authority which provides ‘end-to-end’ ‘whole-of-system’ consistency and leadership for bushfire within WA. Separation of authority for any of the elements across the established Emergency Management Continuum (PPRR) operating within WA can have catastrophic effects on the effective and efficient management of emergencies and lead to segregation and inconsistency.

It should be very clear that FESA does not advocate that the existing prevention responsibilities, nor those responsibilities currently residing with DEC for public land management, transition to it under this proposal.

These proposals are a natural extension to recommendation 40 of the *Community Development and Justice Standing Committee*, and are consistent with the principles underpinning the array of recommendations made by the Committee and the practical application of how the bushfire management system operates on the ground today, including the revised ability for FESA to assume control of bushfires (s 13 of the *Bush Fires Act 1954*), responsibility of FESA to facilitate the *Interagency Bushfire Management Committee*, (under direction of the Minister for Police, Emergency Services and Road Safety in February 2010) its formal authority in *Westplan – Bushfire* (under s 20(1) of the *Emergency Management Act 2005*) and FESA’s extensive statewide capacity and capability.


If accepted, this proposal could also easily be integrated into the current work to implement recommendation 2 of the Committee in the establishment of a single Emergency Services Act (*Community Development and Justice Standing Committee – “Inquiry into Fire and Emergency Services Legislation”*: 2006).

This model is also more closely aligned with previous findings and recommendations from the WA Auditor General (2004), *Community Development and Justice Standing Committee* (2006), WA Coroner (2009) and the model adopted in NSW with the Rural Fire Service. It also contextualises the different starting positions between Victoria, the new model as recommended by the *Victorian Bushfires Royal Commission* and WA, and builds upon the existing successful programs.

This option is also the least disruptive and considered to be the most effective in a WA context.

Figure 39 - Evaluation against design principles

Design Principle	Evaluation
Integration of strategic direction with WA Emergency Management arrangements	
1. Maintain integrity of FESA integrated <i>umbrella</i> organisational structure and philosophy	
2. Single line of ministerial reporting maintained	
3. Able to resonate the discrete cultures of all agencies (including staff and volunteers)	
4. Able to sustain evolutionary transition of Bush Fire Brigades operations and administration from Local Government to FESA	
Increased <i>Line of Sight</i> Accountability and Authority	
5. Has authority to oblige compliance by agencies with reform program, standards and capability requirements	
6. Has overarching operational <i>control</i> powers for major fires over existing agencies	
Efficient and Effective Service Delivery to Community	
7. Facilitates and promotes adaptable, scalable and seamless tenure/agency blind statewide	

service delivery	
8. A simplified Chain of Control and Coordination with streamlined reporting structures and accountability	

Recommendation: Preferred Option

2.1.3.2 Option 2 - Implementation of an independent WA Fire Services Commissioner (the Victorian Model)

This option would involve the appointment of an independent Fire Services Commissioner to sit above the existing agencies with the authority to drive reform, integration, interoperability, standards development and have ultimate control for major fires.

The option would require legislative amendment and has the potential to detract from the fundamental principles associated with the establishment of FESA as an overarching umbrella organisation and the existing programs.

FESA submits some of the issues contained within the Victorian context and under the auspices of the Fire Services Commissioner have already been achieved with the establishment of FESA as a single integrated body and, as alluded to by the Commission (s 10.4.1), the establishment of this position was:

on three areas on which to focus organisational effort and change in the short and longer term:

- *promoting operational improvements and reform*
- *better management of level 3 fires*
- ***accommodating the potential for future change.***” [emphasis added]

Clearly, whilst the Commission did not recommend an amalgamation of the existing agencies into an umbrella organisational structure like FESA, this last point indicates their long term vision was along these lines once the initial work of the Commissioner achieved increased integration.







In the context of the existing WA structural arrangements, the institution of an additional layer of bureaucracy independent from the organisation (volunteers) runs a grave risk of establishing division from what has already been achieved in the FESA integrated structure.

In summary, FESA submits the WA arrangements have already achieved the immediate rationale for the institution of the Victorian model and therefore is coming from a completely different starting position. Moreover, the added complexities associated with the Local Government, DEC and FESA relationships and responsibilities also cast a completely different perspective on the operating environment.

The question that automatically arises from this option is also whether this position is strictly fire related or where there should in effect be a *Fire and Emergency Services Commissioner*, which is the logical next step for Victoria to take, but further encroaches on the complete FESA model and is more akin to Option 3 below.

This option is relatively disruptive and will require significant legislative and cultural change.

Figure 40 - Evaluation against design principles

Design Principle	Evaluation
Integration of strategic direction with WA Emergency Management arrangements	
1. Maintain integrity of FESA integrated <i>umbrella</i> organisational structure and philosophy	
2. Single line of Ministerial reporting maintained	
3. Able to resonate the discrete cultures of all agencies (including staff and volunteers)	
4. Able to sustain evolutionary transition of Bush Fire Brigades operations and administration from Local Government to FESA	
Increased <i>Line of Sight</i> Accountability and Authority	
5. Has authority to oblige compliance by agencies with reform program, standards and capability requirements	
6. Has overarching operational <i>control</i> powers for major fires over existing agencies	

Efficient and Effective Service Delivery to Community	
7. Facilitates and promotes adaptable, scalable and seamless tenure/agency blind statewide service delivery	<input checked="" type="radio"/>
8. A simplified Chain of Control and Coordination with streamlined reporting structures and accountability	<input type="radio"/>

Recommendation: Not preferred








2.1.3.3 Option 3 – Transition from FESA CEO to Fire and Emergency Services Commissioner


A hybrid model that may achieve both the above in a more integrated manner would be to transition the existing non-uniformed FESA CEO position to a uniformed Commissioner.

This position could assume increased powers similar to option 1 above, and still maintain integration and oversight of FESA and its established integrated organisational structure and existing programs. However, balancing the corporate duties of the CEO with those expectations of a position to drive major structural reform in bushfire could prove difficult.

Organisational continuity and internal politics, particularly across the different groups of volunteers, would also be an impediment to achieving this option.

Figure 41 - Evaluation against design principles

Design Principle	Evaluation
Integration of strategic direction with WA Emergency Management arrangements	
1. Maintain integrity of FESA integrated <i>umbrella</i> organisational structure and philosophy	
2. Single line of Ministerial reporting maintained	
3. Able to resonate the discrete cultures of all agencies (including staff and volunteers)	
4. Able to sustain evolutionary transition of Bush Fire Brigades operations and administration from Local Government to FESA	
Increased <i>Line of Sight</i> Accountability and Authority	
5. Has authority to oblige compliance by agencies with reform program, standards and capability requirements	
6. Has overarching operational <i>control</i> powers for major fires over existing agencies	
Efficient and Effective Service Delivery to Community	
7. Facilitates and promotes adaptable, scalable and seamless tenure/agency blind statewide	

service delivery	
8. A simplified Chain of Control and Coordination with streamlined reporting structures and accountability	
Recommendation:	Not preferred

2.1.3.4 Option 4 - Implementation of the position of WA Bushfire Commissioner into FESA Structure

This is a realistic option that maintains a balance between integration with the FESA structure and a clear focus on improving bushfire management for the State.

The option would involve the appointment of a WA Bushfire Commissioner reporting direct to the FESA CEO, but outside of the FESA organisational / operational command structure. The position would be solely focused on bushfire management and be responsible for the following activities, which are not dissimilar to those assigned to the Fire Services Commissioner within the Victorian model:

- Be responsible to the State Emergency Management Committee (SEMC) for *Westplan – Bushfire*;
- Chair a modified IBMC as a more holistic Bushfire Management Team, incorporating, and expanding, the current IBMC areas of focus and authority;
- Manage a modified *Bushfire and Local Government Relations Department*, as the core secretariat and technical expertise/support;
- Develop and oversee a bushfire reform plan across all agencies;
- Develop standards applicable to bushfire management, including determination of capability requirements from a whole-of-government perspective;
- State Controller for major bushfires according to current legislative criteria (s 13 powers);
- Declaration of Total Fire Bans;
- Be the senior public figure for bushfire management issues within the State;
- Be the key conduit to Local Government for Bush Fire Brigades administration and operation, including any transitional arrangements into FESA in accordance with the recommendations of the *Community Development and Justice Standing Committee*;
- Develop and maintain all joint standard operating procedures which span across all agencies and are land tenure blind;
- Oversee accreditation of incident management personnel in accordance with the standards set;
- Manage state aircraft relevant to bushfire;
- Represent WA on national committees associated with bushfire; and

- Oversee the development and implementation of mitigation plans, and other elements essential to supporting bushfire management, Local Government and Bush Fire Brigades within the State.

With the creation of this position within FESA, the supporting secretariat and infrastructure requirements can be easily facilitated along with the transition to the new arrangements.








The creation of this position within FESA does not necessitate significant change to the legislative arrangements, which already contain the ability of delegation from either the Minister or FESA CEO.


Whilst there is potential that the creation of this position may slow the integration of Bush Fire Brigades with the other fire and emergency services within the State, it is considered still manageable provided the position remains within the overall FESA structure.

If accepted, this proposal could also easily be integrated into the current work to implement recommendation 2 of the Committee in the establishment of a single emergency services legislation (*Community Development and Justice Standing Committee – “Inquiry into Fire and Emergency Services Legislation”*: 2006).

This model is also more closely aligned with previous findings and recommendations from the WA Auditor General (2004), *Community Development and Justice Standing Committee* (2006), WA Coroner (2009) and the model adopted in NSW with the Rural Fire Service. It also contextualises the different starting positions between Victoria, and the new model as recommended by the Royal Commission and WA, and builds upon the existing successful programs.

Figure 42 - Evaluation against design principles

Design Principle	Evaluation
Integration of strategic direction with WA Emergency Management arrangements	
1. Maintain integrity of FESA integrated <i>umbrella</i> organisational structure and philosophy	
2. Single line of Ministerial reporting maintained	
3. Able to resonate the discrete cultures of all agencies (including staff and volunteers)	
4. Able to sustain evolutionary transition of Bush Fire Brigades operations and administration from Local Government to FESA	
Increased <i>Line of Sight</i> Accountability and Authority	
5. Has authority to oblige compliance by agencies with reform program, standards and capability requirements	
6. Has overarching operational <i>control</i> powers for major fires over existing agencies	
Efficient and Effective Service Delivery to Community	
7. Facilitates and promotes adaptable, scalable and seamless	

tenure/agency blind statewide service delivery	
8. A simplified Chain of Control and Coordination with streamlined reporting structures and accountability	

Recommendation: Supported (second preference)

2.1.3.5 Option 5 – Status Quo

FESA does not believe the status quo will deliver long term sustainable change beyond that which has already been achieved through existing collaboration and relationships. Despite the best efforts of individuals and agencies involved, the time to take the next step and have an authoritative mandated approach to bushfire management within the State and this cannot be achieved through the status quo.

The retention of the status quo will also perpetuate the agency specific / land tenure based approach to bushfire management within the state.

On this basis FESA does not support and has not evaluated the status quo as a viable option.

Recommendation: Not Supported

Without doubt, as observed by the *Community Development and Justice Standing Committee*, no matter which option for structural reform is selected, there will be organisational sensitivities. However, to do nothing or only incrementally evolve the current arrangements is not an option and will not deliver the necessary changes in FESA’s opinion.

Whilst the drivers for this Review stem from the *Perth Hills Fires* specifically, a number of the inherent issues continue to present themselves and some form of structural reform is necessary to achieve long term and sustainable change for the future. This need is compounded in relation to the age demographic of key staff and volunteers (senior incident managers/leaders), the forecast attrition of key bushfire specialists from DEC (Ferguson 2009: p.6, 13) and the increasing finite level of resources available to be committed by Government and individual agencies. FESA submits these are all compelling reasons to institute structural change as a consequence of this Review.

2.1.4 FESA Proposals

The Review should:

- Note and acknowledge the work done by individuals, organisations and IBMC in continually improving the State's bushfire management arrangements;
- Support the ongoing integrity of the integrated "umbrella structure" of FESA and its underlying philosophy and ethos;
- Support FESA's position that structural change is necessary to maintain the momentum and catalyst for change to the State's bushfire management arrangements;
- Support FESA's position that there is an identified need for a single authoritative mandated approach to bushfire management within the State to achieve true interoperability/integration between agencies and long term and sustainable change for the future;
- Note that FESA has implemented a solution which has started to reduce the risk of bushfire in partnership with Local Government and the community;
- Recognise that any structural reform options considered by the Review must not only have regard for these successful programs but also build upon them for the future;
- Consider the models recommended by FESA and the evaluation of each; and
- Recommend to Government the FESA preferred options for structural change.

2.2 Single bushfire management, policy, planning, systems and mitigation activities

A clear consequence of not having an overarching authoritative structure for bushfire management is individual agency based policy, plans, systems and mitigation activities. Despite the best efforts of individuals within agencies and the agencies themselves, this issue continues to perpetuate across all spectrums of the business of bushfire management. Without even considering the economic consequences of such an approach, the practical realities of operating in isolation and from different bases results in an ever increasing differentiation between agencies for the same hazard type within the State. This is no longer acceptable.

Other States have come some way to standardising these issues via joint operating procedures, but even this incremental enhancement still does not result in uniformity and interoperability.

This issue was explored by the *Victorian Bushfires Royal Commission* and was a key driver for the proposed structural change adopted in that State. The same issue is the reason for FESA's submission for structural change.

The Commission viewed:

...improved operational performance as the absolute priority. In support of this, it considers modest and targeted structural reform is needed as a catalyst for change and to tackle the identified operational shortcomings in order to achieve four goals:

- *improved common operational policy and standards*
- *stronger coordination and unambiguous command and control*
- *improved interoperability*
- *a strengthened capacity for agencies to provide an integrated response.*⁶⁹

The Commission also focussed heavily on the lack of integrated systems and "identified a number of systems that effectively reinforced single-agency approaches. Among them are mapping, global positioning and fire prediction." (s 2.8.2)

This all contributes to an agency-by-agency approach to bushfire management, whether that be in the prevention, preparedness, response or recovery phases. Clear and live examples exist in WA and include:

- Separate mitigation planning, methodology and map base between FESA and DEC;
- Separate communications networks between FESA and DEC;
- No joint standard operating procedures;
- Separate incident management accreditation systems;
- Separate incident management training structures and courses;
- A reluctance to integrate fully into IMTs;
- Adopting more of a liaison role at all levels of incident management; and
- No joint resource management system.

⁶⁹Victorian Bushfires Royal Commission: s.10.5

FESA strongly recommends that regardless of structural change, these issues need to be urgently addressed in the interests of efficiency, effectiveness and safety. This includes the ability to mandate.

2.2.1 FESA Proposal

The Review should:

- Support the need for standardised single bushfire management, policy, planning, systems and mitigation activities for WA.

2.3 Clear lines of accountability (and removal of duplication) within bushfire planning, prevention, mitigation, preparedness and response activities

The existing State arrangements for bushfire management are quite specific to land tenure. However, fire or bushfire risk does not align to land tenure boundaries and it is almost inevitable that the treatment of risk and management of major fires will cross several land tenure types. On these occasions the issues about overall accountability for the different aspects of bushfire management *from a whole-of-system (PPRR) perspective* become somewhat confusing with consequential opportunity for blame shifting and inconsistent approaches. These issues were highlighted and examined in depth within the *Victorian Bushfires Royal Commission* with the Commission being quite scathing about the lack of clarity around accountability and line of control for different aspects of bushfire management.

In the July 2009 *Toodyay Major Incident Review*, it was noted that:

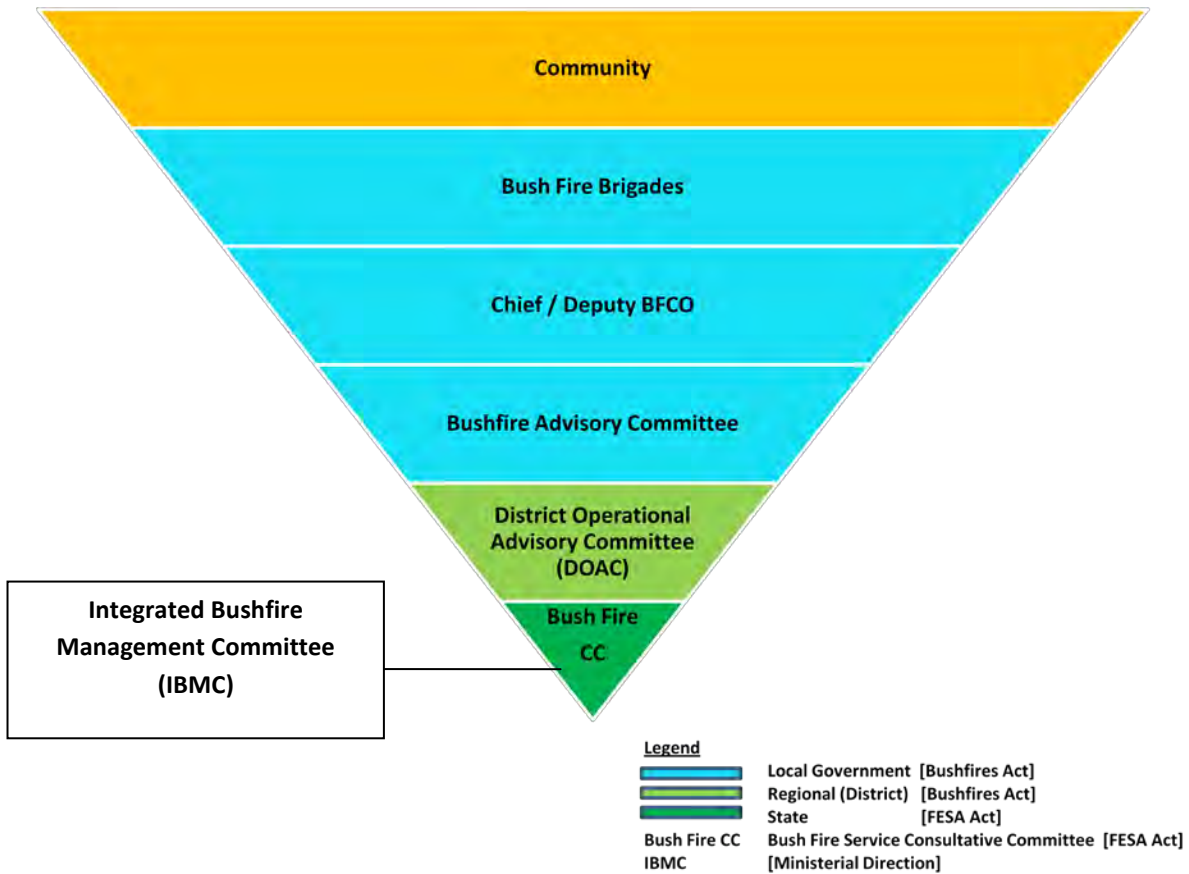
Different layers of command amongst FESA and Local Government creates a potential source of friction and in the case of the Toodyay fires, strong personal relationships between personnel in different agencies and Local Government ensured this was not the case. Effective public administration and emergency management is based on arrangements that are simple, coherent, as 'flat' as possible, consistent and comprehensive, so that they can be easily implemented in times of stress or uncertainty. The Review does not believe that Western Australia's arrangements best align with these principles. Inconsistent local emergency management arrangements (highlighted as a key driver for recent legislative amendments) and varying levels of competency across shires (consistently raised by stakeholders) creates a potential risk to future operations. The legislative change has provided FESA with the power to take control of an incident, however, the Review Team believes this does not provide Western Australia with optimum emergency management arrangements. Additionally, the current arrangements are not consistent with public administration principles such as having a single agency responsible for a single function.

This is one of many similar observations regarding the arrangements within WA and one that leads to a clear lack of accountability because of the 'blurring of the lines' due to the number and type of actors and arrangements, which at times depend on the size, location and other arrangements of the incident itself. This is not an effective way to manage bushfires within the State and requires step change to improve accountability within the structure.

FESA submits that a clear accountability model needs to be established for each element of the overall system, which can withstand scrutiny and not be the subject of confusion and disputation during preparation for or in times of emergency. This approach is totally consistent with other proposals contained throughout this submission.

The consultative structure relating to bushfire is relatively well articulated within legislation, as per figure 44 below.

Figure 43 – Bushfire Consultative Structure



A non-legislated addition to the above structure is the IBMC, established under Ministerial Direction and outlined elsewhere in this submission. This does not appear in the above diagram.

A properly constructed integrated organisational and planning regime will alleviate any duplication or ambiguity within the system.

2.3.1 FESA Proposal

- The Review should:
- Recommend that a clear accountability model be established for each element of the overall bushfire management system, which can withstand scrutiny and not be the subject of confusion and disputation during preparation for or in times of emergency.

2.4 Management of Unallocated Crown Land (UCL) and Unmanaged Reserves (UMR)

In WA, the existence of extensive areas of Unallocated Crown Land (UCL) and Unmanaged Reserves (UMR) creates a unique complexity that extends beyond what is normally applicable and/or is even considered when assessing fire management arrangements, division of responsibility and an appropriate service delivery model.

The overall responsibility for the management of UCL and UMR rests with the Department of Regional Development and Lands (RDL).

Fire management on UCL and UMR for the metropolitan area and each of the 523 regional centres and town sites, consists of around 32,000 parcels of land (approximately 0.89 million hectares) for which FESA delivers fire management services to RDL in accordance with a Memorandum of Understanding (MoU) between it and FESA.

DEC has a similar agreement with RDL for the management of UCL and UMR outside the Perth metropolitan area, regional centres and town sites. This equates to approximately 88.26 million hectares.

Resourcing is provided to the agencies from RDL as part of these MoUs.

The following table outlines the division of responsibility for UCL and UMR across WA:

Table 11 – Fire Management responsibility for UCL and UMR

Agency		UCL/UMR
FESA	Area (million ha)	0.89
	% State	0.35%
DEC	Area (million ha)	88.26
	% State	9%

Whilst the current arrangements have served the historical needs of the State relatively well, they have also resulted in a general lack of understanding within local governments, State Government departments and private land holders about who is responsible for managing which UCL/UMR and which organisation is responsible for bushfire mitigation and response on those reserves.

This is less than effective and needs to be rectified through a more *joined-up* approach to bushfire management arrangements espoused through this submission. In particular the proposed utilisation of a single integrated bushfire risk management system and greater engagement with the community through integrated planning will go some way to addressing the existing lack of knowledge about responsibility.

The operating environment has also changed significantly, which includes the following:

- Legislative change providing FESA with the overall power to assume control of a bushfire;
- Introduction of FESA programs to significantly enhance its bushfire management expertise and capability;
- *Victorian Bushfires Royal Commission* outcomes which focus heavily on mitigation, planning, bushfire safety policy, prescribed burning, accountability and single line of sight control arrangements;
- The need to prioritise mitigation activities to focus on primacy of life; and
- Community expectations and the need to develop community level plans across the PPRR continuum regardless of land tenure.

As outlined above, the functions are currently managed between two agencies – FESA and DEC – which can contribute to causing confusion amongst most stakeholders. Due to the lack of a single management body, deficiencies arise in resourcing, funding, audit ability and strategic community protection from the threat of bushfires across the state. This is another example that supports FESA proposals outlined in this submission for greater alignment of accountability under a single bushfire management authority.

FESA believes it is now well positioned with a new branch and additional capability to potentially support greater UCL and UMR fire management obligations should RDL and/or DEC request further assistance. It may be that the current division of responsibility between FESA and DEC can be reviewed on this basis and alleviate some burden from DEC to allow them to concentrate their efforts on other priorities (either public land or UCL/UMR) now that FESA has greater capacity to support these functions. FESA proposes this occur in a collaborative manner between the relevant partners (RDL, DEC and FESA).

In considering any changes to the current division of responsibility and/or priorities, FESA believes the *primacy of life* and property and the potential consequence management of such activities should be a primary consideration.

The flow-on considerations regarding the management of UCL and UMR should include:

- Clear accountability and line of sight clarity about who is responsible and who manages these requirements;
- Seamless transition between responsibilities for different land tenure (UCL, UMR, Local Government, DEC and FESA);
- Potential to release DEC resources to concentrate on higher priority public land management responsibilities, which include the achievement of prescribed burning targets with finite resources;
- Providing skills maintenance training and experience opportunities for Bush Fire Brigades and FESA personnel (staff and volunteer) to maintain a level of competency through involvement in UCL and UMR fire management activities;
- Enhancing local knowledge and input into UCL and UMR fire risk and management activities that is then seamlessly integrated into operational management activities in the event of a fire;
- Single database and knowledge transfer for UCL and UMR activities;

- Allowing FESA to evolve its integrated *Bushfire Safe – WA* program across land tenures;
- Providing a consistent and professional approach to the use of prescribed fire and bushfire mitigation strategies to protect environmental and cultural heritage within UCL and UMR assets from the effects of wildfire and establishing a single point of contact and relationship between the respective departments responsible for environmental and cultural heritage management;
- A seamless audit trail for investment and outcomes analysis.

FESA's additional capability includes specialist resources and personnel, and a unique, purpose built, integrated database and mapping system with the capacity to store State-wide bushfire mitigation and planning strategies. Currently the Integrated Bushfire Risk Management System being rolled out across the state includes FESA personnel, Volunteer Bushfire Brigades and local governments.

FESA Proposals

The Review should:

- Note the current arrangements for fire management on UCL and UMR and its inherent issues;
- Note FESA's significantly increased capability to support/undertake fire management on UCL and UMR; and
- Note FESA's willingness to review the current division of responsibility and provide additional support to the management of UCL/UMR in a collaborative manner between the relevant partners (RDL, DEC and FESA).

3. THEME 2 – STRATEGIC CAPABILITY BUILDING

3.1 Statewide capability model

Consistent with the separation of the State arrangements, spanning different agencies and not being bound by a single integrated statewide policy, plans, systems or standards, overall statewide bushfire *capability* is presently all done at an agency level with little/no reference to another agencies actual or planned capability or capacity. This leads to duplication, inefficiency and certainly does not result in the level of *interoperability* that one should expect from agencies within the same State for the same hazard type.

FESA firmly believe the planning for and building of capability for bushfire (and for that matter any other hazard) should be done at an integrated statewide level, under the auspices of the responsible response *controlling agency* for the particular hazard type, in the case of bushfire this being FESA (SEMC September 2010).

For the purposes of this section, the following definitions apply:

Capability

The power to achieve a desired community safety effect in a nominated environment within a specified time and to sustain that effect for a desired period.

Capability Analysis

The process of identifying current or prospective capability gaps which may occur through a change in strategic circumstances or a specific capability approaching the end of its effective life.

Capability Baseline

The material system requirements defined as being necessary to meet a state-wide or specific hazard type/s.

Capability Gap

An outcome of extensive analysis which identify current and prospective capability needs that cannot be met within the current capability structures of agencies within the State.

Capability Inputs

The 'Fundamental Inputs to Capability' (FIC) which are the standardised elements required to deliver 'Capability'.

Concept of Operations

A concept for operations is a document that establishes methodology, procedures and priorities to accomplish community safety tasks outlined in strategic statewide policies and plans and provides conceptual guidance to develop an operational basis for action.

Future Capability

New or Enhanced capability.

Interoperability

The ability of systems, units or agencies to provide services to, and accept services from, other systems, units or agencies and to use the services so exchanged to enable them to operate effectively together.

FESA submits lessons can be learnt from the Australian Defence Force (ADF) about building a consistent interoperable capability model. The ADF, like the networked approach to managing bushfire across WA with a number of agencies (e.g. Local Government, FESA and DEC), operate as discrete agencies (e.g. Army, Navy and Airforce) but within a common overarching capability platform and environment. FESA submits it is this approach that needs to occur at managing capability within all aspects of emergency management in WA.

No clearer example needs to be provided for the need for this than the completely separate arrangements and procurement of equipment, ICT systems, vehicles etc. that currently occurs within WA.

This leads to the unacceptable situation that:

- FESA does not know the current capability of DEC and probably vice versa;
- Nor did FESA know the actual deployed DEC resources at the *Perth Hills Fires*; and
- More importantly because of the overall resource strain associated with this and the *Red Hill fires* occurring concurrently, FESA did not know the contingent capacity of DEC available for deployment.

This situation should not occur and whilst the agencies are not acting maliciously, a greater partnership and unified approach to capability *needs analysis* and *structured acquisition* against an established State Capability Plan needs to occur.

FESA accepts that it may also need to change its current and proposed capability plans, which may extend to vehicle typology commensurate with risk, but without taking a global state-wide picture of this it is impossible to determine the current / required *capability baseline* or the *capability gap* necessary for the effective management of bushfire across WA. Moreover, duplication in acquisition and investment from a State perspective will continue if the current practice and independent agency arrangements remain.

The IBMC is a positive step in this regard but still relies heavily on collaborative arrangements and relationships. The Committee has no power to mandate capability requirements that must be followed by the respective agencies. It is on this basis FESA submits that unfortunately without mandating the authority for it to determine a capability model that obliges combat agencies to comply with, after appropriate consultation, and recognising the resource constraints that exist within each agency, the objective of establishing an integrated *statewide capability model* and achieving seamless *interoperability* will not be achieved.

This proposed approach is consistent with the findings of the *Victorian Bushfires Royal Commission* and the outcomes of the major incident review into the July 2009 *Toodyay fire* where it was recommended that:

A whole of capability approach need to be taken when assessing FESA and DEC interoperability. This means developing interoperability through command and control arrangements, joint-doctrine, equipment procedures and training (both individual and collective). Joint command and control arrangements are already documented in WESTPLAN – BUSHFIRE, and joint procedures, training and exercising exists, however, there is not document that provides a philosophical understanding of the way in which the agencies operate (individually and jointly). Doctrine seeks to provide a common and articulated understanding of the bigger picture through documenting roles and responsibilities, resources and capabilities. Joint doctrine between FESA and DEC would provide both agencies a common and articulated way of thinking and operating in joint-operation scenarios. Importantly, doctrine publications are authoritative, but not prescriptive in how operations are to be conducted. Such a document would provide the basis for the development of interoperability in the other capability elements.

*Recommendation 2: FESA and DEC take a whole of capability approach to joint operations, including developing joint doctrine that provides a common and articulated understanding of roles and responsibilities, resources and capabilities.*⁷⁰

This position is also validated by the *Community Development and Justice Standing Committee* findings contained in their report to the Legislative Assembly on 19 October 2006, which concluded:

After comprehensive, wide-spread and inclusive investigation, it was clear to the Community Development and Justice Standing Committee that stakeholder opinion in relation to fire control will never align. The Committee identified that control arrangements of multi-agency incidents would be contentious. However, in making these recommendations, the Committee stated that:

*“Several significant State and Commonwealth Government reports including two coronials have highlighted community safety issues inherent in the authority for control being dispersed across a number of agencies in multi-agency incidents. The Committee acknowledged that in many instances a high degree of cooperation has been engendered at the local level to address this issue. However, it views that to ensure consistency in approach, **such arrangements need to be legislatively mandated** [emphasis added]. The Committee has therefore recommended that one agency, the Fire and Emergency Services Authority of Western Australia, be empowered to assume control in these circumstances.”*⁷¹

⁷⁰ Toodyay Review, pages 11-12

⁷¹ Emergency Services legislation review

A similar observation was also made in the recent *Review of the Ability of the Department of Environment and Conservation to Manage Major Fires* whereby the following comments were prominent in the report:

*The review evidenced many examples of outstanding cooperation and collaboration between DEC, FESA, Local Government and Bush Fire brigades. **There was some evidence provided that at senior levels there still exists potential to strengthen the relationship between DEC and FESA** [emphasis added].*⁷²

Whilst fully appreciative of the origins of this review, FESA remains concerned that the majority of the report continues to perpetuate the current norm of *DEC specific* capability building in somewhat total isolation to FESA and/or the overall State requirements. Moreover, if the recommendations are forming the basis of a DEC strategic plan and approach to bushfire management, this is totally at odds with the proposed integrated approach submitted by FESA as being necessary and efficient for the State.

Following the *Victorian Bushfires Royal Commission*, reform is to be facilitated through a *fire services reform action plan* for the purpose of:

- Enhancing the operational capacity and capability of fire services agencies; and
- Improving the capacity of fire services agencies to operate together in planning and preparing for the response to, and in responding to, major fires.⁷³

The Victorian Fire Services Commissioner legislation also goes onto establishing the requirement for the *fire services reform action plan* to include a program (*work program*) for each fire services agency. Each agency is obligated to implement the work program for the purpose of giving effect to the fire services reform action plan (s 13) which is underpinned by a consultative process in establishing the action plan and associated work programs (s 15). The intent of the legislation is for the action plan to be a rolling and dynamic document that has regard for the resources each of the fire services agencies have available to allocate to implement the work program that applies to them (s 18).

Whilst the general intent of FESA's submission in this regard is aligned to the findings of the Royal Commission and consequential processes implemented in Victoria, FESA, as outlined in another section of this submission, does not believe the institution of an additional layer or position is necessary or efficient to achieve this objective and would only add another unnecessary layer of bureaucracy.

FESA strongly believes that utilisation and firming up of the existing emergency management framework and associated *controlling agency* responsibilities across the all hazards operating environment is the most appropriate and efficient manner to achieve this, whilst still having the authority to mandate compliance by agencies within their existing resource constraints and after consultation in establishing the state-wide capability model and requirements. Clearly, in the case of bushfire this controlling agency authority sits with FESA, hence why it believes it should undertake the role of the *bushfire management authority* (refer to proposals for structural reform).

⁷² Ferguson 2010: p.21

⁷³ *Fire Services Commissioner Act 2010*: s 12

Implementation of this approach will deliver robust and sustainable systems of operation that extend beyond the reliance on agency and individual relationships and collaboration. It will also drive integration, which is supported by the recent *Review of the Ability of the Department of Environment and Conservation to Manage Major Fires* whereby the following comments were prominent in the report:

When establishing or reviewing systems of work such as training, databases, information systems and incident management facilities, the first question that must be asked (by both DEC and FESA) must be: “Can we do this better together?” [emphasis added].⁷⁴

Put simply, this observation by Ferguson is actually the exact same principle that FESA is submitting (i.e. the need for a single integrated capability model for bushfire management across WA).

The bushfire environment is complex by nature but becomes more complex when you consider the inter-relationship between Local and State jurisdiction as well as a range of inter-departmental responsibilities.

Consequently, bushfire management has been the subject of ongoing discussions within FESA, prompted in part by its commitment to continuous improvement and adopting a ‘lessons learnt’ approach not only from its own events but also those from interstate. Arising from these have been a number of improvements, including the IBMC, in an attempt to bring the agencies closer together and legislative change. However, ultimately the responsibility for management of bushfire in *peri-urban* high risk areas rests with either Local Government or FESA, and it is these areas that form the greatest risk to the State in life and property loss.

FESA recognise the development of a *FESA Bushfire Management Capability Model* cannot be considered in isolation to the ‘whole of government’ approach and inclusive of all other agencies capability with State capability needing to be commensurate with risk.

This proposed capability model is made cognisant of the above comments recognising that this approach needs to be considered as a ‘work in progress’ from an agency and ‘whole of government’ perspective, and at this stage the IBMC is the most appropriate forum for this to be discussed.

Whilst this Review and related submissions are focused on *bushfire*, as outlined above, FESA submits this model is totally adaptable to the all hazards environment. Ideally, FESA submits there would be a range of hazard specific capability plans, based on this model, which would then allow cross referencing and consistency within the State. FESA also recognises that one piece of capability derived from these separate plans may also have a dual role within another hazard type and therefore it is important to recognise this and factor it into the overall all-hazards capability plans for the State.

3.1.1 Objective of State Bushfire Capability Model

The objective of the development of a *State Bushfire Capability Model* is to establish, plan and maintain an appropriate level of capability to manage bushfire in accordance with all agencies statutory obligations, commensurate with the bushfire risk that exists in WA.

⁷⁴ Ferguson 2010: p.22

This will be achieved in a structured and incremental manner recognising the current resource / budget constraints and priorities whilst also exploiting all available opportunities to maximise partnerships with other agencies and industry, thus minimising the financial burden and investment needs of agencies and Government.

This concept will also allow the necessary spread of service demand across the State commensurate with the state risk assessment and strategic location plans to support service delivery from both a FESA and multi-agency perspective.

The development of a *State Bushfire Capability Model* will attempt to integrate bushfire emergency management requirements across FESA and other agencies thus providing concise and logical parameters upon which the following can occur:

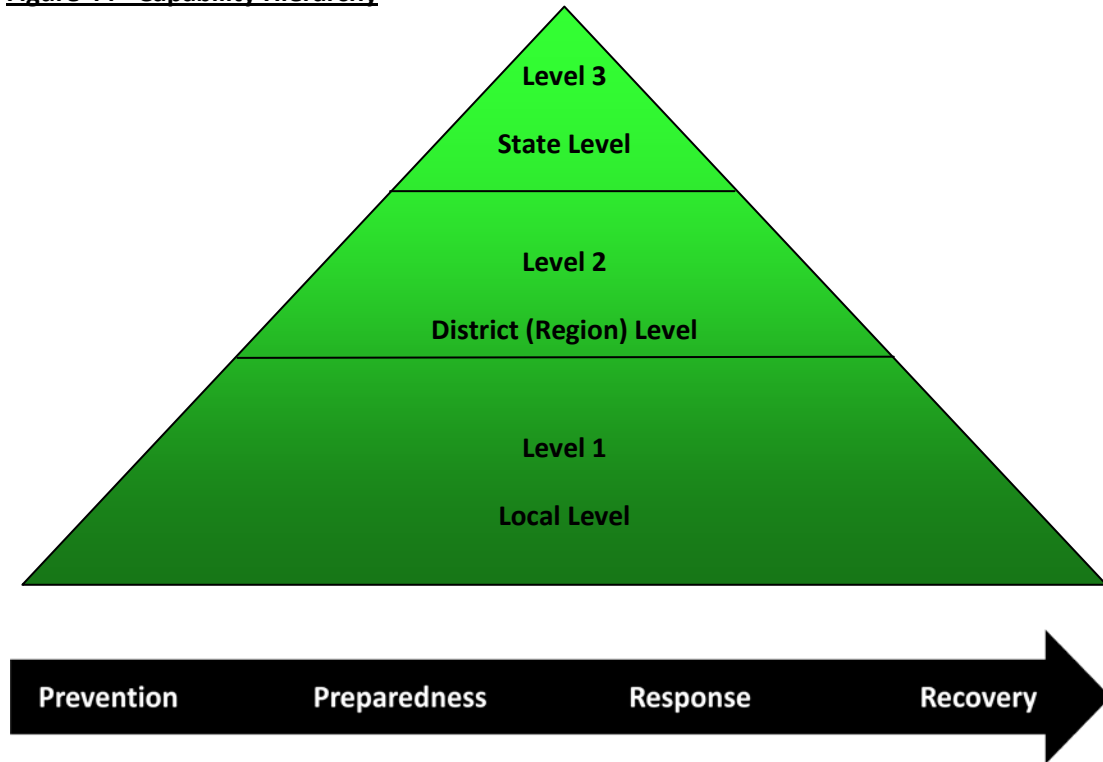
- Single integrated budget and business case / business planning submissions can be made (either internally or through the Government budgetary processes);
- Systematic operational planning at State, Regional and Local level can be undertaken in accordance with the model;
- Multi-Agency planning and co-operative arrangements can be undertaken from a 'whole of government' perspective;
- Internal liaison and planning priorities can be provided within agencies;
- Legislative changes and other external influences can occur, in line with the strategic direction.

In doing so, it will endeavour to build off FESA's strengths as a leader in emergency and bushfire management.

3.1.2 Capability Hierarchy

Consistent with FESA's all-hazards service delivery model and *controlling* agency responsibilities, the following capability hierarchy will govern the manner in which FESA plans and prepares for its broad bushfire management activities, across the PPRR continuum. This approach is aimed at balancing service demand with capacity and provides a framework from which skills, equipment and operational planning can occur. The following figure outlines the proposed capability hierarchy, which will also be applicable to FESA continuing to adopt a partnership approach with Local Government and DEC.

Figure 44 - Capability Hierarchy



2.1.3 Centres of Excellence

Underpinning the achievement of the above and in recognition of the specialist skills (and ongoing maintenance) involved in providing the upper echelon sections of the bushfire capability hierarchy, it is proposed to continue to establish ‘centres of excellence’ across FESA for specific bushfire management needs. These ‘centres of excellence’ will be strategically located in areas of highest risk and allow concentrated effort and achievement of the required skills and maintenance requirements without overloading the multitude of service demands, which currently exist in some brigades and/or individuals.

2.1.4 Capability Outputs

Building off and adapting the Defence model, FESA proposes the following framework of *capability outputs* provides an appropriate vehicle for resource and preparedness management. FESA, as one of WA’s emergency management agencies and in accordance with its statutory responsibilities outlined elsewhere in this submission, are expected to act as the *controlling agency* that either provides, or directly contributes to WA’s overall emergency management capability.

In doing so, FESA submits that a number of measures of effectiveness should be used by the Review (and Government) to determine its suitability to meet its current and proposed bushfire management requirements. These measures include:

- Relevance** FESA continues to provide firefighting and emergency services that contribute to WA’s emergency management arrangements commensurate with risk.
- Credibility** FESA provides the capability to conduct its statutory responsibilities and tasks allocated to it by Government in an efficient and effective manner.

Scalability	FESA can expand and contract in a controlled fashion to meet changing emergency management requirements.
Sustainability	With support from other sources, FESA can maintain specified levels of commitment for the required period of time, particularly focusing at long duration and multiple incidents occurring concurrently from an all-hazards perspective.
Flexibility	FESA possesses a balanced range of capabilities that provide options to satisfy critical strategic objectives. These capabilities are not based on a single means or technology, and they must be responsive to changes in the strategic environment.
Efficiency	The above measures are met using the minimum resources necessary.

The development of effective outputs provides FESA with firefighting and emergency service capabilities that are relevant, effective and capable.

2.1.5 Capability Elements and Preparedness

Recognising the resources available to FESA (and other agencies) will always be limited, whether the task is preparing for operations or fulfilling operational commitments, FESA's operational management framework provides a mechanism to balance competing demands of generating capability for near-term tasks from a *capability baseline*⁷⁵ (preparedness) and developing *future capability* (modernisation). Balance is required between both because decisions to invest in one area will generally result in fewer resources for the other.

Current capability is managed principally by allocating resources to Brigades, whether they are Bush Fire Brigades (under the control of Local Government) or FESA Brigades/Units. FESA suggests that these resources should be described in terms of the following *Fundamental Inputs to Capability* (FIC): organisation, personnel, collective training, major systems, supplies, facilities, support, and command and management.

Currently decisions concerning this allocation are based on preparedness requirements identified by either the Local Government (CBFCO) or FESA Chief Operations Officer in accordance with their respective statutory responsibilities⁷⁶.

⁷⁵ *Capability Baseline* refers to the core capabilities and skills (both individual and collective) required by FESA to perform operational tasks.

⁷⁶ In accordance with Bush Fires Act and FESA Act

2.1.6 Elements of Capability – Fundamentals Inputs to Capability (FIC)

FESA propose capability should be generated by the interaction of the eight FIC elements as outlined in Figure 46 below. Each element is also described below to provide clarity to the manner in which the capability assessment has been conducted and presented in a subsequent section in accord with the underpinning principle espoused by FESA throughout this submission, the following transition from agency specific to state terminology.

Figure 45 - Fundamental Inputs to establishing *Bushfire Safe – WA Capability*



The following describes each FIC:

Organisation

The State needs to ensure that it has the optimum number of personnel positions, the appropriate balance of competency and skill-sets, and the correct structure to accomplish its tasks and to ensure adequate command and control arrangements exist. This is essentially an activity that provides the underpinning structure of agencies. At the Region and Brigade/Unit level, consideration must be given to developing flexible functional groupings that can meet contingency personnel rotation requirements and continual improvement requirements. This includes consideration of available capability from all partner agencies (FESA, Local Government and DEC).

Personnel

Assuming an appropriate establishment is authorised, the positions must be filled with individuals who satisfy appropriate individual readiness requirements. These requirements should include medical and fitness standards, and appropriate individual training for the identified task. Each individual must have the competencies to perform the functions of his or her position (either specialist or base level firefighting skills) and the motivation to apply those competencies to achieve the required performance standards of the organisation. The personnel element includes the retention and development of people to meet the ongoing needs of the State. This category includes both career and volunteer personnel consideration of available capability from partner agencies (e.g. FESA, Local Government and DEC).

Collective Training and Exercising

Collective training applies laterally across combined, joint, and single Agency elements and vertically down to brigade/unit level. To enhance performance, organisational elements must undertake a comprehensive and ongoing collective training and exercising regime validated against the detailed preparedness requirements derived from agency and/or State Emergency Management Arrangements (legislation and/or policy) guidance. The importance of joint exercising, so that personnel from all agencies who will be expected to work together in times of emergency, train and practice through exercising together, is a vital element to this Fundamental Input to capability.

Major Systems

Major systems include firefighting appliances, specialist appliances and/or equipment, information systems and aircraft.

Supplies

Supplies include such items as protective equipment and clothing, auxiliary and minor equipment, portable pumps, standard vehicles, identification systems, stationery and consumables.

Facilities

Facilities include buildings, structures, property, plant and equipment, and areas for training and other purposes (for example, exercise areas and training grounds), utilities and civil engineering works necessary to support capabilities, both at the home and at a deployed location. Facilities may be owned directly by an agency, may be leased or procured through some other arrangement (e.g. partnership arrangements).

Support

Support encompasses the wider agency and/or State support base and includes learning and development support, material and maintenance services, communications and information technology support, intelligence, Human Resources support (e.g. recruiting and retention), research and development activities, administrative support and transportation support. Agencies that could provide this support include:

- Directorates within agencies;
- Support agencies;
- Private industry or contractors;
- Other Government agencies and departments.

Command and Management

Command and management underpins the State's operating and management environments through enhanced command and control decision-making processes and management reporting avenues. Command and management processes at all levels are required to plan, apply, measure, monitor, and evaluate the functions an agency performs, with due cognisance of risk and subsequent risk management. Command and management includes written guidance such as regulations, instructions, publications, directions, requirements, doctrine, tactical-level procedures, and preparedness documents. Consideration must be given to the adequacy of extant written guidance. Command and Management also includes funding not readily attributed to any other FIC element (e.g. discretionary funding).

The FIC elements provide the inputs to agency's capability. They create a template against which agency's physical requirement for operations can be checked and assessed. FESA submits a single State capability model should be derived from the above and applied consistently across each hazard type commencing with bushfire.

2.1.7 FESA Proposals

The Review should:

- Support FESA's position that planning for and building of *State-wide Capability* for bushfire (and for that matter any other hazard type) should be done at an integrated statewide level, under the auspices of the responsible *controlling agency* for a particular hazard, in the case of bushfire this being FESA;
- Support FESA's proposed capability model as the basis of *State-wide Capability* planning; and
- Strongly recommend to Government that they require DEC to integrate capability requirements, including the outcomes of the recent *Review of the Ability of the Department of Environment and Conservation to Manage Major Fires* into a global state-wide approach, using the IBMC as the current appropriate avenue to progress these deliberations.

3.2 Whole-of-Government resource coordination system

Each year WA's emergency management agencies provide direct or supporting services to manage a wide range of hazards and community disruptions, both within WA and interstate/internationally, while continuing to deliver an acceptable standard of 'normal business' to their respective communities.

In recent times we have seen the need for the ability to systematically plan for crisis at all levels of Government in a cohesive manner using a sector-wide approach extending to all aspects of the Public Service.

Today, no agency should be expected to have the full range of capability to manage major and extended incidents in isolation to the overall capability which may exist from a 'whole-of-government' perspective. A recent and real example of this was during the *Perth Hills Fires* where FESA recognised the need for additional GIS mapping expertise and capacity. Through a collaborative arrangement between FESA and Landgate an additional pool of volunteers from Landgate indicated a willingness to assist and from this rosters were developed. Whilst the Landgate volunteers were not required at the end of the day, it is a very good example of taking a whole-of-government approach to future resourcing models to support major emergencies. A similar approach is taken with media support and other elements of the FESA structure.

This approach has a number of benefits, such as:

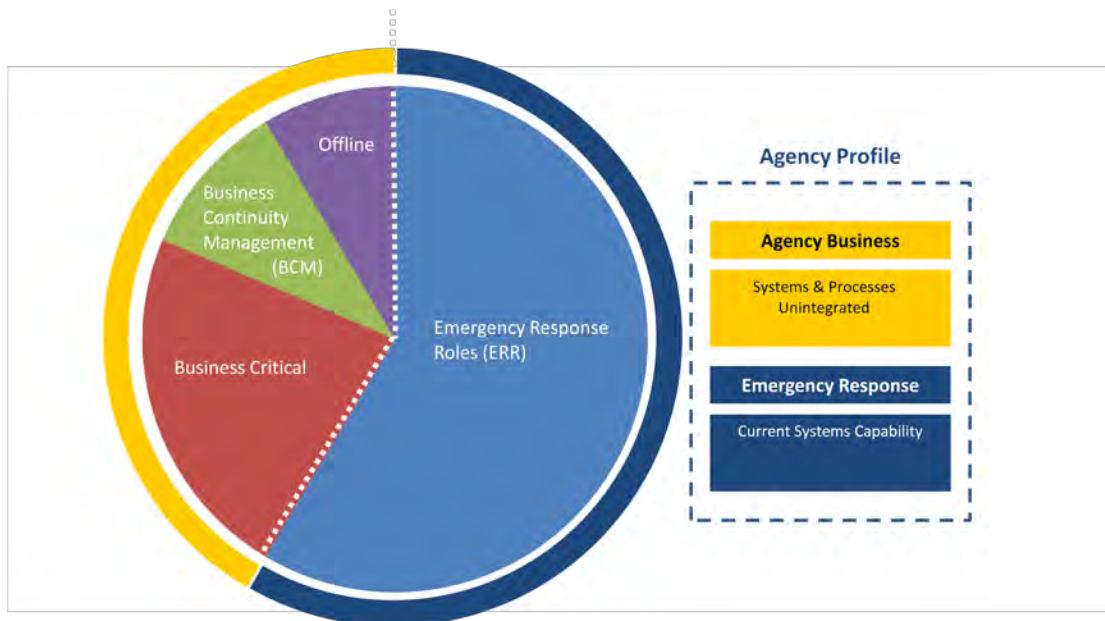
- Removing narrow single agency approach to capability modelling;
- Effective and efficient utilisation of government resources;
- A sense of purpose and community spirit for those involved from agencies and individuals not normally involved in emergency management;
- Increasing the capacity of emergency management agencies by adopting a whole-of-government networked approach to capability;
- Providing diversity and opportunity for individuals involved.

The proposed coordination model is aimed to bridge the gap between the traditional silos of managing the emergency and maintaining a sustainable level of business operations for continuity throughout the emergency event. It provides a simple structure to allow an individual, no matter where they are employed (local or state government) to engage and contribute to emergency management within the State or potentially forming part of the State's interstate/international deployment team during times of crisis.

Taking an integrated and structured approach rather than agency-by-agency or event-by-event approach to this enables a methodology to be established which creates accountability for the total workforce at any one time, present or future.

No matter what the size of the incident or emergency, there will always be segments of the workforce that will fit into one of the categories across all agencies.

Figure 46 – Agency Profile



3.2.1 The importance of a new approach

With a new generation now moving through the workforce and an expectation that most people will continue to move around jobs every few years; experience and knowledge within a single agency or part of Government will not remain static.

The emergency management sector traditionally invests significant resources and time to developing and training individuals. There is a significant 'lag time' in a number of roles associated with gaining the requisite training and experience to be able to perform a number of roles (particularly senior roles) as part of the State's emergency management arrangements.

The potential break in the chain is once these people step outside of the direct fire and emergency management sector (or an agency), as there is no re-entry point for these people (should they wish) to continue providing their skills and experience. They are effectively 'lost' to the State's emergency management capability, and the investment in time and money in training and equipping them for their role is also lost (sunk cost).

A whole-of-government approach allows for everyone to either continue or develop their emergency management contribution to the State, therefore immediately increasing and/or maintaining the return on investment.

Some further important aspects of this proposed structured approach are:

- The establishment of a whole-of-government portal administered by FESA providing easy user access, single point entry of data and establishes a sustainable systems approach to this issue rather than relying on ad-hoc and collaborative relationships to achieve this aim;

- The portal provides an opportunity for a user to nominate and amend availability (including normal work requirements, personal commitments, leave etc.) thereby ensuring the data is current and meets an individual's known availability at any given time;
- The portal has in-built approval processes which require sign-off and authority through the individual's own agency / line management, thus ensuring business continuity is maintained in the home agency;
- A single statewide capability model can be facilitated (which is also in line with the State capability model proposal contained in this submission), thereby informing the nature and gaps of State capability versus individual agency capability and also informing training and investment needs across Government to meet the defined capability requirements;
- 'Realtime' rosters and importantly situational awareness and other general information dissemination can occur across all users of the portal;
- Accurate reporting, including any allowance/other entitlements, can be administered through the portal;
- 'Realtime' resource tracking can be undertaken by the responsible controlling agency but also the home agency of the individual/s;
- Interface with other planning and information systems can be easily facilitated.

The following diagrams outline the pertinent elements of this process:

Figure 47 - Model A:

The traditional approach to agency by agency based workforce planning within the sector:

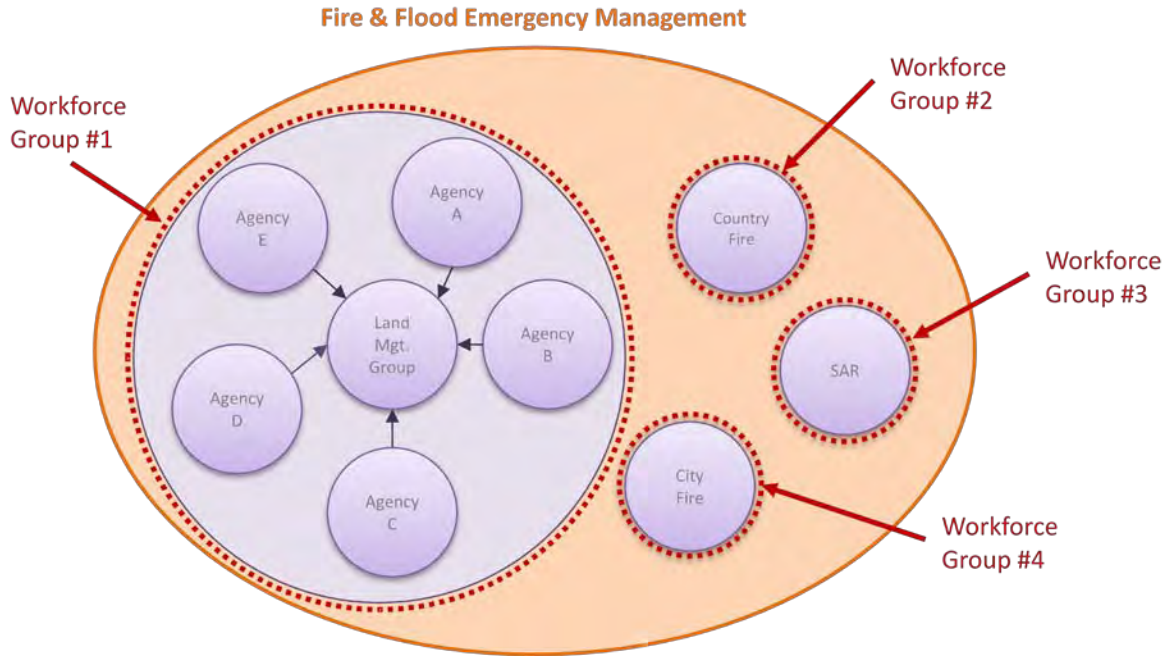


Figure 48 - Model B:

The future whole-of-government networked approach to workforce planning within the sector:

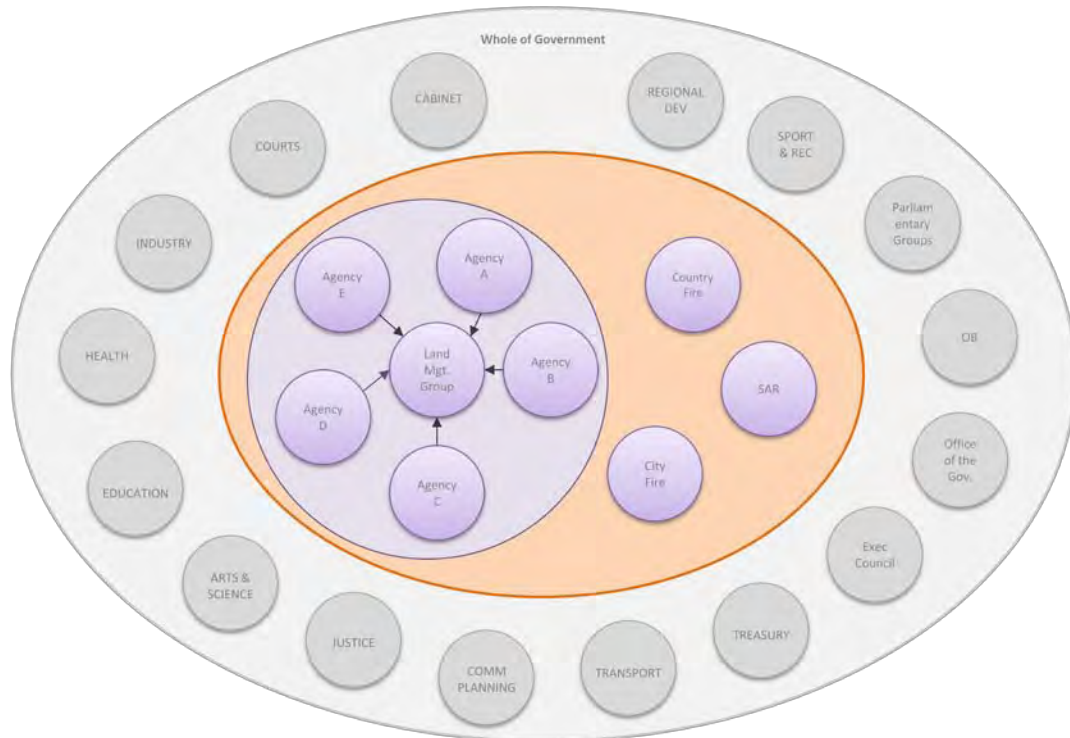
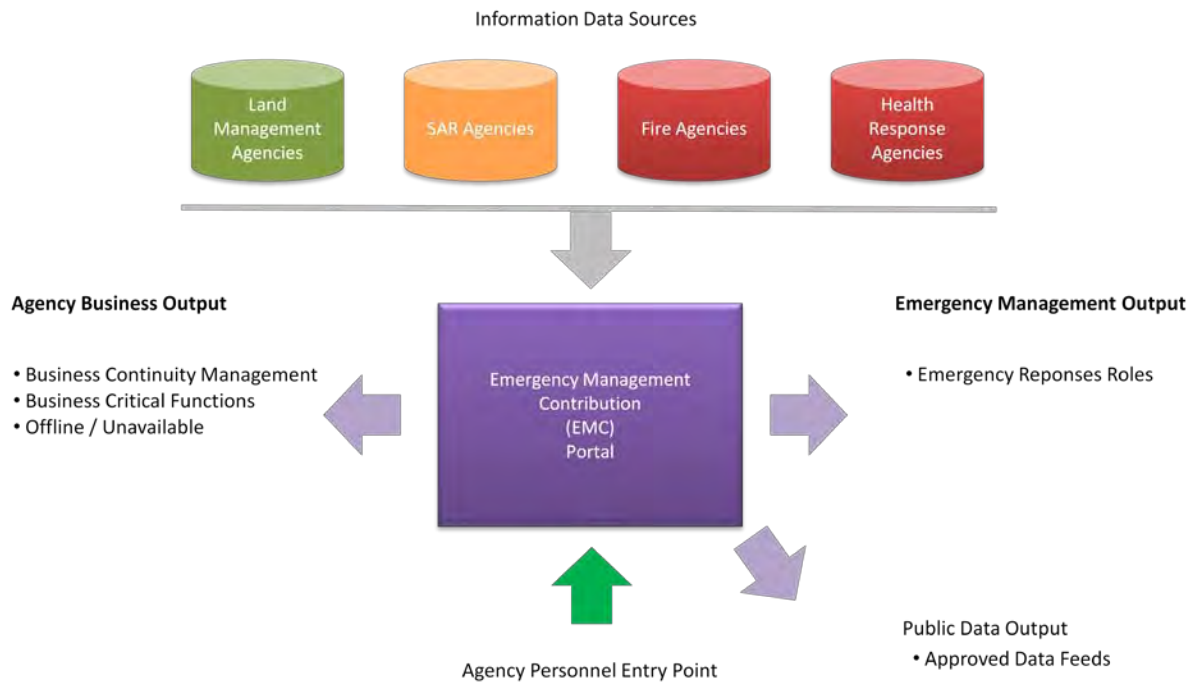


Figure 49 - Model C:

The information management model that will be developed and facilitate the proposed whole-of-government networked approach:



FESA believes this proposed model will significantly enhance the coordination and management of State capability and capacity and have the flow-on benefit of providing clear, unambiguous and structured strategic resource management from a whole-of-government perspective. Moreover, it will clearly demonstrate real-time contingent surge capacity that exists within the State and inform decision making for interstate and/or international support should the need arise. It will allow this resource analysis to be targeted against known capability in an integrated manner.

The additional value of adopting this system, which should not be underestimated, is the penetration across Government of situational awareness of the State’s emergency management arrangements, preparedness activities, incident/event information and education material resulting in an *informed public service*. This is unprecedented in any jurisdiction.

FESA believes that it is the appropriate agency to host this system, given the breadth of its all hazards responsibilities, which inevitably involve the major incidents that will occur across the State.

3.2.2 FESA Proposals

The Review should:

- Note the proposed FESA whole-of-government networked resource coordination system concept; and
- Recommend to Government that it supports FESA in developing and administering this concept for the State.

3.3 Structured recognition and use of local knowledge and structured incident management accreditation system

3.3.1 Local Knowledge

The importance of integrating local knowledge into the incident management structure of an incident is fundamental. Any transition to an Incident Management Team (IMT), which in some cases may consist of a pre-formed IMT made up of personnel from outside the local area, must have regard for the maintenance of local knowledge at all levels of the incident management structure, whether that be on the ground, sector/division management or within the Incident Control Centre (ICC).

The *Victorian Bushfires Royal Commission* explored this issue and stated that:

The benefits of incorporating local knowledge in an incident management team cannot be overstated. An understanding of local geography, infrastructure and community concerns can help the IMT identify priorities for both asset protection and community warnings. Local knowledge was used to good advantage in the Bunyip fire, where a local CFA captain was assigned to help the team preparing the operational plan by 'providing local knowledge of the area'. In contrast, a greater appreciation of local conditions could have been of benefit in the Churchill IMT. The importance of local knowledge was also highlighted by Mr Ewan Waller, who noted that the issuing of warnings requires not only accurate predictions of the run of a fire but is also dependent on 'local knowledge'.

The existing AIIIMS structure does not specify that an IMT include people with knowledge of the area in which the incident is occurring. Indeed, in a level 3 fire it is likely that personnel will have been drawn from across a region or even from elsewhere in the state. The Commission considers local knowledge to be invaluable to IMTs in relation to both operations and community warnings.⁷⁷

The Royal Commission identified information sharing issues during the bushfires, saying:

...the fires of 7 February revealed deficiencies in the sharing of information between the integrated Emergency Coordination Centre and incident control centres, within some IMTs, between some IMTs and the fireground, and between some IMTs and municipal emergency coordination centres.⁷⁸

The Commission made the following recommendation:

Recommendation 14

The Victorian fire agencies amend the AIIIMS framework before the 2010–11 fire season in order to ... ensure that an individual with local knowledge is incorporated in an incident management team.⁷⁹

⁷⁷ July 2010 *Victorian Bushfires Royal Commission* [Volume 2, p 90]

⁷⁸ July 2010 *Victorian Bushfires Royal Commission* [Volume 2, p x]

⁷⁹ July 2010 *Victorian Bushfires Royal Commission* [Volume 2, p 91]

In the *Perth Hills Fires* this was achieved by the nominated Incident Controller meeting and liaising with the Chief Bushfire Control Officer (CBFCO) and taking him into the ICC with him.

In circumstances where this does not occur, local knowledge, intelligence, integration and smooth transition/continuity of knowledge between local control and IMT control will be lost. Another worst case scenario consequence may also be the retention of 'local control' running concurrent with IMT control with severe consequences. Moreover, local CBFCO's and brigade members have the respect, credibility and established networks of the local community and brigade members and unless this is integrated into the IMT structure, this will be lost, as will any effective control and respect that comes from it.

This issue has been explored in numerous inquiries with the same conclusion; however, it still remains an issue when transitioning to an AIIMS Incident Management Team structure.

FESA submits a concerted effort and formal requirement is required to integrate local knowledge into all levels of incident management, regardless of agency/agencies and land tenure involved.

3.3.2 Incident Management Accreditation Structure

Westplan – Bushfire prescribes "The Australasian Inter-service Incident Management System (AIIMS) is to be utilised by all agencies party to this plan."⁸⁰ The utilisation of AIIMS within WA is consistent with the incident management system utilised universally by fire services across Australia.

Uniquely in WA the adoption of AIIMS has the endorsement of the State Emergency Management Committee and all agencies have embraced the concept including the WA Police.

The Australasian Fire and Emergency Services Council (AFAC) is currently progressing a project with their equivalent peak industry body for Police to develop a common incident management system for universal application across Australian Police and Fire/Emergency Service organisations.

Incumbent with the utilisation of AIIMS is an underpinning training and accreditation system for personnel fulfilling roles within the structure. At times this can conflict with the volunteer nature of fire services, whereby personnel are elected to officer positions without any pre-requisite aligned to an agency accreditation system associated with AIIMS.

The *Victorian Bushfires Royal Commission* considered AIIMS and resolved that "The Commission supports the continued use of AIIMS in the management of fire incidents in Victoria. It offers a consistent approach to incident management throughout Australia, as well as allowing for effective interoperability with fire management personnel from New Zealand, the United States and Canada, where comparable incident control systems are use". (Vol 2: s 2.6)

There is also a cultural perception that incident management accreditation is *rank based* or *organisational position based* rather than consideration of whether or not an individual is competent and experienced to undertake the specified role within the AIIMS structure or not. This continues to cause significant concern for FESA and must not be the determinant for accreditation. This is a long term culture for the organisations to overcome but one that must remain a key focus

⁸⁰ *Westplan – Bushfire* 2010 s 4.5, p21

for this issue to be successfully resolved in the future. A comment like “I’m not a level 3 Controller because I haven’t been promoted to xyz rank” is totally at odds with what FESA believes in. Whilst time and experience come with rank and are **one** key consideration in determining suitability to undertake these roles, it is **not** the sole determining criteria.

Experience and fitness for the particular operating environment is also another key consideration in determining accreditation. For instance, nobody would suggest that an experienced rural bush firefighter who may be appropriate as a Level 3 Controller for bushfire should be considered universally accredited as a Level 3 Controller at say a major structure fire or hazardous chemical incident. Likewise, a metropolitan urban firefighter who is accredited as a Level 3 Controller for hazardous chemical incidents and structure fires may not be suitable for bushfires. These are all key idiosyncrasies that must be factored into considerations on Incident Management Team accreditation processes, as are political nous, leadership capabilities, communication skills etc.

The current arrangement applicable to accreditation of incident management personnel in WA is an agreement via the Interagency Bushfire Management Committee (IBMC) to utilise the existing independent agencies’ accreditation systems for 2011 and then develop an integrated statewide accreditation structure across agencies beyond 2011.

The currently FESA accreditation system involves accreditation of Level 2 and 3 Controllers that is hazard specific and refers to Bushfires, Urban and Natural Hazard appointments. The IBMC has a key task to develop and implement a State-based accreditation system that applies to and incorporates all responding agencies and allows for volunteer services.

Presently, however, FESA uses an accreditation approach that consists of:

- An audit of the Training database (TRAIN) to assess gaps associated with Incident Manager competencies or omissions in the recording of them. Currently, personnel have been assigned to a Level 2 or a Level 3 IM group and in order to validate this assignment, further evidence is sought;
- Completion of an Authority to Issue (ATI) by managers who are required to meet with each individual and provide comment, wherever possible, on that person’s previous performance and roles. A number of qualifications and experiences are on the individual’s record, and blacked out, which requires no further action for those outcomes. Completion of the ATI will ensure that all records are updated and current, thus enabling all managers to be verified at the appropriate Level (2 or 3). Where gaps in competencies are identified, training courses will be scheduled to address those gaps. To this end, managers are then required to undertake the following process:
 - Meet with each person for whom they have received an ATI;
 - Review the ATI with regard to the unshaded areas;
 - Where they consider the person can indicate competence against a Unit, provide comment of when, where, how the manager considers they have achieved this, or a copy of the certificate;
 - For the ‘Validation AIIMS’ outcomes, personal observations can be recorded to satisfy these areas. Alternatively, a formal AIIMS validation process may have been completed, and reference can be made of this;

- In cases where a manager considers the person has not fulfilled a particular role, or there is insufficient evidence to validate the person, insert NYC (*not yet competent*) in the relevant box,
- Where providing such evidence, the importance of applying the ‘rules of evidence’ is emphasised, which state the evidence must be:
 - VALID – there must be a clear relationship between the evidence requirements of the unit and the evidence on which the judgement is made;
 - SUFFICIENT – all aspects of the performance criteria and evidence guide are addressed, competency must be demonstrated over a period of time and in a range of different contexts;
 - AUTHENTIC – it can be verified that evidence is that of the candidates. *Please note:* there may be a requirement to generate individual evidence should it be required for audit purposes;
 - CURRENT – evidence demonstrates the candidate’s current knowledge and skill (current would be dependent upon risk factors, legislative or statutory requirements etc, e.g. BA must be in accordance with FESA policy).

Whilst the above rules must be applied to nationally recognised units of competency, they should also be applied when providing evidence against FESA outcomes.

It is also emphasised to managers that this process is not a proper skills recognition assessment, but rather an ‘Authority to Issue’ where assessors/subject matter experts are signing to indicate that individual personnel are competent against the different competencies/outcomes with Level 2 and Level 3 Incident Manager endorsements.

Once this process is complete, the relevant Regional Director is responsible to complete the forms in conjunction with their subordinate staff, and after signing them off, to forward these forms and associated copies of relevant certificates or evidence to FESA headquarters. They are then reviewed and signed off by the Chief Operations Officer and Manager Training and Development.

This process results in FESA having the following capacity for incident management:

- Total Level 3 Accredited Incident Controllers 29
 - Consisting of:
 - Level 3 (All Hazards) 10
 - Level 3 Bushfire (Metro) 6
 - Level 3 Bushfire (Country) 13
- Total Level 2 Accredited Level 2 Controllers 51 (includes 29 L3)

Another extremely important key consideration in this regard is the age demographic of current key incident management team personnel, forecast attrition and succession planning requirements. This is further compounded by the lag time associated with acquiring and practicing the skills to gain the underlying experience necessary to fulfill the requirements of the most senior positions.

The following provides a demographic profile of FESA Level 2 and 3 Accredited Incident Controllers:

- Average age of people (accredited) 52.2 years
- Average length of service (accredited) 19.1 years

The importance of this data is represented by the known average separation age and length of service, which provides an indication of the urgent need for succession planning and associated development plans for these pivotal roles. The following provides this known separation data, taken over the last 6 years:

- Average age of people (at separation) 48.82 years
- Average length of service (at separation) 19.4 years

The above highlights the critical nature of FESA's incident management capability at these senior (Level 2 and 3) levels. When taking a State approach to this critical capability, FESA is confident similar challenges will apply with DEC and Local Government personnel. This is evidenced by the following findings of recent Inquiries:

- In the April 2004 *National Inquiry on Bushfire Mitigation and Management*, the Council of Australian Governments also noted (at p 206):

...many people who are responsible for bushfire mitigation and management in land management agencies are concerned about the consequences of an ageing workforce and about the substantial diminution in capacity as a result of downsizing and an increasingly commercial focus.

- The September 2010 *Review of the Ability of DEC to Manage Major Fires* suggested that

a fire management staff succession plan would minimise the loss of core fire management skills and experience in the future and provide a planned approach to development of prospective fire management staff.

This recommendation was made in response to the DEC's submission that the future challenge for their agency is to replace the loss of experienced bushfire managers through impending retirements. In this same review DEC

*drew attention to the potential loss of up to 90 staff from the Forest Products Commission associated with proposed changes to that organisation.*⁸¹

- The Senate Committee which produced *Incidence and severity of bushfires across Australia* in August 2010 heard similar evidence that incident controllers with bushfire expertise "are declining due to changes in land tenure and deficiencies in training arrangements".⁸²
- The October 2004 report *Responding to Major Bushfires* also recognised the need for succession planning for DEC's ageing fire crews, noting that

*CALM [renamed the Department of Environment and Conservation on 1 July 2006] faces challenges in maintaining its current level of trained staff.*⁸³

⁸¹ September 2010 Review of the Ability of DEC to Manage Major Fires

⁸² August 2010 Incidence and Severity of Bushfires across Australia p 122

FESA submits senior incident management personnel are a critical component to the State's capability to manage bushfire in the future, are not readily replaceable, and the training and associated experiential learning takes a significant effort and time. This is a critical issue to be considered by the agencies in the development of future plans. It is also one that the Review needs to give weight to in its deliberations.

Personnel charged with Incident Controller responsibilities in the *Perth Hills Fires* were accredited through the existing FESA accreditation system commensurate with the level of fire.

3.3.3 Accreditation Principles

FESA submits any future accreditation system must be premised on the following principles:

- Accreditation must not be aligned to organisational rank or position or whether or not a person is a volunteer or paid staff, but purely on competency and experience (i.e. proficiency);
- Accreditation should not be a simple *red-lining* or *deeming* process against current agency accredited position and must be validated through a structured, rigorous and auditable process;
- Accreditation to more than one senior level position should be avoided to alleviate any 'false' assessment of capacity available by double counting personnel accredited for multiple positions;
- A regular skills maintenance process underscores ongoing accreditation.

3.3.4 FESA Proposals

The Review should:

- Support the importance of integrating local knowledge into all levels of the incident management structure;
- Require the agencies to adopt a requirement that local knowledge, regardless of land tenure, be integrated into incident management structures as much as practicable given the availability of and resourcing priorities.
- Support the continued use of AIIMS as the State incident management structure for bushfire;
- Note the complexities associated with an incident management system accreditation system;
- Note the intention of FESA and DEC to introduce a joint incident management accreditation system prior to the 2011/12 fire season;
- Support the FESA proposed principles for an incident management accreditation system;
- Note the critical capability forecasts for senior incident managers within the State; and
- Recommend to Government that they need to make resources available to the agencies in order to urgently develop a joint succession and development plan to address the critical forecast shortfall in senior incident management personnel.

⁸³ [October 2004 Responding to major bushfires, page 5]

3.4 Enhancing Volunteerism

3.4.1 Background

FESA is a community centered organisation that provides a range of fire and emergency service functions to the community of WA. It achieves this through a unique structure consisting of paid staff and very dedicated volunteers. FESA is very proud of its achievements over its very short life as an integrated organisation and strongly believes it has the right organisational approach for the management of fires and emergencies within WA.

FESA (and its predecessor organisations) have a very proud history, which has been shaped to a very substantial degree by its involvement with volunteers. A fundamental component of FESA's activities is the community centered nature of the organisation and how it delivers its services through an extensive network of staff and volunteers operating within and as part of the community. It is this latter point that provides FESA volunteers with a sense of real ownership over their activities within their own community and is a clear example of directly contributing to the social capital of the community. Notwithstanding the economic value of FESA volunteers to the State, it is this complete social integration within the community that is its greatest attribute.

This service delivery model attempts to provide the necessary diversity, skills and experience to deliver fire and emergency services across the State. The model also provides the necessary *surge capacity* to combat major incidents from an *integrated* and *all hazards* perspective. No longer can organisations segregate the roles and responsibilities of a finite workforce like volunteers into discrete bundles and create artificial barriers to participation. This is a fundamental and important element of FESA's purpose and modus operandi.

The following provides an overview of the volunteer demographic profile of the organisation.

Table 12 – Volunteer Demographics

Volunteers	Number of Brigades, Groups or Units	Volunteer Numbers as at 30 June 2010		
		Operational	Support	Total
Volunteer Bush Fire Service	593	25,593	599	26,192
Volunteer Fire and Rescue Service	88	2,056	194	2,250
State Emergency Service	65	1,898	16	1,914
Volunteer Marine Rescue Service	33	1,336	24	1,360
Volunteer Emergency Service	16	541	1	542
Volunteer Fire Service	9	353	6	359
FESA Education and Heritage Centre	1	0	18	18
Total		31,777	858	32,635

Cadets and Juniors as at 30 June 2010	
Emergency Services Cadets	1,380
Juniors and cadets registered with brigades, groups and units	538
Total Cadets and Juniors	1,918
Emergency Services Cadet (ESC) Units	43
Junior Cadet Programs	79

[FESA Annual Report 2009/10]

This resource base and unparalleled organisational infrastructure results in FESA being the only agency capable, and with the capacity, to be the lead agency for bushfire management within the State.

Like any other volunteer based emergency service organisation, the majority of FESA volunteers (94.74%) are engaged on an operational basis and they form a total of 805 brigades, groups and units spread throughout WA.

Recognising the fundamental importance of volunteers to FESA and the State, in February 2005 FESA established a Volunteer and Youth Services Branch (VYSB), which was dedicated to provide non operational support to emergency service volunteers and youth. The branch focus was placed on:

- strategies for the attraction, recruitment and retention of emergency services volunteers across all FESA Brigades, Groups and Units;
- management and development of FESA's Youth Development programs;
- administration and development of FESA's Reward and Recognition program.

FESA's achievements in this area have been significant over the past 6 years and include the following successful initiatives.

3.4.2 Volunteer Charter

The signing of a *Volunteer Charter* by Government, in recognition of its gratitude and appreciation of the effort and commitment of volunteers to the State. The Charter commits Government to engage and consult with volunteers on any matter that may affect them and any proposed changes.

3.4.3 1800 Volunteer Recruitment Information Line

A dedicated telephone line was set up in 2005, with hundreds of genuinely interested people lodging enquiries each year, resulting in new volunteer members (e.g. 438 enquiries in 2005, increasing annually to 777 enquiries in 2010).

3.4.4 Volunteer Marketing Online

Advertising for Emergency Services Volunteering has been extremely successful with the ongoing marketing strategy online, using two websites (*Seek and Go Volunteer*). A monthly feedback report from both websites indicates that thousands of hits have been recorded, raising community awareness and resulting in many recruitment enquiries. There has also been a recent increase of interest from overseas people who are travelling within Australia on suitable visas, requesting additional information.

3.4.5 Volunteer Recruitment DVD

A Volunteer Recruitment DVD marketing all services has been produced, and was launched in 2006. Over a thousand copies have been requested from brigades, groups and units throughout the state to assist them in developing local/targeted strategies to meet the needs of their towns.

3.4.6 Cinema Advertising

Using the Volunteer Recruitment DVD for an alternative purpose, a 30 second cinema advertisement was prepared and shown on a daily basis at Geraldton Cinemas for 12 months in 2007.

3.4.7 Volunteer Recruitment Resources

FESA's Volunteer and Youth Services Branch has designed and produced service specific resources:

- brochures
- banners
- bumper stickers
- business cards
- posters
- postcards
- other related products aimed directly at volunteer recruitment

The resources are available for ordering through the volunteer portal and are distributed regularly to our volunteers and FESA offices across WA. The Volunteer and Youth Services Branch are regularly consulting with volunteers to constantly improve and update resources to meet the needs of each volunteer service.

3.4.8 FESA's Volunteer Website

FESA developed a volunteer website in November 2007 to assist volunteer members to obtain easy and immediate access to a wide range of non operational, operational and information resources, e.g. volunteers were previously unable to access this information electronically. Registered FESA volunteers are able to access a wide range of information relevant to their volunteer role, and Members of the public have restricted access to view volunteer recruitment information. The website now has more than 2,300 registered volunteer users.

3.4.9 Western Australian Emergency Service Levy Rates Notices

A successful initiative in 2007 was the inclusion of an emergency service volunteering brochure printed on the back of council rates notices and posted across the state. A significant number of joining enquiries was a direct result.

3.4.10 Volunteer Employer Recognition Program

A nationally accredited Volunteer Employer Recognition Program (VERP) was developed and launched in August 2008. This program formally recognises the supportive employers and self employed emergency services volunteers and helps to raise public awareness of the valuable assistance they provide in the field of emergency services. The program acknowledges the employer and strengthens employer support of volunteering, leading to greater volunteer participation and retention. More than 150 employers have received a VERP Award to date.

3.4.11 Targeted Volunteer Recruitment Strategies

FESA produced a Volunteer Recruitment Action Handbook in 2009. The handbook is designed to provide every brigade, group and unit with ideas, strategies and action plans that can be adapted and used in response to individual recruitment needs and to increase volunteer recruitment success. Whether the brigade, group or unit is based in an urban or rural setting, many ideas and strategies can be adapted to fit their unique recruitment needs and circumstances. The handbook is available online through the volunteer portal, in hardcopy, or in CD format for downloading the templates.

3.4.12 Youth Development

FESA has an extensive Youth Development Program which includes more than 2,000 young people and 200 adult volunteer instructors who belong to either an Emergency Services Cadet Corps Unit attached to a Secondary School in WA (currently 43 units in WA – both metropolitan and regional locations), for which FESA is the host organisation on behalf of Cadets WA, or linked directly to one of 93 volunteer Brigades, Groups or Units.

There has been a trend of Juniors and Cadets 'graduating' to adult volunteering roles when they reach the appropriate age. These programs are now recognised as a valuable pool of potential future volunteer recruits and a pathway to senior volunteering. FESA makes available a total of up to \$50,000 per year for distribution under a grants scheme to those Youth Programs which are attached to FESA's Volunteer Brigades, Groups and Units.

3.4.13 Reward and Recognition Program

FESA has a staff position within the Volunteer and Youth Services Branch whose role is to focus solely on Reward and Recognition, which is considered an important factor in retaining valuable volunteers by rewarding them for their years of service as well as recognising and acknowledging their outstanding contributions. Through this position, FESA regularly administers Australian Honours (Australian Fire Service Medals, Emergency Services Medals, National Medals and clasps) as well as a comprehensive range of FESA Awards for all volunteer services (Service Badges, Certificates). In 2007 FESA created the prestigious Volunteer Marine Rescue Service Long Service Medal, which subsequently led to the introduction of the State Emergency Service Long Service Medal and the Volunteer Fire and Rescue Service Medal, both in 2009.

3.4.14 Attendance at various volunteer forums and visits to Brigades, Groups and Units

All members of the FESA's Volunteer and Youth Services Branch attend/present at seminars, forums (Captains' Forums, Leaders' Forums, Bush Fire Games, Consultative Committees, etc.) to discuss volunteer recruitment and other related matters, to assist volunteers with their recruitment strategies.

3.4.15 Volunteer Recruitment Displays

Numerous displays have been set up by the Volunteer and Youth Services Branch at events such as the Annual Sea Rescue Conference, Bush Fire Forum, State Emergency Service Conference

and FESA Managers Forum to demonstrate the material and explain what is available for use by volunteer Brigades, Groups and Units.

3.4.16 Volunteer Associations

Regular contact is maintained between FESA's Volunteer and Youth Services Branch and the respective Volunteer Associations, so that a regular flow of information between parties can continue and the positive relationships which have been built can also continue to exist.

3.4.17 Attendance at Volunteer Brigades , Groups and Units

FESA's Volunteer and Youth Services staff undertake visits to volunteer premises and to FESA Regional Offices when possible, to provide face to face advice/direction/support when it is needed.

3.4.18 CHALLENGES

3.4.18.1 Diversity and Demographics⁸⁴

a) Age Profiles

FESA has an ageing volunteer workforce with 39% of volunteers over the age of 60. A further 20% are over 45 years old and only 18% of volunteers are under the age of 35. This trend is particularly evident within the Bush Fire Service, Volunteer Marine Rescue Services and the Volunteer Fire Service.

The age profiles for Volunteer Fire and Rescue, State Emergency Service and Volunteer Emergency Service are more evenly spread. This is an area demanding attention, to ensure that our succession plans are sound and that we continue to focus on the recruitment of younger volunteer members. Of particular concern is the 60-64 year age demographic, if they were to leave during the next few years, there will be a huge gap unless an equivalent number of volunteers (12,500+) are recruited to replace them.

Many of the brigade captains, CBFCOs and unit leaders are in the older cohort. Given their years of dedicated service, accumulated operational experience, knowledge of local conditions and wisdom, particular attention should be given to developing strategies which recognize this and offer opportunities to continue to have a meaningful association with their brigade/unit. Strategies should support members exiting with dignity and may also include transitioning from an operational role to one of mentoring and coaching new leaders whilst allowing retention of their rank so as to maintain their status in the local community.

A review of the Youth Development Programs is in its early stages and a longer term aim from that Program is to increase the numbers of young people transitioning to adult volunteering when they reach the appropriate age. FESA has the opportunity to groom /mentor/encourage and support the young people of WA into our future emergency service volunteers.

⁸⁴ FESA - OMS Report April 2010

b) Gender

FESA records reflect that volunteering is male dominated, with 74% male volunteers and 25% females (the remaining 1% was not declared). This situation creates an opportunity for FESA to focus on the recruitment of more female volunteers, which appears to be an under used resource at this time. These figures are fairly consistent across all services with SES having a more even gender mix of 63% males and 37% females. Some extra attention is required within the Volunteer Fire and Rescue Service and the Volunteer Fire Service where ratios exceed 80%/20%.

c) Length of Service

Length of service can be one indication of experience but should be viewed with caution. Some long serving volunteers may have attended relatively few minor incidents, whilst others with much shorter service may have attended numerous incidents, including major events. Notwithstanding the limitations of this indicator, it can help inform what the volunteer workforce looks like.

While some volunteer members achieve significant years of service, FESA statistics indicate that almost 88% of FESA volunteers have less than 15 years service, with half of those falling into the 0-5 year bracket. This information presents another opportunity for FESA to find out reasons why so many of our volunteers leave during the first 5 years and then another significant percentage (30.5% leave between 5 and 10 years).

d) Diversity

The participation rates of women and young people have been discussed above. Other than age and gender, FESA does not currently collect and record diversity details. However, anecdotal evidence indicates low participation rates of people from culturally and linguistically diverse (CaLD) background and Indigenous people. Aside from building organisational capacity to engage effectively with people in these groups, it may be necessary to consider alternative, more culturally appropriate models for volunteering to increase participation.

Improved data and further work is required to identify the barriers and enablers to Indigenous and CaLD groups to participation in emergency service volunteering.

e) Fit for Duty

The issue of whether a volunteer is fit for duty is a subject of discussion at the national level through the Australasian Fire and Emergency Service Authorities Council (AFAC). FESA is actively engaged in these discussions and fully appreciates this is a sensitive issue which needs to be managed accordingly. It is somewhat of a 'double-edged sword' in that it is logical in an emergency services environment that these requirements exist for the safety of the individual volunteer, fellow volunteers and the community; however, this needs to be balanced against the backdrop of sheer availability and capacity available to volunteer, particularly in the more rural and remote locations that experience attrition/decline within the community. The dimensions of what constitutes 'fit' can include:

- Personal character including criminal convictions;
- Clearance to work with children;
- Medical clearance;
- Physical fitness.

FESA's volunteer brigades, groups and units have processes in place to assess and select new volunteer members based on several factors including character, conduct, police clearance etc. Some services arrange for new volunteer members to undertake a medical assessment prior to commencing, to ensure that the new volunteer is fit and able to undertake the volunteer role for which they are recruited. This is not a compulsory requirement across FESA and in some cases a 'role description' is provided to the medical practitioner as a tool to assist with the assessments. There is no 'fit for duty' assessment available for each service.

Given that there is a high risk of harm to bush fire fighters from cardiac arrest, the Bushfire Cooperative Research Centre (CRC) has undertaken a considerable body of work into the physical fitness requirements for tanker based fire fighting. To date the work has included identifying the physical demands of the tasks undertaken on the fire ground. This data will now be used to design a scientifically valid, legally defensible fitness for duty screening tool.

The findings and lessons learned will help FESA in meeting moral and OHS legal responsibilities to preserve the health and safety of its volunteer fire fighters. However, this does not include FESA's other (non-fire) services. Currently, a component of FESA's career employment assessment requires applicants to undergo a functional movement test. This could be considered as part of the recruitment process for volunteer services.

FESA has applied to the National Emergency Management Projects for funding to participate in a national pilot volunteer health monitoring program. This pilot program, building on the work of the Country Fire Authority, will establish a national dataset of health indicators for emergency service volunteers. This data will inform future health and wellbeing programs and development of fit for duty policy.

f) Decline of Rural Communities

Volunteering within FESA is faced with a continuing challenge of recruitment and retention in rural communities. The farming industry in WA is declining. A high percentage of volunteers in these areas are in the 50 plus age group and in some areas there just aren't enough people living in the area to commit to volunteering. Recent research completed by Volunteering WA sought to find out what prevents greater or continued volunteering in the Wheatbelt towns of WA.

The main points identified were the need for flexibility in the approach from community organisations to make it possible for a wider range of people to volunteer. The need to break down the 'inner circle' or 'closed shop' which exists in some volunteering organisations is a matter which FESA could investigate. The Volunteer and Youth Services Branch continues to work with brigades, groups and units in this regard, to influence behaviour and attitudes to newcomers, and to ensure all prospective new members are not faced with barriers such as this.

Many regional areas are faced with ageing membership and rapidly declining numbers. Further work is required to implement systematic reporting to identify vulnerable locations to enable

FESA to engage with the volunteers, area managers, regional staff and communities to develop strategies to target specific needs and requirements for their brigade, group or unit.

The inception of the FESA multiservice Volunteer Emergency Service Unit (VESU) model has provided an excellent vehicle to bring together separate units in locations that were struggling to maintain a sufficient number of members to field a viable response. The VESUs can be combinations of VFRS, SES, VMRS and BFS. The VESU model has expanded to 16 units since its beginnings in 2003.

Given the strong emotional attachment to service identities, FESA will not progress establishment of a VESU without the support of the local community and the respective services unit members.

g) Retention – Exit Surveys

Losing talented and experienced volunteers is a cost to FESA and the communities they serve. Knowing why a volunteer chooses to leave can provide a great insight into the unit, service and FESA, and provide valuable information to support retention initiatives. The attrition rate for volunteers has remained fairly stable at 6-7% over the last few years. It is not known how this rate compares to other Australian jurisdictions; however, it is comparable to the New Zealand Fire Service⁸⁵.

FESA does have a volunteer exit survey⁸⁶; however, it has had limited application and this represents a lost opportunity for FESA to better understand why volunteers leave.

In the absence of our own data, it is not unreasonable to assume the reasons for leaving FESA would not be markedly different from other emergency service organisations. Exit surveys from the New Zealand Fire Service in 2009 found that the primary reasons for volunteers leaving were:

- Conflict in the brigade (at 28%);
- Brigade poor communication/ management (at 26%);
- Poor leadership (at 26%)
- Moving out of the area (at 26%).

This information presents some opportunities for FESA in terms of future direction. The first three items on the survey point towards the need for better management of volunteers; and to provide opportunities for management training for FESA volunteers and to some extent, to the FESA staff charged with the responsibility of managing the volunteer services. It may also be an opportunity to review processes in place, in regard to how volunteer managers are appointed, to ensure the right people are placed into the roles.

FESA routinely provides opportunities for volunteers to attend leadership development training offered by AFAC and Emergency Management Australia. These activities are conducted in the eastern states and time and costs associated with travel limit participation. FESA could

⁸⁵ 2011 Hearn J, Director Human Resources NZFS, telephone conversation 29 March.

⁸⁶ See attached.

potentially partner with the providers to offer the same training locally to increase the number of volunteer leaders (and emerging leaders) who could benefit from this development.

An ongoing challenge with existing FESA ageing volunteers is the need to adapt/change the way of thinking and to offer a different type of volunteering experience beyond the traditional roles undertaken by brigades, groups and unit members. While it is understood that many of these areas are being affected by declining regional populations, fly in/fly out working arrangements and aging residents, there is a need to identify why volunteers are leaving.

A challenge for FESA is to take greater ownership of exit interviews. This process and knowledge is currently housed locally and not widely collected or supported. The exit questionnaires require review and additional information needs to be collected to determine exit trends and other information. Where volunteers are simply moving residence, there needs to be a process in place so that they can easily be recruited into a volunteer service in their new location. FESA is intending to implement a 'Learning from Leaving' program in 2011-12 for employees which, subject to satisfactory evaluation, could be extended to volunteers.

h) Spontaneous Volunteering

At the end of 2010 and for the first 2-3 months of 2011, communities were struck by a series of natural disasters including floods in Carnarvon, fires in the Perth Hills, floods in Queensland, earthquakes in New Zealand and the recent earthquake and tsunami which hit Japan. These incidents attracted world-wide media attention and placed a spotlight on emergency services volunteering. A result of that attention was a huge influx of people wanting to volunteer to join our emergency services.

FESA's Volunteer and Youth Services Branch referred 36 potential new volunteer members in December 2010, a further 74 people in January 2011 and another huge 150 who wanted to join in February 2011. We have now reached a situation where several of our metropolitan SES Units have full capacity membership and have to turn new potential members away. In addition, there are other Units close to capacity, which are expected to reach that same situation shortly. A similar position is in place at one of our metropolitan volunteer Fire Brigades.

Some preliminary work has commenced in regard to creating some strategies to 'capture and retain' these potential volunteers until suitable volunteer vacancies arise for their placement.

A large number of the volunteer joining enquiries during this period came from people categorised as 'spontaneous volunteers' and many of them were from outside the local community (in some instances from the eastern states and overseas).

These callers were unaffiliated and unskilled and/or untrained in emergency services, and wanted to 'help now' with an immediate start, rather than undertake the essential training required for emergency services volunteering. These people were directed to appropriate volunteering agencies such as Australian Red Cross, Volunteering WA and Volunteering Qld. Some of these potential volunteers were/are visiting Australia on a variety of visas with limited time to assist and in some cases not eligible.

One of the challenges for FESA is to capture these enthusiastic community members and have the ability to follow them up once an incident has been controlled. During a major incident the Volunteer and Youth Services Branch staff members are required to assist in all areas of operations. As a result it is sometimes necessary to set the recruitment telephone line to a message bank for long periods of time, which causes some frustration from prospective volunteers who can't reach the recruitment line. Although return phone calls are made within a day or two, some of their initial enthusiasm may have subsided.

FESA has been involved in workshops with Australian Red Cross (who received an Australian Government grant) to explore a range of issues in managing spontaneous volunteers in the post disaster context. A resource toolkit was developed as a result of the grant which is an extremely useful tool for not for profit agencies and some lifeline agencies, but does not assist FESA in managing large influxes during major incidents.

However, despite this huge influx of volunteer applicants during an incident, the reality is that most enquiries come from the Perth metropolitan area where there are a limited number of volunteer fire brigades and incidents are handled by career fire stations. The majority of callers are encouraged to join a State Emergency Service Unit as there are a larger number in the metropolitan area.

3.4.19 OPPORTUNITIES

3.4.19.1 Motivations and Expectations of Volunteers

The motivations of volunteering have been the subject of a range of research studies and a particular focus area of the Bushfire CRC *2003-2010 program – Program D Enhancing Volunteerism*⁸⁷. According to 2004 Western Australian research⁸⁸ the top five motivations for volunteering are (in order of importance):

- Values: acting on the belief of the importance for one to help others;
- Reciprocity: the belief of what goes around comes around;
- Recognition: being recognised for their skills and contribution;
- Understanding: to learn more about the world through their volunteering experience; and
- Self Esteem: to increase their own feelings of self worth and self esteem.

The experiences offered by emergency service volunteering affords a high degree of satisfaction of the top five motivational factors and places FESA well in a competitive market for potential volunteers.

Given the motivations for volunteering, remuneration is not considered to be an effective incentive. The act of volunteering or gifting of their time is contrary to seeking a financial reward. Volunteers do however expect that they will be reimbursed for reasonable out of pocket expenses associated with volunteering. FESA is continuing to improve processes to ensure that reimbursement is administratively streamlined and timely.

⁸⁷ <http://www.bushfirecrc.com/projects/d3/enhancing-volunteerism>

⁸⁸ 2004 Esmond, J and Dunlop P Developing the Volunteer Motivation Inventory to assess the underlying Motivational Drivers of Volunteers in Western Australia. www.morevolunteers.com/resources/MotivationFinalReport.pdf

3.4.19.2 Impact of fly-in/fly-out (FIFO) Employment Arrangements on Volunteering

WA mining companies have a large impact on FESA volunteering, with their increasing offers of high paid employment opportunities for working in the Kimberley and Pilbara regions. The mining industry has adopted a flexible working arrangement of flying workers up to these regions for a 2 or 4 week term and flying them back to their homes for a 2 to 4 week break. This arrangement is creating large gaps in careers and volunteering across the state. The initial fly in fly out recruitment was mainly from the Perth metropolitan area, but the concept now includes flying personnel from some significant country towns, e.g. Bunbury and Albany.

Volunteering agencies across the state are reporting that they are experiencing a decline in volunteering numbers due to this arrangement. No research appears to have been undertaken on the possibilities, opportunities and challenges associated with these arrangements. FESA records indicate that we have very few volunteer members who undertake the fly in fly out working arrangements.

There is a view from within many of our volunteer services that their own volunteer members need to be available to attend incidents 24/7, or at least for a high percentage of callouts. This group of potential 'part time' volunteers appears to have been largely overlooked. A challenge for FESA is to examine attitudes towards potential volunteers who fall within the fly in fly out category and to welcome this group into their ranks

This presents an opportunity for FESA to consult with mining companies to identify their needs, market the benefits of allowing their staff to volunteer with emergency services and encourage their participation.

3.4.20 Legislative Requirements

Whilst not paid workers, FESA's volunteer workforce is subject to many of the same legislative requirements as employees, including *Equal Opportunity Act 1984* and volunteers being deemed to be 'public officers' for the purposes of the *Corruption and Crime Act 2003*.

With the implementation of the national Work Health and Safety Regulations due to come into effect in January 2012, WA volunteers will, for the first time, be afforded legislative coverage for occupational health, safety and welfare. FESA is currently considering the impact of this reform on maintenance of a sustainable volunteer workforce, with particular regard to education, training, hazard reporting, fitness for duty and governance.

Considering the legislative obligations and responsibilities around volunteers, and given the size and spread of FESA's unpaid workforce, there needs to be a greater recognition and appreciation from Government of the effort required to adequately support and manage such a significant resource.

3.4.21 Summary

As highlighted by the above, FESA volunteers directly contribute enormously to the safety of the WA community, which is unparalleled by any other volunteer group within the State. It is absolutely vital that FESA and Government continue to actively support the concept and growth of volunteerism as a cornerstone to the safety of the WA community. This cannot happen in isolation

and there are numerous considerations that need to be considered in addressing this complex and sensitive issue.

FESA is acutely aware of the adverse impact of any additional impost on volunteers through such activities as prescribed minimum training requirements, additional workload associated with administration, mitigation/community engagement etc. FESA is totally committed to continually providing the most flexible and efficient process possible to minimise this impost and still achieve the same outcome. This may include developing and exploiting lateral solutions to addressing the issue in consultation with volunteers themselves. Increased use of online opportunities, portability of skill (including broader membership opportunities within brigades), brigade classification structures (collocation opportunities and hub-spoke model opportunities) are all potential examples. One of the more innovative programs that have been established is in the Kimberley where the *Indigenous Rangers* help to manage a combination of land/fauna, and their role includes fire mitigation. Integrating volunteers involved in environmental conservation and emergency services is another concept that may be considered.

Volunteerism should not be taken for granted and the Review must be extremely conscious of the potential flow-on impact of any of its recommendations on volunteers. The experience, affinity and supporting infrastructure of FESA is essential in continuing to provide ongoing support and coordination of emergency service volunteers across WA. This cannot, and should not, be separated out of the host organisation and any attempt to do so would, in FESA's opinion, diminish the ownership and integration of volunteers within the organisation, sector and community in general.

FESA is committed to continually exploring opportunity to grow volunteerism within the State, stem the decline, retain the extensive experience and knowledge base and ensure volunteers continue to be given a voice and input into issues that directly affect them.

3.4.22 FESA Proposals

The Review should:

- Recognise the significant contribution of volunteers in the *Perth Hills Fires* and more generally to the overall safety of the WA community;
- Recognise the evolution of volunteer support activities within FESA and the successes of these initiatives / programs;
- Recognise the existence of a *Volunteer Charter* and carefully consider the potential impact on volunteers of any recommendations it might make to Government as a consequence of this Review;
- Strongly recommend to Government that FESA is the most appropriate agency to continue to coordinate emergency service volunteers within WA; and
- Encourage Government to work directly with FESA to explore future opportunities to support emergency service volunteers, including as necessary advocacy to the Commonwealth Government for additional support arrangements.

4. THEME 3 – COMMUNITY FIRE SAFETY PLANNING

4.1 Building engaged and active Fire Safe Communities

As detailed in the *FESA Overview* section of this submission, FESA has proactively been modifying and evolving its service delivery model to ensure it maximises the opportunities to engage with the community in all facets of its business. It is vitally important that this occurs in a consistent manner and is directly aligned to national and state-wide bushfire management policy, plans and associated activities.

FESA recognises that a safer community can best be achieved through the formation of partnerships with communities that enhance each community's level of resilience (self-reliance). To achieve this, FESA has embraced a more facilitative role in managing risk that involves greater community participation. FESA largely achieves this through its suite of community engagement programs and strategies.

FESA's community engagement specialists develop programs and complimentary resources to support the organisation, including staff and volunteers, and collaborate with the community in achieving community safety outcomes. These span the all hazards environment which FESA works within.

FESA recognises the importance of school aged education as a long term approach to building community resilience. FESA's school aged programs apply continuation learning across a range of curriculum linked, age appropriate programs. These programs assist in developing sound behaviour and attitudes towards risk in young people in preparation for longer term risk exposure. However, the school aged programs do not seek to improve immediate levels of community preparedness

A key focus of FESA's community engagement programs is community prevention and preparedness as the impacts of disasters on the community are significantly influenced by the level of prevention and preparation by the community. These activities help to build community resilience to disasters because they build the capacity of the community to withstand, recover from, and respond positively to an emergency or crisis.

FESA believes that community engagement increases resilience, firstly by raising the awareness of the community to the risks they face and empowering and secondly by enabling them to undertake activities that reduce their exposure to this risk. This is achieved through a range of education and empowerment methods that require a long-term approach which involves the establishment of trust and active partnerships between the community and FESA.

Essentially resilience is increased by sharing responsibility for the risk and making the community *active participants* rather than *passive recipients* in risk reduction strategies.

Traditionally interaction between the emergency services and the community has primarily involved a one way transfer of information and it is now widely accepted that it is unrealistic to expect that applying this type of interaction will have an immediate impact on the community's behaviour. It ignores the complex process involved firstly in communicating risk and secondly in aligning this to the readiness of the community to change. This traditional approach may result in the community becoming more aware of the risks and understanding the key safety messages; however, it is unlikely to lead to the behaviour change necessary to actively mitigate risk.

Community engagement, however, embraces a more complex process of education and involves a much higher level of interaction between the emergency services and the community. It embraces a two-way process of education that enables a greater understanding of a given situation and the establishment of solutions (i.e. treatments) appropriate to the needs of particular individuals or groups within a specific risk environment or situation. In this approach, the transfer of information is only one aspect of the interaction between the emergency services and the community. It also involves shared decision making, two-way education and capacity building and, importantly, the building of relationships and trust. This more complex process is challenging and to be effective needs to occur at a local level.

FESA's community engagement framework (attached as Appendix 10) seeks to foster a more localised approach to its programs to embrace this more complex process. A localised approach is necessary to enable the community to become active participants in the process. It also means the process is able to reflect the local situation both in terms of the hazard profile and the particularities of the local community. In addition, involving the community at the local level gives the individual community members a greater opportunity to be involved in negotiating how to address their needs.

FESA's community engagement programs aim to facilitate this diversity by adopting a more localised community-centred approach and actively involving the community in problem solving and decision making rather than simply being passive recipients of generic, broad scale one-off information. Involving the community in decision making is more likely to lead to behavioural change because it enables individuals to take greater responsibility for their own safety. Where the community has had the opportunity to develop trust in the process they are more likely to accept responsibility for their specific role/s in reducing risk. This is enhanced further when the community can trust they are being supported by agencies such as FESA who are also undertaking a broad range of complementary strategies to manage the risk.

A *localised* community engagement process is more likely to be sustainable as it enables the community to gradually take on greater and greater responsibility for their own risk environment/s.

4.1.1 Existing Community Development System and Programs

FESA recognises that the community's level of understanding of their exposure to risk and the responsibility they take for reducing or preparing for this risk varies significantly across the diverse groups and individuals who make up the 'community' of WA.

The Community Engagement Directorate is responsible for facilitating and coordinating the adoption and development of a community engagement approach within FESA. This is achieved through a 'program approach'. The aim of a program is to provide a strategic approach to the planning, development, implementation and evaluation of community engagement activities.

FESA's program approach recognises that effective community engagement is a long-term process that involves many people, including both community members and stakeholders, and therefore requires strong leadership and coordination. To facilitate this longer term view to engaging the community, FESA's community engagement programs are based on a 5 year term in accordance with phase 1 of FESA's *2023 Shaping Our Future Strategy*.

The programs are developed around five core community-centred program principles:

- collaborative arrangements;
- evidence based decision making;
- community and organisational needs;
- appropriate risk communication; and
- treatment options.

FESA's community engagement programs are developed around a particular risk (hazard) profile. This is largely due to the variable nature of the hazards that FESA is responsible for managing, in particular the seasonal and geographic variance and the various stakeholder roles, responsibilities and capacity.

Individual hazard programs enable the development of overarching strategies that reflect the specifics of a hazard and also allow those hazards with a greater risk priority to have more investment and a greater level of impact. It is also important to develop programs that realistically reflect community need and this also varies between hazards.

An extremely important aspect of this multi-hazard arrangement is to ensure the community members are not overwhelmed with competing messages and expectations. For the information to penetrate the community, it must be adaptable and comprehensible to the general community member.

This issue is further compounded with the diametrically opposed messages presented to the community which have the very real potential to confuse the community, for instance, the differences in messaging for different hazard types which may be occurring concurrently (e.g. leave early for bushfire versus stay indoors for heatwave, which can both be occurring at the same time in the same location).

The programs by nature foster local level activities; however, they still need to be aligned strategically to risk priority at the State level.

FESA school aged education programs include the following:

- *Emergency Helpers in the Community and Me*: introducing bushfire brigades and what they do;
- *Natural hazards*: impact and behaviour of bushfire, community impact and resilience/recovery; and
- *Law and Government*: arson, *Bush Fires Act 1954*, emergency management arrangements State and federal.

FESA's community engagement programs are developed to achieve the following objectives:

- Raise awareness in high risk areas about the importance of planning and preparing where possible for hazards such as cyclones, floods and bushfires;
- Increase understanding of how to prepare for, respond to and recover from the stresses particular communities will face; and
- Increase adoption of preparedness measures and appropriate response behaviours in high risk areas.

Bushfire Risk is addressed through two Community Engagement Programs: the *Bushfire Community Engagement Program*, which addresses risk in the Southwest Land Division, and the *Dry Season Bushfire Community Engagement Program* which addresses risk in the Kimberly and Pilbara. As mentioned elsewhere in this submission, the two discrete seasons require FESA to take this unique approach which does not exist in other States.

4.1.2 Bushfire Community Engagement Program

FESA has developed the *Bushfire Community Engagement Program 2008-2013* to provide a strategic approach to the planning, development, implementation and evaluation of its community engagement activities. It seeks to facilitate a collaborative and coordinated approach across a range of bushfire stakeholders and the community to undertake activities aimed at reducing bushfire risk.

The program aim is to “reduce the level of bushfire risk to the community”. The program outcomes are to:

- Increase community awareness to the risk of bushfire;
- Increase the level of timely preparedness by the community; and
- Increase the level of resilience of the community.

The program is facilitated by the Community Safety Branch within the Community Engagement Directorate which comprises of a manager and three coordinators. Each of the Community Safety Coordinators facilitates the bushfire program in their respective regions. FESA has established a Bushfire Community Engagement and Communications Committee to ensure coordination and collaboration across all bushfire stakeholders. IBMC have discussed the potential to integrate a committee into their structure in relation to community engagement, but have decided to consider this further based on the outcomes of the Review.

4.1.3 National Position

FESA places significant focus on active participation in the national bushfire community safety arena, and since the Victorian bushfires FESA has been an active contributor to the development of evidence based strategies and national positions designed to improve community safety from bushfire throughout Australia.

In September 2010 FESA, as a member of the Australasian Fire and Emergency Services Authorities Council, endorsed the *National Bushfire and Community Safety Position* (AFAC 2010) for application within WA. Accordingly, FESA has immediately commenced the processes necessary to implement all elements of this national and State adopted position into State plans, policies and associated arrangements.

Not all elements of the *National Bushfire and Community Safety Position* have been fully implemented as there is considerable state-wide, cross sectoral work and collaboration to be carried out in respect of contextualising and implementing all key elements. This includes the identification and designation of *places of shelter* from bushfire. This issue alone requires extensive research, ground testing, consultation, the development of a relevant State Policy and significant resource support. It also needs to be fully investigated in relation to factors such as integration into operational arrangements during the preparedness and response phases, and consideration of

vulnerable groups within affected communities and how these people would be treated in this regard.

The key elements of the *National Bushfire and Community Safety Position* (AFAC 2010) are as follows:

- The protection of people is always the highest priority;
- Fire agencies should give priority to informing and protecting people, and protecting the assets communities value;
- Firefighting resources will not always protect every property;
- Managing risk and reducing loss is a shared responsibility between government, communities and individuals;
- Sound policy and planning is essential for effective bushfire mitigation;
- Fire agencies should engage with at-risk communities, and seek to influence their preparedness for bushfire resources will not always protect every property;
- Fire agencies and their partners should implement a broad range of risk reduction measures;
- People in bushfire-prone areas should make their own decisions and preparations for how they will respond to the bushfire threat;
- People threatened by bushfires need ready access to accurate information and timely warnings to take effective action;
- People usually have two safe options when threatened by bushfire: leaving early or staying and defending adequately prepared properties. Leaving early is always the safest option;
- Many people fail to prepare adequately for bushfires, leave it too late to make critical decisions, and have few safe options. They are vulnerable and need direction;
- Vulnerable people who cannot cope with bushfire may need assistance to relocate well before fire impacts;
- Large scale evacuation is not the default option, although in some circumstances it may be the safest option;
- Incident controllers should seek information that will enable them to make decisions about whether or not to recommend evacuation;
- Last minute relocation or evacuation is dangerous;
- Road access must be carefully managed during fire events; and
- Fire agencies can and should support community recovery.

4.1.4 Bushfire Ready Program

The *Bushfire Ready Program* is a community driven program that FESA has established in partnership with Local Government to increase the resilience of the community to bushfire risk. Through the program FESA and Local Government are seeking to create a 'safer community' for those people living in high bushfire risk areas by fostering shared responsibility for the risk.

Bushfire Ready is a local community action program aimed at encouraging local residents to work together in preparing and protecting their families and properties against bushfires. It aims to build the resilience of communities by providing the opportunity for neighbours to network, share ideas and information and develop and implement strategies to reduce their bushfire risk.

The program began in WA in 1996, originally known as *Community Fireguard*, and was rebranded *Bushfire Ready Action Group* (BRAG) in 2001 and again revised to *Bushfire Ready* in 2008 to enable the community to more readily recognise its purpose; to build community resilience to bushfire risk. The program was originally based on the *CFA Community Fireguard* model developed in 1993.

The program is self managed, flexible and community driven. Groups comprise of community members who are lead by a Facilitator. The Facilitator is typically a resident and member of the local Bush Fire Brigade. Facilitators are supported by Street Coordinators who are also residents but not members of the brigades. The facilitators are trained by FESA's Community Safety Branch with the support of FESA Operations and Local Government.

- Facilitators receive kits including a t-shirt, satchel and manual. The manual contains 11 modules outlining roles and responsibilities and key areas of community bushfire education; and
- The Street Coordinators are trained by the Facilitators and also receive a manual outlining their roles and responsibilities.

FESA also supports the Facilitators through the three Community Safety Coordinators, who manage the all hazards responsibilities of FESA (not just bushfire), who are centrally based but each aligned to diverse regional areas. This includes regular communication and resource development, training and professional development.

Technical advice and support is provided to the Facilitators by a range of bushfire stakeholders from FESA and Local Government and this is typically coordinated through the FESA District Manager.

A concentrated focus by FESA has led to a doubling of state-wide capacity of the Bushfire Ready Group since 2009. There are currently 66 Bushfire Ready Facilitators in WA and each has a varied number of Street Coordinators.

Table 13 - Profile of Bushfire Ready Facilitators

BUSHFIRE READY GROUPS	TOTAL NUMBER OF FACILITATORS	NUMBER OF NEW FACILITATORS SINCE 2009
Metro North Kalamunda Wanneroo Bullsbrook Chidlow Woodridge Darlington Chittering Mt Helena Gidgegannup West Gidgegannup East Swan Lower Chittering East Swan Quinns Sawyers Valley Stoneville Parkerville Chidlow	26	14
Metro South Mandogalup Oakford Roleystone Singleton Baldivis Bassendean Bedfordale Jandakot	28	12
Midlands Goldfields Toodyay	2	1
Southwest/Lower South West Shire of Murray Molloy Island South Yunderup/Ravenswood Dunsborough Yallingyup Tingleview	3	3

Great Southern Goode Beach Frenchman Bay	7	3
TOTAL	66	33

With respect to the *Perth Hills Fire* area in particular, there are currently six Bushfire Ready Facilitators and approximately 75 Street Coordinators in Roleystone, Kelmscott and surrounding areas within the City of Armadale. Three of the Facilitators specifically cover Roleystone.

4.1.5 2010-11 Southern Bushfire Season

FESA's programmed 2010-11 bushfire campaign targeted five key communication areas to focus activities in the following ways:

- Focus on the fact that the majority of people do not have a bushfire survival plan and develop 'call to action' messages to target them;
- Promote the need for people to actively seek information, be aware of their surroundings and watch for signs of bushfire, especially smoke and flames;
- Increase the awareness of the bushfire warning system and the three levels of alert used once a fire has started;
- Communicate what the Fire Danger Rating tells people, how they can use it and why they should use it;
- Educate and inform people about where they should shelter in their homes if they cannot leave; and
- Work on addressing myths around the best place to shelter.

4.1.6 2010-11 Seasonal Prognosis

In response to 2010-11 seasonal prognosis, FESA brought forward the Media, Public Affairs and Community Engagement annual campaigns designed to educate communities at risk from bushfire. This challenged the communities' perceptions of when the bushfire season commences based on previous experience.

Community Engagement relies on support from bushfire stakeholders, staff and volunteers for the facilitation of community prevention and preparation activities. Once the season starts, staff and volunteers are far less available to participate in, and support community engagement activities.

FESA's Community Safety Branch commenced facilitation of the 2010-11 Season *Bushfire Community Engagement Program* in September 2010, approximately six weeks earlier than the previous season, commensurate with the seasonal prognosis.

The program was aligned to the seasonal progression from North to South. Community engagement activities commenced in the Midwest Gascoyne in early October to accommodate the early season, commencing initially in the northern part of the southwest land division. The Great Southern Region was commenced later in the season.

Relatively early incidents such as Karnup on 30 November 2010 and Gooseberry Hill on 13 December 2010 were both followed up with a mail out and community meetings. Anecdotal evidence suggests many residents were not as well prepared due to the early commencement of the season.

4.1.7 Bushfire Action Week

FESA implements an annual media campaign to raise the awareness of the community to bushfire risk and how they can prepare themselves, their families and their properties. FESA hosted *Bushfire Action Week* from 10 to 17 October 2010 to enable the broad scale dissemination of bushfire preparation and safety messages along a daily 'targeted theme'. In its second year, *Bushfire Action Week* encourages people in high bushfire risk areas to take action and prepare for bushfire season.

Communication strategies associated with *Bushfire Action Week* included:

- A Sunday Times lift-out promoting the actions people need to take to prepare their home for bushfires, the bushfire warning system, where to find information during a bushfire and StateAlert. There was also an editorial feature that promoted volunteering and the seasonal outlook;
- A media doorstep was held to launch the week at a property that had been impacted by a bushfire in 2009-10. The Chief Operations Officer outlined the potential for a bad bushfire season with indications of the season being six weeks earlier. The property owners told how they had prepared for a bushfire but had not prepared enough, and encouraged people not to underestimate what it takes to be prepared;
- ABC Bushfire Awareness Day took place during the week with at least one interview on each program relating to bushfire preparation by FESA spokespeople and members of the public who had been through a bushfire talking about their experiences;
- Community Service Announcements ran on ABC radio and the Weather Channel promoting the week and how people can prepare for the bushfire season;
- The Emergency Services Minister spoke in Parliament about *Bushfire Action Week*, the key actions people needed to take in October and urged support from fellow members;
- *Bushfire Clean-up Day* provided another media opportunity to conclude the week and to see people in action preparing their properties for the season. The Chief Operations Officer, a property owner and a Bushfire Ready Group Facilitator provided comments to encourage people to prepare; and
- Activities to promote the week were coordinated by local governments, Bushfire Ready Groups, Brigades and Stations at grassroots community level.

4.1.8 Priority Locations

Priority locations are identified in the lead-up to each Bushfire Season. The priority locations become the focus of 'localised' engagement strategies that seek to address local risk with activities that reflect the local community. Currently the priority locations are established using a combination of the State Bushfire Threat Analysis, local knowledge, and information on fire related criminal activities and then further refined in consultation with regional bushfire stakeholders. A copy of priority locations is attached as Appendix 11 of this submission.

In summary there are:

- 92 locations with an identified bushfire risk;
- 32 identified priority locations; and
- 14 new priority locations added in 2010/11 (some previous priority locations may have been replaced on the list by some of these 14).

The priority locations are the focus of 'localised' engagement strategies that seek to address local risk with activities that reflect the culture of the local community. FESA's Community Safety Coordinators collaborate with the local bushfire stakeholders including FESA staff and volunteers, Local Government and other community based organisations to design and facilitate 'localised' activities. The activities include:

- Door knocks within high risk locations;
- Joint FESA / Local Government letters to targeted locations;
- Strategies to engage absentee landowners;
- Strategies to engage tourists/campers;
- Strategies to leverage bushfire ready facilitation; and
- Community meetings/street meets.

The FESA Education and Heritage Centre 'All Hazards Gallery' includes the following Bushfire information:

- Evaporative Air conditioners;
- Preparing your Property;
- Hazard in Australia;
- The Fire Danger rating; and
- Audio Visual Fire History – Dwellingup 1961, Tenterden 2004 and Canberra 2003.

18,000 visitors have passed through the centre since it opened in September 2009

4.1.9 Communicating Change to Bushfire Stakeholders

A range of strategies and resources was developed and undertaken to ensure bushfire and emergency services stakeholders were aware of the changes and the areas of focus for engaging the community. These included:

- Frequently asked questions and speaking notes;
- Prepare | Act | Survive | PowerPoint presentation for community meetings;
- 'Pocket' Prepare | Act | Survive | flip pad designed to be carried in the pockets of staff and volunteers as a quick reference tool for engaging the community;
- Warnings and Fire Danger Ratings information sheet;
- Prepare | Act | Survive | briefings to volunteers and stakeholders (i.e. DOACs, Captains' meetings, presentations at Bushfire Forum [including Chief Bushfire Control Officers] and Community Emergency Service Managers Forum);
- Mail outs of bushfire safety information to 8,356 householders in the priority locations;

- Articles were placed in all local newspapers in priority locations and within the Horizon Power magazine;
- Brigade open days;
- Bushfire information sessions;
- Variable message board advertising preparation messages;
- Distribution of bushfire warning information cards through real estate agents and the Visitors Centres in high risk locations;
- Face-to-face engagement;
- Staffed displays at shopping centres, festivals/shows and expos;
- Community information display day, including property assessments for local residents;
- Distribution of bushfire advice to campers in Local Government and DEC managed parks in a number of priority locations, in conjunction with DEC and Local Government rangers; and
- Use of localised banners to advertise bushfire messages.

A comprehensive 'schedule of activities' on the specific strategies and the stakeholders involved is available should the Review want further information on this matter.

4.1.10 Community Engagement Activities

Other strategies and resources developed and undertaken to support community engagement activities included the following:

- Revised Prepare | Act | Survive | Guide (principal bushfire resource):
 - Printing and distribution of 20,000 copies throughout WA.
- Pocket' Prepare | Act | Survive | and laminated Warnings and FDR Information Sheet:
 - A 'pocket' resource has been developed to increase emergency service staff and volunteer understanding and confidence in the recent changes and to encourage staff and volunteers to 'engage' the community around bushfire safety. The pocket P.A.S has been distributed to career and volunteer fire and rescue services, Brigades, FESA regional offices, Bushfire Ready facilitators and Department of Environment and Conservation (DEC) staff.
- Prepare | Act | Survive | Evaporative Cooler Flyer:
 - Covering the risk arising from evaporative coolers during bushfires, particularly in the *peri-urban* areas surrounding 'pockets' of bush land.
- An existing flyer has been updated to the Prepare | Act | Survive | style and is being used to targeted residents who live in built up areas not typified as high bush risk areas. The flyer has also been translated in 17 emerging CALD languages and made available online (i.e. Amharic, Arabic, Cantonese, Chin, Dari, Dinka, Farsi, French, Indonesian, Karen, Kirundi, Mandarin, Nuer, Somali, Sudanese Arabic, Swahili, Vietnamese).
- Prepare | Act | Survive | *After the Fire*:

- A recovery brochure for people affected by bushfire to have information to assist them in the initial aftermath of the incident.
- Prepare | Act | Survive | *Bumper sticker*:
 - For Bushfire Ready Groups to appear more 'visible' at the neighbourhood level.
- Prepare | Act | Survive | *Vinyl Roadside Banners*:
 - Following the success of roadside banners last season additional banners have been produced and distributed per region.
- Prepare | Act | Survive | *Postcards*:
 - Two postcards have been developed:
 - 'brigade visit card' to enable brigades to let community know they have been in the area door knocking;
 - 'absentee landowners' postcard for invitations or reminders of risk.
- Prepare | Act | Survive | Fridge magnet with emergency information numbers and web address.

A comprehensive 'catalogue of resources' on the specific strategies and the stakeholders involved is available should the Review want further information on this matter.

4.1.11 Circle of Safety – Building Protection Zone

One of the core elements of the Prepare | Act | Survive | strategy includes assisting residents to create a 20 metre circle of safety around their home and other buildings to establish a building protection zone.

15 key areas are addressed in achieving the circle of safety (FESA 2010, Prepare Act Survive V2, p 24) including ember protection measures, vegetation clearance, gas cylinder safety and the provision of alternate water and power supplies.

The guide also contains bushfire survival plan templates and checklists to facilitate the process and further reinforce the bushfire safety messages.

4.1.12 Absentee Landowner Strategies

Absentee landowners have been identified by numerous local governments and FESA regions as higher risk. They are a challenging group to engage because they are geographically dispersed and often permanently reside in low bushfire risk areas and lack awareness about the risk to their rental or holiday home.

Two metropolitan based workshops were held at Bold Park Ecology Centre on, 10 November 2010 in the evening and on 20 November 2010 in the morning. 4,650 postcard invites were sent out to the local governments for Denmark, Bremer Bay, Lower Chittering, Margaret River-Augusta (and surrounds), Yallingup and Toodyay. The invites included community

safety messages targeting absentee landowners. Over 100 people attended the workshops facilitated by FESA.

4.1.13 FESA Public Information Systems

FESA's public information systems are now used by all WA fire agencies to inform the community of information about fire incidents. This has led to an increase of over 300% in the number of times FESA's Media and Public Affairs was activated by Local Government and DEC to provide public information.

4.1.13.1 FESA Website

In 2009 FESA undertook to completely redevelop its website to meet the increased demands and expectations of the community to receive timely and accurate information about emergencies and emergency services. The Chair of the Public Information Sub-Committee to SEMC commented at the 3 March 2011 SEMC meeting:

"That currently the coordination of information role is being handled well by the FESA website"

FESA is currently in Stage 4 of this systematic redevelopment. The following outlines the individual phases of this program:

Phase 1

Involved the complete redevelopment of FESA's critical online capabilities and making them available on a new software platform - commonly known as MOSS 2007 (Microsoft Office SharePoint Services 2007). This included Emergency Alerts, Fire Danger Ratings, Total Fire Bans and Media Releases. This replaced FESA's ageing 1996 web platform (VIVID) and has substantially improved FESA's ability to deliver a modern and efficient public facing internet presence. The critical online capabilities went 'live' on 1 December 2009.

Phase 2

Was completed in February 2010 and included a refinement of FESA's homepage highlighting the critical online capabilities. This provided linked menu items for each online capability and allowed members of the public to request RSS feeds. The temporary Total Fire Ban tool was also enhanced.

Phase 3

Was completed in November 2010 ensuring business continuity of a readily scalable service for the community interface to FESA's critical online capabilities being available to the Western Australian community at all times. FESA now uses an external hosting model including load balancing features, business continuity and disaster recovery facility.

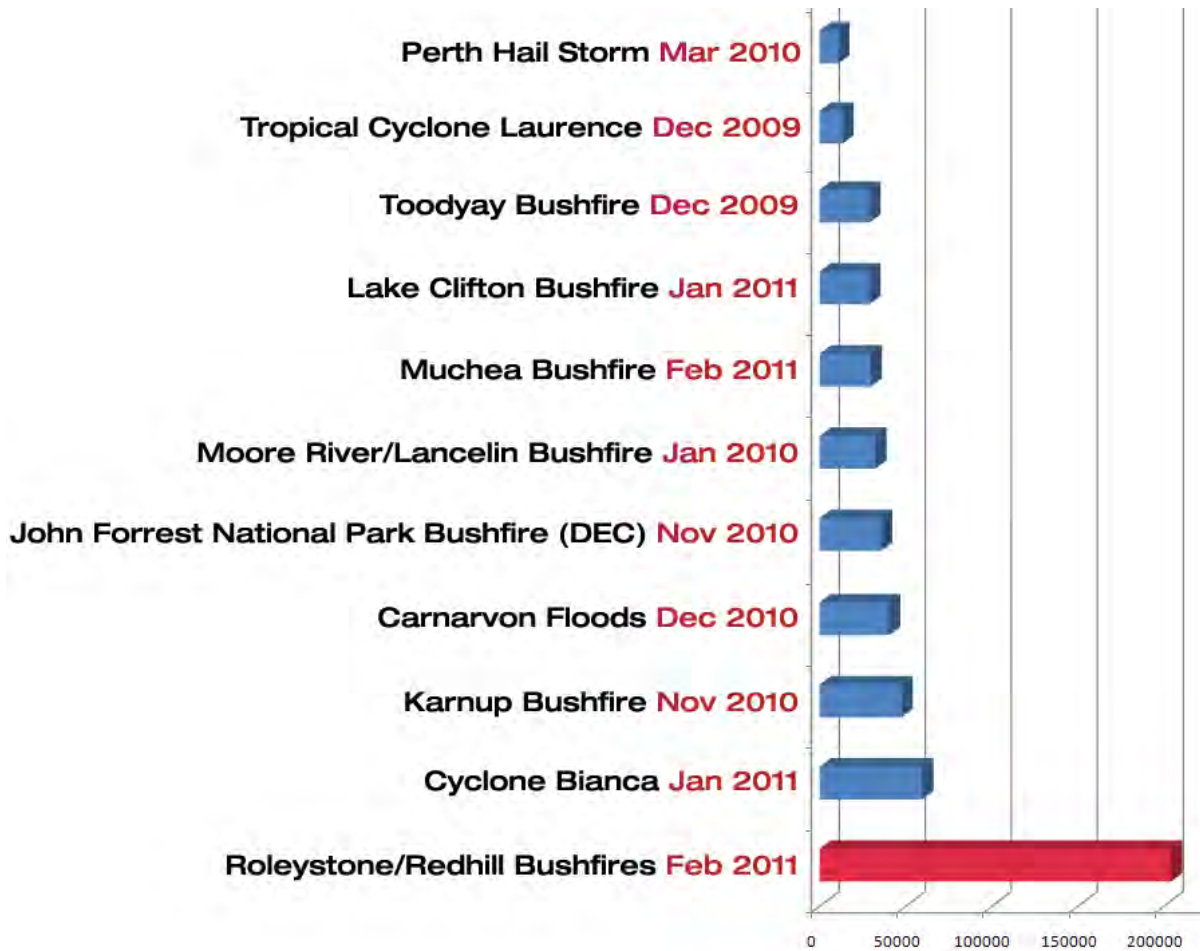
Phase 4

Is currently underway and will be delivered in the first half of 2011. This phase includes updating all the old technology features that reside outside of the critical applications.

This work has proven to be extremely valuable for the community of WA, as FESA has witnessed a massive increase in web site usage with people accessing vital information during emergencies, without any system failure or down time during these events.

The below tables provides a clear indication of the increase in FESA website traffic, including specifically that relating to the *Perth Hills Fires*.

Table 14 – Website Traffic during Perth Hills Fires in February 2011



Date Period	FESA Website Traffic
01/12/10 – 25/03/11	474,050 Unique Visitors 4,597,193 Pageviews
01/12/09 – 01/04/2010	201,314 Unique Visitors 1,265,764 Pageviews

4.1.13.2 StateAlert

Community expectations for timely, accurate and specific information during times of emergency are at an all time high. This has been evidenced in recent bushfires and also recent non-fire related events such as the Queensland floods, Cyclone Yasi and the earthquakes in Christchurch and Japan. Another extremely important system for providing this information, in addition to pre-event/season education and community meetings etc during an emergency, is the StateAlert system.

The functionality of this system is as follows:

- StateAlert has multiple channel delivery – fixed phone line, mobile phone, fax, SMS and web. Any mix of channels can be used and all channels are integrated, so that sending a message to different channels is a streamlined ‘one-click’ process;
- StateAlert has multiple group delivery. The system can provide message delivery to pre-defined groups, e.g. strike teams, as well as geographically defined areas;
- StateAlert has dial-out and dial-in capability. A message sent using any of the channels can be attached to a dial-in number, which can be advertised as an information line for the public to access. This ensures consistency of information delivered to the public and reduces the manning required for public information requests;
- StateAlert has the ability for public users to ‘opt-in’ other addresses (i.e. addresses of properties other than the property address of listed phone numbers). For example, public users can ‘opt-in’ to receive messages on a nominated number for an address relating to an elderly relative, or a second property, such as a holiday home or an area which will be associated with their mobile phone rather than the fixed billing address of the mobile; and
- StateAlert has been designed and constructed using internationally recognised protocols and standards. StateAlert utilises the *Common Alerting Protocol v1.1*, which is an approved protocol for sending emergency warning messages (the Common Alerting Protocol was recently approved by Australasian Fire Authorities Council as their standard for delivering emergency warning messages).

The system provides the following flexibility:

- StateAlert can be modified to use multiple telecommunications carriers (i.e. the system is not tied to a single carrier). This offers improved system resilience and improves efficiency of sending messages as load sharing can be used for large message distributions whilst also creating competitive billing options;
- StateAlert is built on open-source architecture which provides flexibility of development; and
- StateAlert has a proven track record and continues to perform well in times of crisis.

The system provides value-for-money by way of the following:

- StateAlert offers flexible models for system support and maintenance, which can align to individual State’s requirements; and
- Alerting costs are ‘per alert’, not an annual flat rate, therefore States only pay for their direct use of the system.

Usage and performance of this system during the *Perth Hills Fires* is contained elsewhere in this submission.

4.1.14 Community Engagement – Evaluation of Effectiveness

FESA recognises that engaging the community requires a significant investment in time and resources, and more often than not this includes the invaluable time of volunteers. FESA is keen to ensure the activities undertaken have the potential to affect outcomes and not just focus on outputs.

At the end of each hazard season FESA undertakes a program evaluation with stakeholders. The outcomes of this process are then integrated into the planning process for the subsequent season.

FESA is also a member of the Bushfire CRC and the Australasian Fire and Emergency Services Council through which it commissions and participates in both national and local research. The research provides an important evidence base for the programs.

4.1.15 Perth Hills Fires – Lessons Learnt

FESA and the Bushfire Cooperative Research Centre are collaborating to conduct bushfire community safety research following the Perth Hills Bushfires on 6 February 2011. The research aims to understand how the bushfire affected communities experienced the fire with a view to informing future bushfire safety; engagement strategies and activities. The utilisation of the Bushfire CRC supported by the University of Western Australia, together with researchers from La Trobe and RMIT Universities in Victoria, provides both independence and academic rigour to the outcomes.

Up to 400 residents from the *Perth Hills Fires* area have been asked to take part in a study to understand and improve bushfire community safety. This involved teams of researchers from the University of Western Australia, together with researchers from La Trobe and RMIT Universities in Victoria, interviewing up to 400 residents from Roleystone, Kelmscott and Red Hill. Face to face interviews commenced on the 28 February 2011 and were completed by 31 March 2011. In addition to these face to face interviews a mail-out survey was also undertaken but this will not be completed until 30 April 2011.

Currently lessons learnt are limited as they are largely based on anecdotal evidence. The Bushfire CRC research will provide a rigorous and valid evidence base that is thoroughly analysed. The research is aligned to previous bushfire community safety research undertaken following the Victorian bushfires in 2001 and the *Lake Clifton Bushfires* in January 2010. This provides an important opportunity for comparative analysis and will significantly strengthen the underpinning research to inform future programs within WA.

As requested by the Review during the hearing conducted on 29 March 2011, the CRC survey instruments (for both face to face and mail-out surveys) being used are attached as Appendix 12 and 13 of this submission.

The final research report will not be available until 28 June 2011, which FESA understands is too late for the Review purposes. However, a preliminary statistical report based on the face to face interviews and without any analysis (i.e. raw data) is attached as Appendix 14 for consideration of the Review.

4.1.16 Challenges

Engaging the community requires a significant investment in both time and resources. Bushfire community engagement relies heavily upon the Bush Fire Brigade volunteers. The profile and capability/capacity of brigades varies significantly; some are very proactive and supportive of community engagement whereas others are more focused on other bushfire activities, largely response. Often brigades lack the capacity or time to undertake community engagement due to a

range of challenges including recruitment, retention and an ageing volunteer profile. Staff and volunteer capacity is also limited during the bushfire season when the core focus is understandably on response. This is an ongoing cultural and resource challenge for FESA (and for that matter any emergency management agency).

Brigades are encouraged to support the establishment and maintenance of the Bushfire Ready Program in their local area, especially those areas considered at high bushfire risk. Supporting Bushfire Ready is not a core function within the brigade structure and some brigades do not have members who are interested in this role. Bushfire Ready however is seen by FESA and Local Government as playing a key role in facilitating activities that mitigate bushfire risk, therefore hopefully placing less reliance on response based activities.

Bushfire Ready is mostly facilitated by the volunteer Bush Fire Brigades. Along the urban rural fringe (*peri-urban* areas) many high bushfire risk areas occur within the Gazetted Fire District and the volunteer Bush Fire Brigades do not have primary responsibility within these areas. This is a further example of the complex layering of responsibility that occurs within the WA operating environment. Bushfire Ready provides the highest level of engagement as it is community driven.

'At risk' and hard to reach communities such as the new and emerging Culturally and Linguistically Diverse communities (CaLD), hard of hearing, elderly and people with disabilities all require special strategies and programs. This requires a significant investment in time and resources.

Absentee landowners (transient community) are those people who own a second property and reside elsewhere. They are a challenging group to engage and are often unaware or apathetic about property preparation for bushfire risk. In some Local Government areas absentee landowners make up a significant part of the ratepayer base. Furthermore, the properties are more likely to be occupied during peak periods, which can often coincide with the bushfire season.

WA's population is widely dispersed and often geographically isolated with a low population density. This creates challenges for supporting and servicing these locations, especially with developing relationships and trust with local level stakeholders.

Where there is community apathy, the community is generally difficult to engage as they have many competing day-to-day responsibilities and stresses. They are also regularly inundated with information. Community safety information on bushfires has to compete with a range of other community safety messages such as smoking, which often have extensive social marketing campaigns underpinning them.

When conceptualising risk the community has a bias about low frequency events. It is important to understand that even the more frequently occurring hazards such as bushfire and cyclone have a relatively low likelihood of affecting any individual or household. Therefore, even if they are aware of the risk, people avoid taking action by believing it will happen to someone else ('won't happen to me syndrome'). People also tend to over-estimate their levels of preparedness. This is due to a range of reasons including the tendency to misinterpret information and a limited experience and understanding of risk and fire behaviour.

Communicating about risk in regional or generic probability over large geographic areas also affects people's perception as it does not relate the risk specifically to them personally (i.e. at the

household or neighbourhood level). People tend to transfer responsibility (i.e. “if the problem is that big there is nothing I can do about it, it’s the Government’s responsibility”). People’s belief in whether their actions will make a difference also affects their behaviour towards risk. This is referred to as ‘outcome expectancy’ (i.e. how people assess the effectiveness of any actions that can be taken to reduce risk).

‘Negative outcome expectancy’ describes the belief that the hazard is too destructive for personal action to make a difference. ‘Positive outcome expectancy’ describes the belief that personal preparation can make a difference. Those individuals with a tendency toward negative outcome expectancies are highly unlikely to undertake preparation or mitigation activities. Personal competencies also affect whether people progress an intention into an action due to people’s self belief in their ability to achieve something. An important aspect of people’s coping style is their capacity for problem solving and their ability to actively confront challenges.

Often the media contradicts FESA’s community safety messages by showing inappropriate behaviours, such as standing on the roof of a house in shorts and thongs.

4.1.17 Opportunities

There is an opportunity to undertake a recruitment campaign directed at volunteers to include people interested in community engagement. The CFA in Victoria ran a similar campaign recently and freed up regulatory restrictions to increase the pool of ‘non-response’ members to support the broader brigade needs, such as administration, training, community education etc. This is a core opportunity to increase brigade capability and capacity in support of their broader functions. Another option in this regard is the adoption of a *hub-and-spoke* model to support smaller brigades from the additional capacity that exists in *hub brigades* within the general area. FESA will continue to actively pursue these lateral solutions to this issue in consultation with Local Government and in addition to the evolution of the Community Emergency Services Manager and Bushfire Mitigation Officer programs.

The use of social networking technology such as Facebook and Twitter to actively engage and promote community awareness and preparation is another core opportunity that FESA will continue to pursue. This is even more relevant to cater for generational change and the advancements in technology that society is now embracing.

Social marketing campaigns which include technology such as YouTube and viral marketing strategies are used effectively by other organisations to affect community behaviour and raise awareness. This links directly with the combination of the above and is included in FESA’s considerations for the future.

The role of community engagement has largely focused on pre-season prevention and preparedness. During the *Perth Hills Fires*, Community Engagement became involved in the operational based community interaction. This included:

- Activities such as supporting Operations to advise people whose homes had been damaged or destroyed; and

- Coordinating those people who had lost homes to return safely to see their property prior to the fire ground being opened and providing an interface at the Recovery Centre including updates on the fire and the status of when people would be able to return home.

These activities support the basic tenet of FESA's submission, in that all bushfire management activities *must* be treated as an end-to-end system and not isolated activities within the PRR continuum or based on land tenure.

The challenge remains to get the balance and resource alignment right to proactively engage the community and key stakeholders in accordance with this mindset. This is not easy nor is it a short term issue. FESA recognises this is a long term culture change at both organisational and community level.

4.1.18 FESA Proposals

The Review should:

- Recognise that FESA has proactively been modifying and evolving its service delivery model to ensure it maximises the opportunities to engage with the community, including the progressive growth in Bushfire Ready Facilitators;
- Strongly support that *primacy of life* is treated as the first and highest priority in all of FESA's operational and community engagement strategies and decision making, and is a core element of the Prepare | Act | Survive | communications strategy developed by FESA based on the National Bushfires and Community Safety Position;
- Note FESA's acknowledgement that it is inevitable that a focus on the protection of life over property will lead to additional property loss, particularly where decisions have been made to relocate or evacuate people who may otherwise choose to stay and defend their property;
- Support the *FESA Community Engagement Framework*, including its 5 year term, developed in accordance with the *FESA 2023 Shaping Our Future Strategy*;
- Note the adoption of the national position and the incremental achievement in implementing this position within WA including the number of challenges and work to be undertaken to achieve full compliance with this position (e.g. shelters);
- Note the specific status of resources applied to the areas affected by *Perth Hills Fires* (currently six Bushfire Ready Facilitators and approximately 75 Street Coordinators in Roleystone, Kelmscott and surrounding areas within the City of Armadale, including three Facilitators specifically covering Roleystone);
- Note the earlier activation and increased community engagement activities commensurate with the seasonal prognosis and timing;
- Note the anecdotal evidence from relatively early incidents such as Karnup on 30 November 2010 and Gooseberry Hill on 13 December 2010 that suggests many residents were not as well prepared due to the early commencement of the season;
- Recommend to Government that it considers the current resourcing constraints, community expectations and future demands on providing contemporary community engagement activities before, during and after an emergency event and place a priority in future budgets to increase resourcing to this important issue, which will also support and alleviate any additional burden being placed on volunteers;
- Recognise the effectiveness of the programs and strategies and acknowledge the efforts of volunteers to date;
- Support FESA's initiation of specific research in partnership with the Bushfire CRC to inform future programs and strategies;

- Recommend to Government that all bushfire management activities *must* be treated as an end-to-end system and not isolated activities within the PRRR continuum or based on a land tenure basis;
- Note that behaviour change is a challenging process that has been well researched through the Bushfire CRC *C2 Project*, which showed it requires a significant investment in time and resources over an extended period of time;
- Support FESA's position that these issues a long term culture change at both organisational and community level; and
- Note that FESA's website is coordinating and handling the increased traffic well and that final redevelopment will be completed in the first half of 2011.

4.2 Fire Hydrant Ownership

In WA, although fire hydrants are connected to water providers' mains and effectively universally controlled by them (i.e. maintenance contracts, third party usage etc.), they are owned by FESA or Local Government. FESA owns hydrants located in gazetted fire districts, and 100 individual local governments own hydrants located outside of these areas.

This ownership arrangement is unique to WA and contrary to other national and most international jurisdictions where hydrants are appropriately considered part of water provider infrastructure.

A number of anomalies arise from these unique arrangements which in 2006 led the *Community Development and Justice Standing Committee (CDJSC) Inquiry into Fire and Emergency Services Legislation* to recommend that hydrant ownership be transferred from FESA and Local Government to WA water provider agencies.

Subsequent attempts to transfer ownership of the hydrants to WA water providers (including extensive consultation carried out with the implementation of a joint working group described in recommendation 78 of the CDJSC) have been vigorously opposed by the water providers and to date these attempts have been unsuccessful. The opposition to the transfer has largely been based on claims of increased public liability and costs, although these issues were all considered by the CDJSC.

There are a number of unsatisfactory aspects of WA's unique arrangements for fire hydrant ownership which include but are not limited to the following:

- There are significant deficiencies in the coverage and the maintenance of hydrants outside of fire districts which increases risk to community safety;
- FESA and Local Government incur a cost to enable water providers to use the hydrant infrastructure to sell water to a third party. Third party use of hydrants (permitted as a commercial business arrangement by water providers) contributes to hydrant maintenance and repair costs, for which Water Corporation provides only a partial subsidy to FESA. The subsidy is not applied to repairs of hydrants owned by local governments and despite allegedly owning the asset, FESA has no control over third party usage;
- There are a number of inefficient administrative duplications between FESA, Local Government and water providers which are unavoidable if the status quo is to continue;
- The Water Corporation charges FESA and Local Government a 17% management fee for all hydrant repairs they complete. Over the last two years alone, management fees to FESA (not counting Local Government) have amounted to approximately \$400,000, with little or no control, transparency or key performance standards applying to FESA's fees; and
- Despite allegedly owning the asset, FESA cannot be involved directly in service level agreements with hydrant repair contractors, as current legislation specifies that only the water providers can directly contract repairs to hydrants. Despite the management fee arrangement, approximately 1000 hydrants, i.e. 2.5% in the metropolitan area are unserviceable at any given time with repair times in some instances being greater than 12 months. This is a significant risk to community safety and one which FESA has no control over to mitigate.

FESA contends that WA's unique hydrant ownership and repair arrangements unsatisfactorily impact on community safety. Consistent with FESA's submissions for increased line of sight accountability for all aspects of the fire management system, the segregation of fire hydrants in the manner in which it currently exists is a further example of ineffective and inefficient arrangements which in FESA's opinion, shared by the *Community Development and Justice Standing Committee*, should be addressed. The current situation simply does not make sense.

Whilst FESA accept fire hydrants are a fundamental asset for use by fire agencies, they strongly believe they are simply another means of water distribution and in an 'end-to-end' sense should rightfully be the responsibility of the relevant technical expert (i.e. water providers). This is further emphasised by the fact that hydrants are used by third parties so are not uniquely a fire service asset.

The state of serviceability and lack of ability to directly control and/or mitigate the risks associated with this is also unacceptable. FESA accepts the practicality of not having a '100% in service' performance standard, but cannot accept the current performance standard, regardless of the transfer of ownership proposition, nor the lack of control it can have on these arrangements.

Overall, put simply, FESA submits ownership and management of water assets is not its core function nor area of expertise and this rightfully rests with the water providers, as it does almost universally across Australia. This does not mean FESA will not play an active role in inspecting hydrants as part of its overall preparedness activities, but this should then result in a report to the relevant water provider for rectification of any identified faults.

4.2.1 FESA Proposals

The Review should:

- Note the current arrangements applicable to fire hydrant ownership in WA, its uniqueness, the recommendations of the *Community Development and Justice Standing Committee* and the inability to progress this issue with the water providers;
- Recommend the ownership and associated maintenance of fire hydrants should transfer to water providers as a matter of urgency; and
- Recommend FESA's role with respect to fire hydrants include routine and scheduled inspection with follow-up reports provided to the water provider for rectification of any observed faults.

4.3 Planning and construction in bushfire prone areas

'Peri-urban' literally means the area around an urban settlement. It is distinctive in its diversity, having a mix of land uses and residents. It is rural in appearance but many residents will have jobs in the nearby urban area to which they commute. The settlement patterns within WA create a diverse area of current or potential peri-urban areas. These areas are popular for those commuting to jobs in population centres, including Perth. A list of identified high and very high bushfire risk areas is attached as Appendix 15 of this submission.

With the devastation caused by the *Perth Hills Fires* destroying 71 houses and damaging several more, coupled with the general expansion of peri-urban areas across Australia (and WA in particular), a critical evaluation is needed of future building standards and land-use planning commensurate with risk and the overarching *primacy of life* principle. Associate Professor for Biodiversity and Climate Change at Curtin University, Dr Grant Wardell-Johnson, warns that climate change is causing many areas of WA and the nation to become hotter and drier, resulting in more frequent catastrophic fire days. According to Dr Wardell-Johnson, in places like Perth's hills, the nearby bushland provides available fuel for potential fires in proximity to people's homes. In addition, peri-urban areas can be very difficult to fire proof and expensive to plan with fire safety in mind.

"Peri-urban is the place that is the most vulnerable because we can't prescribe burn easily, because of all the houses. Also, the smoke bothers the airport. So, we've got restrictions on how we manage those forests," says Dr Wardell-Johnson. A peri-urban release may also need additional or more expensive infrastructure such as power lines to be built under ground and several roads leading in and out, with houses having specific design requirements. With more frequent catastrophic fire days, Dr Wardell-Johnson says prescribed burning becomes less efficient in preventing a fire outbreak.⁸⁹

The *Victorian Bushfires Royal Commission* also explored this issue in detail, resulting in its recommendations with respect to Planning and Building. The Commission outlined in its final report:

The unpredictable nature of fire and extreme weather conditions means it is not possible to guarantee that any building will survive a bushfire. Nevertheless, the construction of buildings and their siting relative to surrounding fuel loads are central to their defendability. Maximising a house's ability to withstand bushfire is important, both for people who choose to stay and defend and for those unexpectedly caught in their home during a fire. It can also help minimise the personal, social and economic costs of the widespread destruction of homes.

Land-use planning and regulation of building standards in bushfire-prone areas are two of several measures available for improving people's chances of surviving a bushfire. Individual planning and response are also essential. As lay witness Mr Rainier Verlaan of Callignee noted, 'Building regulations and bushfire plans need to go hand-in-hand together. There is no point in having these bushfire building regulations without the need for some form of

⁸⁹ Lorna Seatter, *WA warned against building homes in bushfire-prone areas* (2010) Science Network Western Australia <<http://www.sciencewa.net.au/topics/environment/192-News/2934-wa-warned-against-building-homes-in-bushfire-prone-areas>>

bushfire survival plan as well'. Applying land-use planning and building controls to minimise or reduce bushfire risk does, however, present challenges. In particular, the planning and building systems, which seek to reduce risk to communities in the long term, operate prospectively and have little capacity to deal with past decisions in relation to existing settlements or buildings in bushfire-prone areas.

Many have argued that planning regulation is crucial; for example, the 2004 report of the National Inquiry on Bushfire Mitigation and Management cited land-use planning as 'the single most important mitigation measure in preventing future disaster losses in areas of new development'. Good planning offers the potential to help people who choose to leave their property in the face of a fire by allowing for the development of evacuation routes. It can also make it easier for firefighters to gain access to and defend a property by imposing entry, exit and water supply requirements. Additionally, planning decisions in relation to settlement matters, land use and development, and the location of individual buildings on a property can potentially reduce bushfire risk by, among other things, restricting development in the areas of highest risk, where people's lives may be gravely endangered in the event of extreme bushfire.⁹⁰

This is an extremely complex operating environment, but generally the comments and findings of the *Victorian Bushfires Royal Commission* validate FESA's overall proposals contained within this submission. These include:

- Nominating FESA as the lead authority for bushfire, charged with responsibility to establish standards, policies and planning regimes and to work with regulatory authorities with respect to building standards/regulation;
- Planning and execution of plans (during mitigation and response phases) which are premised on the *primacy of life* principle;
- The need for a single integrated / centralised mapping base (including criteria and single site assessment methodology), which FESA submits should be the *FESA Bushfire Mitigation Portal* and associated threat analysis methodology;
- Mapping of bushfire risk, which FESA submits should be done using the *FESA Bushfire Mitigation Portal*;
- Establishing nominated bushfire prone areas and bushfire management overlays; and
- The need to integrate State and local planning schemes to manage bushfire risk.

4.3.1 Planning for Bush Fire Protection Guidelines

The *Planning for Bush Fire Protection* guidelines were first established in WA in 2001 in accordance with Department of Planning Policy DC 3.7 *Fire Planning and Planning for Bush Fire Protection*.

In 2010, FESA and the Department of Planning completed a review of *Planning for Bush Fire Protection* and developed revised planning guidelines for the consideration of the State Emergency Management Committee⁹¹ and the Western Australian Planning Commission (WAPC).

⁹⁰ *Victorian Bushfires Royal Commission*, Vol. 2 Ch. 6

⁹¹ This was done through the Land Use Planning Working Group to the State Mitigation Committee.

The revised guidelines were prepared in accordance with clause 6 of State Planning Policy No. 3.4 *Natural Hazards and Disasters*. The guidelines set out a range of matters that need to be addressed at various stages of the planning process, to provide an appropriate level of protection to life and property from bushfires and avoid inappropriately located or designed land use, subdivision and development on land where a bushfire risk is identified.

The guidelines outline a range of matters that need to be addressed at various stages of the planning process, to provide an appropriate level of protection to life and property. The objectives of the guidelines are:

Objective 1

To identify areas where fire poses a significant threat to life and property, and through the use of an assessment methodology, determine the level of bush fire hazard applying to those areas.

Objective 2

To avoid increased fire risk to life and property through inappropriately located or designed land use, subdivision and development.

Objective 3

To ensure that land use, subdivision and development takes into account fire protection requirements and includes specified fire protection measures where there is any risk from fires, especially involving land that has a moderate or extreme bush fire hazard LEVEL or a bush fire attack level between BAL-12.5 and BAL-FZ.

4.3.2 Introduction of Interim Guidelines – Planning for Bushfire Protection (Edition 2)

These guidelines were introduced in May 2010 as ‘interim’ guidelines due to the acknowledged need for further review following the release of the final report of the *Victorian Bushfires Royal Commission* and also to invite submissions on the interim guidelines. Whilst it may have been deemed easier to ‘wait’ for the final VBRC report, FESA and the Department of Planning identified that it was important to introduce the enhanced guidelines to benefit community safety from the effects of bushfire as soon as possible.

A copy of the *Planning for Bushfire Protection (Edition 2) – Interim Guidelines* is attached as Appendix 16 of this submission.

4.3.3 The Review of Interim Guidelines

FESA and the Department of Planning began the review of the *Planning for Bush Fire Protection (Edition 2)* guidelines with the publication of the VBRC final report. The review will be completed during the second quarter of 2011.

Although the introduction of Edition 2 of the guidelines represents a significant step forward in fire risk management, FESA believes there are a number of additional measures that could be taken to strengthen their impact and improve the safety of communities from the threat of bushfire.

Whilst the guidelines are supported by State Planning Policy, they have not been enacted to ensure consistent application throughout the State. Local governments are encouraged to adopt the guidelines as policy, but the majority do not. As guidelines, they are subject to individual interpretation, with some Local Government jurisdictions taking a firm line whilst others see them as 'just a guide'.

4.3.4 The Application of Bushfire Protection Requirements to Rebuilding after loss and destruction

The existing guidelines are currently designed for land use planning, land development and land intensification, and unless subject to individual policy by Local Government (through the exercise of statutory planning discretion) they are not applied to rebuilding on existing developments such as that which occurs following a devastating bushfire that has destroyed numerous homes (e.g. the *Perth Hills Fires*).

4.3.5 Australian Construction Standard for Bushfire Prone Areas

Australian Standard 3959 (AS 3959) is the standard for construction in bushfire prone areas. It has effect through the Building Code of Australia (Volume 2, part 3.7.4) and requires both the assessment of a site and the construction of buildings to improve their performance when subject to burning debris, radiant heat and flame contact. The triggering of the Building Code of Australia (BCA) requirements for construction in bushfire prone areas requires an area to be identified as 'likely to be subject to bushfire' (bushfire prone) through legislation; otherwise AS 3959 has no legal effect under Western Australian building legislation.

Without the declaration of a bushfire prone area, the local authority (via the building inspector) does not have the necessary statutory power to ensure construction occurs to the appropriate standard for the potential bushfire risk.

Currently in WA, the power to 'declare' bushfire prone areas resides exclusively with local governments through the application of regional or town planning schemes or the *Local Government (Miscellaneous Provisions) Act 1960*. Despite the high number of locations in this State that have large areas with moderate to extreme bushfire risk, there are only a small number of local governments that have exercised the power to declare bushfire prone areas.

Some local governments have cited potential for increased liabilities, lowering property prices, insurance issues and potential developers viewing the imposition of additional construction standards as a disincentive to invest in their area as reasons for not exercising this power. FESA submits these issues need to be fully understood and should not in themselves override responsible planning laws that are premised on the *primacy of life* principle.

Whilst the *Planning for Bush Fire Protection (Edition 2)* guidelines recommend that all homes be built to the appropriate bushfire risk level, regardless of whether the home is built in a 'declared' bushfire prone area or not, the reality is that there is no legal requirement to improve the construction standards and this rarely occurs if the area has not been 'declared'. Moreover the lack of 'take-up' of including these guidelines into local planning laws with no central legislative requirement for this to occur will never, in FESA's opinion, result in a uniform State-wide approach to this issue and the consequential risk reduction in life and property loss.

4.3.6 Legislative Reform – Planning and Construction in Bushfire Prone Areas

FESA believes that legislative reform is required to:

- Incorporate the bushfire protection measures as State development *requirements* rather than guidelines; and
- More consistently identify and declare areas that are bushfire prone.

FESA is currently working with key stakeholders including the Department of Planning and the Building Commission Division within the Department of Commerce, and is in the final stages of developing a submission on legislative reform options for the ‘declaration of bushfire-prone areas’ for consideration by Cabinet.

Whilst there is more than one option open to WA, FESA believes that declaring the whole of the State as prone to bushfire risk, is a simple and effective way to apply a more accurate and consistent identification of bushfire prone areas. Given that developers are already required to undertake site assessment for potential bushfire hazard in order to follow the *Planning for Bushfire Protection (Edition 2)* guidelines, there is limited additional burden placed on them from this proposal. There will however be some additional work for Local Government building surveyors to complete as part of a simplified bushfire risk assessment process required for all properties, and this process could be worked through as part of consultation prior to implementation. In addition, the proposed approach could include an ‘opt-out’ type arrangement whereby local governments could make submissions supported by appropriate supporting information to ‘undeclare’ an area from being a declared bushfire prone area and therefore alleviate this legislative requirement from their planning considerations. These are complementary elements of this proposal.

In February 2009 the Australian Building Codes Board published the “*Final Regulatory Impact Statement for Decision (RIS 2009-02)*” which identified additional costs associated with building to the “*Australian Standard 3959 – 2009 Construction of buildings in bushfire-prone areas*”.

The results are depicted in the following table (extract from larger comparative table):

Table 15 - Cost of compliance with 2009 AS 3959

<i>Category of bush fire attack</i>	<i>Base house</i>	<i>Large two storey</i>	<i>Elevated light weight construction</i>
2009 Standard			
<i>BAL – low</i>	\$0	\$0	\$0
<i>BAL – 12.5</i>	\$11,535	\$14,981	\$21,428
<i>BAL – 19</i>	\$11,535	\$14,981	\$21,428
<i>BAL – 29</i>	\$15,471	\$17,095	\$35,024
<i>BAL – 40</i>	\$17,107	\$19,751	\$62,357
<i>BAL – FZ</i>	\$20,885	\$28,905	\$76,679

As can be seen from the above table, if the site is assessed as having a low bushfire attack level (BAL), no increased construction standards are required. It is also important to remember that a low bushfire attack level can also be achieved by increasing the distance between the home and the predominant vegetation.

4.3.7 Retrospective Application of Planning and Construction Standards

Whilst the retrospective application of planning and construction standards is costly and problematic, the retrofitting of ember protection for homes along with the implementation of building protection and hazard separation zones in bushfire prone areas would significantly improve community safety from the threat of bushfire.

Increased standards supported by legislation could also be applied to *rebuilding* on developed land where bushfire threat exists, such as those areas impacted by the recent *Perth Hills Fires*. This would address issues such as construction standards, building protection and hazard separation zones, although matters such as land suitability, development design and road layout would be significantly complex issues for local governments to remedy in well established but poorly planned communities. The level of home owner insurance coverage may also be affected by the costs of increased construction standards.

Once again, FESA submits these are appropriate considerations that need further analysis by the Review but should not by themselves override the *primacy of life* principle.

4.3.8 Evaporative Coolers

A specific reference in these fires and contained within the terms of reference relates to the “*operation of evaporative coolers*”. This issue has a specific relevance to future building standards and construction in bushfire prone areas. These devices are a popular and effective cooling mechanism, given the relatively benign relative humidity in WA, and they are used in a large number of houses across bushfire prone areas. This was certainly the case with a number of houses in the *Perth Hills Fires* area.

Whilst the house loss assessment research for the *Perth Hills Fires* is not yet complete, there is clear evidence that a number of homes were destroyed after embers entered evaporative coolers.

The combustible nature of evaporative cooler components increases the risk of fire from ember attack on homes where they are installed. Many homes burnt down after embers entered the cooling systems and ignited the filter pads. Since 2001 FESA has taken a number of proactive steps to reduce the danger to the community, including but not limited to:

- Submitting a discussion paper to the Australasian Fire Authorities Council of Australia;
- Producing safety material to inform the community of the fire danger posed by evaporative coolers, including some tips on how that risk can be mitigated;
- Liaising with and writing to manufacturers and retailers of evaporative coolers and their components, alerting them of the dangers and recommending measures to mitigate risk;
- Recommending that fibreglass filters should be utilised rather than paper based filters; and
- Being involved in research projects with the University of Western Australia which included the design of an ember protective screen.

Unless specific design standards are incorporated, evaporative coolers do not meet the requirements of AS 3959 for construction in bushfire prone areas.

FESA submits that the proper application of the declaration of bushfire prone areas will prevent the further proliferation of unprotected evaporative coolers being installed in these bushfire risk locations and consequential risk of property loss. FESA also submits consideration should be given to some retrospective application of requirements for evaporative coolers already installed in homes within designated bushfire prone areas, although it appreciates this could have a significant financial impact on many Western Australians.

During the hearing with the Review on 29 March 2010, the Review sought further information of the estimated costs of fitting ember protection screens to evaporative coolers. FESA has further researched this issue in order to provide the Review with a response to this question and have been advised the cost of filters will vary significantly because of the lack of being able to provide specific design specifications and time to construct these for each of the various evaporative cooler models. However, FESA understands from discussions with the firm that developed the prototype that the costs could range from around \$250 to \$400 depending on the model, the protective screen design chosen and the materials.

4.3.9 FESA Proposals

The Review should:

- Note the partnership between FESA and the Department of Planning and the progress they have achieved through the *Planning for Bushfire Protection (Edition 2) – Interim Guidelines*, together with the proposed review of these guidelines following the outcomes of the *Victorian Bushfires Royal Commission*;
- Note the partnership between FESA, the Department of Planning and the Building Commission Division of the Department of Commerce to develop a submission on legislative reform options for the ‘declaration of bushfire-prone areas’ for consideration by Cabinet.
- Explore the issues raised by local governments which act as disincentives to the incorporation of bushfire protection guidelines into local planning laws (e.g. potential for increased liabilities, lowering property prices, insurance issues and potential developers viewing the imposition of additional construction standards as a disincentive to invest in their area);
- Explore any potential ‘gap’ that may exist in insurance premiums applicable to those affected by the recent fires and work with insurance companies and the State Government to overcome these potential impediments to rebuilding in accordance with *best practice* bushfire protection methods for the future;
- Support FESA’s position that these issues need to be fully understood and should not in themselves override responsible planning laws that are premised on the *primacy of life* principle;
- Recommend to the State Government the need for legislative reform to:
 - adequately incorporate the bushfire protection measures as State development requirements rather than guidelines; and
 - more consistently identify and declare areas that are bushfire prone,
- Recommend to the State Government the retrospective application of planning and construction standards as part of the legislative reform program;
- Absent of recommending legislative reform, recommend to the State Government that they press local governments to urgently adopt the *Planning for Bushfire Protection* guidelines within their local planning laws for both rebuilding in areas recently impacted by fires and for future developments;
- Recommend to the State Government that FESA be the responsible authority to work in partnership with the Department of Planning to determine State-wide policy and standards applicable to defining and building in bushfire prone areas; and
- Note the issues associated with evaporative coolers and consider this in the context of future building standards and planning regimes.

4.4 Critical water infrastructure protection

Following a series of bushfires in Sydney in 1994, the vulnerability of water supplies and associated infrastructure became apparent. In the same year, fires in the Darling Escarpment in the Perth Hills further highlighted this potential risk. Accordingly, a Ministerial Working Group chaired by local MLA John Day was instituted to examine the readiness of the State should a similar disaster occur in the Darling Range area, east of Perth.

The Inquiry made a number of recommendations to improve bushfire management in these areas. One of these recommendations was the development of the Darling Escarpment Emergency Water Scheme (DEWS). The DEWS details pump station and tank capabilities and their inter-connectivity, measures to promote interoperability and liaison between fire agencies and the Water Corporation, and Water Corporation protocols in fire emergencies. DEWS identifies that a number of Water Corporation sites are considered 'critical' to maintaining water supplies within that area.

However, the DEWS document does not address the vulnerability of the nominated 'critical sites' from bushfire attack or the rationale for a site being designated 'critical'.

The 2009 Victorian bushfires and the subsequent Royal Commission have also been a catalyst for Australian water providers to review their strategies and policies to manage the delivery of water for firefighting and community use during significant bushfire emergencies. The *Victorian Bushfires Royal Commission* provided an indication of the intense scrutiny that water providers may be subject to in the wake of bushfires in relation to the robustness of water supply in similar circumstances. Accordingly, the Water Corporation implemented a review of the DEWS sites to assess risks at the sites and their ability to provide a dependable water supply in a bushfire scenario.

As part of the review, the DEWS sites were jointly inspected by FESA and Water Corporation staff on 30 November and 1 December 2009. FESA then produced a report which focused primarily on issues directly related to bushfire management and vulnerability of water distribution networks as a consequence of the impact from bushfire. The objective of this assessment is to improve the capacity of water distribution network in the event of a significant bushfire. It identified that many of these sites carried high fuel loads; had little, if any, hazard separation zones; and suffered low levels of general housekeeping.

The most significant issue noted whilst inspecting the DEWS sites was the inadequate level of site housekeeping which had a negative impact on the building protection zone, with the following issues specifically identified:

- Tree branches over-hanging buildings;
- Close proximity of trees/vegetation to buildings;
- High levels of grass and fine fuel present within site;
- Vulnerability of exposed power cables and transformers;
- Lack of ember screens on vents;
- Gaps in walls and under doors that would facilitate ember attack;
- Lack of hazard separation zones;
- Where present, open eaves;

- Lack of firebreaks at larger sites; and
- Fire prone nature of some older structures.

Several of the sites visited had elevated fuel loads, in excess of 20t/ha. A fire generated under these conditions would be intense with major damage to nearby infrastructure expected. To achieve effective bushfire protection it was imperative that a building protection zone be implemented at all DEWS sites as a matter of urgency. This would be achieved by creating greater separation between buildings/structural elements and adjacent bushfire fuel, or by increasing the construction standards to provide improved protection from the radiant heat and embers produced from a bushfire.

The report was provided to Water Corporation who acted on the advice given by FESA and fitted ember screens, improved housekeeping dramatically and removed excessive fuel loads. An example of how the review and subsequent follow up actions at these sites has proved beneficial is the Scott Road Pump Station which was under direct attack during the *Perth Hills Fires* but emerged unscathed and was operational as soon as power was reconnected. The following aerial photos demonstrate the mitigation actions associated with this work.

Photo 1 - Scott Road Pump Station on March 2010 prior to bushfire mitigation works



Photo 2 - Ember screens fitted to Scott Road Pump Station as result of bushfire mitigation inspection



Photo 3 - Scott Road Pump Station post-fire, taken on 15 February 2011 (including visible mitigation works undertaken prior to fire)



Photo 4 - Scott Road Pump Station post-fire (note supplementary generator front left)



4.4.1 Automatic Shut-off

FESA understands that at sites where chlorinators are located, the water supply is automatically cut off when the power supply or communication link fails. It should be noted that the loss of power in a bushfire situation is a common occurrence. The end result is that although water is available in the local storage tank, the automatic shut-off arrangements will result in no water being released through the reticulated water mains for firefighting or community use. These arrangements are of serious concern to fire management who rely heavily on this water for fire suppression. Although water supply can be maintained with deployment of a suitable generator, life and property can be vulnerable during this period of power loss.

Outside of the DEWS area, FESA understands that there are approximately 50 sites throughout rural WA where automatic shut-off of town water supply occurs with the loss of power or communication. FESA will discuss this further with the Water Corporation to develop solutions to improve water supply availability in bushfire prone locations.

4.4.2 Power Supply Contingency Arrangements

Electrical power is crucial for the continued operation of pump stations, either from Western Power or auxiliary power from portable generators. In most cases generators will need to be deployed by Water Corporation staff or contractors, and gaining access to these sites during a bushfire is often difficult. In the recent Victorian bushfires, access to an area post-fire was difficult due to police and fire agency restrictions on movement to a fire impacted area. This can cause major problems in enabling personnel the access required to provide contingency services.

Given the criticality of maintaining power supply to water distribution infrastructure, FESA has committed to the Water Corporation a suitable protocol to facilitate priority access for the safe escort of the Water Corporation transporters carrying generators to restore power to water pumping facilities. Water Corporation OSH principles will also be a factor to be considered.

4.4.3 Future Direction

Clearly the value of this joint mitigation activity between FESA and the Water Corporation proved beneficial during the recent fires. However, it should be noted that this review has only covered the area contained within the existing DEWS framework. Given there are a number of other bushfire prone areas adjacent to communities around the State, similar surveys conducted on a joint Water Corporation and FESA basis should be considered.

This initiative is a further example of FESA's proactive mitigation and engagement programs with key stakeholders.

4.4.4 FESA Proposals

The Review should:

- Note the work undertaken by FESA and the Water Corporation and its clear benefit to protection of critical water infrastructure during the recent *Perth Hills Fires*;
- Strongly recommend to the State Government that all water authorities and other departments responsible for critical infrastructure in designated bushfire prone areas be directed to engage with FESA to establish a joint mitigation program as part of their business continuity plans;
- Strongly recommend to the State Government that a building protection zone is implemented at all DEWS sites as a matter of urgency; and
- Recommend to the State Government that it fund FESA to undertake this critical infrastructure mitigation program on an ongoing basis as part of its *Integrated Bushfire Risk Management System*.

4.5 Clearer understanding and promotion / acceptance of the “primacy of life” in state fire control priorities and mitigation planning/works

There is absolutely no doubt, supportive by ample evidence and analysis, that *primacy of life* must underpin all aspects of bushfire management. FESA respect the use of prescribed burning on public land is a primary tool for fire management. However, this must be integrated into a single planning regime and premised on the *primacy of life* principle.

The Royal Commission considered the tension that exists in balancing biodiversity and stated

DSE should modify its Code of Practice for Fire Management on Public Land so that it is clear that protecting human life is given the highest priority, and should report annually on prescribed burning outcomes...

To ensure continuing environmental protection, the State needs to improve its understanding of the effects of different fire regimes on flora and fauna...

The Commission is aware of the unresolved tensions between mitigation of bushfire risk and environmental conservation in the approach to roadside clearing and the legislative complexities...⁹²

Likewise Incident Management Teams must ensure incident action plans include this principle as the overarching priority in managing an incident.

Whilst this may appear logical and a given, FESA believes a consistent and structured approach to embedding this principle into:

- State Fire Control Priorities, that informs the development of incident action plans and the focus of operations;
- The planning for and execution of mitigation activities and prescribed burning, regardless of tenure; and
- Consistent and clear direction to all activities, including the education of the media and community.

This issue is relatively self explanatory and in FESA’s opinion must be supported by the Review, despite potential criticism from those that lost property in the *Perth Hills Fires* as a consequence of the Incident Management Team adopting this approach.

4.5.1 FESA Proposal

The Review should:

- Recommend the adoption of the *primacy of life* principle in all mitigation and incident management plans and priorities, regardless of land tenure.

⁹² Royal Commission 2010:pp.15-16

4.6 Evolution of existing bushfire planning systems to more localised township protection/ community level plans

Existing planning processes and frameworks do not extend to supporting community decision making or knowledge of local fire management arrangements (including what is expected of them and any limitations/constraints of emergency service organisations) that the community should be aware of in determining their own plans. As demonstrated in a range of emergency situations, community expectations for timely and accurate information to inform their individual decision making is at an unprecedented level. This places enormous expectations on controlling agencies in developing plans *with* and not *for* the community, engaging the community in the planning process, educating the community and agency personnel on the specific plans developed at a local level and finally managing information flow at the community level.

It is also important that when expecting the community to be *active participants* rather than *passive recipients* in emergency management, the community is fully cognisant of and integrated into the overall plans before, during and after an incident. A disjointed approach will inevitably result if this planning continuum is not established and achieved, which is contrary to the overall objectives of emergency management.

The *Victorian Bushfires Royal Commission* considered this issue which resulted in the following recommendations:

Recommendation 3

The State establish mechanisms for helping municipal councils to undertake local planning that tailors bushfire safety options to the needs of individual communities. In doing this planning, councils should:

- *urgently develop for communities at risk of bushfire local plans that contain contingency options such as evacuation and shelter*
- *document in municipal emergency management plans and other relevant plans facilities where vulnerable people are likely to be situated – for example, aged care facilities, hospitals, schools and child care centres*
- *compile and maintain a list of vulnerable residents who need tailored advice of a recommendation to evacuate and provide this list to local police and anyone with pre-arranged responsibility for helping vulnerable people⁹³*

This recommendation has resulted in significant changes and advancements in community based planning and incorporation of this detail in *Township Protection Plans* for the 52 nominated high bushfire risk areas within Victoria.

In addition, the Commission made specific references in relation to a structured approach to identifying and establishing safe locations for the community to relocate to. This was contained within two interrelated recommendations as follows:

⁹³ 2009 *Victorian Bushfires Royal Commission*; p24

Recommendation 4

The State introduce a comprehensive approach to shelter options that includes the following:

- *developing standards for community refuges as a matter of priority and replacing the 2005 Fire Refuges in Victoria Policy and Practice*
- *designating community refuges – particularly in areas of very high risk – where other bushfire safety options are limited*
- *working with municipal councils to ensure that appropriate criteria are used for bushfire shelters, so that people are not discouraged from using a bushfire shelter if there is not better option available*
- *acknowledging personal shelters around their homes as a fallback for individuals*

Recommendation 5

The State introduce a comprehensive approach to evacuation, so that this option is planned, considered and implemented when it is likely to offer a higher level of protection than other contingency options. The approach should:

- *encourage individuals – especially vulnerable people – to relocate early*
- *include consideration of plans for assisted evacuation of vulnerable people*
- *recommend ‘emergency evacuation’⁹⁴*

The combination of these recommendations in Victoria rightfully extends agency planning frameworks down to community level. Suggestions that a Local Government area is the appropriate level for this to be considered ‘community level’ is also flawed as within a single municipality, several discrete townships (risk precincts) may exist that each require their own specific bushfire safety plan.

Westplan – Bushfire establishes a regime for “locally developed and implemented Bushfire Risk Management Plans (BFRMP) that incorporate prevention and mitigation strategies” which “represent a documented outcome of an application of the risk management process by all agencies to bushfire risks across a Local Government area regardless of tenure” (s 2.3 *Westplan – Bushfire*). In addition, *Westplan – Bushfire* documents that “preparedness strategies will be documented in each Local Government BFRMP by the Bushfire Advisory Committee and endorsed by the Local Government Council” (s 3.1). The plan also establishes that special needs and at risk groups “need to be identified and documented in Local Bushfire Risk Mitigation Plans” (s 3.2.5).

The challenge that confronts the State is to now evolve this planning regime to become more community centred and extend beyond *prevention* and *preparedness* to all elements of the emergency management continuum in an end-to-end manner, recognizing that this needs to occur at each layer of the planning framework.

⁹⁴ 2009 Victorian Bushfires Royal Commission; p24

FESA submits the underlying problems with the existing bushfire planning arrangements include the following:

- Planning is generally done at an agency level and as a consequence is also generally aligned to land tenure;
- The majority of planning is focused on prevention and mitigation and does not extend in a systemic manner into the response and recovery elements of the emergency management continuum;
- Planning processes fail to engage the community;
- There is a general lack of respect between plans developed in abutting areas, whether they be public/private, private/private or local government/local government;
- There is an actual or perceived conflict of interest with land management agencies having responsibility for fire prevention and fire suppression on public land when developing and executing plans;
- The lack of integration at the planning stages perpetuates the lack of integration at the response stages of an incident;
- A focus on planning solely at a Local Government or even a District (Regional) level does not take a holistic approach to risk that may extend contiguously across Local Government boundaries and should be treated as a single risk precinct.

The common issues with planning arise in nearly every Inquiry conducted into major emergencies. Dating back to the 1939 Black Friday fires Commissioner Justice Stretton made the following comment which remains relevant today:

*The full story of the killing of this small community is one of unpreparedness, because of apathy and ignorance and perhaps something worse.*⁹⁵

The real risk for Governments and agencies now and into the future is the dynamic, fast paced environment coupled with generational change that does not consider *co-production* as a necessary trait in modern living. This will only compound this mindset and risk environment. 'Tree changers' and others will expect services to be delivered to them, rather than considering they have any particular role in the process of risk mitigation and ongoing management.

Justice Stretton also made one finding which also remains pertinent today:

As no scheme of prevention or safeguards can be brought to a state of effectiveness in this State without education, goodwill, and the expenditure of money and patient labour, the day is yet distant when we may be able to say that we have, not a condition of perfect safety, but at least a working plan and the knowledge that the plan has earned the approval of the rural populace.

[Stretton 1939:7]

On the basis of the above observations, FESA submits, consistent with the common thread of integration and single line accountability that comes throughout this submission, that planning

⁹⁵ Stretton 1939:5

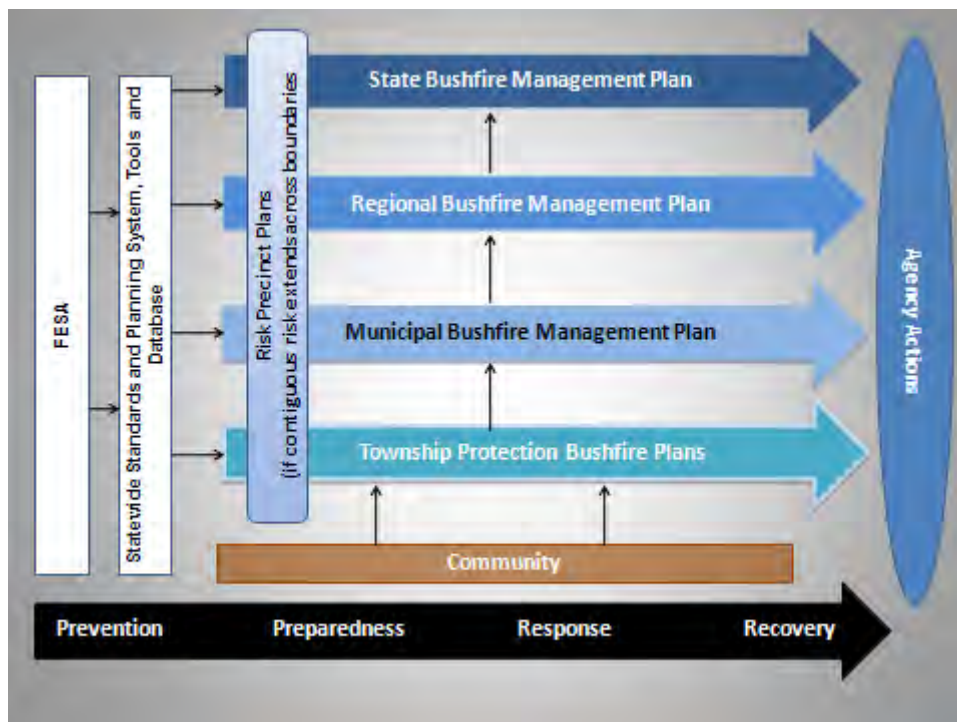
must extend to local community based township protection plans and needs to occur commensurate with risk and be tenure and boundary blind.

Through its active involvement in the planning process, the community should clearly understand the plan, which in turn will achieve the necessary culture change of having a shared sense of risk and responsibility between the community and responsible authorities. This should unlock the full potential of both the community and agencies by recognising they all have a ‘joined-up’ role before, during and after an event.

These plans should be exercised jointly with agencies and the communities to ensure the plans are understood, practiced and relevant.

In FESA’s mind, the resultant integrated planning framework which engages with the community, extends throughout the complete emergency management continuum in an end-to-end manner, caters for risk precinct planning which may occur in circumstances of contiguous risk extending across or within boundaries and consequentially the layers of the proposed framework, and engages the community in local township protection plans; all of which is built off a common set of standards, systems, tools and using the same integrated database which are all established by FESA and the responsible planning authority. The structure also obligates agency actions across all aspects of managing bushfire within WA and actively contributes to a *Bushfire Safe – WA*. The following outlines the interrelationship between these elements of the proposed planning framework:

Figure 50 – Proposed integrated planning framework



Whilst the bushfire risk areas are all known to agencies and potentially the community, not many have an actual end-to-end plan in place commensurate with this risk. Elements of the PPRR continuum are treated in isolation and run as separate components. This is no longer acceptable and needs to be addressed through a consolidated integrated fire management planning framework.

FESA appreciates this will take some time to fully achieve, and it too has to take responsibility for the current state, but this integrated process must commence in order for the State to achieve a satisfactory level of bushfire preparedness.

4.6.1 FESA Proposals

The Review should:

- Recommend the establishment of a new fire management planning framework that supports end-to-end tenure blind planning and fully engages the community; and
- Recommend the establishment of priority plans for very high and high risk areas.

4.7 Bushfire Risk Management in Indigenous Communities

An extension of an issue associated with fire management of Unallocated Crown Land (UCL) and Unmanaged Reserves (UMR) is bushfire management within indigenous communities. This is a further core element to FESA's submission with respect to consolidating responsibility for fire management on UCL and UMR under a single agency with an integrated approach.

FESA plans, through the relatively newly established Bushfire and Local Government Relations Branch, to consolidate all bushfire mitigation activities and programs for approximately 286 indigenous communities, with a focus on the communities located in high and very high bushfire risk areas across the state. These existing bushfire mitigation programs include:

- Specific and tailored Fire Management Plans for a number of indigenous communities; and
- Operational pre-plans for seven Indigenous *hub communities*.

As a result of these programs, FESA has established strong regional and local community linkages which enable FESA to evolve more effective community safety behavioural change and outcomes, potentially create future community based employment, and engage advocates from the indigenous community. The project is premised on creating long term and sustainable community engagement with limited Government and external financial backing from private organisations. The project will achieve:

- Better community safety outcomes relating to bushfire for indigenous community members;
- Tailored mitigation activities, including a structured and planned prescribed burning regime which will be attractive to indigenous community members;
- Enhanced understanding, appreciation and education of the indigenous community in fire safety activities;
- Shared appreciation through active involvement of the roles and responsibilities of FESA working in partnership with the indigenous community; and
- Alignment with indigenous community ancestry practices leading to:
 - Increased social benefits; and
 - Meeting mining industry carbon credit requirements.

A similar program was established within the CFA at Lake Tyers in East Gippsland, Victoria, with the result being the indigenous community members themselves established a registered CFA Volunteer Brigade, were provided with equipment and training by CFA and became extremely active participants in fire management within their communities. This highlights the potential of these proactive engagement programs which FESA wants to continue to strive towards, with its direct correlation to enhancing the social capital of communities.

This can only be successfully achieved through an integrated approach to fire management on UCL and UMR, and the existing FESA *Integrated Bushfire Risk Management System* has the capacity to be used for this purpose. FESA also has the capacity, expertise, knowledge and relationships with local governments and bushfire brigades comprising of approximately 20,000 volunteers to support this initiative on a state-wide basis. It has the empathy and understanding of the volunteer and community engagement ethos to make this work. These developed partnerships enable FESA to

manage risk to a large degree, and with the development of the *Integrated Bushfire Risk Management System*, is able to enhance those relationships through robust and reliable tools and underpinning methodologies.

4.7.1 FESA Proposals

The Review should:

- Note FESA's vision for working with indigenous communities and the achievements to date;
- Recommend to Government that it fully supports FESA's initiatives to engage and work directly with indigenous communities across WA; and
- Consider this issue in making any recommendations relevant to responsibility for UCL and UMR.

4.8 Prescribed Burning / FESA Integrated Bushfire Risk Management System (IBRMS)

As outlined elsewhere in this submission, the FESA Bushfire and Local Government Relations Branch are working closely with Local Governments to assist them in the management of their bushlands. This section specifically outlines detail with respect to the programs administered by this area of FESA and also specifically responds to the request made by the Inquiry during the hearing on 21 March 2011 whereby it requested FESA to “provide information on prescribed burning in 2010”.

4.8.1 System Overview

Local Governments with high bushfire risk will have the ability to have all their bushlands mapped and mitigation programs developed via the *FESA Integrated Bushfire Risk Management System (IBRMS)* in the near future.

The focus and priority of Bushland Mitigation staff is on a town site protection burning program in all high and very high fire risk areas using the *Bushfire Threat Analysis (BFTA)* for prioritisation with the emphasis being on a tenure blind assessment to ensure all towns/communities are well protected from the threat of bushfire. This approach is consistent with the focus of FESA on *primacy of life*, as outlined throughout this submission, as opposed to biodiversity and/or other priorities. Numerous meetings are held with Local Government personnel, Department of Environment and Conservation staff (DEC) and other key stakeholders to maintain continuity in bushfire risk management through this system.

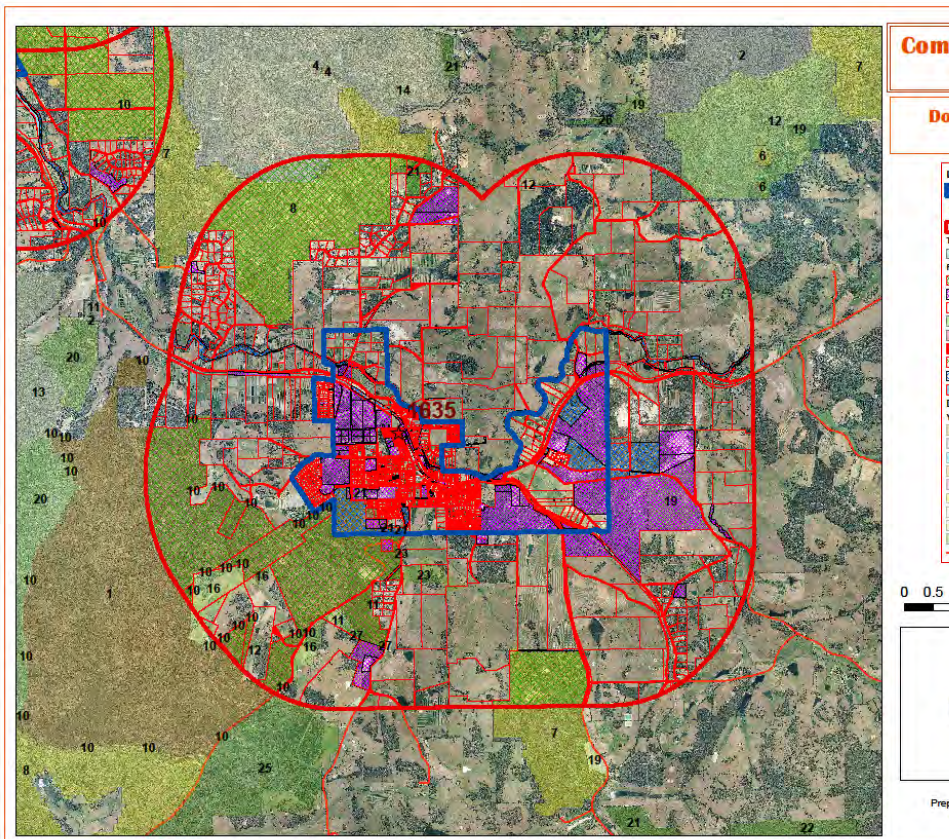
4.8.2 Process

To be able to reduce the risk of bushfire events impacting on communities, a process needs to be followed. This process developed by the Branch includes a two phase process:

Phase 1:

Strategic Planning, Identifying and assessing the risk: The regional assessments, analysis and prioritisation of bushfire risk on land within and adjacent to communities.

- Using the BFTA to identify community risk at the state level;
- To focus at the community level and consider parcels of land that may present risk to the community within 1 to 3 kilometres of the community. The following diagram provides a sample Community Bushfire Risk Mitigation Map;
- To apply a logical and standard assessment process for each parcel using the BFTA methodology;
- Conducting specific site assessments to validate the BFTA information and assess current fuel loads;
- Rate land in order of highest risk to the community by using a scaling factor;
- Capturing information in an endorsed Community Bushfire Risk Mitigation Plan (CBRMP) for each community and distributed to all stakeholders. Attached as Appendix 17 of this submission is a sample Community Bushfire Risk Mitigation Plan (CBRMP).

Figure 51 – Sample Community Bushfire Risk Mitigation Map

Phase 1 involves meeting with the Local Government and major stakeholders to consider the community values and preferred methods to reduce the risk to mitigate against a bushfire impacting on the local community.

Phase 2:

Operational Planning: The development of a three year rolling mitigation works program with annual implementation and review.

- Develop 3 year rolling works “treatment” schedule as part of CBRMP;
- Develop treatment options based on priority and budget;
- Decide on most effective (*risk vs cost*) treatment;
- Agreement and “sign off” between responsible agencies for treatment of “risk”;
- Recording and sequencing mitigation treatments through the FESA IBRMS portal;
- Coordination meetings with other stakeholders to complement works and optimise use of resources to achieve community protection;
- Developing scheduled works plans on a 3 yearly and annual basis that include slashing, mulching, parkland clearing, chemical spraying, dozing and grading for FESA UCL/UMR and other tenure as required;
- Recording schedules and treatments by all agencies in IBRMS (portal).

The Branch also assists Local Government & FESA staff with:

- Hazard reduction burning programmes:
 - Undertaking fuel load/risk assessments
 - Preparing burn prescriptions
 - Preparing pre burn checklists
 - Preparing smoke management guidelines
- Completion of Environmentally Sensitive Areas (ESA) and cultural heritage site checks
 - Conduct the approvals process for works in Environmentally Sensitive Areas and for cultural heritage sites
 - Document the approvals process
 - Engage and direct contractors to undertake mitigation works
 - Liaise with state agencies
 - Liaise with corporations and various indigenous groups

4.8.3 Methods of Mitigation Treatments

A variety of methods can be used to mitigate bushfire risk depending on the landscape, location and other values. These are:

- Firebreak: Firebreaks are developed for a range of purposes. Each purpose will be determined by the bushfire protection needs of the individual parcels of land. This should be determined by the combination of soil types, slope, vegetation type and density, the risk of ignition, the fire suppression response capability and options and the values at risk.
 - Mulching: this is a method of installing firebreaks and hazard separation zones in bushland. The method used is a large mulching machine coupled to heavy mobile equipment, the machinery is driven through vegetation, “mulching” that vegetation as it proceeds. This method is used to maintain the integrity of the soil by leaving the root system and stabilising the soil, minimising soil erosion
 - Chaining: The process of flattening vegetation (usually mallee or scrub) by dragging a heavy chain or cable between two large tractors or bulldozers.
 - Chemical Spraying: The application of chemical to eradicate vegetation growth
 - Grading and Dozing: The process removing all flammable material from the ground leaving mineral earth
- Hazard (Fuel) reduction burning: the planned application of fire, under pre-determined environmental conditions and within defined geographical boundaries, to achieve specific land management objectives.

4.8.4 IBRMS Reporting (financial, mapping and works plan)

IBRMS has functionality to record the following:

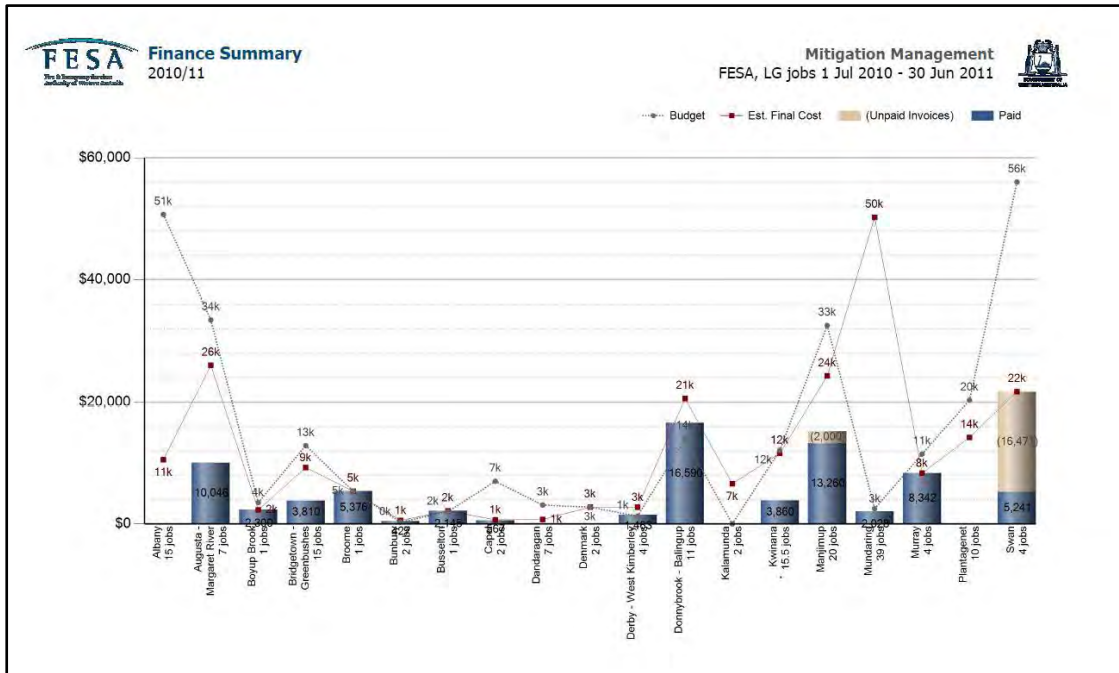
- Financial summary: The financial summary includes area by locality, town, region or State and registers parcels of land held by FESA and LG. It includes assessments and treatments carried out, budget allocated to the region, a means for managing invoicing, final cost of treatments and a cost spent to asset protection value. The following provides a sample finance summary report.

Figure 52 – Sample Finance Summary Report

Area	FESA, LG :		FESA, LG Jobs		Budget	Invoicing		Est. Final Cost (Invoices, budget)	Est. Asset Protection	
	Reg'd	Parcels	Assessments	Treatments		Paid :	Invoiced		Completed jobs :	All Treatments
Local Governments	2562	9219	34.9	138.6	\$288,516	\$78,755	\$97,226	\$230,602	\$105,150,000	\$410,670,001
Albany	243	559	0	15	\$50,684	\$0	\$0	\$10,554	\$0	\$8,500,000
Augusta - Margaret River	99	294	2	5	\$33,500	\$10,046	\$10,046	\$26,046	\$0	\$0
Boyup Brook	103	230	0	1	\$3,500	\$2,300	\$2,300	\$2,300	\$9,000,000	\$9,000,000
Bridgetown - Greenbushes	154	229	0	15	\$12,860	\$3,810	\$3,810	\$9,255	\$0	\$27,860,000
Broome	240	1095	1	0	\$5,376	\$5,376	\$5,376	\$5,376	\$0	\$0
Bunbury	81	161	0	2	\$300	\$427	\$427	\$577	\$0	\$0
Busselton	76	340	0	1	\$2,000	\$2,145	\$2,145	\$2,145	\$9,000,000	\$9,000,000
Capel	44	143	1	1	\$7,000	\$567	\$567	\$677	\$2,500,000	\$2,500,000
Dandaragan	226	394	0	7	\$3,100	\$0	\$0	\$728	\$0	\$3,000,000
Denmark	26	235	0	2	\$2,750	\$0	\$0	\$2,750	\$10,000,000	\$10,000,000
Derby - West Kimberley	157	2745	0	4	\$1,280	\$1,463	\$1,463	\$2,743	\$0	\$1,000,001
Donnybrook - Balingup	112	223	4	7	\$14,000	\$16,590	\$16,590	\$20,590	\$2,000,000	\$15,300,000
Geraldton - Greenough	121	355	0	1	\$0	\$0	\$0	\$0	\$0	\$5,300,000
Kalamunda	16	50	0	2	\$0	\$0	\$0	\$6,600	\$2,500,000	\$2,500,000
Kalamunda	31	119	1	9	\$17,200	\$3,300	\$3,300	\$9,900	\$50,500,000	\$50,500,000
Kwinana	60	193	4.9	10.6	\$12,080	\$3,860	\$3,860	\$11,580	\$18,000,000	\$58,125,000
Manjimup	179	467	4	16	\$32,595	\$13,260	\$15,260	\$24,301	\$0	\$91,100,000
Mundaring	211	395	17	22	\$2,500	\$2,028	\$2,028	\$50,223	\$0	\$72,095,000
Murray	110	232	0	4	\$11,470	\$8,342	\$8,342	\$8,342	\$1,650,000	\$1,650,000
Nannup	80	222	0	0	\$0	\$0	\$0	\$0	\$0	\$0
Plantagenet	177	334	0	10	\$20,321	\$0	\$0	\$14,203	\$0	\$0
Swan	16	204	0	4	\$56,000	\$5,241	\$21,712	\$21,712	\$0	\$43,240,000

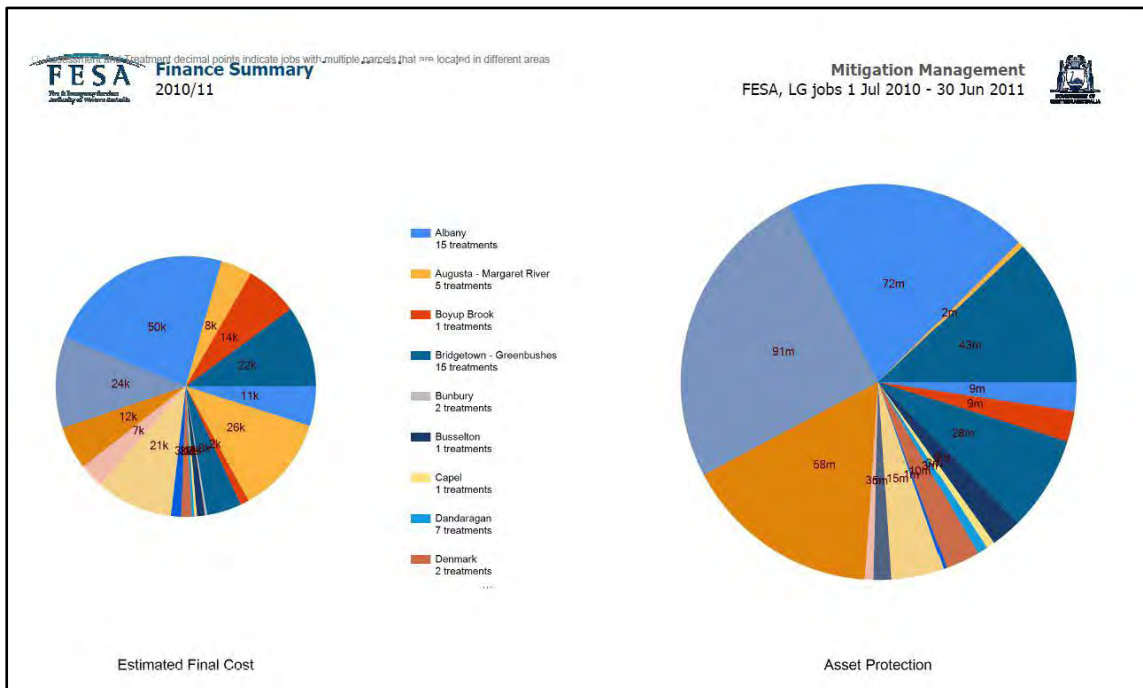
The Financial Summary of budget, estimated cost, unpaid and paid invoices can also be viewed as a graph. The following provides a sample graphed financial summary.

Figure 53 – Sample Graphed Financial Summary



The financial summary also includes Pie charts expressing estimated financial costs to asset protection. The following provides a summary pie chart report.

Figure 54 – Sample Pie Graph Finance Summary



IBRMS Treatment Areas

The summary of assessment areas includes FESA and Local Government areas that can be defined as individual works (i.e. burns, hazard separation zones) or a summary of all defined areas in hectares. These treatment areas can also be reported against outlining fixture and treatment work.

Figure 55 – Sample Fixture and Treatment Work Report

Area	FESA, LG Jobs			Unverified Areas		Verified Areas		All Treatment Areas	
	All Jobs	Treatments	with related shapes	Shapes	Hectares	Shapes	Hectares	Shapes	Hectares
Local Governments	* 173.5	* 138.6	* 58.8	* 24.8	261	* 57.0	367	* 81.8	629
Albany	15	15	1	0	0	1	0.28	1	0.28
Augusta - Margaret River	7	5	2	0	0	2	7.68	2	7.68
Boyup Brook	1	1							
Bridgetown - Greenbushes	15	15	11	3	0.30	21	20.5	24	20.8
Broome	1	0							
Bunbury	2	2							
Busseton	1	1							
Capel	2	1							
Dandaragan	7	7	1	0	0	1	102	1	102
Denmark	2	2							
Derby - West Kimberley	4	4							
Donnybrook - Balingup	11	7	6	1	4.92	11	175	12	180
Geraldton - Greenough	1	1							
Kalamunda	2	2							
Kalamunda	10	9							
Kwinana	* 15.5	* 10.6	* 8.8	* 5.8	52.9	* 3.0	1.59	* 8.8	54.5
Manjimup	20	16	11	1	0.24	12	30.2	13	30.4
Mundaring	39	22	15	14	203	3	4.03	17	207
Murray	4	4							
Nannup	0	0							
Plantagenet	10	10							
Swan	4	4	3	0	0	3	25.7	3	25.7

□ Job and shape decimal points indicate jobs with multiple parcels that are located in different areas

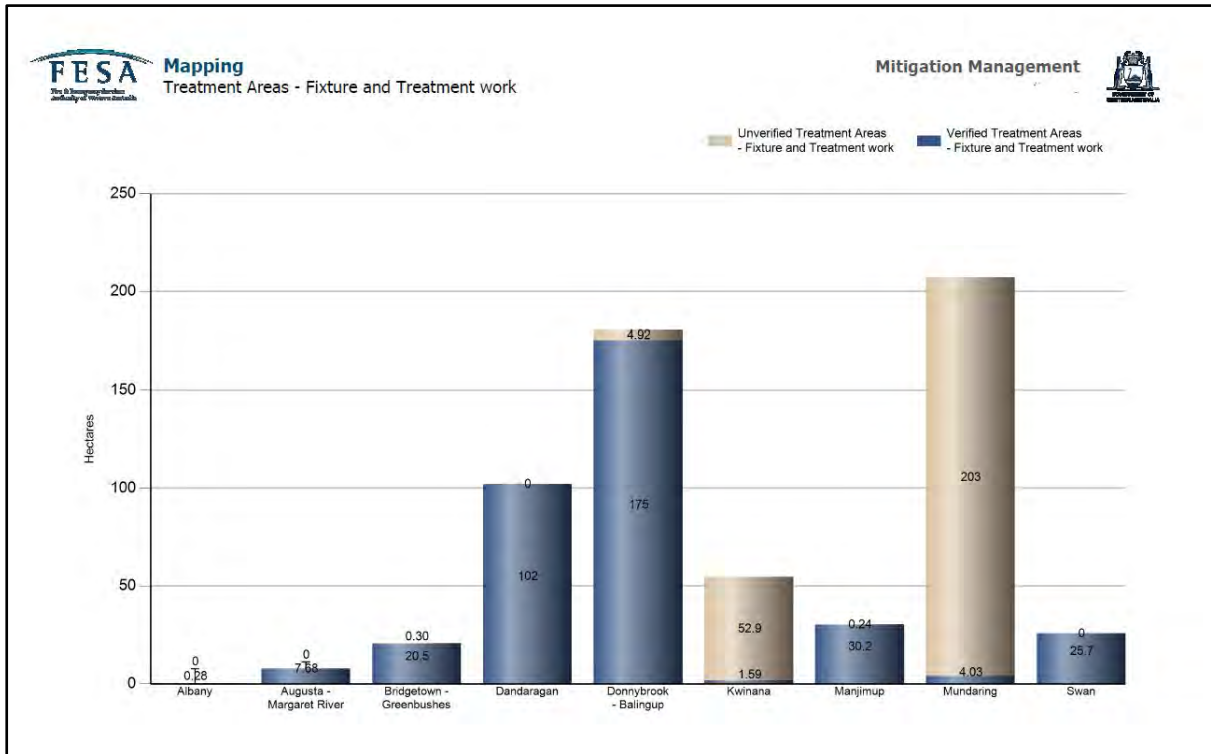
The works plan summary captures planned assessment and mitigation works as well as future works required and is categorised by risk values. The following provides a sample Mitigation Work Plan report.

Figure 56 – Sample Mitigation Work Plan Report

FESA		Work Plan for 2010/11		Bushfire Risk Management FESA, LG jobs 1 Jul 2010 - 30 Jun 2011		
Mitigation Works						Total jobs: 297
When	Scope	Summary	Status	Location	Who	
Action priority 1		Very High risk	52 jobs			
07 Jul	Prescribed Burn	Hazard Reduction Burn	Projected	Mundaring (metro)	FESA	
09 Jul	Prescribed Burn	581488 Eastern Town site prescribed burn for town site protection	Projected	Dandaragan Badgingarra	FESA	
15 Jul	Slash	Slash grass and watsonia	Scheduled	Mundaring (metro)	FESA	
21 Jul	Slash	Opposite Old Mullewa Rd Slashing of scrub & grass	Scheduled	Geraldton (6) Parcel 612771 Wells St, Parcel 612824 North West Coastal Hw...	FESA	
09 Aug	Prescribed Burn	581488 Eastern Town site prescribed burn for town site protection	Projected	Dandaragan Badgingarra	FESA	
16 Aug	Mulch	Jurien 2010 mulching Mulching of UCL to protect adjoining properties within Jurien townsite	Scheduled	Dandaragan Jurien Bay	FESA	
06 Sep	Prescribed Burn	Wooroloo burns 2010 Burns at UCL reserve 4198 Mayo Rd & reserve 17100 Liberton rd	Scheduled	North Metro Mundaring	FESA	
08 Sep	Grade	Firebreak upgrade 2009-2010 Upgrade UCL- UMR Firebreaks throughout Mundaring Shire	Projected	Mundaring (60) Parcel 206851, Parcel 209192 Barrett Rd, Parcel 209197 Bar...	FESA	
09 Sep	Prescribed Burn	581488 Eastern Town site prescribed burn for town site protection	Projected	Dandaragan Badgingarra	FESA	
14 Sep	Prescribed Burn	Parkerville BFB Burns 2010 3ha burn on UCL reserve south of properties on Carrawatha Rd	Scheduled	North Metro Mundaring	FESA	
16 Sep	Mulch	Jurien 2010 mulching Mulching of UCL to protect adjoining properties within Jurien townsite	Projected	Dandaragan Jurien Bay	FESA	
09 Oct	Prescribed Burn	581488 Eastern Town site prescribed burn for town site protection	Projected	Dandaragan Badgingarra	FESA	
11 Oct	Prescribed Burn	Buffer burn	Projected	Mundaring - metro (2) Parcel 218415 Rosedale Rd, Parcel 218515 Rosedale Rd	FESA	
16 Oct	Mulch	Jurien 2010 mulching Mulching of UCL to protect adjoining properties within Jurien townsite	Projected	Dandaragan Jurien Bay	FESA	
20 Oct	Slash (heavy)	Cervantes UCL 2010 To provide strategic acces and separate area of land into manageable parcels	Scheduled	Dandaragan Cervantes	FESA	
01 Nov	Mulch	Mulch widen fire breaks Liberton Rd Warrigal Way, Chidlow area	Scheduled	Mundaring - metro (7) Parcel 1356256, Parcel 218514 Liberton Rd, Parcel 218419 R...	FESA	
05 Nov	Doze	Upgrade existing Nelson Rd fire access track below winery (300m) and southern end adjoining Helena Valley(400m) with dozer.	Projected	Mundaring - metro (5) Parcel 211116 Glen Forrest Dr, Parcel 211117 Glen Forrest D...	FESA	
09 Nov	Prescribed Burn	581488 Eastern Town site prescribed burn for town site protection	Projected	Dandaragan Badgingarra	FESA	
		Jurien 2010 mulching				

Treatment areas including hectares and locations can also be viewed as graphs. The following provides a sample graphed display of treatment works.

Figure 57 – Sample Graphed Treatment Areas Report



The firebreak summary includes the length of firebreaks installed for each area. This can also be reported against as part of the reporting functionality of the system. The following provides a sample Firebreak Lengths report.

Figure 58 – Sample Firebreaks Length Report

Area	FESA, LG Jobs			Unverified Fixtures		Verified Fixtures		All Firebreak Lengths	
	All Jobs	Treatments	with related shapes	Shapes	Km	Shapes	Km	Shapes	Km
Local Governments	* 173.5	* 138.6	* 21.9	* 0.9	1.14	* 40.0	24.5	* 40.9	25.6
Albany	15	15	1	0	0	2	0.77	2	0.77
Augusta - Margaret River	7	5							
Boyup Brook	1	1							
Bridgetown - Greenbushes	15	15	3	0	0	5	1.53	5	1.53
Broome	1	0							
Bunbury	2	2							
Busselton	1	1							
Capel	2	1							
Dandaragan	7	7							
Denmark	2	2	1	0	0	5	5.77	5	5.77
Derby - West Kimberley	4	4							
Donnybrook - Balingup	11	7	3	0	0	11	8.45	11	8.45
Geraldton - Greenough	1	1							
Kalamunda	2	2	2	0	0	2	0.19	2	0.19
Kalamunda	10	9	8	0	0	10	1.47	10	1.47
Kwinana	* 15.5	* 10.6	* 2.9	* 0.9	1.14	* 2.0	3.50	* 2.9	4.64
Manjimup	20	16							
Mundaring	39	22							
Murray	4	4							
Nannup	0	0							
Plantagenet	10	10							
Swan	4	4	1	0	0	3	2.80	3	2.80

□ Job and shape decimal points indicate jobs with multiple parcels that are located in different areas

4.8.5 Building History

The IBRMS has been available for use for approximately 3 months. Within this period some FESA regions and Local Governments have been able to enter bushfire mitigation history, current and future programs. Historical data for all other regions will be captured within the IBRMS over the next 18 months. Continual development of the system will enhance the bushfire mitigation planning and management across the State leading to a ‘Bushfire Safe WA’. It will provide an archive of historical works which will provide valuable data to analyse long term trends and outcomes.

4.8.6 Programs completed

Due to the recent development of the IBRMS recording of mitigation works is held within various areas and sections of FESA and Local Governments (managed by Community Emergency Service Managers). Collated data from various regions of approximate works completed in 2010/11 are in the summarised reports above and below:

Strategic townsite burning	Hectares burnt	Number of properties burnt		comments
		UCL	Shire	
Metro	338	9		LG and UCL Townsite protection
Denmark	15	10		Brigades assist DEC with their burns
Bremer Bay	20	2		
Margret River	50	1		
Augusta	28	1		
Wundowie	10	1		
Esperance	10	2		
Munglunup	220	1		
Quindingup	10	1		
Hopetoun	20	1		
Greenbushes	4		1	Burnt in conjunction with DEC, bordering State Forrest
North Greenbushes	2	2		
Bridgetown	30		3	
Broome	100	15		
Derby	30	15		
Peninsular (Kimberly)	250,000			Community protection (Ranger groups, DEC, FESA)
Kimberly	1,000,000			Roadside and pastoral protection (DEC, pastoralists, FESA)
Kimberly (ECO Fire Project)				Protecting approximately 30 pastoral and indigenous communities (FESA, DEC Indigenous groups, pastoral)
Mundaring	100			Strategic burning in consultation with DEC to protect townsites

Shire	Works	Area/km	Parcels	Purpose	Who
City of Geraldton-Greenough (CGG)	Slashing	78ha	140 CGG reserves and freehold title	Fire breaks in accordance with Local Firebreak notice and fire prevention strategies.	CGG Parks and Works staff and contractors.
	Grading of firebreaks	23km			
	Mulching 20m wide	4km			
	Burning	15ha			
	Spraying of firebreaks	12km			
	Under prune and manual clearing	5ha			
City of Geraldton-Greenough (CGG)	Mulching 20 m	2km	9 UCL or UMR parcels	Bushfire Hazard Mitigation	FESA MWGRO
	Under pruning and manual clearing	2ha			
	Spot Spraying	5ha			
	Slashing	18 ha			

As demonstrated by the above, FESA has significantly enhanced its capability and capacity to positively contribute to and manage the State’s bushfire mitigation requirements in partnership with Local Governments and DEC. FESA strongly contends that the evolution to a single bushfire mitigation system is an integral part of achieving a *joined-up* approach to a *Bushfire Safe – WA*. Without this, mitigation activities will continue to occur on an agency by agency basis with little/no level of sophistication and reporting available to demonstrate auditable outcomes (return on investment) both planned and completed works. It will also continue to result in duplication and investment by agency and/or Local Government. FESA believes it has established an appropriate system that over time will deliver the desired outcomes for the State.

4.8.7 Private Landowners Bushfire Mitigation Works - The Winter Burning Project

FESA’s Bush Fire and Environmental Protection Branch (BFEPB) through their research and training activities produce a significant amount of contemporary material to assist FESA staff, land owners and managers to conduct a range of bushfire mitigation activities.

One of the initiatives worthy of specific mention in this submission due to relevance is the Winter Burning Project designed specifically for private land owners in the Perth Hills. The winter burning project is designed to provide community members with sufficient knowledge to be able to undertake a prescribed burn on their property under winter season conditions.

The winter months are a perfect time for owners to prepare their properties in readiness for the potential of summer bushfires but FESA found that many people now living in the rural / forest interface zone do not have a suitable level of knowledge of bushfires or prescribed burning, and how they may be able to undertake prescribed burning on their land to reduce the potential impact of bushfires.

The goal of the project was to give the people living in the rural / forest interface zone on land holdings of less than five hectares the knowledge on how to conduct a prescribed burn. This knowledge base is supported through the production and dissemination of a DVD on how to burn; a burning guide booklet and the conduct of field demonstration days. The burning guide is supported by a science based burning criteria developed by the BFEPB. The aim is to create different levels of fuel to maintain a mosaic of recently burnt and unburnt vegetation.

FESA's Winter Burning Project was recognised for its contribution to community safety as the winner of the 2009 Australian Safer Community Awards in the State Government category.

The Winter Burning Guide and DVD are attached at Appendix 18. A catalogue of all the contemporary guides and tables produced by FESA's BFEPB is also available for review by the Inquiry if desired.

FESA Proposals

The Review should:

- Note the response to its request for further information arising from the hearing held on 21 March 2011;
- Recommend to Government the adoption of the *FESA Integrated Bushfire Risk Management System (IBRMS)* underpinned by the *Bushfire Threat Analysis* methodology as the basis for all bushfire mitigation planning and reporting into the future; and
- Note the Private Landowners Bushfire Mitigation Works - The Winter Burning Project.

5. THEME 4 – UNIFIED CONTROL

5.1 Integration of agencies within a single *State Operations Centre*

5.1.1 Context

Unified control must start at the top and penetrate long term culture change for integrated operations down through the individual agencies involved in bushfire management within WA. This notion has been identified by numerous inquiries but agency inaction has prevented effective integration of agencies' activities.

FESA has instituted unified control amongst its constituent services of the Fire and Rescue Service, Bush Fire Service, Volunteer Emergency Services, Volunteer Fire Services, State Emergency Service and Volunteer Marine Rescue Service. Previously each service had a separate Chief Officer or Executive Command structure.

This model is without equal in Australia; however, it is widely considered and promoted by other jurisdictions. The *Victorian Bushfires Royal Commission* fell short of such a recommendation given it was unlikely to receive political acceptance due to the major restructures required.

The *Bush Fires Act 1954* legislative changes in 2010 further provided FESA the ability to take control of all fires regardless of land tenure. However, this arrangement only applies once a declaration occurs and therefore has the deficiency of fire management agencies operating separately until it is considered appropriate to institute a s 13 declaration. Whilst this arrangement provides unity of control once declared, it lacks the lead-up continuity of the fire situation and runs the risk of establishing these arrangements too late. It is therefore extremely important for FESA and partnering agencies to carefully consider the timing of such a declaration, to minimise this risk and maintain effective and efficient control over bushfires.

The *Victorian Bushfires Royal Commission* recognised the problems with control and command when separate organisations are responsible for fire management, finding "*serious deficiencies in top-level leadership as a result of divided responsibilities, and the operational response was hindered by differences between agencies' systems, processes and procedures*". The Royal Commission noted that:

*many of the concerns identified related to operational matters such as control, interoperability and interagency standards, leading the Commission to conclude that a focus on improving operational capability is required... For many of the operational problems the Commission identified, previous attempts to improve coordination had failed. Typically progress has been slow or incomplete or has not achieved the level of interoperability required.*⁹⁶

In the October 2004 report *Responding to Major Bushfires*, the WA Auditor General noted:

The authority for fighting bushfires is shared across each of the 122 local governments in regional Western Australia, the Fire and Emergency Services Authority (FESA), and the Department of Conservation and Land Management (CALM) [renamed the Department of Environment and Conservation on 1 July 2006]. Authority is based on land tenure, according

⁹⁶ 2009 *Victorian Bushfires Royal Commission*, p 8

to the geographical jurisdiction of each organisation. While fire fighting organisations generally work well together, major bushfires have exposed weaknesses in these arrangements. Changes are needed to establish a more cohesive fire fighting structure and a sound authoritative basis for managing bushfire emergencies.

The WA Auditor General went on to recommend that the Government:

...establish a State-wide command structure across volunteer Bush Fire Brigades for fighting major bushfires, to more effectively manage the coordination of personnel and resources [and] establish emergency management legislation which clarifies State and Local Government responsibilities...⁹⁷

Whilst legislative provisions have changed and FESA is now the *controlling agency* for bushfire within WA which can assume control of bushfires under certain conditions regardless of land tenure (s 13 *Bush Fires Act 1954*), the supporting system to facilitate this and to facilitate agency integration is vitally important.

As the controlling agency for bushfire within WA, and having regard for its other proposals within this submission for a more integrated *systems approach* to managing bushfire, FESA intends to adopt an integrated approach to incident management, which includes statewide coordination. FESA strongly believes the finite resources available to these important roles need to be deployed in a manner which provides seamless, agency and tenure blind incident management and statewide deployment.

FESA believes that the construction of the new FESA headquarters at Cockburn Central (currently due for completion in 2011), which includes a new *State Operations Centre*, provides an ideal catalyst to commence this new approach to coordination and culture change. No longer is it acceptable for agencies to simply collocate in the one centre and maintain their separate operations. There is no greater example of where this was highlighted than the outcomes of the *Victorian Bushfires Royal Commission*, where all of these elements were tested and found extremely wanting. This situation equally applies within WA, whereby despite the best efforts of agencies, an integrated and mandated system of work continues to be an issue and needs resolution.

5.1.2 Perth Hills Fires Issues

The following issues were apparent during the *Perth Hills Fires* and warrant examination and planning for resolution into the future:

5.1.2.1 Non-compliance with Westplan – Bushfire and State Emergency Management Policy

Westplan – Bushfire (2010) and *State Emergency Management Policy (4.1)* (2010) establish an agreed arrangement for *State Operations Command* (pp 22, 41 and 42) and functionality of an *Operational Area Support Group* (OASG) (p 10). These specify that *State Operations Command* shall consist of the FESA State Duty Director, the DEC State Duty Officer and liaison officers from key agencies within the OASG, who must have the ability to provide:

⁹⁷ Responding to Major Bushfires, pages 5 and 6

- consolidated report on agency response activities;
- agency specific impact assessment;
- resource status;
- significant issues.

During the *Perth Hills Fires* despite the requirements of the above State plans and policies and a request from FESA for the DEC to send a senior representative in accordance with the above given the significance of the fire and the number of fires within the landscape within various regions, DEC sent a metropolitan regional representative who indicated he had “been instructed not to get involved in State Operations and was able to report on local commitments only” (OASG Minutes 06/02/11). FESA finds this totally inappropriate, non-compliant with State arrangements and a significantly inhibiting factor in effective State coordination. This resulted in the requirement for FESA to seek this statewide / strategic information via phone from a senior statewide DEC representative who was operating in isolation, presumably in the DEC centre.

FESA also accepts the provisions applicable to pre-formed joint Incident Management Teams did not occur in accordance with these plans/policy and this is also an indication of the need for greater integration at all phases of the PRR continuum, which is also relevant to the following points.

5.1.3 Ineffective Strategic Resource Planning

The above situation resulted in ineffective and inefficient strategic resource planning, an example being that during the *Perth Hills Fires* and to date FESA cannot ascertain the exact times of arrival and details of DEC resources on the fireground. Moreover, safety issues on the fireground, similar to those subject to the *Linton Coronial Inquest* following the death of five CFA volunteer firefighters in 1998, are a significant risk in operating a non-integrated incident management (and communications) structure. It is also contrary to the concepts of operation outlined in *Westplan – Bushfire*.

In situations like those confronted on 5 and 6 February 2011 with multiple large fires in the landscape, potential for further fires and the need to undertake very strategic resource planning, this lack of integration cannot occur. Effective resource planning should:

- Encompass all available resources within the State;
- Have regard for time and space issues in deployment;
- Consider an all hazards perspective to planning, including the alignment of resource capability/capacity commensurate with risk/hazard type;
- Provide a level of contingency planning, including consideration of the potential need for interstate and Commonwealth resource support;
- Incorporate the potential long term duration requirements of an incident/s, including business continuity and welfare/fatigue management obligations;
- Forecast impending conditions and ongoing potential.

This cannot occur with agencies operating at a discrete agency level or in isolation from one another.

The criticism of FESA requesting interstate support from Victoria is a clear example of this lack of an integrated approach. However, the formal approach to Victoria was sent under the joint signature of FESA and the DEC Director General, so any suggestion this request occurred without the knowledge of DEC is simply not correct (email to Waller 6/2/2011).

5.1.4 Potential Duplication in Incident Management

This same approach must penetrate all levels of the incident management structure, from State, Regional and Incident levels.

Unfortunately the issues described above at State level also operated at the Incident Management Team level during the *Perth Hills Fires* and occurs regularly.

DEC sent a representative to the Incident Management Team who arrived late into the fire and never fully integrated into a formal functional position within the AIIMS structure at the Incident Management Team. This led to the DEC representative operating in relative isolation, more as a *liaison officer* rather than being an active member of the Incident Management Team. This approach perpetuates the separation of incident management arrangements and operations of the fireground, which cannot occur.

FESA acknowledges some great work by DEC crews at the *Perth Hills Fires*, but strongly believes this can be more effective in the future when the agencies operate at a totally integrated level.

The establishment and exercising of joint pre-formed Incident Management Teams must occur and be the catalyst for integrated operations at the incident level.

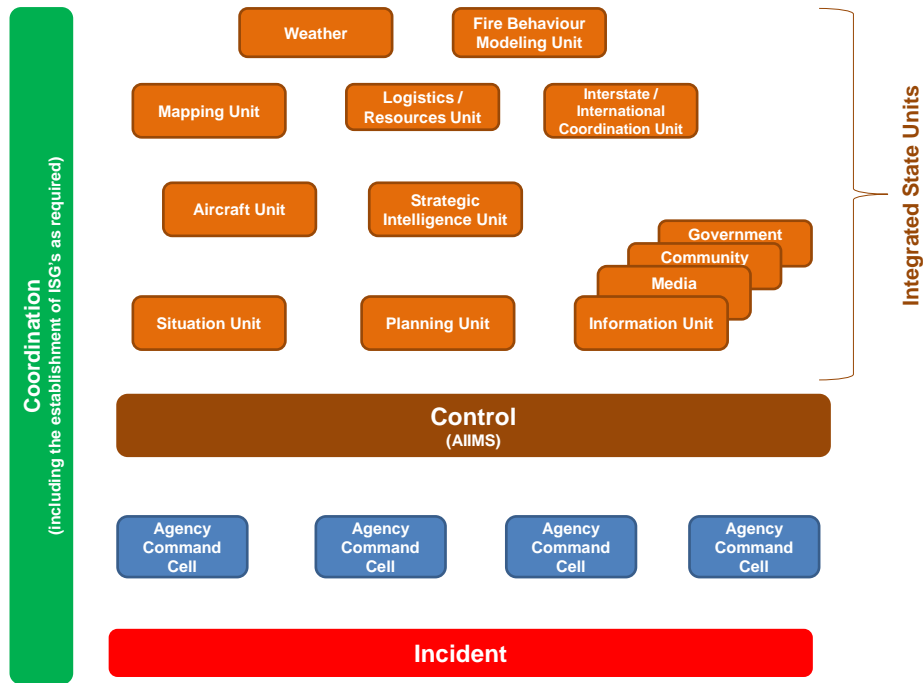
A further example of these types of issues occurred at another fire (*Muchea Fire*) after the *Perth Hills Fires* where DEC demonstrated hesitancy integrating into the incident management structure, which unfortunately appears to be the typical *modus operandi* for DEC. This includes operating standalone communications structures, which inhibits the ability of FESA (as the controlling agency) to truly manage all fireground resources (including DEC resources).

5.1.5 Future Approach

The approach to be adopted by FESA in the future will ensure that FESA, as the *controlling agency* on behalf of the State, utilises the available resources (regardless of agency or department) in the most efficient and effective manner possible to achieve a 'joined up' outcome for the State. This approach will align specific expertise and experience (regardless of agency or department) to the variety of roles undertaken in incident management and State coordination.

The following diagram outlines the core concepts of this proposal:

Figure 59 – Overview of proposed integrated statewide incident management and coordination structure



A plan of the new *State Operations Centre* to facilitate the above is attached as Appendix 19 of this submission. This plan clearly demonstrates the integrated nature of the centre, clear *State Controller* functionality, clear *Agency Commander* functionality and integrated *functional units* within the centre. It also demonstrates the clear division between FESA Metropolitan Region operations arrangements and that of State arrangements, which have not been as clearly demarcated in the current facility and/or modes of operation.

The proposal does not in any way alter individual agencies' internal *command* responsibilities or activities during emergencies, nor does it impact on the normal roles and responsibilities of land owners/occupiers in bushfire prevention and mitigation, including the role of DEC and its land management responsibilities which include fire as a tool for land management.

However, as soon as it becomes a bushfire then FESA submits the integrated incident management and state coordination arrangements should be activated. This does not mean that 'control' responsibilities of individual agencies will be eliminated nor is FESA proposing it should automatically assume 'control' under section 13 of the *Bush Fires Act 1954*, but simply that a robust and agency/land tenure blind approach should be adopted for establishing the most suitable and equipped incident management (State, Region and Incident level) arrangements possible. In addition to utilising the most appropriate and skilled personnel regardless of agency, this approach will also ensure any subsequent transition of 'control' to FESA under the provisions of s 13 occurs in a more seamless manner, with a multi-agency incident management and single coordination structure already in place.

FESA has initiated discussions with the DEC with respect to them having a permanent presence at the State Operations Centre and administering their Prescribed Burning Program from the Centre. This is seen as truly advantageous not only to facilitate seamless transition of control to the State Centre but also from building a more integrated teamwork perspective through day-to-day activities.

FESA has also initiated discussions with the Bureau of Meteorology (BOM) to locate a severe weather specialist at the State Operations Centre fulltime which will support Prescribed Burning programs, weather forecast (across all hazards), declaration of Total Fire Bans and increased expertise in relation to this extremely important aspect of emergency management. The BOM representative could also train FESA and DEC staff on weather related matters and fully integrate into the overall State Operations Centre team.

This position is supported by the October 2009 Boorabbin Coronial Inquest which recorded the Incident Controller's failure to send spot forecast information to operational personnel and his failure to appreciate the importance of monitoring wind changes at uncontrolled bushfires, even after the inquest. The Coroner said:

The failure to take adequate note of reliable weather forecast information provided by the Bureau of Meteorology compromised the safety of all involved in fire suppression activities on 30 December 2007. It was fundamental to hazard reduction on that day that the Incident Management Team should be alert to all of the spot forecast information and be well aware of any significant wind changes which might take place during the course of the day.

The importance of up-to-date and accurate information and intelligence was recognised by the Review Committee for *Western Australia's Bushfire Preparedness* in April 2009, which noted that:

Bureau of Meteorology (BoM) forecasts provide essential data in support of bushfire incident management. Effective use of this intelligence requires the most effective interpretation of BoM forecasts by fire agencies. Enhanced interpretive services between BoM and agencies would ensure that the best possible intelligence supports response efforts.⁹⁸

The Review Committee noted that:

FESA and DEC will consider options and funding issues for the provision of BoM forecasters to ensure more effective interpretation of BoM forecasts by fire agencies and report to their Ministers before 1 October 2009.⁹⁹

This proposal is totally consistent with the findings of the *Victorian Bushfires Royal Commission* who were quite specific about the need to ensure a single line of control existed and removal of any ambiguity in the operational structural arrangements, but is tailored to cater for the WA operating environment.

It is also logical and necessary that this centre be located at the controlling agency's headquarters for it to avail itself of the necessary supporting infrastructure to perform the role effectively. It is also logical that this centre be located at the FESA headquarters, given the high potential and

⁹⁸ April 2009 Review of Western Australia's Bushfire Preparedness [p 43]

⁹⁹ Review of Western Australia's Bushfire Preparedness [p 44]

regular occurrence of multiple incidents occurring at the same time from FESA's all hazards operating environment. To isolate the centre in another location would not be effective or efficient and would require additional resourcing to that which can be provided through FESA's existing resource base. Moreover, given bushfire is the only hazard type within the State that has multiple agencies exercising control responsibility, and given the ability for FESA to assume control (s 13 *Bush Fires Act 1954*), it is appropriate that these operations be integrated into the all hazards *State Operations Centre* at FESA.

Of fundamental importance is also the need to ensure Police activities, which include potential terrorism response/coordination, occur at a separate centre which can also perform the role of a *State Crisis Centre* rather than a *State Operations Centre* for non-crime/security related activities. FESA appreciate it will have a support/combat agency function in these types of activities and when this occurs it will also be required to send a liaison officer to the *State Crisis Centre* and link back to its own *State Operations Centre* for FESA command/agency coordination functions. FESA accept similar arrangements would need to be instituted when the Midland Police Operations Centre is operating during Police operations affecting FESA.

This proposed arrangement virtually duplicates the current operating arrangements in Victoria, where they operate a *State Control Centre*, which is where the State Controller (fire or flood undertaken by the Fire Services Commissioner and SES Director Operations respectively) operates. This arrangement includes the establishment of two discrete teams:

State Emergency Management Team (SEMT)

This team is akin to the WA SECG except that it is chaired by the relevant State Controller and consists of broad representation across agencies/departments.

State Fire (or Flood) Control Team

This is a smaller and focused team established to support the State Controller (who acts as the Chair) and consists of the fire agency commanders (in Victoria this being the Chief Officers of CFA, MFB and DSE; in WA it would be FESA and DEC) and a senior Victoria Police (Assistant Commissioner) representative to ensure the legislated coordination function is integrated into this arrangement.

FESA proposes that the establishment of a *State Fire Control Team* arrangement, similar to Victoria, would be a beneficial addition to the structural arrangements which operate in WA and would assist to facilitate the integration, partnership and input of the key fire services, supported by Police to ensure the *State Emergency Coordinator* functions are truly integrated into this arrangement via a senior Police representative. This would in turn require the Police representative to ensure the SEC (Commissioner of Police) is kept apprised of the current/pending situation and any relevant issues.

In addition to the above, Victoria actually operates four separate centres at State level:

- Fire/Flood Control through the State Control Centre;
- Crime/Security arrangements through the State Police Operations Centre;
- Emergency support/coordination functions through the State Emergency Support Centre; and

- State Crisis Centre for Government/political purposes.

[EMMV 2010:p3-20]¹⁰⁰

In FESA's opinion this is overly complex and alignment of centres as proposed in this section of FESA's submission is far more effective in providing:

- Maintenance of existing *controlling agency* arrangements;
- Certainty of line of control;
- Continuity of management/information;
- Integration and partnership evolution of key services;
- Appropriate separation between crime/security activities and other emergencies at the State level;
- Resource efficiency; and
- Facilitation of the appropriate whole-of-government alignment at the most senior level at the State Crisis Centre.

FESA's proposed arrangement is akin to that which operates successfully in Victoria; whereby there is not one centre operating which is under the control of the Police as the coordinators; rather, separate centres aligned to control of a particular hazard type and coordination.

The proposal to establish an integrated *State Operations Centre* is also supported by the recent *Review of the Ability of the Department of Environment and Conservation to Manage Major Fires* whereby the following comments were prominent in the report:

The reviewer also noted that DEC is establishing a new operations coordination centre at Kensington. FESA are also building a new facility and operations centre at Cockburn Central. The FESA facility will be designed to allow DEC fire personnel to operate from a designated part of the state coordination centre. Given the principle of "unity of command" the question must be asked: "Is this a missed opportunity to co-locate two important bushfire management agencies?" [emphasis added].¹⁰¹

In the same report the reviewer noted the potential loss of experience and the need to adopt an integrated approach by "including FESA officers in pre-formed Level 3 IMTs, establishing additional pre-formed Level 3 IMTs with FESA".¹⁰² FESA supports this recommendation and accepts this has not occurred to a satisfactory level to date and requires attention.

¹⁰⁰ Emergency Management Manual Victoria, 2010

¹⁰¹ Ferguson 2010: p.22

¹⁰² *ibid* p.3

The proposed State centre arrangements also facilitate the most appropriate venue for the relevant State level support structures to function. FESA submits the following arrangements would apply to facilitate these arrangements:

Figure 60 – Support Structures and Centres Relationships

Centres

Support Structures

State Level

Region Level

Local Level

FESA submits an area requiring further examination is the establishment of pre-determined Incident Control Centres and the applicable standards. At present this is a rather ad-hoc process determined at times of emergency and FESA does not believe this is either desirable or sustainable for the future.

5.1.6 FESA Proposals

The Review should:

- Note the issues arising during the *Perth Hills Fires*;
- Require agencies to fully integrate incident management personnel into a single Incident Management Team and the appropriate level of representation at all levels of the State's arrangements, in accordance with the principles of AIIMS, *Westplan – Bushfire* and State policy;
- Require agencies to adopt the joint pre-formed incident management structures for all future planning and deployment, in accordance with the preparedness triggers outlined in State plans and policy arrangements;
- Note the situation which operates in Victoria and the synergies to the FESA proposals and aligned outcomes;
- Recommend the establishment of a single *State Operations Centre* (for all non-crime based operations) located at FESA Cockburn;
- Support FESA's intention to:
 - Implement a fully integrated approach to State level operations in its new *State Operations Centre*,
 - Establish a State Fire Control Team (SFCT) to support integration and its State controlling agency functions for fire;
- Recommend that DEC fully integrate their emergency operations and prescribed burning coordination activities into this centre and cease all independent activities at their own centre/s;
- Recommend to the Bureau of Meteorology that they appoint a fulltime severe weather specialist to operate out of the new *State Operations Centre*; and
- Note the absence of pre-determined incident control centres and the intention to examine this issue further in consultation with all relevant stakeholders.

5.2 Strategic intelligence management, including public information and use of social media

To achieve an appropriate situational awareness system that will aid decision makers to execute a high standard of calibration in their decision making process, some basic principles must be followed. Intelligence gathering and analysis (i.e. an intelligence unit) does not currently formally exist within the AIIMS incident management structure. FESA submits this needs to occur and is advocating for this to be adopted in the current national review of AIIMS being conducted by the Australasian Fire and Emergency Services Council (AFAC). The introduction of an intelligence function/unit also must recognise and avail itself of the unprecedented growth and use of social media within the community. This is culturally a challenge for the fire and emergency services sector.

Much of the fire and emergency management sector is comfortable with the growing move to the digitised two dimensional (2D) spatial approach. Generally speaking this is in the form of paper or electronic maps.

The next phase of development is to synthesise data to enhance the 2D experience and move into the third and fourth dimensions to understand information both in a spatial and temporal approach.

Any development of a future system must be guided by the principles of being:

- *Spatial* Where is it?
- *Temporal* When or for how long did it occur?

The ongoing work of gathering intelligence from public information, community engagement and online work across the emergency services sector should in FESA's opinion be guided by two core principles:

- Open data; and
- Two-way community engagement.

These principles are outlined further below.

5.2.1 Open data

All emergency services agencies should work towards building a system where all data and information are open, conform to a uniform standard and are geo-referenced. Within agencies and the community, the number one cultural behaviour that is taking place is information sharing, and without easily accessible, transparent and exportable data, the agencies will not be able to create a common operating picture or be able to coordinate information at the level required.

5.2.2 Two-way community engagement

There are many examples of how the community is engaging with Government and with themselves online. Following the Queensland floods, expectations for online engagement during emergencies was high. This was further escalated in the Christchurch and Japan earthquakes, but in particular the Japanese event. Without a focus on engaging communities online and the

appropriate policies, resources and platforms to engage two-way with communities during emergencies, the potential for intelligence gathering and public information provision are severely limited.

Whilst the current processes of website information and conduct of community meetings during emergencies has served the sector well to date, the next phase of development must be online engagement through the use of social media as a core engagement tool. This will clearly require a changed culture for the emergency services, who in the past have tended to use the 'excuse' of "we must validate the information through our chain of command and security" as a means of avoiding this issue. This will no longer be acceptable and emergency services, like the rest of the community, must accept that the information will be gathered and disseminated by others within minutes, if they won't do it.

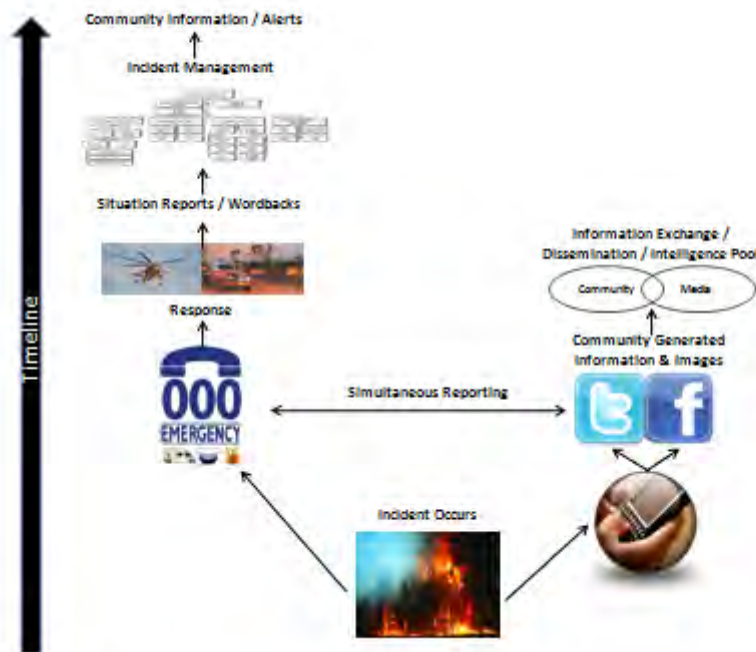
In actual fact, with the increased use of smart phone technology and forums such as Facebook and Twitter, the community will generate an intelligence pool extremely quickly and if emergency service agencies do not avail themselves of this intelligence and simply rely on the old 'chain of command' to provide intelligence to decision makers then they are missing the opportunity and more importantly will not keep pace with the expectations and information sources generated by the community themselves. This is an unacceptable scenario that will not be tolerated by the community into the future.

FESA is committed to integrating intelligence gathering and analysis into its doctrinal approach to managing fire and other emergencies into the future, which will not only provide intelligence one-way (i.e. from the community) but will be two-way (i.e. feed information back to the community) in times of preparation for, during and following emergencies.

Other recent examples of the potential application of social media in emergency management is the Queensland floods, Cyclone Yasi, and the Christchurch and Japan earthquakes whereby it was extensively used as a tool for information dissemination and gathering of volunteers/logistics for recovery efforts. In the Japanese event, social media was one of the only forms of communication that remained operative during the emergency, which in itself says a lot about the power and increasing reliance on this source of information.

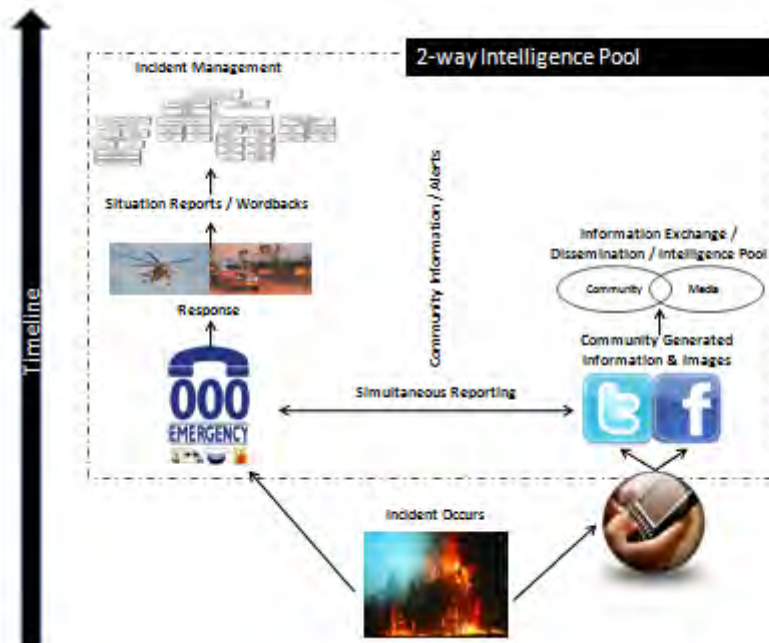
Put simply, the following demonstrates the *current state* which applies to the gathering and dissemination of intelligence, which clearly shows the complete separation of the fire agency and community processes that apply. This results in the rapid information (including images) gathering, exchange and dissemination at the community (including media) level and the lag time associated with the same at the fire agency level, as demonstrated by the diagram and associated timeline. This is not conducive to effective and efficient operations and certainly does not result in the interpretation and use of this vital intelligence by the fire agencies to inform their decision making, resulting in a lost opportunity.

Figure 61 – Current State (Intelligence Gathering and Use)



FESA strongly believes the following *future state* process needs to occur and is the basis upon which FESA will progress the introduction of this function and the use of social media in the future. This process results in the two-way use of intelligence and more effective and efficient operations, which include more timely community information and alerts as well as the use of this externally generated information to inform decision making.

Figure 62 – Future State (Intelligence Gathering and Use)



5.2.3 FESA Proposals

The Review should:

- Note the advancements of integrating strategic intelligence, including the appropriate use of social media, into the overall incident management structure and FESA’s position on this issue; and
- Recommend to Government that it support FESA in the ongoing development of this concept.

5.3 Clarity in definition around command, control and coordination

The use of the terms ‘command’, ‘control’ and ‘coordination’ are commonly misused interchangeably within documentation and general language within the emergency management sector. This needs a concerted effort to ensure the terms are both clearly understood and applied in the correct context across the State.

Whilst this appears on face value a relatively minor issue, it is essential in achieving effective best practice emergency management in Western Australia. It was also a matter commented on by the *Victorian Bushfires Royal Commission* that stated, “*although AAIMS operates at the incident level, there is a need to ensure that the common language and consistent approach and understanding are applied at the area of operations and state levels in order to respond to the challenges posed by managing multiple incidents*”.¹⁰³

A similar definitional issue exists within the State’s emergency management arrangements between the use of the term ‘District’ to describe a defined emergency management area (i.e. Local Government area or Gazetted Emergency Management District) and the term ‘Region’.

A further issue that arises with respect to the designation (nomenclature) associated with a geographic area that at times causes confusion is the terminology used within individual agencies. This includes the need to cater for the designation of an ‘operational area’ that has overall responsibility for one or more incidents.

These issues equally require clarification.

Once these issues are formally clarified and become policy then all agencies share an obligation to ensure the accuracy of agency material and education of all relevant personnel (staff and volunteers).

5.3.1 FESA Proposal

The Review should:

Recommend to the *State Emergency Management Committee* that they:

- Urgently confirm the definitions of ‘command’, ‘control’ and ‘coordination’ in Operational Management Policy 4.1; and
- Clarify what term is to be used between ‘District’ and ‘Region’ to be defined in Operational Management Policy 4.1.

¹⁰³ 2009 *Victorian Bushfires Royal Commission* Final Report, Volume 2, section 2.6

5.4 Access to incident ground

5.4.1 Context

The *Perth Hills Fires* that occurred on 6 February 2011 (Red Hill) and 7 February 2011 (Roleystone) have again raised issues for the *Controlling Agency* with respect to access to the designated operation area by displaced residents and others.

The matter is not new with similar occurrences reported in the 29 December 2009 *Toodyay Bushfire* and the 10 January 2010 *Lake Clifton Fire*.

The problem by definition is ensuring a simple but robust system of clearing areas for entry and/or re-entry to residents and other relevant persons posited clearly on maintaining their own safety and also the legal obligations that exist for *controlling agencies*.

Currently when an authorised Incident Controller declares an area as unsafe he utilises the necessary powers under the *Bush Fires Act 1954* s 13 ('Duties and Powers of Bush Fire Liaison Officers') and s 14(b) which enable him to direct or prohibit the movement of people, animals and vehicles from the affected area; specifically:

- (2) *During the authorised period, an authorised person may do all or any of the following —*
 - (a) *direct, or by direction prohibit, the movement of persons, animals and vehicles within, into, out of or around the affected area or any part of the affected area;*
 - (b) *direct the evacuation and removal of persons or animals from the affected area or any part of the affected area;*
 - (c) *close any road, access route or area of water in or leading to the affected area.*

There are penalties for non-compliance with these directions under s 14(c).

In developing a system that will assist emergency managers in dealing with this problem, cognisance of the following factors is required:

- The safety of the incident area (e.g. damaged infrastructure including roads, bridges, power lines and utilities, flammable and hazardous material including displaced asbestos, and damaged structures);
- The identification of valid persons (including registration) with a bona-fide right to entry;
- The need to escort or supervise entry and exit in some circumstances;
- Provision of counsellors and support persons where circumstances have potential stressful consequences;
- The ongoing and protracted maintenance of road blocks and exclusion zones are resource intensive and usually allocated to Police to enforce, which often is unsustainable; and
- The need to have a formal handover of responsibility to the Local Government (or other owner of the area) once the incident is concluded.

5.4.2 FESA Position

FESA is extremely conscious of some criticism and emotional issues associated with this very complex issue, the complexities of which are not readily understood or appreciated. The exclusion from the incident ground (whether that be bushfire or any other hazard) is clearly a difficult decision but one that must be made in the interests of *primacy of life*. FESA takes its responsibilities in this regard extremely seriously and does not utilise these powers lightly. The risks associated with the event itself, let alone the potential flow-on risks after the event have passed (e.g. falling trees, unsafe structures and infrastructure damage) are very real and often not understood.

The issue of evacuation is complex enough and FESA accepts, as referred to elsewhere in this submission, that further analysis, planning and implementation of these arrangements (including the designation of safe shelters) needs to occur.

FESA also accepts further consideration of re-entry procedures needs to occur to cover the issues outlined above.

FESA will examine all of these issues further prior to the next fire season in an attempt to find a mutual accommodation that respects the interests of the *controlling agency* and those of persons with a pecuniary and/or other interest in accessing the incident ground. This examination will include the systems of operation adopted in other states and internationally to address this issue.

5.4.3 FESA Proposals

The Review should:

- Note the complexities involved in this issue and support FESA's position that access and/or re-entry to the incident ground must be positioned on safety; and
- Support the proposed ongoing review by FESA with respect to a *safe system of work* and associated procedures to accommodate the interests of the *controlling agency* and those of persons with a pecuniary and/or other interest in accessing the incident ground.

6. CONCLUSION

The 2010/11 fire season was predicted and proved to be extremely dangerous. The number of major fires and the losses associated with these was clear evidence of this. Not only was bushfire a major factor for emergency service agencies, but these coupled with tropical storm activity in the north of the State resulted in FESA being extremely active during this period. These events tested community engagement and operational structures. Whilst the loss of private and public assets was significant, the potential for greater impact and losses was equally significant.

It must be recognised that many people gave up their time and expertise to combat these events and support the community of WA. None more so than the extremely dedicated staff and volunteers of FESA, who continue to apply their training and experience and their efforts should be applauded.

However the significance of the losses and the need to improve is not lost on FESA. It tested its own operating environment, recent changes to legislation and other arrangements and the valuable lessons learnt through this experience will not be forgotten. It is on this basis that FESA has carefully considered how these should translate into improved arrangements for the future. A number of these improvements are beyond FESA's direct control and rely on the support of Government to achieve enhanced bushfire management arrangements for the future. FESA appreciates some of its proposed changes may not be popular, but it considers them necessary to realise the step change necessary for the future and address the common themes that have emanated from past inquiries both inter and intra state. These include inadequacies in inter-agency coordination, land use planning, building standards, incident management structures, community engagement/public information and capability / capacity of the State to manage these enduring hazards.

Whilst this submission has been compiled on the basis of information available to FESA at the time of writing, it does not purport to be exhaustive and needs to be considered in this context. The Major Incident Review initiated by FESA is yet to be finalised, community research through the Bushfire CRC is also to be finalised and a range of proposed improvements will require further detailed analysis if accepted by the Review and Government prior to implementation. However, FESA believes there is sufficient evidence to support its analysis and proposals for change contained within the submission and these warrant careful consideration by the Review.

As indicated in its introductory remarks of its submission, FESA believes these events and the Review provide an ideal opportunity and catalyst to bring about change in the manner in which agencies and the community operate in bushfire management. Resolution of a number of these issues will require concerted effort and direction, because collaboration and relationship have not been able to achieve these outcomes to date and relying on this to achieve the change necessary for the future, FESA believe will not be delivered without this.

FESA believe the combination of its interrelated issues outlined in its submission can deliver best practice bushfire management leading towards a *Bushfire Safe – WA* and strongly encourages the Review and Government to make the courageous decisions necessary to deliver this.

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8. APPENDICES

The following provides a list of appendices referred to within FESA's submission for consideration of the Inquiry:

APPENDIX NUMBER	TITLE	SUBMISSION REFERENCE
1	<i>State of the Service</i> 2010 Report	1.1
2	FESA Organisational Structure	1.1.3
3	'CONFIDENTIAL INFORMATION' NOT FOR PUBLIC RELEASE Cause of the Property Losses (Raw Data)	1.5.1
4	High Level Chronology of Pertinent Information	1.5.1
5	Statistical Performance Report for StateAlert – Voice	1.5.3.8
6	Statistical Performance Report for StateAlert – SMS	1.5.3.8
7	Previous Inquiries – Findings and Recommendations	1.6.1
8	Victorian Bushfires Royal Commission Recommendations - Relevance to WA and Status Report as at 10 March 2011	1.6.2
9	FESA's Bushfire Mitigation Strategic Resource Distribution Map	2.1.2.2
10	FESA's Community Engagement Framework	4.1
11	Priority Locations for 'localised' engagement strategies to address local risk	4.1.8
12	CRC Survey Instrument – Face to Face Interview	4.1.15
13	CRC Survey Instrument – Mail-Out Document	4.1.15
14	Preliminary Report on the February 2011 Fires in Roleystone, Kelmscott and Red Hill Research Project	4.1.15
15	Identified High and Very High Bushfire Risk Areas	4.3
16	Planning for Bushfire Protection Guidelines (Edition 2)	4.3.2
17	Community Bushfire Risk Mitigation Plan (Sample)	4.8.2
18	Winter Burning Guide and DVD	4.8.7
19	New State Operations Centre Plan	5.1.5

9. TABLE AND FIGURES

Figure 1 – FESA Organisation Structure 5

Table 1 – Volunteer Demographics 6

Figure 2 – Interface of four key areas of planning framework 8

Figure 3 – Corporate Planning Framework 9

Figure 4 – Four Approaches to Emergency Management 17

Figure 5 - Comprehensive Approach to Emergency Management Continuum..... 18

Figure 6 - Graduated Response Arrangements 21

Figure 7 - *Emergency Management Act 2005* 22

Figure 8 - Emergency Management Framework in WA 24

Figure 9 - Hazard Management Structure..... 24

Table 2 – Prescribed Hazard Management Agencies (as at 1 March 2011) 26

Figure 10 - Combat Agency (examples, not a comprehensive list) 28

Table 3 – Support Organisations (examples, not a comprehensive list) 28

Table 4 – Emergency Management Structure Overview (including committees)..... 29

Figure 11 - SEMS Sub-Committee Structure..... 32

Figure 12 - Emergency Management Districts (Regional) 33

Figure 13 - Emergency Management Districts (Perth) 33

Figure 14 – Operational Management Structure..... 34

Figure 15 - Incident Support Group (ISG) Interrelationship to Controlling Agency..... 35

Figure 16 – Multi-Incident / Multi- Agency Operational Area Support Group Interrelationships 35

Figure 17 – Concurrent Response / Recovery Phases 43

Table 5 - Acronyms..... 48

Table 7 - Schedule of provisions of *Bush Fires Regulations 1954* that provide responsibilities / powers; create offences; prescribe penalties 82

Table 8- Schedule of provisions of *Bush Fires (Infringements) Regulations 1978* that provide responsibilities / powers; create offences; prescribe penalties 96

Table 9 – Resource Summary..... 106

Figure 18 – Roleystone Fire Overview 108

Figure 19 – Overview of houses lost..... 112

Figure 20 – Overview of partial damage..... 112

Figure 21 – Public Information Process 115

Figure 22 – Public Information Dissemination Process..... 116

Figure 23 – Increased Demand for Information	118
Figure 24 – Increases in FESA distributing information on behalf of DEC and Local Government ..	119
Figure 25 – Distribution of Bushfire Information	119
Figure 26 – Public Information Unit Structure	122
Figure 27 – StateAlert Statistics	125
Figure 28 – Call Centre Statistics	128
Figure 29 – Global Website Traffic Statistics.....	129
Figure 30 – <i>Perth Hills Fires</i> Website Traffic Statistics	130
Figure 31 – Media Demand.....	131
Figure 32 – Media Coverage (by station)	132
Figure 33 – Media Coverage (by type).....	132
Table 10 - Major Reviews and Inquiries Since 2004	137
Figure 34 – IBMC Structure	160
Figure 35 – Community Emergency Services Manager (CESM) reporting relationships.....	165
Figure 36 – Local inter-relationships to achieving a Bushfire Safe - WA	166
Figure 37 – Structural Reform Design Principles	168
Figure 38 – Structural Reform Design Principles Evaluation Criteria	169
Figure 39 - Evaluation against design principles.....	171
Figure 40 - Evaluation against design principles.....	173
Figure 41 - Evaluation against design principles.....	175
Figure 42 - Evaluation against design principles.....	178
Figure 43 – Bushfire Consultative Structure	184
Table 11 – Fire Management responsibility for UCL and UMR.....	185
Figure 44 - Capability Hierarchy	195
Figure 45 - Fundamental Inputs to establishing <i>Bushfire Safe – WA</i> Capability	197
Figure 46 – Agency Profile	201
Figure 47 - Model A:.....	203
Figure 48 - Model B:	203
Figure 49 - Model C:	204
Table 12 – Volunteer Demographics	212
Table 13 - Profile of Bushfire Ready Facilitators	231
Table 14 – Website Traffic during <i>Perth Hills Fires</i> in February 2011.....	238

Table 15 - Cost of compliance with 2009 AS 3959	251
Photo 1 - Scott Road Pump Station on March 2010 prior to bushfire mitigation works	256
Photo 2 - Ember screens fitted to Scott Road Pump Station as result of bushfire mitigation	257
Photo 4 - Scott Road Pump Station post-fire (note supplementary generator front left).....	258
Figure 50 – Proposed integrated planning framework	264
Figure 51 – Sample Community Bushfire Risk Mitigation Map	269
Figure 52 – Sample Finance Summary Report.....	271
Figure 53 – Sample Graphed Financial Summary	272
Figure 54 – Sample Pie Graph Finance Summary	272
Figure 55 – Sample Fixture and Treatment Work Report	273
Figure 56 – Sample Mitigation Work Plan Report	274
Figure 57 – Sample Graphed Treatment Areas Report	275
Figure 58 – Sample Firebreaks Length Report.....	275
Figure 59 – Overview of proposed integrated statewide incident management and coordination structure.....	284
Figure 60 – Support Structures and Centres Relationships	288
Figure 61 – Current State (Intelligence Gathering and Use).....	292
Figure 62 – Future State (Intelligence Gathering and Use)	293

10. ACKNOWLEDGEMENTS

FESA acknowledges that the cornerstone of its organisation and bushfire management arrangements rely almost exclusively on volunteers, Bush Fire Brigades and Local Government. The tireless commitment and efforts of these key parties, supported by FESA and Local Government staff, is to be commended and continues to be the underlying basis upon which FESA evolves its core development and support programs, without which the State's arrangements would not be as effective as they presently are. The volunteer ethos that underpins FESA and the State's emergency management arrangements is not lost on it and underpins all elements of FESA's submission and achievements at the *Perth Hills Fires*.

FESA also acknowledges the myriad of support agencies and personnel that assisted it during these fires and other emergencies across the State. Without this support FESA's ability to fulfill its obligations and the safety of the WA community would not be achievable.

Finally, the compilation of a comprehensive submission of this nature within the tight deadlines, whilst still maintaining normal service delivery, would not be possible without the dedicated support and efforts of all the FESA staff involved. The effort and thought leadership of all involved is appreciated and will no doubt form the cornerstone of our future thinking and hopefully operating arrangements.

11. SUMMARY OF FESA RECOMMENDATIONS

The following provides a summary of FESA’s recommendations contained within its full detailed submission for consideration of the Review:

FESA RECOMMENDATION		SUBMISSION REFERENCE
STRATEGIC OVERVIEW		
A	FESA Overview	
A1	The Review should note and support the principle that FESA has no vested interest, perceived conflict or pecuniary interest in taking on the lead role for bushfire management within the State and has sufficient infrastructure and most importantly state-wide <i>reach</i> into all communities and through its regionally based service delivery model to adequately fulfill this task.	s.1.1.4
A2	The Review should recognise the FESA resource base and unparalleled organisational infrastructure makes it the only agency capable and with the capacity to be the lead agency for bushfire management within the State.	s.1.1.4
A3	The Review should support the <i>FESA 2023</i> plan and its service delivery philosophy with a focus on risk mitigation and community resilience.	s.1.1.5 s.1.1.6
B	WA Emergency Management Arrangements	
B1	The Review should recommend the application of the FESA Bushfire Mitigation Portal and associated programs and infrastructure should be the consistent basis upon which LEMA are developed for bushfire across the State.	s.1.2.22
B2	The Review should recommend a similar integrated approach be taken from an all hazards/all agencies perspective to ensure each individual Local Government and the State as a whole is adequately prepared for any potential emergency which may exist across the State commensurate with risk.	
C	FESA as a Statutory Authority	
C1	The Review should note the ongoing concerns of key stakeholders, particularly volunteers, with respect to <i>Duty of Care</i> and <i>Responsibility</i> provisions.	s.1.3.
C2	The Review should note FESA’s position, which is supported by legal advice received from the State Solicitors Office, with respect to <i>Duty of Care</i> and <i>Responsibility</i> .	s.1.3.1
C3	The Review should strongly support the retention of appropriate protections for volunteers from personal liability for actions taken to prevent, mitigate and/or control a bushfire.	
C4	The Review should support the retention of the current hierarchy of <i>Responsibility</i> which is posited on primary responsibility residing with the land occupier and/or owner.	s.1.3.2
C5	The Review should note the complexities associated with the current legislative regime affecting bushfire management across WA.	s.1.3.3.
C6	The Review should support the recommendations of the <i>Community Development and Justice Standing Committee Inquiry into Fire and Emergency Services Legislation</i> and note the action being taken to develop a single consolidated emergency services Act and associated facilitative provisions that allow transfer of Bush Fire Brigades administration and operations from Local Government to FESA.	s.1.3
C7	The Review should consider the relevance of the existing enforcement and penalty regimes that operate within WA commensurate with risk and potential consequence.	s.1.3 Table 6 & 8
C8	The Review should note the general absence of Local Government adopting	Table 6

	local laws relevant to bushfire management with only forty-three out of a potential one-hundred and twenty-two Local Governments with local laws in place.	(refer comments against s.41)
C9	The Review should note the City of Armadale have local laws in place at the time of the <i>Perth Hills Fires</i> .	Table 6 (refer comments against s.41)
C10	The Review should strongly recommend that all Local Governments that have a bushfire risk promulgate local laws relevant to their area.	
C11	The Review should note the absence of any formal audit regime to audit compliance with Permit Conditions under reg 15B and recommend that non-compliance should be viewed seriously and attract the more serious level of any enforcement and penalty regime.	Table 7
D	Additional Preparedness Commensurate with Prognosis	
D1	The Review should note the seasonal prognosis leading into the 2010/11 fire season and the additional preparedness activities undertaken by FESA.	s.1.4.2
D2	The Review should note the prognosis for the weekend of 5 and 6 February 2011 and the additional preparedness activities undertaken by FESA in preparation for the weekend.	s.1.4.3
D3	The Review should note the identification of a number of issues for improvement that will be pursued by FESA prior to the next fire season.	s.1.4.4
D4	The Review should note the alignment between the issues identified and synergy with FESA's submission.	s.1.4.4
E	Perth Hills Fires - Overview	
E1	The Review should recognise the efforts of FESA staff and volunteers, DEC, Local Government and all attending combat and support agencies at the Roleystone Fire.	s.1.5.1
E2	The Review should support the adoption of the <i>primacy of life</i> principle as the overarching strategy and the rationale for adopting this approach.	s.1.5.1
E3	The Review should consistent with the (national) issues existing in other States, note FESA's intention to continue to research and opportunistically adopt improved strategies, after further underpinning research, to identify defensible properties in a more effective manner.	s.1.5.1
E4	The Review should note the information with respect to Buckingham Bridge awareness and strategies adopted.	s.1.5.1
E5	The Review should note the issues associated with the need to further explore: <ul style="list-style-type: none"> o Pre-determination of Incident Control Centres; o Evacuation system (including access to incident ground / re-entry issues). 	s.1.5.1
E6	The Review should maintain confidentiality over the data associated with cause of loss/damage provided to the Inquiry.	s.1.5.1
F	Perth Hills Fires - Public Information	
F1	The Review should note the increasing demand and significant advancements in public information management made by FESA over recent years.	s.1.5.3.4
F2	The Review should recognise the professionalism and commitment of FESA staff and volunteers efforts in gathering and circulating timely information during a period of intense public scrutiny and demand during the <i>Perth Hills Fires</i> .	
F3	The Review should note the role of FESA in providing public information services to support DEC and Local Government in recent years and the pivotal role FESA plays in this regard as the overarching HMA for bushfire.	s.1.5.3.4
F4	The Review should note the intention of FESA to continue to improve on public information activities, particularly the appropriate use of social media and a further integrated approach as a unit within the <i>State Operations</i>	

	<i>Centre.</i>	
F5	The Review should recognise the demonstrated robustness of the FESA public information system and how it held up well under unprecedented pressure.	
G	Previous Inquiries Overview	
G1	The Review should note the consistencies in subject matter between Inquiries/Reviews conducted nationally and more importantly within WA.	s.1.6.1
G2	The Review should note the synergies between the findings and recommendations of several Inquiries/Reviews and the contents and submissions made by FESA in relation to significantly improving bushfire management within WA.	s.1.6.1
H	Victorian Bushfires Royal Commission	
H1	The Review should note the establishment of a system by FESA to assess the relevance and the status of the <i>Victorian Bushfires Royal Commission</i> outcomes in FESA.	s.1.6.2
H2	The Review should note the status of the <i>Victorian Bushfires Royal Commission</i> outcomes and considers this status in evaluating the outcomes and recommendations arising from the Review.	Appendix 8
	STRUCTURAL REFORM TO ACHIEVE A SEAMLESS AND INTEGRATED BUSHFIRE SAFE - WA	
I	Nomination of a Single Agency Responsible for Bushfire Management within WA	
I-1	The Review should note and acknowledge the work done by individuals, organisations and IBMC in continually improving the State's bushfire management arrangements	s.2.1.1
I-2	The Review should support the ongoing integrity of the integrated "umbrella structure" of FESA and its underlying philosophy and ethos.	s.2.1.1
I-3	The Review should support FESA's position that structural change is necessary to maintain the momentum and catalyst for change to the State's bushfire management arrangements.	s.2.1.1
I-4	The Review should support FESA's position that there is an identified need for a single authoritative mandated approach to bushfire management within the State to achieve true interoperability/integration between agencies and long term and sustainable change for the future.	
I-5	The Review should note that FESA has implemented a solution which has started to reduce the risk of bushfire in partnership with Local Government and the community.	s.2.1.2
I-6	The Review should recognise that any structural reform options considered by the Review must not only have regard for these successful programs but also build upon them for the future.	s.2.1.2
I-7	The Review should consider the models recommended by FESA and the evaluation of each.	s.2.1.3
I-8	The Review should recommend to Government the FESA preferred options for structural change.	s.2.1.3
J	Single Bushfire Management Policy, Planning, Systems and Mitigation Activities	
J1	The Review should support the need for standardised single bushfire management, policy, planning, systems and mitigation activities for WA.	s.2.2
K	Clear Lines of Accountability	
K1	The Review should recommend that a clear accountability model be established for each element of the overall bushfire management system, which can withstand scrutiny and not be the subject of confusion and disputation during preparation for or in times of emergency.	s.2.3
L	Management of Unallocated Crown Lands (UCL) and Unmanaged Reserves (UMR)	
L1	The Review should note the current arrangements for fire management on UCL and UMR and its inherent issues.	s.2.4
L2	The Review should note FESA's significantly increased capability to support/undertake fire management on UCL and UMR.	s.2.4

L3	The Review should note FESA's willingness to review the current division of responsibility and provide additional support to the management of UCL/UMR in a collaborative manner between the relevant partners (RDL, DEC and FESA).	s.2.4
STRATEGIC CAPABILITY BUILDING		
M	Statewide capability Model	
M1	The Review should support FESA's position that planning for and building of <i>State-wide Capability</i> for bushfire (and for that matter any other hazard type) should be done at an integrated statewide level, under the auspices of the responsible HMA for a particular hazard, in the case of bushfire this being FESA.	s.3.1
M2	The Review should support FESA's proposed capability model as the basis of <i>State-wide Capability</i> planning.	s.3.1.1
M3	The Review should strongly recommend to Government that they require DEC to integrate capability requirements, including the outcomes of the recent <i>Review of the Ability of the Department of Environment and Conservation to Manage Major Fires</i> into a global state-wide approach, using the IBMC as the current appropriate avenue to progress these deliberations.	s.3.1
N	Whole-of-Government Resource Coordination System	
N1	The Review should note the proposed FESA whole-of-government networked resource coordination system concept.	s.3.2
N2	The Review should recommend to Government that it supports FESA in developing and administering this concept for the State.	s.3.2.1
O	Structured Recognition and Use of Local Knowledge and Structured Incident Management Accreditation System	
O1	The Review should support the importance of integrating local knowledge into all levels of the incident management structure.	s.3.3.1
O2	The Review should require the agencies to adopt a requirement that local knowledge, regardless of land tenure, be integrated into incident management structures as much as practicable given the availability of and resourcing priorities.	s.3.3.1
O3	The Review should support the continued use of AIIMS as the State incident management structure for bushfire.	s.3.3.2
O4	The Review should note the complexities associated with an incident management system accreditation system.	s.3.3.2
O5	The Review should note the intention of FESA and DEC to introduce a joint incident management accreditation system prior to the 2011/12 fire season.	s.3.3.2
O6	The Review should support the FESA proposed principles for an incident management accreditation system.	s.3.3.3
O7	The Review should note the critical capability forecasts for senior incident managers within the State.	s.3.3.2
O8	The Review should recommend to Government that they need to make resources available to the agencies in order to urgently develop a joint succession and development plan to address the critical forecast shortfall in senior incident management personnel.	
P	Enhancing Volunteerism	
P1	The Review should recognise the significant contribution of volunteers in the <i>Perth Hills Fires</i> and more generally to the overall safety of the WA community.	s.3.4.1
P2	The Review should recognise the evolution of volunteer support activities within FESA and the successes of these initiatives / programs.	s.3.4.2-3.4.17
P3	The Review should recognise the existence of a <i>Volunteer Charter</i> and carefully consider the potential impact on volunteers of any recommendations it might make to Government as a consequence of this Review.	s.3.4.2
P4	The Review should strongly recommend to Government that FESA is the most	s.3.4.21

	appropriate agency to continue to coordinate emergency service volunteers within WA.	
P5	The Review should encourage Government to work directly with FESA to explore future opportunities to support emergency service volunteers, including as necessary advocacy to the Commonwealth Government for additional support arrangements.	s.3.4.21
COMMUNITY FIRE SAFETY PLANNING		
Q	Building Engaged and Active Fire Safe Communities	
Q1	The Review should recognise that FESA has proactively been modifying and evolving its service delivery model to ensure it maximises the opportunities to engage with the community, including the progressive growth in Bushfire Ready Facilitators.	s.4.1
Q2	The Review should strongly support that <i>primacy of life</i> is treated as the first and highest priority in all of FESA's operational and community engagement strategies and decision making, and is a core element of the Prepare Act Survive communications strategy developed by FESA based on the National Bushfires and Community Safety Position.	s.4.1.3
Q3	The Review should note FESA's acknowledgement that it is inevitable that a focus on the protection of life over property will lead to additional property loss, particularly where decisions have been made to relocate or evacuate people who may otherwise choose to stay and defend their property.	
Q4	The Review should support the <i>FESA Community Engagement Framework</i> , including its 5 year term, developed in accordance with the <i>FESA 2023 Shaping Our Future Strategy</i> .	Appendix 10
Q5	The Review should note the adoption of the national position and the incremental achievement in implementing this position within WA including the number of challenges and work to be undertaken to achieve full compliance with this position (e.g. shelters).	s.4.1.3
Q6	The Review should note the specific status of resources applied to the areas affected by <i>Perth Hills Fires</i> (currently six Bushfire Ready Facilitators and approximately 75 Street Coordinators in Roleystone, Kelmscott and surrounding areas within the City of Armadale, including three Facilitators specifically covering Roleystone).	s.4.1.4
Q7	The Review should note the earlier activation and increased community engagement activities commensurate with the seasonal prognosis and timing.	s.4.1.5 s.4.1.6
Q8	The Review should note the anecdotal evidence from relatively early incidents such as Karnup on 30 November 2010 and Gooseberry Hill on 13 December 2010 that suggests many residents were not as well prepared due to the early commencement of the season.	s.4.1.6
Q9	The Review should recommend to Government that it considers the current resourcing constraints, community expectations and future demands on providing contemporary community engagement activities before, during and after an emergency event and place a priority in future budgets to increase resourcing to this important issue, which will also support and alleviate any additional burden being placed on volunteers.	s.4.1.16
Q10	The Review should recognise the effectiveness of the programs and strategies and acknowledge the efforts of volunteers to date.	s.4.1.16
Q11	The Review should support FESA's initiation of specific research in partnership with the Bushfire CRC to inform future programs and strategies.	s.4.1.14 s.4.1.15
Q12	The Review should recommend to Government that all bushfire management activities <i>must</i> be treated as an end-to-end system and not isolated activities within the PPRR continuum or based on a land tenure basis.	
Q13	The Review should note that behaviour change is a challenging process that has been well researched through the Bushfire CRC <i>C2 Project</i> , which showed it requires a significant investment in time and resources over an extended period of time.	s.4.1.17

Q14	The Review should support FESA's position that these issues a long term culture change at both organisational and community level.	s.4.1.17
Q15	The Review should note that FESA's website is coordinating and handling the increased traffic well and that final redevelopment will be completed in the first half of 2011.	s.4.1.13.1
R Fire Hydrant Ownership		
R1	The Review should note the current arrangements applicable to fire hydrant ownership in WA, its uniqueness, the recommendations of the <i>Community Development and Justice Standing Committee</i> and the inability to progress this issue with the water providers.	s.4.2
R2	The Review should recommend the ownership and associated maintenance of fire hydrants should transfer to water providers as a matter of urgency.	s.4.2
R3	The Review should recommend FESA's role with respect to fire hydrants include routine and scheduled inspection with follow-up reports provided to the water provider for rectification of any observed faults.	s.4.2
S Planning and Construction in Bushfire Prone Areas		
S1	The Review should note the partnership between FESA and the Department of Planning and the progress they have achieved through the <i>Planning for Bushfire Protection (Edition 2) – Interim Guidelines</i> , together with the proposed review of these guidelines following the outcomes of the <i>Victorian Bushfires Royal Commission</i> .	s.4.3.1
S2	The Review should note the partnership between FESA, the Department of Planning and the Building Commission Division of the Department of Commerce to develop a submission on legislative reform options for the 'declaration of bushfire-prone areas' for consideration by Cabinet.	s.4.3.6
S3	The Review should explore the issues raised by local governments which act as disincentives to the incorporation of bushfire protection guidelines into local planning laws (e.g. potential for increased liabilities, lowering property prices, insurance issues and potential developers viewing the imposition of additional construction standards as a disincentive to invest in their area).	s.4.3.3
S4	The Review should explore any potential 'gap' that may exist in insurance premiums applicable to those affected by the recent fires and work with insurance companies and the State Government to overcome these potential impediments to rebuilding in accordance with <i>best practice</i> bushfire protection methods for the future.	s.4.3.7
S5	The Review should support FESA's position that these issues need to be fully understood and should not in themselves override responsible planning laws that are premised on the <i>primacy of life</i> principle.	s.4.3.7
S6	The Review should recommend to the State Government the need for legislative reform to: <ul style="list-style-type: none"> o adequately incorporate the bushfire protection measures as State development requirements rather than guidelines; and o more consistently identify and declare areas that are bushfire prone. 	s.4.3.6
S7	The Review should recommend to the State Government the retrospective application of planning and construction standards as part of the legislative reform program.	s.4.3.7
S8	The Review should absent of recommending legislative reform, recommend to the State Government that they press local governments to urgently adopt the <i>Planning for Bushfire Protection</i> guidelines within their local planning laws for both rebuilding in areas recently impacted by fires and for future developments.	s.4.3.6 s.4.3.7
S9	The Review should recommend to the State Government that FESA be the responsible authority to work in partnership with the Department of Planning to determine State-wide policy and standards applicable to defining and building in bushfire prone areas.	

S10	The Review should note the issues associated with evaporative coolers and consider this in the context of future building standards and planning regimes.	s.4.3.8
T Critical Water Infrastructure Protection		
T1	The Review should note the work undertaken by FESA and the Water Corporation and its clear benefit to protection of critical water infrastructure during the recent <i>Perth Hills Fires</i> .	s.4.4
T2	The Review should strongly recommend to the State Government that all water authorities and other departments responsible for critical infrastructure in designated bushfire prone areas be directed to engage with FESA to establish a joint mitigation program as part of their business continuity plans.	s.4.4.3
T3	The Review should strongly recommend to the State Government that a building protection zone is implemented at all DEWS sites as a matter of urgency.	s.4.4
T4	The Review should recommend to the State Government that it fund FESA to undertake this critical infrastructure mitigation program on an ongoing basis as part of its <i>Integrated Bushfire Risk Management System</i> .	
U Embedding the "primacy of life" principle		
U1	The Review should recommend the adoption of the <i>primacy of life</i> principle in all mitigation and incident management plans and priorities, regardless of land tenure.	s.4.5
V Evolution of bushfire planning into township protection/community level plans		
V1	The Review should recommend the establishment of a new fire management planning framework that supports end-to-end tenure blind planning and fully engages the community.	s.4.6
V2	The Review should recommend the establishment of priority plans for very high and high risk areas.	s.4.6
W Bushfire Risk Management in Indigenous Communities		
W1	The Review should note FESA's vision for working with indigenous communities and the achievements to date.	s.4.7
W2	The Review should recommend to Government that it fully supports FESA's initiatives to engage and work directly with indigenous communities across WA.	s.4.7
W3	The Review should consider this issue in making any recommendations relevant to responsibility for UCL and UMR.	s.4.7
X Prescribed Burning / FESA Integrated Bushfire Risk Management System (IBRMS)		
X1	The Review should note the response to its request for further information arising from the hearing held on 21 March 2011.	s.4.8
X2	The Review should recommend to Government the adoption of the <i>FESA Integrated Bushfire Risk Management System (IBRMS)</i> underpinned by the <i>Bushfire Threat Analysis</i> methodology as the basis for all bushfire mitigation planning and reporting into the future.	s.4.8.1 Presentation (12/04/11)
X3	The Review should recognise and promote through the Inquiry the Winter Burning Program initiative established by FESA as a means of bushfire mitigation by private landowners.	s.4.8.7
UNIFIED CONTROL		
Y Integration of Agencies within Single State Operations Centre		
Y1	The Review should note the issues arising during the <i>Perth Hills Fires</i> .	s.5.1.2
Y2	The Review should require agencies to fully integrate incident management personnel into a single Incident Management Team and the appropriate level of representation at all levels of the State's arrangements, in accordance with the principles of AIIMS, <i>Westplan – Bushfire</i> and State policy.	s.5.1.3
Y3	The Review should require agencies to adopt the joint pre-formed incident	s.5.1.4

	management structures for all future planning and deployment, in accordance with the preparedness triggers outlined in State plans and policy arrangements.	
Y4	The Review should note the situation which operates in Victoria and the synergies to the FESA proposals and aligned outcomes.	s.5.1.5
Y5	The Review should recommend the establishment of a single <i>State Operations Centre</i> (for all non-crime based operations) located at FESA Emergency Services Complex	s.5.1.5
Y6	The Review should support FESA's intention to: <ul style="list-style-type: none"> ○ Implement a fully integrated approach to State level operations in its new <i>State Operations Centre</i>, ○ Establish a State Fire Control Team (SFCT) to support integration and its State HMA functions for fire. 	s.5.1.5
Y7	The Review should recommend that DEC fully integrate their emergency operations and prescribed burning coordination activities into this centre and cease all independent activities at their own centre/s.	s.5.1.5
Y8	The Review should recommend to the Bureau of Meteorology that they appoint a fulltime severe weather specialist to operate out of the new <i>State Operations Centre</i> .	s.5.1.5
Y9	The Review should note the absence of pre-determined incident control centres and the intention to examine this issue further in consultation with all relevant stakeholders.	s.5.1.5
Z	Strategic intelligence management, including public information and use of social media	
Z1	The Review should note the advancements of integrating strategic intelligence, including the appropriate use of social media, into the overall incident management structure and FESA's position on this issue.	s.5.2
Z2	The Review should recommend to Government that it support FESA in the ongoing development of this concept.	
AA	Clarity in definition around command, control and coordination	
AA1	The Review should recommend to the <i>State Emergency Management Committee</i> that they: <ul style="list-style-type: none"> • Urgently confirm the definitions of 'command', 'control' and 'coordination' in Operational Management Policy 4.1; • Clarify what term is to be used between 'District' and 'Region' to be defined in Operational Management Policy 4.1. 	s.5.3
AB	Access to the Incident Ground	
AB1	The Review should note the complexities involved in this issue and support FESA's position that access and/or re-entry to the incident ground must be posited on safety.	s.5.4.1 s.5.4.2
AB2	The Review should support the proposed ongoing review by FESA with respect to a <i>safe system of work</i> and associated procedures to accommodate the interests of the <i>controlling agency</i> and those of persons with a pecuniary and/or other interest in accessing the incident ground.	s.5.4.2



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Fire & Emergency Services Authority**



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