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PARLIAMENT OF TASMANIA

**AUDITOR-GENERAL
SPECIAL REPORT No. 99**

Bushfire management

June 2011

Presented to both Houses of Parliament in accordance with the provisions of Audit Act 2008

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21 June 2011

President
Legislative Council
HOBART

Speaker
House of Assembly
HOBART

Dear Madam President

Dear Mr Speaker

SPECIAL REPORT NO. 99

Bushfire management

This report has been prepared consequent to examinations conducted under section 23 of the *Audit Act 2008*. The report centred on the degree to which state entities had implemented recommendations made in the COAG 2004 report titled *National inquiry on bushfire mitigation and management*.

Yours sincerely

H M Blake

AUDITOR-GENERAL

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Foreword

It is an understatement to suggest that being prepared for and managing bushfires is important in the Tasmanian and Australian contexts, which is why we were keen to audit this aspect of public sector service delivery. Recommendations made in COAG's 2004 report *National inquiry on bushfire mitigation and management* seemed to us an appropriate starting point to assess whether or not responsible state entities were keeping up to date with contemporary bushfire management knowledge and practice.

We concluded that the level of uptake of the COAG recommendations was not outstanding although much has been achieved, with no recommendations ignored and there was commitment to keeping pace with contemporary knowledge and practice. This was evident in a number of ways including work done by the Department of Premier and Cabinet and others to address various matters we identified including the need for improved coordination, professional development and where necessary legislative responses although these have still to be enacted.

However, we concluded more could be done with our eleven recommendations aimed at achieving this.

H M Blake

Auditor-General

21 June 2011

List of acronyms and abbreviations

AFAC	Australasian Fire and Emergency Service Authorities Council — the industry body for fire, land management and emergency service organisations in Australia and New Zealand
AIIMS	Australian Inter-service Incident Management System
BCA	Building Code of Australia
BCRC	Bushfire Cooperative Research Centre — is made up of all the fire and land management agencies in Australia and New Zealand, CSIRO, the Bureau of Meteorology, the Attorney General's Department and several other fire related organisations. Its mission is to enhance the management of the bushfire risk to the community in an economically and ecologically sustainable manner
BRAM	Bushfire Risk Assessment Model
COAG 2004	COAG's 2004 report <i>National inquiry on bushfire mitigation and management</i>
COAG update 2007	<i>Implementation Report — COAG National Inquiry on Bushfire Mitigation and Management November 2005</i> was presented at National Emergency Management Committee meeting in April 2007
DPAC	Department of Premier and Cabinet
DPEM	Department of Police and Emergency Management
DPIPWE	Department of Primary Industries, Parks, Water and Environment (host department of the Parks and Wildlife Service)
EMA	Emergency Management Australia is a Division of the Australian Government Attorney-General's Department
Forestry	Forestry Tasmania
SFMC	State Fire Management Council — established under the <i>Fire Service Act 1979</i> , the Council's primary role is to develop a State Vegetation Fire Management Policy to be used as the basis for all fire management planning
TFS	Tasmania Fire Service

Executive summary

Executive summary

Background

Bushfires are an inherent part of the Australian landscape that have the potential to become catastrophes. In living memory, Tasmania has suffered severe loss of life and property damage: in 1967, ‘Black Tuesday’ killed 62 people and caused \$45m property damage. In the intervening years, Tasmania has been spared similar disasters but the 2009 bushfires in Victoria horrified the nation and triggered widespread concern as to how the risks could be better contained in future.

Against that backdrop, we decided that it was timely to investigate the State’s preparedness to cope with bushfires. Developing suitable audit criteria against which to measure public sector performance is a critical part of our process. After some preliminary discussions with entities and fire experts, it appeared to us that many potential areas for criteria were contentious and that bush fire management was a nascent science.

Accordingly, we came to the conclusion that rather than auditing against hard and fast criteria, we should audit whether or not responsible entities were keeping up to date with contemporary knowledge and practice. This appeared to be particularly important in the context of the Royal Commission into the Victorian bushfires, that was in progress at the time our audit was being planned, since clearly there would be much to be learned from that exercise.

To assess whether Tasmania was keeping up-to-date, we decided to determine the extent to which recommendations from COAG’s 2004 report *National inquiry on bushfire mitigation and management* (referred to in this Report as either ‘COAG 2004’ or the Inquiry) had been taken up. We based our work on that report because it:

- had status as a major national inquiry
- explicitly built on reports from previous bushfire inquiries
- had been in the public domain long enough for there to be a reasonable expectation that its recommendations had been implemented
- discussed and debated similar matters to those before the 2009 Victorian Bushfires Royal Commission.

The objective of the audit was to determine whether respective government entities had implemented the recommendations from COAG 2004 as a guide to assessing whether or not responsible

entities were keeping pace with contemporary knowledge and practice.

The scope of the audit included state entities with a land management or a fire fighting role.

Audit approach

The audit criteria that we applied were the 29 recommendations made in the COAG 2004 report. We grouped those recommendations thematically, as indicated by the sub-titles that follow (and that mirror the chapter titles used in the body of this Report).

In producing audit findings, we relied on evidence that we collected from state entities through survey questionnaires that gauged the extent to which those entities had implemented the COAG recommendations. Supporting data and documentation was supplied to back up those surveys. We held discussions with entity staff as necessary to verify the reasonableness of entities' self-assessments. In some cases, we moderated their ratings where it appeared that, relative to other audit clients, they had rated themselves too highly or too harshly.

Audit conclusion

Our assessed implementation levels for the grouped COAG 2004 recommendations are shown in the following table.

Table 1: COAG 2004 recommendations — Degree of implementation

Grouped recommendations	Degree of implementation
Bushfire education	50%
Risk management and performance indicators	40%
Research and information	50%
Building in bushfire-prone areas	50%
Bushfire operations	85%

While the results were not outstanding, much had been achieved and no COAG 2004 recommendations had been ignored. In some cases state entities had done as much as they could but our rating was impacted by our perception of a lack of progress at a national level.

As a general rule, we observed that the degree of implementation was higher for fire fighting recommendations than for preparation and mitigation. Stronger findings included:

- Incident control was well covered with solid progress towards achievement of a common system that included effective flow of information and made good use of local knowledge.
- Tasmania's 'Prepare, stay and defend or leave early' policy was consistent with the recommendation as revised by the 2009 Victorian Bushfires Royal Commission with further work progressing in the areas of education and training.
- Media involvement arrangements with the ABC existed and had been recently tested. Further arrangements with commercial broadcasting organisations were being negotiated.
- Key fire management entities were largely satisfied with the standard of training provided under the national framework although there were continuing concerns about its funding.

Areas of low implementation included development of performance indicators and fire regime mapping. While reasonable progress has now been made on recommendations that relate to land use planning and construction of buildings, response in the early years was disappointing. Even though new development applications will be subject to land use and building construction standards, there are many properties in bushfire prone areas that were built prior to those standards being imposed.

Overall, we found reasonable evidence to conclude that state entities with a responsibility for bush fire management were committed to keeping pace with contemporary knowledge and practice.

List of recommendations

The following table reproduces new recommendations that we made as a result of our work and that support the thrust of the COAG 2004 report.

Rec No	Section	We recommend that ...
1	1.3.2.2	<p>... the Tasmania Fire Service, the Department of Primary Industries, Parks, Water and Environment and Forestry Tasmania pursue funding from the Commonwealth (Department of Education, Employment and Workplace Relations), in line with COAG Recommendation 11.2, namely</p> <p>that the states and territories and the Australian National Training Authority provide additional funding, as necessary, to registered training organisations to support the development and delivery of learning and training resources to all firefighters.</p>
2	1.3.3.2	<p>... the Tasmania Fire Service, the Department of Primary Industries, Parks, Water and Environment and Forestry Tasmania continue to encourage the relevant national bodies to further implement the COAG 2004 recommendation, namely:</p> <p>... that the Australasian Fire Authorities Council and Emergency Management Australia — in partnership with state and territory agencies and other education and research institutions — coordinate a national program of professional development focused on bushfire mitigation and management. Under the program, partners would deliver nationally coordinated professional development services to all jurisdictions.</p>
3		<p>... the State Fire Management Council work with local government councils to improve the availability of relevant professional development.</p>
4	2.2.2	<p>... funding be sought to enable the State Fire Management Council to take a greater coordination role for bushfire risk management and mitigation.</p>
5		<p>... the Local Government Association of Tasmania advocate, coordinate and support local councils' input of bushfire risk assets data into the <i>Bushfire Risk Assessment Model</i>.</p>
6	2.2.3	<p>... the State Fire Management Council support the further development of the <i>Bushfire Risk Assessment Model</i> with a view to it becoming the central information source for use by all entities with responsibility for fire management and mitigation.</p>

Rec No	Section	We recommend that ...
7	2.3.2	... the State Fire Management Council work with all entities with responsibility for bushfire management to develop a state-wide position on performance indicators and promote that view nationally.
8	4.2.2	<p>... local government councils should move promptly to:</p> <ul style="list-style-type: none"> ▪ adopt the Tasmania Fire Service <i>Guidelines for Development in Bushfire Prone Areas of Tasmania</i> ▪ give effect to the Department of Primary Industries, Parks, Water and Environment <i>Neighbouring Developments and Fire Management Policy</i>.
9	4.3.2	<p>... local government councils should:</p> <ul style="list-style-type: none"> ▪ strongly encourage owners to make improvements to construction or increase buffers in order to meet minimum safety standards ▪ implement programs to audit impacted properties and issue abatement notices where necessary ▪ monitor and maintain their reserves to ensure that adequate buffers to neighbouring buildings exist.
10	4.4.2	... local government councils implement a zoning approach to fuel management as recommended by COAG 2004.
11	5.3.2	... Tasmanian entities with responsibilities for bushfire management actively pursue national consistency of warning systems and emergency warning signals through national bodies such as the National Emergency Management Committee.

Audit Act 2008 section 30 — Submissions and comments received

Audit Act 2008 section 30 — Submissions and comments received

Introduction

In accordance with section 30(2) of the *Audit Act 2008*, a copy of this report was provided to the state entities indicated in the Introduction to this Report. A summary of findings along with a request for comment or submissions was also provided to the Treasurer and the Ministers for:

- Environment, Parks and Heritage
- Police and Emergency Management
- Energy and Resources
- Local Government.

The comments and submissions provided are not subject to the audit nor the evidentiary standards required in reaching an audit conclusion. Responsibility for the accuracy, fairness and balance of those comments rests solely with those who provided a response or comment.

In some instances responses have requested minor edits. In those cases we have made the changes and omitted those sections of the formal responses.

Submissions and comments received

Government departments

Police and Emergency Management

[The department's response is incorporated in the response from the Tasmania Fire Service.]

Premier and Cabinet

The Office of Security and Emergency Management, within the Department of Premier and Cabinet (DPAC), was established to provide policy advice to the Premier on related issues and to support cross-government consideration of security and emergency management policy.

In March 2009, the Tasmanian Government requested that DPAC provide advice on a package of measures to ensure that the construction of houses in Tasmania was appropriate having regard to the risk from bushfires. The Government agreed to the recommendations of this review in August 2010. The Tasmanian Planning Commission (TPC) has subsequently released a draft

standard code for development and use in bushfire prone areas that will standardise the treatment of bushfire risk in all Tasmanian planning schemes.

DPAC has also been working with the Tasmania Fire Service (TFS) and the TPC to ensure that there is a clear legislative foundation for the accreditation of individuals to certify bushfire hazard management plans and to ensure that councils can rely on the advice of these experts. This will require amendments to the *Land Use Planning and Approvals Act 1993* and the *Tasmania Fire Service Act 1979*.

The proposed controls on the use or development in bushfire prone areas do not apply to existing properties. Current risks associated with bushfires need to be managed by councils, with assistance from the TFS. The current Community Protection Planning Initiative will assist councils to prioritise available resources to manage properties that are at high risk from bushfires.

Primary Industries, Parks, Water and Environment

Thank you for your letter inviting comment on the draft Report to Parliament on the compliance audit into bushfire management.

The findings made in the report by the Tasmanian Audit Office are generally supported but no comment is made here where a different view may be held on minor matters of interpretation or fact. Recommendations 1, 2, 4, 5, 6, 7, 8, 9, 10, and 11 are supported and these recommendations either directly implicate the Parks and Wildlife Service (PWS) for implementation or else will provide benefit to the management of reserved land. Other Tasmanian Government entities are more appropriately placed to comment on Recommendations 3. Some specific comments are provided below.

Recommendation 1

The PWS has already received significant Productivity Placement Program funding for fire-fighter training through a registered training organisation. Therefore the recommendation could state ‘... continue to pursue funding from the Commonwealth...’

Recommendation 4, 5, 6 and 7

The PWS strongly supports the recommendations for State Fire Management Council (SFMC) to take a broader role in bushfire risk management and mitigation and for the expanded use for the Bushfire Risk Assessment Model. Coordination of risk management and mitigation across all public and private land is required to reduce the significant bushfire risk to Tasmanian communities and SFMC is well placed to deliver this. SFMC must receive adequate

funding to be able to undertake this expanded role but at the present time it does not receive any funding.

Recommendation 8

The PWS strongly supports this recommendation. Recently the Department of Primary Industries, Parks, Water and Environment (DPIPWE) made a representation to the Tasmanian Planning Commission on the draft Planning Directive — Bushfire Prone Areas Code. In this representation, DPIPWE requested that the principles in the PWS Neighbouring Developments and Fire Management Policy be included in the Bushfire Prone Areas Code. The Planning Directive will require an identical Bushfire Prone Areas Code in every planning scheme in Tasmania, effectively implementing the first part of Recommendation 8. The second part of Recommendation 8 will also take effect if DPIPWE's request is incorporated into the Bushfire Prone Areas Code.

Commission

State Fire Service

Thank you for the opportunity to review and respond to the audit report.

Tasmania Fire Service (TFS) and other state land and emergency management agencies provided follow up reports, responses and actions to the original 2004 COAG report recommendations in 2005. These responses were channelled through Department of Premier and Cabinet (DPAC) and the Australasian Fire & Emergency Services Authorities Council (AFAC).

TFS (and no doubt others) considered the recommendations at that time. Some were considered to be less applicable in the local context, some were considered to be effectively managed already, and others were prioritised and scheduled for action.

The 2009 Victorian Black Saturday fires resulted in the tragic loss of 173 lives. The lessons from this event became a major focus for TFS and ultimately many other government entities. The Victorian Bushfires Royal Commission (VBRC) made a total of 125 recommendations.

TFS actively worked with AFAC, the office of the Attorney-General, and the National Emergency Management Committee (NEMC) in influencing and contributing to national initiatives and assisting in the development of a 'Tasmanian Whole of Government' response to the range of VBRC recommendations.

New fire danger ratings, warnings, media arrangements, Bureau of Meteorology products, community education and engagement programs, construction standards, planning and land use positions,

operational priorities, command, and interoperability initiatives have subsequently been developed for TFS and Tasmania generally as a direct result of our significant efforts in reviewing and contextualising the VBRC recommendations and their application for Tasmania.

The Premier formally responded to Tasmania's position and subsequent actions (in respect to the VBRC recommendations) in 2010.

Some VBRC recommendations mirrored elements of the 2004 COAG recommendations, others did not.

One of the more significant differences between 2004 COAG and the VBRC was the emphasis placed on the 'primacy of life'. While the 2004 COAG recommendations reflected a strong position on the mitigation of fires in the landscape, the Victorian recommendations were very focussed on the protection of people's lives and community protection.

To a large extent actions on the VBRC recommendations have taken precedence over those of the 2004 COAG report.

TFS has been active for several years in the area of school fire education programs. TFS delivers structured education programs to all Tasmanian primary school pupils focused on domestic home fire safety. TFS incident data shows that Tasmania has approximately 100 times more dwellings lost to house fires than bushfires, and approximately 100 times more deaths related to house fires than to bushfires (past 40 years of data) and the per capita fire fatality rate in Tasmania is amongst the highest in the country. Such statistics support the need to focus these programs on domestic home fire safety. TFS would support the introduction of bushfire management and mitigation into the school curriculum, but also understands there are many priorities for the education systems.

Reporting on performance indicators is provided to the Productivity Commission's *Report on Government Services*. TFS specifically reports on fire deaths, injuries to firefighters, dwellings destroyed, and bushfires per person and per hectare. This reporting has been developed since the 2004 COAG report was issued. Additional measures are being developed in a cooperatively funded and coordinated way by AFAC on behalf of its members and TFS will report on the additional measures when this work is completed.

Finally, I note there are several recommendations in regard to additional roles and responsibilities for the State Fire Management Council (SFMC). The Council may be the logical representative group to oversee this work. However, SFMC has effectively no budget or resources to undertake the new responsibilities as

recommended in this report in its current form. Additional resourcing for SFMC to manage a statewide strategic fuel reduction program is a matter currently before Government.

Thank you again for the opportunity to respond.

Government business enterprise

Forestry Tasmania

Thank you for the opportunity to comment on this final draft of the audit report.

The report repeatedly refers to the ‘Go or stay and defend’ policy. The COAG 2004 report incorrectly used that term when the correct name is and was at that time ‘Prepare, stay and defend or leave or early’. Unfortunately, that name was abbreviated and corrupted in general use, (often by those who should have known better) and often to ‘Stay or go’. In all of the common variations the critical word ‘prepare’ was lost, yet preparation is essential if individuals are to understand and be equipped and informed to evaluate the options available to them. [We have now made the requested change throughout this Report.]

Finally, the report recommends a series of actions to be undertaken by the State Fire Management Council. Because of the confidentiality requirements attached to the circulated drafts of the report not all Council members are aware of these recommendations. I draw to your attention that only some members of the Council are government employees paid for their work and that the Council has no resources with which to implement these recommendations. I suggest that the report would be improved by the addition of a further recommendation to the effect that the Department of Treasury and Finance provide funds to enable these recommendations to be implemented.

I should also point out that Forestry (unlike DPIPWE and TFS) is not funded by government for its fire-fighting, and if CSOs are not provided by government, then Forestry may no longer be able to afford to deliver these activities.

State-owned companies

Aurora Energy Pty Ltd

Aurora Energy has reviewed the draft report and would like to make the following comments:

Aurora has a bushfire management strategy in place but is always seeking to enhance its approach to risk management; its current work includes monitoring ongoing outcomes from the Victorian bushfire Royal Commission, the VIC Powerline Bushfire Safety

Taskforce and the Energy Networks Association Bushfire Mitigation Workshops.

In reference to Section 2.2.3, while Aurora is exploring the possibilities of including datasets from BRAM into Aurora's fire risk assessment models, Aurora does not apply BRAM to Aurora's current risk management process.

With regard to Section 4.4 *Fuel management*, Aurora notes that 4.4.2 *Our findings* states that, 'Aurora used a TFS fire risk map which TFS now considers to be long out of date'. Aurora confirms that works are currently underway to ensure its existing risk assessment model remains up to date and aligned with current methodologies and thinking applied by key risk management authorities within Tasmania and the broader national framework. Aurora's current risk assessment model includes 'Fuel Management' as one of many inputs.

Transend Networks Pty Ltd

Thank you for the opportunity to comment in relation to the draft report.

The only comment, which Transend Networks wishes to make in relation to the draft, is to note that while Transend has provided input into the BRAM in the form of transmission line locations etc., we are not using it as part of our fire management or risk assessment strategies.

Advisory councils

State Fire Management Council of Tasmania

Thank you for giving me an opportunity to respond to this report as Chair of the State Fire Management Council (SFMC). I note that there are four recommendations that directly affect SFMC. Before I respond to each of them individually, it is important to note that SFMC exists as an advisory Council to the Minister, it does not have any budget or resources of its own with which to do anything, other than advise. Note, however, that we have prepared a State Fire Vegetation Fire Management Policy as required by the *Fire Service Act 1979*.

Please also note that this response is by me as Chair of SFMC alone, in the time available to respond to your Report it has not been possible to convene a meeting of the Council.

SFMC currently has before the State Government a proposal to undertake strategic prescribed (i.e. hazard reduction) burning across the State, this proposal was put together by SFMC at the request of the State Government as part of their response to the recommendations of the Victorian Bushfires Royal Commission.

This proposal does involve resourcing SFMC, at least to the extent necessary to deliver the burning program. The success or otherwise of the proposal is obviously dependent upon the State Government's current budget considerations.

With regard to your recommendations that directly affect SFMC:

Recommendation 3

(SFMC work with Local Government to improve professional development)

I would have thought that the provision of such training and development was a role for Tasmania Fire Service (TFS), even if they were to 'out-source' the delivery to a third party training provider; of course I would see SFMC having input into the content of such training.

Recommendation 4

(Funding be sought to allow SFMC to be more involved in bushfire risk management and mitigation)

Here we come back to the SFMC resourcing issue. As noted above, we are seeking funding for a strategic hazard-reduction burning program. Should this proposal be successful, we will be in a position to undertake hazard reduction burning, guided by the need for bushfire risk management and mitigation.

Recommendation 6

(SFMC support the further development of the Bushfire Risk Assessment Model — BRAM)

In principle, I believe SFMC could be the body to oversee the development and application of BRAM to the wider Tasmanian context and (if resourced) SFMC might manage the development of BRAM.

Recommendation 7

(SFMC develop a Statewide position on performance indicators)

I support this recommendation and believe the appropriate place for such a 'Statewide position' would be inclusion in our Statewide Vegetation Fire Management Policy at its next revision (scheduled for this year).

Local government councils

Break O'Day

The report accurately reflects Break O'Day Council's current fire management planning and implementations.

Central Highlands

No comment was received from Central Highlands Council.

Circular Head

I refer to your request for a formal response to the above compliance audit report and offer the following comment against the recommendations of the audit report that are targeted to Council operations.

Recommendation 3

In regards to Recommendation 3 and professional development, Circular Head Council being a small and relatively isolated Council welcomes any support given to provide training or to increase the availability of specialist resources that can be accessed by its community. It is important that as there is an increased need for more specialised advice that this is readily accessible.

Recommendation 8

Being in a small rural area, Circular Head Council welcomes moves to implement a consistent statewide code which incorporates a standard definition of bushfire prone areas into the assessment of planning applications. This, together with proposals to map and gazette bushfire prone areas for the purpose of the Building Code of Australia, would also see that new building works incorporate the appropriate bushfire protection measures.

Recommendation 9

Council is not opposed to playing a role in community education about fire safety, nor managing reserves and undertaking its role to abate nuisances under the *Local Government Act 1993*. The fire abatement nuisances are typically implemented on a seasonal basis in order to reduce overgrown vegetation and provide some buffer between adjoining properties or from publicly accessible frontages. This focus is on limiting spread of fire and public safety, rather than on assessing the inherent risk on or within and existing property.

Proposed planning standards will establish the expertise and qualification in relation to providing assessment of fire risks for new development, and establishing building standards and management controls. Circular Head Council rejects any move that would see Council use the abatement notice process to impose a fire hazard control on existing development, to a level commensurate with current standards. Council is not the subject matter expert or public authority that should be undertaking retrospective audits of existing development in order to establish whether or not the building construction and management regime for fire buffer areas meet contemporary expectations.

If it is desirable to impose some level of requirement upon existing development to implement additional controls, this should be established under separate provisions and implemented by a body such as the Tasmania Fire Service.

Hobart City

The Hobart City Council welcomes your audit of this area. The Council takes its role in the management of bushfire risk very seriously and has dedicated substantial resources to meet its responsibility.

Whilst I wish to note that Council was only afforded a limited opportunity to review the draft, the Council is supportive of the Audit Office recommendations contained in the report.

Launceston City

Launceston has endeavoured to introduce measures through planning controls that protect individuals and their assets to the best of our endeavours within the constraints that current planning and building laws, and state policy allows. While the report recognises these constraints it could be more up front in stating this.

Recommendation 9

Requires Council to audit and police impacted properties (through the issue of abatement notices). This is not a task Launceston City Council currently carries out and the imposition of this responsibility and potentially the incumbent liabilities would in my mind be paramount to cost shifting from the State to Local Government.

Dot Point three maintenance of buffer zones in Council's parks and reserves, I do not have an issue with.

The balance of the report I do not have any major issues with that would warrant comment in this response. I would finish in saying all levels of government have various responsibilities in ensuring a fire safe environment for the community. Launceston City Council has and will continue to do what it needs to, and can, given legislative and resource constraints to achieve this outcome.

Sorell

We have read the draft in some detail, particularly those sections with relevance to local government. The document appears both accurate and a fair representation of the situation.

Tasman

I was surprised having spent a number of years in planning and development to be completely unaware of the existence and role of

AFAC, AIIMS, BCRC, BRAM, the COAG reports, SFMC and the DPIPWE Neighbouring Developments and Fire Management Policy until I had read the draft report.

Given the scope and jurisdiction of activities covered by the organisations listed in the draft report, I consider Council's role to be on two fronts. Firstly, that we have in place an Emergency Management Plan which is currently before the SES for final review and which of course specifies and coordinates the roles and responsibilities between Council, SES, Police, etc. in the event of an emergency. The importance of the Plan cannot be underestimated in a rural fire prone locality with a small Council workforce, albeit it is a reactionary tool.

Secondly, with regard to where development occurs and the manner by which it occurs (for those not requiring re-zoning), this is determined by a planning scheme that is over 32 years old and predates nearly all current related legislation. For these developments the TFS *Guidelines for Development in Bushfire Prone Areas of Tasmania* is the reference document relied upon with fire management plans having to be submitted by the applicant and endorsed by the TFS. I am unsure if this arrangement provided by the TFS is likely to continue. Council does not actively enforce compliance against approved fire management plans.

We are currently developing a new planning scheme as part of the regional planning project and the inclusion of a statewide bushfire code is long overdue and would provide the necessary statutory mechanism to ensure these matters are applied consistently. The combination of this and an appropriate entity or mechanism to endorse fire management plans will be a considerable improvement. The remaining matter is, of course, auditing the implementation of the fire management plans for compliance although one would expect this to be self regulating to a large extent if people are making a significant financial investment in a fire prone area.

As part of the development and review of the planning scheme it is expected that the TFS will review residential zoning locations. There is no statutory referral process in place for the TFS with amendments/re-zonings to the current planning scheme particularly if there is no associated development application at the same time.

Waratah–Wynyard

I refer to your request for a formal response to the above compliance audit report and offer the following comment against the recommendations of the audit report that are targeted to Council operations.

Recommendation 3

This initiative is supported as Waratah–Wynyard Council would facilitate opportunities for appropriate professional development from the relevant peak bodies in fire management.

Recommendation 8

Council are actively engaged in the current Regional Planning Initiative. It is recognised that this process will produce uniform outcomes within the region and the resultant Planning Schemes will include a Planning Directive to include a Bushfire Prone Areas Code. Again, it is by action through the peak planning body, the Tasmanian Planning Commission in consultation with the Tasmania Fire Service that the issues of uniform planning controls for bushfire prone areas can be promulgated. It is noted that Council's current planning scheme, the Waratah–Wynyard Planning Scheme 2000 includes a Bushfire Prone Areas Schedule.

In respect to the above commentary it is accepted that small councils do have an important role in supporting and engaging in processes to facilitate a safer environment in relation to fire management but the key primary responsibility to roll out fire management reforms rests with the peak bodies.

Ministerial

Minister for Planning

4.2.2 Land use planning and development — Our finding

A more comprehensive survey of current planning controls was carried out as part of a DPAC review in conjunction with the Tasmanian Planning Commission. At the time of the survey, a total of 17 (of 29) Councils had planning schemes that included a bushfire schedule or a special bushfire area control.

Ten Councils had a bushfire schedule in their planning schemes. These 10 schedules all rely on a definition of bushfire prone areas, based on the *Guidelines for Development in Bushfire Prone Areas of Tasmania* 2005.

Seven other planning schemes have a special Fire Hazard Area provision.

Four of these seven planning schemes rely on a definition of a bushfire prone area.

In contrast to the survey of councils carried out by the TAO, this survey of planning schemes presents a different result for some of

the specific councils surveyed. For example Central Highlands, Waratah–Wynyard, Sorell and Tasman reported to the TAO low levels of compliance but the Central Highlands Planning Scheme relies on the TFS Bushfire Prone Area definition and has a mandatory referral to the TFS. The Waratah–Wynyard Planning Scheme has a complete schedule based on the TFS Guidelines. Neither Tasman nor Sorell have any provisions.

Additionally, although many planning schemes may not refer directly to the TFS Guidelines, the practice is that the Guidelines are invariably used where there is a more general consideration of bushfire hazard and especially if there is some form of referral to the TFS.

The Tasmanian Planning Commission’s contribution has been to assist DPAC in drafting a standard Code (aka schedule) to be inserted in all planning schemes across the State through a Planning Directive. That Code is based directly on the TFS Guidelines and invokes them for assessment purposes. It also provides for the acceptance of Bushfire Hazard Management Plans prepared by accredited people and is to be supported by proposed amendments to the *Land Use Planning and Approvals Act 1993*.

The current situation is that the Draft Planning Directive has been exhibited as part of the formal assessment process and will soon be subject to a series of public hearings. A decision on the planning directive could be anticipated within 2–3 months.

Once the planning directive is in place it will override any other provisions in existing planning schemes and fill the gaps where no such provisions exist. At that point in time the compliance level would be 100 per cent.

This policy appears to address best practice in terms of fire management and fuel reduction on properties neighbouring Crown Land or some form of reserves. It is not a planning matter but more of a land management practice. The Planning Directive’s Code addresses provision and maintenance of bushfire hazard management areas irrespective of neighbouring land tenure.

The recommendation does not reflect the current state of play in the progress towards a Statewide Code for development in bushfire prone areas, which is a matter of a few months from blanket implementation. Nor does it acknowledge the process the Government has pursued to require local councils to adopt the Guidelines, which is essentially through mandating the Statewide Code by way of a Planning Directive. This will have the effect of amending all current local council planning schemes.

The 50 per cent implementation score is not considered a reasonable assessment at the current point in time and does not acknowledge that within a few months the combined reforms to the planning and building regulatory framework will provide 100 per cent compliance.

Secondly, the reference to giving effect to the DPIPWE Neighbouring Developments and Fire Management Policy is inappropriate in a section on land use planning and development. It would be better placed in a section on land management.

4.3.2 Construction of buildings — Our finding

The Planning Directive does not technically cover both building and planning arrangements in bushfire prone areas although it is drafted to provide for a seamless integration with requirements of the Building Code.

The Planning Directive does not require changes to the *Building Act 2000* and *Land Use Planning and Approvals Act 1993* to have effect. It can operate directly on current planning scheme by mandating a Code for planning applications. The Planning Directive is not dependent on the declaration of bushfire areas to operate as is required for the Building Code and AS 3959. The only amendment to the *Land Use Planning and Approvals Act 1993* is to provide for the acceptance of accredited bushfire hazard management plans. The Directive can still operate without this amendment if required.

4.4.2 Fuel management — Our finding

There seems to be some confusion over the term ‘zoning approach’ to fuel management. This is not related to zones in planning schemes although there may be some consideration of fire management zones in determining land use zones. The comment regarding Circular Head seems to indicate this confusion.

Introduction

Introduction

Background

Bushfires are an inherent part of the Australian landscape that have the potential to become catastrophes. In living memory, Tasmania has suffered severe loss of life and property damage: in 1967, ‘Black Tuesday’ killed 62 people and caused \$45m property damage at that time. In the intervening years, Tasmania has been spared similar disasters but the 2009 bushfires in Victoria horrified the nation and triggered widespread concern as to how the risks could be better contained in future.

Against that backdrop, we decided that it was timely to investigate the state’s preparedness to cope with bushfires. Developing suitable audit criteria against which to measure auditees’ performance is a critical part of our process. After some preliminary discussions with entities and fire experts, it appeared to us that many potential areas for criteria were contentious and that bushfire management was a nascent science.

Accordingly, we came to the conclusion that rather than auditing against hard and fast criteria, we should audit whether or not responsible entities were keeping up to date with contemporary knowledge and practice. This appeared to be particularly important in the context of the Royal Commission into the Victorian bushfires, that was in progress at the time our audit was being planned, since clearly there would be much to be learned from that exercise.

To assess whether Tasmania was keeping up-to-date, we decided to determine the extent to which recommendations from COAG’s 2004 report *National inquiry on bushfire mitigation and management* (referred to in this Report as ‘COAG 2004’ or the Inquiry) had been taken up. That report was chosen because it:

- had status as a major national inquiry
- explicitly built on reports from previous bushfire inquiries
- had been in the public domain long enough for there to be a reasonable expectation that its recommendations had been implemented
- discussed and debated similar matters to those before the 2009 Victorian Bushfires Royal Commission.

Audit objective

The objective of the audit was to determine whether respective government entities had implemented the recommendations from COAG 2004 as a guide to assessing whether or not responsible entities were keeping up to date with contemporary knowledge and practice.

To some extent it was necessary to adjust ratings for performance at a national level, although in the main, our assessments were based on responses to the recommendations by Tasmanian entities.

Audit scope

In scoping the audit, we included entities with an emergency management, land management or a fire fighting role:

- Tasmania Fire Service (TFS)
- Department of Primary Industries, Parks, Water and Environment (DPIPWE)
- Forestry Tasmania (Forestry)
- Department of Premier and Cabinet (DPAC)
- Department of Police and Emergency Management (DPEM)
- Aurora Energy Pty Ltd (Aurora)
- Transend Networks Pty Ltd (Transend)
- Forest Practices Authority
- selected local government councils, namely:
 - Hobart City
 - Launceston City
 - Circular Head
 - Waratah–Wynyard
 - Sorell
 - Break O’Day
 - Central Highlands
 - Tasman.

Audit criteria

The audit criteria that we applied were the 29 recommendations made in the COAG 2004 report. However, we excluded a small number of recommendations which we saw as having little relevance at the Tasmanian level.

Audit approach

We based the findings of the audit on evidence collected from state entities through survey questionnaires that gauged the extent to which those entities had implemented the COAG recommendations. Those surveys were backed up by supporting data and documentation. We held discussions with entity staff as necessary to verify the reasonableness of entities' self-assessments. In some cases, we moderated their ratings where it appeared that, relative to other audit clients, they had rated themselves too highly or too harshly.

In our audit, we also reviewed national follow-ups of COAG 2004 by COAG itself in 2007 (referred to in this Report as 'COAG update 2007'). We included comment on the COAG update 2007 only where it canvassed matters not covered by responses from our audit clients.

In addition, we also took into account some of the findings of the 2009 Victorian Bushfires Royal Commission where there was possible conflict with COAG 2004.

About this report

Throughout this Report, we have grouped the COAG 2004 recommendations thematically, according to the chapter titles. In that way, the sequence differs from that of the original COAG 2004 report.

In each section, we have summarised material from COAG 2004, so as to enable the reader to understand the context of the recommendations made by COAG. After that, we present 'Our findings' which summarise material accumulated in our audit working papers.

At the conclusion of each section of this Report, we provide the audit opinion, expressed as an overall rating against the COAG 2004 recommendation, as per the following example:

Our assessment: 25 per cent implementation.

To produce that assessment, we took into account the individual ratings supplied by the audit clients affected by the particular COAG 2004 recommendation. Our assessment took into account:

- the extent to which the recommendation had effect in Tasmania
- work by both national organisations but more commonly state entities

- necessary downstream implementation to give the recommendation effect in Tasmania
- where state entities had not implemented the actual recommendation (in that situation, we have generally rated implementation at a high level).

Where necessary, we have made additional recommendations of our own. In any event, our expectation is of full achievement of the COAG 2004 recommendations unless agencies have made a clear decision that those recommendations are not worthwhile.

Timing

Planning for this audit began in June 2010. Fieldwork was completed in April 2011 and the report was finalised in June 2011.

Resources

The total cost of the audit excluding production costs was \$164 000.

1 Bushfire education

1 Bushfire education

1.1 *Background*

Effective education about bushfires was central to COAG 2004's vision for bushfire mitigation and management. This Chapter looks at:

- school-based education
- training and professional development.

Community education is also a key component of bushfire education and preparedness but there were no COAG 2004 recommendations that dealt with this matter explicitly.

1.2 *School-based education*

1.2.1 *COAG 2004*

COAG 2004 found that an integrated, nationwide program of school-based education was needed for Australians to learn how to live with bushfires. Australians who have participated in such programs 'are more likely to accept their responsibility for bushfire preparedness and safety'.

While the Inquiry noted that excellent educational material on bushfires was already available in a number of states and territories, it found that it was neither universally nor consistently delivered. It also contrasted the relative lack of progress with bushfire education against that made in alerting Australians to other important aspects of living in our environment, such as learning to swim and sun protection.

It considered that bushfire education was of such importance as to warrant the Australian Government playing a stronger leadership role in supporting the development of bushfire education in schools, while the states and territories remain responsible for delivery.

COAG 2004 recommendation 3.1

... state and territory governments and the Australian Government jointly develop and implement national and regionally relevant education programs about bushfire, to be delivered to all Australian children as a basic life skill.

1.2.2 Our finding

At a national level, Emergency Management Australia has created an on-line catalogue of national bushfire education resources, in collaboration with the states and territories¹. It has also supported the inclusion of bushfire education in the Australian Curriculum for geography.

However, closer examination of *Shape of the Australian Curriculum: Geography* found only one obscure reference to bushfire, at Point 82 in Year 8 under the study of *biomes*². In addition, any bushfire-related study appeared to be optional, rather than mandated.

At a Tasmanian level, TFS advised that it has previously developed and made available educational resources about bushfire and other hazards for upper primary and secondary students, which it considered the appropriate stage to introduce this content.

The Department of Education indicated that bushfire education is provided in the context of the curriculum, often in relation to science and sustainability studies. This was supplemented by availability of relevant information on a schools website and visits to primary schools by officers from the TFS.

However, TFS considered that the most effective approach was for Emergency Management Australia to seek to get bushfire education into the national curriculum rather than for each state to negotiate separately.

We also noted that a national survey of bushfire preparedness in 2007 and 2009 found that Tasmanians were better informed about bushfire risk and more likely to have a fire escape plan in place than other Australians. TFS attributed that success, in part, to the effectiveness of its community education program.

In summary, it appeared to us that some high-quality material was being effectively delivered in Tasmanian schools, but that full implementation of the recommendation was dependent on more effective integration of bushfire education into the national curriculum.

Our assessment: 50 per cent implementation.

¹ Emergency Management in Australia is a Division of the Australian Government Attorney General's Department.

² The Australian Curriculum, Assessment and Reporting Authority (ACARA) — The Australian Curriculum: Geography <http://www.acara.edu.au/geography.html>

1.3 *Learning and training*

Chapter 11 of COAG 2004 dealt with other aspects of knowledge, learning and training relevant to bushfire mitigation.

1.3.1 *General training*

1.3.1.1 *COAG 2004*

Training for bushfire mitigation and management has evolved and made considerable progress in the past 20 years in accordance with the Public Safety Training Package³. The national framework had provided commonality of skills and qualifications between jurisdictions together with efficiencies in training delivery and resources.

However, COAG 2004 noted that recent structural changes to the National Training Agenda had created a concern that the responsible Public Safety training body would be absorbed into a larger body. Fire and emergency services agencies were concerned that the new arrangements would diminish their capacity to influence the development and delivery of future training needs and thus undermine the relevance and value of this training. There was also concern at the potential impact of the expected changes on volunteers' willingness to undertake further training.

COAG 2004 argued that states' and territories' continuing commitment to the Australian Quality Training Framework was dependent on the public safety sector retaining a strong degree of influence over the training package. Its preferred outcome was for a National Safety and Security Skills Council to be created as an industry skills council within the revised industry advisory arrangements.

COAG 2004 recommendation 11.1

... that the Australian National Training Authority establish a National Safety and Security Skills Council to continue the development and administration of the Public Safety Training Package, including competencies and qualifications relevant to bushfire mitigation and management⁴.

³ The Australian Quality Training Framework recognises bushfire-related education and training units as part of the Public Safety Training Package.

⁴ The Australian National Training Authority was abolished soon after the COAG 2004 report was released, and its responsibilities transferred to the Commonwealth Department of Education, Employment and Workplace Relations. To simplify our Report, we continue to refer to the Australian National Training Authority, except when making additional recommendations.

1.3.1.2 *Our finding*

TFS advised that there has been no progress on the establishment of National Safety and Security Skills Council. Nevertheless, TFS continues to train and qualify its fire fighting personnel under the Public Safety Training Package framework and its 53 relevant training units along with some local input. We also noted from a 2008 review of implementation of the COAG 2004 recommendations that the Australasian Fire and Emergency Service Authorities Council (AFAC) provides professional development for fire services, including Graduate Certificate programs.

Forestry and DPIPWE also train staff in fire fighting using the Public Safety Training Package framework, selecting units relevant to the bushfire fighting work they are required to undertake.

Forestry agreed that there had been no progress on the specific recommendation, but that there was a consensus that the existing Industry Skills Councils were sufficient to achieve the aims of the recommendation. Notwithstanding that view, Forestry argued that development of the public safety competencies and qualifications was under-resourced.

We accept that the aims of the recommendation were being met and that key fire management bodies in Tasmania were largely satisfied with the Public Safety Training Package, although funding of continuing development was criticised by some entities.

Our assessment: 75 per cent implementation.

1.3.2 *Funding for training*

1.3.2.1 *COAG 2004*

COAG 2004 reported that implementation of the Public Safety Training Package had varied nationally. Significant costs had been imposed on both volunteers and fire agencies by the formal competencies required of Australia's 180 000 volunteer firefighters. The Inquiry argued that there was a case for additional assistance, from the states and territories and through the Australian National Training Authority, for the development and delivery of learning and training resources.

COAG 2004 recommendation 11.2

... that the states and territories and the Australian National Training Authority provide additional funding, as necessary, to registered training organisations to support the development and delivery of learning and training resources to all firefighters.

1.3.2.2 *Our finding*

Neither TFS nor Forestry was aware of additional funding from either the state government or from the Australian National Training Authority. Both TFS and Forestry are registered training organisations and largely self-funded but take advantage of various Commonwealth grants to augment training, where available.

DPIPWE also noted a need for additional funding to support delivery of learning and training to its fire fighting staff. However, DPIPWE acknowledged that it and Forestry had received funding from the Productivity Placements Program of the Australian Government specifically for fire training and now had a large number of personnel enrolled in certificate courses and diploma qualifications.

In summary, it appeared to us that — in the main — the national funding had not been provided as envisaged by the COAG 2004 recommendation.

Our assessment: 25 per cent implementation.

Recommendation 1

We recommend that TFS, DPIPWE and Forestry pursue funding from the Commonwealth (Department of Education, Employment and Workplace Relations), in line with COAG Recommendation 11.2.

1.3.3 *National program of professional development*

1.3.3.1 *COAG 2004*

COAG 2004 noted the benefits of professional development beyond the Australian Quality Training Framework. It further noted that a number of national bodies already offered a range of programs in generic and specialist areas, including emergency management and leadership development. However, COAG 2004 was concerned at a lack of professional development focused specifically on bushfire mitigation and management.

Some states and territories already offered professional development opportunities, specifically relevant to bushfire mitigation and management, to their own staff and others from interstate. The Inquiry considered existing national bodies were in a good position to coordinate the provision of professional development specifically relevant to bushfires.

The Inquiry also noted the USA model of a ‘National Bushfire Academy’, but considered it too costly for Australia.

COAG 2004 recommendation 11.3

... that the Australasian Fire Authorities Council and Emergency Management Australia — in partnership with state and territory agencies and other education and research institutions — coordinate a national program of professional development focused on bushfire mitigation and management. Under the program, partners would deliver nationally coordinated professional development services to all jurisdictions.

1.3.3.2 *Our finding*

We noted that, in conjunction with the University of Technology Sydney, TFS had developed tertiary courses for the building and planning community and fire mitigation staff. TFS also advised that there was some general professional development available through AFAC, although not specifically directed at bushfire mitigation and management. TFS also noted the availability of several tertiary programs, but commented that there was no coordinated approach to accessing them.

DPIPWE observed that AFAC coordinated a number of professional development courses and forums, as well as development and review of fire training competencies, qualifications and resources. However, the concept of each partner entity delivering a component of a nationally coordinated program had not happened in the way envisioned by the COAG recommendation.

Forestry advised that it had delivered training and courses that had been attended by DPIPWE, TFS, forest industry personnel and others. Forestry also noted that, in addition to standard training programs, individual agencies had shared materials and conducted training. However, there was no single, nationally used program. Neither was there a suite of training materials or standards focussed on bushfire mitigation and management delivering nationally coordinated professional development services.

Forestry added that the recommendation had been extensively discussed by AFAC member agencies, which divided into two groups; those who support a single national curriculum and a single set of learning materials, and those who argue the need for material specific to a jurisdiction or agency. So far it had not been possible to reach agreement and nationally portable qualifications had not been achieved for firefighters.

Councils generally responded that they regarded themselves as interested consumers of relevant professional development materials and were concerned at the lack of available professional development. They viewed the recommendation as requiring state or national level coordination. The State Fire Management Council

(SFMC) may be an appropriate body for that purpose⁵. However, at this stage, SFMC has a narrow role and has neither the resources nor the authority to take on that role.

In summary, there had been a reasonable level of implementation from the point of view of TFS, DPIPWE and Forestry, but Councils were concerned at a lack of available professional development.

In summary:

Our assessment: 50 per cent implementation.

Recommendation 2

We recommend that TFS, DPIPWE and Forestry continue to encourage the relevant national bodies to further implement COAG 2004 recommendation 11.3.

Recommendation 3

We recommend that SFMC work with Councils to improve the availability of relevant professional development.

1.4 *Conclusion*

For school-based education some high quality educational material was being effectively delivered in schools, although full implementation of the recommendation required integration of bushfire education into the national curriculum.

In the area of training and professional development, key bushfire management bodies in Tasmania were largely satisfied with the Public Safety Training Package but less so with funding for its continuing development. We recommend that funding be sought from the Australian National Training Authority for that purpose.

The COAG 2004 recommendation regarding national coordination for the provision of professional development specifically relevant to bushfires has had a reasonable level of implementation with regard to larger agencies, but Councils were concerned at a lack of relevant PD materials.

Overall, our assessment of bushfire education: 50 per cent implementation.

⁵ Established under the *Fire Service Act 1979*, the Council's primary role is to develop a State Vegetation Fire Management Policy to be used as the basis for all fire management planning.

2 Risk management and performance indicators

2 Risk management and performance indicators

2.1 Background

In this Chapter, we examine a number of COAG 2004 recommendations dealing with strategic management in the categories of:

- risk management
- performance indicators
- principles.

2.2 Risk management

2.2.1 COAG 2004

COAG 2004 indicated that a structured risk management process, consistent with the relevant Australian Standard, offered ‘the best framework for making strategic and operational decisions about bushfire mitigation and management’.

The Inquiry noted that the level of risk depended on the severity of the fire, the assets under threat and the ability of the community, fire services, buildings, infrastructure and the environment to withstand the fire and to recover from it.

It noted however, that effective risk management of bushfires required a thorough understanding of:

- the full range of assets threatened by bushfire
- past bushfires and potential fire behaviour
- causes and likelihood of ignition.

The Inquiry also considered that planning for bushfires should have a spatial component because accurate and comprehensive spatial data is critical for mapping of bushfire risks across the landscape.

COAG 2004 recommendation 4.1

... that a structured risk-management process based on the Australian Standard for Risk Management be further developed and applied in all aspects of bushfire mitigation and management, informed by a thorough understanding of the full range of assets.

2.2.2 Our finding

At the national level, a risk assessment advisory group was established and endorsed by the National Emergency Management

Committee in 2006. As a result, a structured risk management process based on Australian Standard AS 4360 *Risk management* (AS 4360) was being applied to bushfire mitigation and management⁶.

At a state level, DPIPWE had developed a Bushfire Risk Assessment Model (BRAM) that is a sophisticated graphics-based risk assessment tool aligned to AS 4360. BRAM underpinned DPIPWE's risk-management approach for Tasmania's parks and reserves. BRAM will be further discussed in Section 2.2.3. We noted that DPIPWE had developed Regional Strategic Management Plans for the northern and southern regions although the plan for the northwest region had yet to commence.

TFS had a draft risk assessment framework which has been endorsed by national bodies and was based on the Australian Standard. Also, TFS had obtained funding for development of community protection plans, based in part on the capabilities of BRAM. The plans are designed to coordinate identification of hazards, prioritization of assets to be protected, preparedness of households to respond to threats and assistance for brigades and emergency response teams.

Forestry listed its assets in District Fire Management Plans. BRAM was also being used to record Forestry's assets and it envisaged that BRAM would be fully adopted for risk management.

Transend and Aurora both advised of risk management plans that met Australian standards covering assets such as electricity transmission equipment and associated easements.

Of the councils that we surveyed, their approaches to risk management of their assets varied quite markedly. Only Hobart and Launceston City Councils had risk management programs structured in accordance with the standard. Other councils had developed various risk management tools and strategies.

Our conclusion was that although most entities covered by this audit had addressed bushfire risk in some way, the approaches varied widely. In part, that reflected the distinct perspectives of entities, with some more focused on managing hazards, others on preparing households and others on emergency response. While those differences are valid, we believe that, to ensure that all aspects of fire management are collectively and efficiently addressed by all entities, there is a need for a more coordinated approach to risk

⁶ National Emergency Management Committee is an Australian Government–State/Territory body charged with responsibility for managing national strategic emergency management issues and policies.

management. We make the point that while those entities have fire-related responsibilities, it is not core business for any of them other than TFS. For that reason, there is a need for an overarching body that would focus on all aspects of fire management and mitigation. As stated in Section 1.3.3.2, the SFMC may be an appropriate body for that purpose. However, at this stage, SFMC has a narrow role and has neither the resources nor the authority to take on that role.

Normally, we are very reluctant to make recommendations that explicitly mention funding. Nevertheless, we believe the huge losses that flow from a major bushfire, as shown in Victoria in 2009, justify such a reference in this case.

Our assessment: 50 per cent implementation.

Recommendation 4

We recommend that funding be sought to enable SFMC to take a greater coordination role for bushfire risk management and mitigation.

Recommendation 5

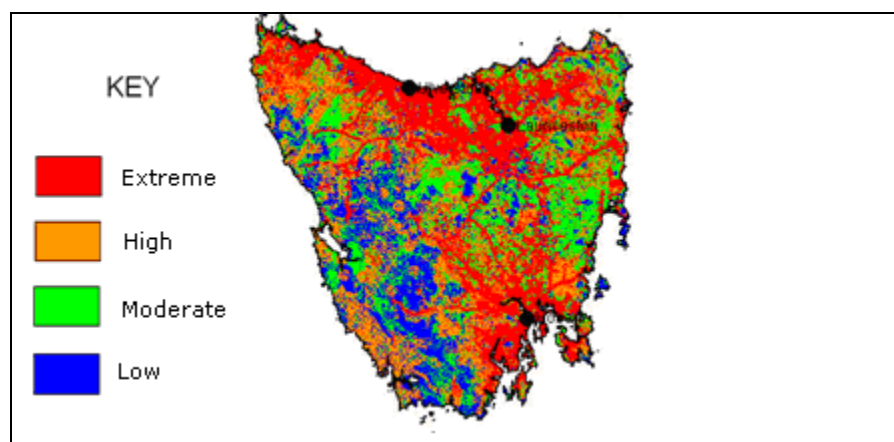
We recommend that the Local Government Association of Tasmania advocate, coordinate and support local councils' input of bushfire risk assets data into BRAM.

2.2.3 BRAM

As noted in Section 2.2.2, DPIPWE had developed a sophisticated graphics-based risk assessment tool (namely BRAM). At the time of the audit, BRAM included information relevant to TFS, Forestry, Aurora and Transend. Specifically, BRAM contained:

- assets (such as houses, roads and parks)
- historic fire data
- vegetation mapping
- risk of ignition
- fuel loads
- suppression capability.

As an example of its capabilities, Figure 1 shows Tasmania mapped according to fire risk.

Figure 1: BRAM Map of fire risk areas

BRAM contained 25 types of information about assets and fuel characteristics and could produce customised maps down to 100-metre resolution. While outputs from BRAM were limited by the resource inputs, significant data was being gathered and interpreted for use in bushfire management, mitigation planning and operational activities.

BRAM was already being applied in TFS and Forestry, notwithstanding the concerns of those entities about the resources needed to maintain currency of the database. These entities had commenced inputting and aligning their records of assets with BRAM and using BRAM to inform their own risk assessment processes. An example was Forestry's plan to use BRAM for development of its zoning approach to fire management.

The positive views of the system demonstrated by Forestry, TFS, DPIPWE and Aurora were not fully reflected by DPEM, the State Emergency Service and DPAC. For example, an ongoing risk assessment exercise led by DPAC and the State Emergency Service could have benefitted from a more developed version of BRAM.

The impression we gained was that DPEM, the State Emergency Service and DPAC regarded BRAM as a land management tool rather than as having emergency response applications. In relation to managing the risk of bushfire, it appeared to us that there must be considerable overlap between data required for land management and for emergency response. TFS argued that BRAM had potential for improving decision-making in areas such as fire bans and permits or use of specialist resources on high fire-risk days.

A concern raised by Forestry was of the significant risk attached to committing to statewide use of BRAM under current arrangements since it relies on the ongoing support of DPIPWE and of particular officers of and consultants to that agency. We acknowledge the risk but believe that, as with any large IT project, it is possible to devise strategies to manage that risk.

Recommendation 6

We recommend that the State Fire Management Council support the further development of BRAM with a view to it becoming the central information source for use by all entities with responsibility for fire management and mitigation.

2.3 *Performance indicators*

2.3.1 *COAG 2004*

COAG 2004 emphasised the importance of comparable and meaningful performance information to allow states and territories to assess their fire readiness. However, it observed that states and territories only gained an appreciation of fire mitigation and management performance when there was a major bushfire event.

A national review mechanism existed with the Productivity Commission's *Report on Government Services*, but coverage of bushfire performance was not extensive. Moreover, variations in jurisdictions' reporting limited the value of interstate comparisons, and land management agencies were generally not accounted for.

COAG advocated development of consistent indicators of good practice based on the five mitigation and management factors it had identified⁷. The indicators would provide benefits of:

- identifying performance trends within a jurisdiction
- enabling inter-jurisdictional comparison
- relating performance against identified risks and management strategies.

Importantly, the Inquiry saw it as inappropriate to review the performance of fire agencies in isolation including local governments and communities.

COAG 2004 recommendation 13.1

... that the states and territories agree to a common set of national bushfire indicators of good practice, based on the five mitigation and management factors ...

⁷ The Inquiry identified research, information and analysis; risk modification; readiness; response; and recovery as factors of fire mitigation and management.

2.3.2 Our finding

In our view, the recommendation applied to the major land-owning or fire fighting agencies; that is TFS, DPIPWE and Forestry. TFS and DPIPWE both rated implementation at 25 per cent. Some work had been progressed nationally, with AFAC in the process of developing landscape performance measures for bushfire. TFS indicated that it would consider implementation and reporting on those measures once finalised.

DPIPWE noted that AFAC intended to report against four of 24 identified measures, namely:

- deaths
- injuries to firefighters
- dwellings destroyed
- bushfires per person and per hectare.

DPIPWE indicated that ‘reporting against the other 20 performance measures may occur in future years’.

Forestry noted that Productivity Commission performance indicators were being reported by Forestry, DPIPWE and TFS. However, as noted in Section 2.2.1, COAG 2004 considered those indicators to be not extensive, inconsistent between jurisdictions and not addressing the activities of land managers. Forestry also noted that the process had been contentious and that agreement to the four indicators had been qualified. Forestry also questioned the value and likelihood of national agreement for further indicators.

In its response, Aurora observed that the recommendation did not apply to it, but provided a list of performance indicators that could allow comparison with other electricity utilities.

In summary, the various entities had a variety of views. We believe that the SFMC would be the most suitable body for developing and promoting a state-wide position on performance indicators.

Our assessment: 25 per cent implementation.

Recommendation 7

We recommend that SFMC work with all entities with responsibility for bushfire management to develop a state-wide position on performance indicators and promote that view nationally.

2.4 *National principles*

2.4.1 *COAG 2004*

COAG 2004 outlined a number of reasons for having national principles for bushfire mitigation and management, namely to:

- improve effectiveness and efficiency
- assist fire management bodies when seeking resources
- facilitate cooperative approaches and responses
- assist with development of national performance standards.

COAG 2004 recommendation 14.1

... that the Council of Australian Governments adopt a statement of national principles as the framework for the future direction of bushfire mitigation and management in Australia.

2.4.2 *Our finding*

TFS considered that, up until the 2009 Victorian bushfires, progress had been slow and Tasmanian contributions had been driven by individual entity needs, rather than coordinated by a central agency or group such as the SFMC. However, there had been substantial progress since then with some fire policy having been developed at a national level by AFAC with DPEM and DPAC contacted for feedback.

In addition, TFS had led the development of the 2010 national positions on bushfires and public safety, which incorporated recommendations from the 2009 Victorian Bushfires Royal Commission and included new and more effective ways of managing public safety in bushfires.

Forestry noted that the Forest Fire Management Group, made up of the forestry and land management entities of the states and territories, had developed a policy and was in the process of seeking support via AFAC for national recognition.

Despite the slow start mentioned by TFS, we concluded that there appeared to have been reasonable progress on development of an agreed set of principles.

Our assessment: 50 per cent implementation.

2.5 *Conclusion*

Although most entities had addressed bushfire risk in some way, the approaches were very different. We believe there is a need for a

more coordinated approach to risk management that would ensure that all aspects of fire management are collectively and efficiently addressed. A risk management product, BRAM, appeared to have much potential but lacked widespread support.

There had been some progress with performance review and despite a slow start, there appears to have been some progress on development of an agreed set of principles.

Overall, our assessment of risk management and performance review: 40 per cent implementation.

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3 Research and information

3 Research and information

3.1 *Background*

Effective bushfire management requires reliable information, including information about weather patterns, fuel loads, fire history and community assets. Such information supports both strategic and operational decisions and is important for fire-fighters, land managers, members of the community, policy makers and researchers.

Australia has a strong history of research into bushfires undertaken by national agencies such as CSIRO and universities. However, COAG 2004 noted limitations in national bushfire data including lack of consistency in data collected. It further noted that resourcing was widely regarded as modest with research fragmented. The lack of up-to-date maps was identified as a limitation to effective response by fire-fighters in the 2003 Canberra fires. In particular, that deficiency in maps had hampered local and interstate units' capacity to work efficiently and effectively in unfamiliar territory.

In this Chapter, we examine a number of COAG 2004 recommendations dealing with research and information in the categories of:

- funding and resourcing of research
- fire regime mapping
- nationally consistent data
- strategy for research
- establishment of a Centre for Bushfire Lessons Learnt.

3.2 *Strategy for research*

3.2.1 *COAG 2004*

The Inquiry noted a number of related concerns with Australian bushfire research, such as declining expenditure, fragmented efforts to coordinate research and the lack of a longer-term strategic view.

In 2003, the Bushfire Cooperative Research Centre (BCRC) had been established to address some of the above concerns. In particular, BCRC was designed to provide coordination in an environment where there was a diversity of funding sources and priorities. However, Cooperative Research Centres had a limited life (seven years) and there was no guarantee of permanency.

COAG 2004 considered that the best way of further developing and sustaining Australian research capacity was a long-term integrated strategy.

COAG 2004 recommendation 5.4

... that the Australian Government, in partnership with the states and territories and relevant research organisations, develop a strategy for sustaining bushfire research and capacity building, in the context of a risk management approach to bushfire mitigation and management.

3.2.2 Our finding

State agencies were not aware of any such action on the part of the Australian Government. TFS, DPIPWE and Forestry were supporting BCRC, through substantial funding and active participation. In addition, TFS, DPIPWE and Forestry through AFAC were supporting the drive for an on-going Fire Research Institute.

Our assessment: 50 per cent implementation.

3.3 Fire regime mapping

3.3.1 COAG 2004

COAG 2004 recognised fire regime data — frequency, intensity, seasonality and type of fire — as central to mitigation and management decisions. The Inquiry found that fire regime information was very limited for most of Australia, with large-scale fire mapping having only recently been made possible by technological advances.

COAG 2004 recommendation 5.2

... that the Australian Government and the state and territory governments jointly provide additional resources and work in partnership to establish and refine a national program of fire regime mapping.

3.3.2 Our finding

State entities were not aware of any nationally coordinated program or of any national progress against this criterion. While SFMC had agreed to this in principle, there was no evidence of a coordinated attempt by state government entities to address the recommendation.

DPIPWE advised that it was undertaking fire history mapping of all fires that occur on reserved land and stored this information in BRAM and graphical information systems. Additional resources had

not been provided for mapping since the COAG 2004 report, and the mapping did not follow national standards or form part of a national program. DPIPWE accepted that there were deficiencies in the quality and detail of mapping being undertaken.

Forestry mapped areas that had been burnt and assigned estimates of severity, which provided some relevant data, but was not fire regime mapping, as such. It was also providing relevant data to BRAM.

Up until 1997, TFS did not use electronic mapping for fires, which was a limitation to information for fires on freehold land. Similarly, there was no fire mapping by local government or evidence that such efforts were under consideration. In recent years, TFS has created burn-area maps, although little is being done with them in regard to the recommendation. TFS considered that integration of their maps with BRAM would be beneficial.

In summary, at a joint Commonwealth–State level, there had been no additional resources or work-in-partnership to achieve this recommendation. Some relevant efforts had been made by individual Tasmanian entities for some categories of land.

We restate Recommendation 6:

We recommend that the State Fire Management Council support the further development of BRAM with a view to making it the central information source for use by all entities with responsibility for fire management.

Our assessment: 25 per cent implementation.

3.4 *Nationally consistent data*

3.4.1 COAG 2004

Strategic and operational decisions for bushfire mitigation and management call for spatial data and information. COAG 2004 reported that the scope and format of data and information available to government was extensive, ranging from digital spatial data to text records such as fire management plans.

COAG 2004 believed that common procedures and standards for spatial mapping by all states and territories would offer a number of advantages, such as greater operational efficiencies, easier national reporting, and improved inter-jurisdictional deployments. The Inquiry advocated that Australia’s spatial data, information products and services be readily available and accessible to all users.

COAG 2004 recommendation 5.3

... that the Australian Government and the state and territory governments continue to develop national consistency in data sets relevant to bushfire mitigation and management under the Australian Spatial Data Infrastructure framework, and within this context, identify and resource national bushfire data set coordinators.

3.4.2 Our finding

DPIPWE and Forestry collect data on bushfires in a standard format from a database hosted by Forestry. However, it was not clear the extent to which national consistency or compliance with the spatial data framework had been achieved, although we noted that Transend and Forestry had a member sitting on the Tasmanian Government Spatial Committee⁸. In any event, we were satisfied that Tasmanian entities were meeting their obligations.

Our assessment: 75 per cent implementation.*3.5 Funding and resourcing of research**3.5.1 COAG 2004*

COAG 2004 saw a need for action and additional resources to sustain processes that would help to meet data, information and knowledge needs of those engaged in bushfire mitigation and management.

COAG 2004 recommendation 5.1

... the provision of additional resources jointly by the Australian Government and the state and territory governments to:

accelerate research into fuel loads, fire behaviour and ecological responses to assist with development of ‘burning guides’ and nationally accessible databases

establish ecological research sites to provide a basis for long-term monitoring of the impacts of fire regimes and fire events.

3.5.2 Our findings

COAG update 2007 noted difficulties resourcing BCRC. DPIPWE confirmed that additional resources had not been allocated and that

⁸ In 2008, the Tasmanian Government Spatial Committee was formed within DPIPWE to guide spatial information development and management across the public sector.

there had been no acceleration of national research since 2004. In addition, no national network of long-term ecological research sites had been established.

On the other hand, Tasmanian agencies had been involved in research activities in a number of ways:

- Forestry, DPIPWE and TFS had provided a small research fund.
- TFS had participated in national studies of fuel characteristics.
- DPIPWE had established long-term monitoring sites and continued to fund BRAM development.
- DPIPWE, TFS, the University of Tasmania and Forestry had conducted research into fuel loads and fire behaviour for dry eucalypt forests and buttongrass moorlands.
- Forestry had established the Warra Long-Term Ecological Research site in the Huon Valley.
- The Tasmanian Government had provided \$0.7m to a number of bodies including, but not limited to, the BCRC over seven years to June 2010 and intended to continue to fund research.

In summary, there had been little national response to the recommendations, but Tasmanian entities had continued to prioritise research.

Our assessment: 50 per cent implementation.

3.6 Centre for Bushfire Lessons Learnt

3.6.1 COAG 2004

One of the primary characteristics of learning organisations is the existence of a process for capturing and sharing learning from real events. COAG 2004 supported a US model of a group with the specific role of facilitating learning from experience within and across organisations.

The Inquiry considered that such a centre would be of substantial strategic benefit to bushfire mitigation and management.

[COAG 2004 recommendation 11.4](#)

[... that the Council of Australian Governments support and fund the establishment of an Australian Centre for Bushfire Lessons Learnt, for an initial period of five years.](#)

3.6.2 Our finding

COAG update 2007 rated the implementation status as complete. It also suggested supporting a mechanism, possibly internet-based, to disseminate information on lessons learnt and that this need not involve establishment of a new entity as the function could be adopted as an additional role of an existing organisation.

On the other hand, TFS indicated that no separate body had been established. Instead, the function of learning from previous bushfire experience had been assumed, to some extent, by the BCRC. In our view, that result fell well short of the dedicated body envisaged by the recommendation.

Our assessment: 50 per cent implementation.

3.7 Conclusion

With respect to funding and resourcing of bushfire research, we found that these activities had attracted a high priority in Tasmania. Fire mapping had proceeded but entities that responded to us were not aware of a nationally coordinated program.

The need for nationally consistent data had been met through DPIPW and Forestry collecting data on bushfires in a standard format consistent with the Australian Incident Reporting System.

The State supports national initiatives for ongoing bushfire research through participation in the BCRC. That said, however, the current situation regarding a dedicated national body appears to be well short of the situation envisaged by COAG 2004.

Overall, our assessment of research and information: 50 per cent implementation.

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4 Building in bushfire prone areas

4 Building in bushfire-prone areas

4.1 *Background*

Many Australians choose to live close to the natural environment and are passionate about the aesthetics of being surrounded by trees, shrubs and the wildlife they support. Many others are living close to bushland as a result of past settlement patterns, occupations or economic factors or simply because they moved to live in a newly developed suburb.

As a consequence, the landscape in which fires burn is being modified by increased urban expansion, increasing rural–residential areas beyond urban fringes, and changing land tenure. COAG 2004 highlighted the fire risk posed by urban gardens in the Canberra fires of January 2003, reporting that drought had led to many parched gardens and this promoted ember attack when the firestorm reached the Canberra suburbs.

In this Chapter, we examine a number of COAG 2004 recommendations dealing with building in bushfire-prone areas in the categories of:

- land use planning and development
- construction of buildings
- fuel management.

4.2 *Land use planning and development*

4.2.1 *COAG 2004*

Under extreme conditions, fire agencies and other response organisations are unable to guarantee that a bushfire will not inflict loss or damage. The Inquiry supported the view that land use planning is the single most important mitigation measure for preventing future bushfire losses. Responsibility for land use planning rests with private land owners, councils and managers of national parks, conservation reserves, Crown lands, private and public forests.

COAG 2004 also supported a recommendation from the *Natural Disasters in Australia* (NDA) report that all state and territory jurisdictions should introduce statutory land use planning policies and requirements governing development in areas of significant bushfire risk. The NDA report also recommended related changes to relevant planning tribunals and associated legislation. COAG 2004 recognised that strict planning guidelines and building codes can be unpopular, but considered such an approach to be essential.

COAG 2004 recommendation 6.1

... endorses the recommendations in the *Natural Disasters in Australia* report relating to disaster mitigation through land use planning and development controls and urges the states and territories to continue to make their advisory and statutory measures more effective.

4.2.2 *Our finding*

In 2005, TFS revamped its *Guidelines for Development in Bushfire Prone Areas of Tasmania*. That publication, which remains current, provides a definition of bushfire prone areas and suggested procedures for development approval and construction standards.

Of the eight councils surveyed, Hobart City, Launceston City and Break O’Day had implemented the TFS guidelines and Circular Head reported partial compliance. Central Highlands, Waratah–Wynyard, Sorell and Tasman reported low levels of compliance, citing reasons such as:

- waiting on development of DPAC guidelines — even though TFS guidelines have long existed
- failure of the State Government to declare bushfire prone areas — even though that delay was relevant to building standards (see Section 4.3.1) rather than development zoning
- looking to coordination through the Tasmanian Planning Commission.

On the positive side, councils have practised mitigation with a varied set of planning approval strategies including planning permits and approval of fire hazard plans by TFS.

In fairness to the councils with low levels of compliance, DPAC had been conducting a review intended to clarify land use planning and development, which only reported in August 2010⁹. The review was performed in consultation with relevant agencies and local government councils. It addressed building construction controls for areas of high fire danger, but also covered wider planning and development concerns for those areas, including:

⁹ *Review of Construction and Development Control in Bushfire Prone Areas, DPAC, August 2010*

- redefining bushfire prone areas for subsequent incorporation in the regulations of the State's *Building Act 2000*
- discouraging or disallowing high risk developments such as nursing homes, schools or hospitals
- buffering with set-back distances or requirements to have recreational (i.e. grass land) areas around the perimeter.
- fire fighting access, and capability to contain fires that do occur
- providing for escape routes for residents.

DPAC did not consider that all councils had relevant expertise with respect to developments in areas of high fire danger and its report envisaged use of accredited designers to prepare plans for development applications submitted to planning authorities. The suggested changes were waiting on legislative amendments. It was also intended that the Tasmanian Planning Commission would ensure consistency and also provide a 'big picture' perspective.

The DPAC report also saw a role for councils to provide localized maps to aid potential developers based on the definition of bushfire prone areas to be included in regulations of the *Building Act 2000*. As noted in Section 2.2.3, we see BRAM as having potential to assist with that mapping, after further development including more accurate vegetation mapping of urban areas.

DPIPWE also advised that it had a policy (namely *Neighbouring Developments and Fire Management Policy*) with relevance to the recommendation. However, DPIPWE also acknowledged that it had still to develop a strategy for communicating its policy to councils and, consequently, there had been little uptake.

In summary, there appears to have been good recent progress and a thoughtful approach to land use development and planning. However, after six years the level of implementation of this recommendation that the Inquiry considered being 'the single most important mitigation measure' was disappointing.

Our assessment: 50 per cent implementation.

Recommendation 8

We recommend that councils should move promptly to:

- **adopt the TFS *Guidelines for Development in Bushfire Prone Areas of Tasmania***
- **give effect to the DPIPWE *Neighbouring***

Developments and Fire Management Policy.

4.3 Construction of buildings

4.3.1 COAG 2004

The concept of building design as a risk-avoidance measure was embedded in the *Building Code of Australia 1996* (BCA) and Australian Standard AS 3959 *Construction of Buildings in Bushfire Prone Areas* (AS 3959). These sources provided a national approach that underpinned safe building and living in fire-prone environments.

The BCA contained provisions for constructions that would resist bushfire and reduce the likelihood of property loss. At the time of the Inquiry, a planned review of the Building Code had been delayed, as had a review of AS 3959.

The Inquiry supported the recommendations in the *Natural Disasters in Australia* report that sought to ensure that the BCA adequately deals with resistance to natural hazards and that there is compliance with the Code throughout Australia.

COAG 2004 also supported AFAC's work to develop a nationally consistent approach for the protection and construction of habitable buildings in bushfire-prone areas and its call for:

- incorporation of building maintenance in AS 3959
- continuing research into the adequacy and compliance with the Code and the standard
- extending the scope of the standard to cover existing buildings and those not in declared bushfire prone areas.

COAG 2004 recommendation 6.2

... that the review of the Building Code of Australia, with particular reference to the Construction of Buildings in Bushfire Prone Areas Standard ... be completed by the Australian Building Codes Board as a matter of priority.

4.3.2 Our finding

In assessing implementation of this recommendation, we looked at not only whether the review of the building codes had been achieved but also the extent to which state entities had incorporated the amended code into their practices.

Only since 2010 has a revised BCA been introduced that imposed building construction standards in formally declared bushfire prone areas. BCA was linked to the Australian Standard for construction of homes in bushfire prone zones, AS 3959, which had been updated after the 2009 bushfires in Victoria.

We noted that both TFS and DPAC guidelines had provided generic descriptions of bushfire prone areas (as opposed to formally declaring particular areas). DPAC had made recommendations on construction and development controls in bushfire prone areas in July 2009. TFS guidelines had also provided advice on materials to be used for rooves and exterior walls as well as measures to reduce the risk from embers for developments in bushfire prone areas.

Although the BCA has been updated as per the recommendation, Tasmania's failure to formally designate bushfire prone areas had meant that the relevant measures of the BCA had no effect at the time of the audit. For that reason, most councils rated implementation of the COAG 2004 recommendation as low.

DPAC was in the process of giving effect to the BCA through the following measures:

- a planning directive covering both building and planning arrangements in bushfire prone zones
- changes to the *Building Act 2000* and *Land Use Planning and Approvals Act 1993* to make the planning directive effective and incorporate the generic definition of bushfire prone areas

Preliminary work indicated that 93 per cent of Tasmania could be considered bushfire prone. Whilst that proportion seemed very high, it should be noted that the majority of the State's population live within the remaining seven per cent.

Cabinet has endorsed the implementation of the recommendation of the DPAC review and DPAC hopes the planning directive will be functional towards the second half of 2011. On the other hand, we are not aware of any proposals to extend construction requirements to cover existing buildings. The absence of such strategies leaves a serious risk that many existing buildings (such as houses) constructed in bushfire prone areas are at unacceptable risk from a bushfire and may not be defensible.

In summary, both the review of BCA and formal designation of bushfire prone areas by Tasmania was protracted. DPAC's parallel process offers a better control framework but was incomplete and did not provide coverage of existing buildings.

Our assessment: 50 per cent implementation.

Recommendation 9

We recommend that, in regard to existing buildings in bushfire prone areas, councils should:

- **strongly encourage owners to make improvements to construction or increase buffers in order to meet minimum safety standards**
- **implement programs to audit impacted properties and issue abatement notices where necessary**
- **monitor and maintain their reserves to ensure that adequate buffers to neighbouring buildings exist.**

4.4 *Fuel management*

4.4.1 *COAG 2004*

Two distinct objectives of fuel risk-reduction are to:

- reduce the intensity and spread of unplanned bushfires
- enable safer and more effective protection of assets.

In order to be effective in mitigating the effects of bushfire on assets, fuel-reduction activities need to be strategically located and repeated often enough to keep the fuel load from exceeding a particular threshold level.

The Inquiry found that detailed information to assess the effectiveness of fuel-reduction burning programs had not been collected or analysed in a systematic way. However, the principle of reducing the risk posed by bushfires by reducing the amount of fuel was supported by empirical studies and anecdotal experience. A noteworthy example of a positive impact from reduction of fuel loads was the Mt Cooke fire near Perth in 2003. That fire showed how an unplanned bushfire burning at high intensity through forest with high fuel loads reduced markedly in intensity when it reached forest blocks that had been burned for fuel reduction.

On the other hand there were also anecdotes of severe bushfires burning through areas that had been treated by such reduction burning in the recent past, including during the 2002–03 Victorian fire. Such anecdotal evidence showed that fuel reduction offers no firm guarantee that a bushfire will be readily contained, at least for some terrain, vegetation types and in extreme weather conditions.

There are a number of constraints to achieving broad-scale burning at a frequency necessary to maintain low fuel loads, including:

- inadequate funding, skill levels, staffing and equipment

- concern on the part of land managers to avoid risks of injury and of fire escape
- the number of days each year that are suitable for fuel-reduction burning, for example, 10 per year in Victoria
- public pressure to reduce fuel-reduction burning in order to protect air and water quality as well as aesthetic values
- other land management objectives, for example, forestry and agricultural production.

In order to be effective in reducing the risks to assets, the frequency of fuel-reduction burning would have to be sufficient to keep fuel loads low. COAG argued that the magnitude of the task and the existence of unavoidable constraints made it unachievable on a broad scale. For example, as a result of the rapid build-up of fuels after fire in many ecosystems, it had been estimated that some 25 to 50 per cent of fire-prone landscapes in New South Wales would have to be burnt annually to achieve a fuel load of less than 8 tonnes per hectare.

Accordingly, COAG considered that focus on the gross area treated annually in fuel-reduction burning was not useful. Instead, it supported the adoption by all states and territories of a system for classifying fuel management zones across the landscape. The zone category would direct the nature and priorities for risk-management action. A zoning approach had been emerging in a number of jurisdictions, with the following features:

- asset protection zones — typically the rural–urban interface — where regular fuel reduction should be undertaken in the vicinity of specific assets
- strategic fuel management zones, which aim to provide areas of reduced fuel in strategic areas, to reduce the speed and intensity of bushfires and reduce the potential for spot-fire development.

COAG further noted that fuel management zoning had been adopted in Victoria and New South Wales and recommended for the ACT by an inquiry into the January 2003 Bushfires.

COAG 2004 recommendation 6.3

... that all states and territories should have a zoning approach to the classification of fuel management areas, with clear objectives for each zone. The process should be applied at the landscape scale, and all land managers and the community should be involved.

4.4.2 Our finding

SFMC endorsed the recommendation, with responsibility for implementation residing with land management entities. It was intended that SFMC develop a state vegetation fire management policy to assist with the management of vegetation fire. SFMC was to give detailed consideration to the value of existing prescribed burning programs and associated long-term data collection.

Uptake by local government was poor, with six councils advising that there had been no implementation. Most of those councils argued that they were waiting on TFS to provide local government with mapped fire prone areas. It appeared to us that introduction of a zoning approach to fuel management areas was in no way dependent on formal designation of bushfire prone areas. Of those councils that claimed partial implementation:

- Hobart City made no mention of having adopted a zoning approach but had carried out some fuel management activities. Its approach to private land was reactive rather than based on zoning.
- Circular Head applied a simple zoning approach, but only to new private development applications. That is, Council assessed whether the site was in a possible fire hazard area. If so, it required a fire hazard plan to be developed covering reduction and management of fuel load. No such zoning approach for Council land was identified.

Despite the non-implementation of the zoning recommendation, we noted that councils were involved, to some extent, in fuel management activities including the issue of fire abatement notices.

DPIPWE had developed a zoning framework that was consistent with the approach proposed in the COAG 2004 report. The zoning approach was applied in BRAM (see Section 2.2.3) and was being implemented through the Strategic Fire Management Plans.

Forestry used a zoning approach in fire management planning appropriate to its needs. As the BRAM framework progresses, Forestry indicated that it intended to further refine its zoning.

With respect to the electricity utilities, Transend maintained vegetation management plans as a condition of its electricity transmission license. We consider those plans to be a reasonable proxy for the recommended zoning approach.

Similarly, Aurora's bushfire management programs are based on identified fire danger zones across Tasmania. We noted that Aurora used a TFS fire risk map which TFS now considers to be long out of

date. On the other hand, Aurora advised that it continuously revised its risk profile on the basis of new information.

In summary, there has been a reasonable level of implementation for all but council and private land.

Our assessment: 50 per cent implementation.

Recommendation 10

We recommend that councils implement a zoning approach to fuel management as recommended by COAG 2004.

4.5 *Conclusion*

While there appears to have been good recent progress in land use development and planning, the level of implementation of this important recommendation was disappointing.

Tasmania's failure to formally designate bushfire prone areas has meant that the relevant measures of the Building Code of Australia had no effect at the time of the audit.

Despite the non-implementation of the zoning recommendation, we noted that councils were involved, to some extent, in fuel management activities including the issue of fire abatement notices.

Overall, our assessment of building in bushfire prone areas: 50 per cent implementation.

5 Bushfire operations

5 Bushfire operations

5.1 Background

In this Chapter, we examine a number of COAG 2004 recommendations dealing with bushfire operations in the categories of:

- incident control (including incorporation of local knowledge and effective flow of information)
- warning systems
- media protocols
- ‘Prepare, stay and defend or leave early’ policy
- financial support for rural fire service volunteers.

5.2 Incident control system

Large rural fires are difficult because of their speed and unpredictability and the number and variety of resources that must be managed. The Inquiry noted that AFAC considered the Incident Control System to be the basic building block for effective use of resources within and across agencies and jurisdictions.

5.2.1 A single system

5.2.1.1 COAG 2004

The Australian Inter-service Incident Management System (AIIMS) was adapted from a US system during the mid-1980s and had been progressively implemented since that time. All Australian fire authorities were committed to managing fire incidents within the AIIMS framework.

COAG 2004 noted that police and other emergency services did not use the system. However, it also observed that these agencies were able to mesh their protocols with those of fire authorities through the AIIMS framework. Nevertheless, the Inquiry saw merit in the National Emergency Management Committee considering whether there is scope for more widespread adoption of the framework for all emergency incidents.

COAG 2004 recommendation 8.1

... that implementation of a single Incident Control System for the management of multi-agency emergency incidents be further examined by the National Emergency Management Committee, with a view to developing one nationally agreed system.

COAG 2004 recommendation 8.4

... that all Australian fire authorities adopt and continue to use the AIIMS Incident Control System in accordance with Australasian Fire Authorities Council guidance and policies.

5.2.1.2 Our finding

TFS, Forestry and DPIPWE have adopted and used a common Incident Control System (namely AIIMS) for many years and have incorporated it into the Inter-Agency Fire Management Protocol.

We were advised that, in the event of a major fire, the incident control system used by the State Emergency Service and Police would be a different system to AIIMS. Whilst not the same, it was developed from AIIMS and was substantially compatible. We found that in Tasmania, a joint operation involving emergency service agencies and land management agencies would involve parallel use of AIIMS and the police system.

Member agencies of AFAC, including Forestry and DPIPWE, were continuing to progress the development of a single Incident Control System that would include Police and SES.

Our assessment: 75 per cent implementation.

5.2.2 Incorporation of local knowledge

5.2.2.1 COAG 2004

COAG 2004 noted that AFAC's review of AIIMS had identified a need to take better account of local knowledge, including both knowledge of the local environment and knowledge of previous fire events. The Inquiry strongly endorsed the AFAC position, following comments that many rural landowners and volunteer fire-fighters considered that using AIIMS stalled decision making and discouraged the input of local knowledge. The Inquiry found that failure to acknowledge and use local knowledge had the potential to erode the credibility of fire agencies and AIIMS, ultimately reducing the effectiveness of the national bushfire-response effort.

COAG 2004 recommendation 8.2

... that the AIIMS Incident Control System be adjusted so that it adequately allows for the identification and integration of local knowledge during fire fighting operations.

5.2.2.2 *Our finding*

COAG update 2007 noted that this recommendation had been fully implemented in Tasmania, notwithstanding ongoing national concerns.

TFS advised that it made informal use of local knowledge but was pushing for formal inclusion of local knowledge within AIIMS. Forestry agreed that in Tasmania use was already made of local knowledge supported by the state's relatively small scale and close cooperation between agencies.

Our assessment: 100 per cent implementation.

5.2.3 *Flow of information*

5.2.3.1 *COAG 2004*

The Inquiry emphasised the role of AIIMS and the Incident Controller. The Incident Controller had the responsibility to ensure that adequate information was transmitted to threatened communities, government, police and other emergency services authorities. COAG also called for the establishment of long-term, effective relations with the media and government information services.

COAG 2004 recommendation 8.3

... that a central function of the AIIMS Incident Control System be the flow of adequate and appropriate information to threatened communities, government, police and other emergency services authorities. The incident controller should have overall responsibility for this.

5.2.3.2 *Our finding*

TFS has long recognised the central role of an incident information officer reporting to the Incident Controller under AIIMS. TFS has focused on its information-gathering processes through training. Improvements were also made to information systems to allow communications from controllers to be sent directly to the public. This system makes use of automated message distribution networks including e-mail, SMS, and the Internet.

DPIPWE endorsed the importance of communications noting that it, TFS and Forestry worked effectively together on Incident Management Teams. DPIPWE also noted that management of fires that threaten communities were sometimes the responsibility of its own Incident Controller.

Forestry agreed that responsibility for issuing broad-area warnings and advice on relocation should remain with a single entity.

Our assessment: 100 per cent implementation.

5.3 *Warning systems*

5.3.1 *COAG 2004*

COAG found that the states and territories did not use consistent intensity indicators when advising the public about potential and current bushfire events. This had the potential to create confusion for an increasingly mobile Australian population. The inconsistency in fire warnings was contrasted with national cyclone warnings.

In the Inquiry's view, consistently formatted bushfire warnings should be used, when providing fire ban advice and when advising local communities of the level of threat posed by a current bushfire. The Inquiry considered it would take little effort by state and territory fire authorities to standardise fire ban information provided to the public. Development of a consistent current bushfire threat would be more complex and should include consideration of:

- media obligations to broadcast warnings
- a consistent warning signal at the beginning of the advice when lives are at risk or there is a major threat to property
- advice of the location, size and intensity of the bushfire threat
- expected movement of the fire front and identification of threatened communities or properties
- advice of appropriate action by residents or community members under threat.

COAG 2004 also considered Emergency Management Australia's Standard Emergency Warning signal — a siren played for a few seconds at the beginning of a critical emergency warning message on radio or television, to warn the public in the event of major emergencies, including bushfires. However, the Inquiry observed that infrequent use of the warning signal in southern Australia had led to the public being largely unaware of its significance. Also, reluctance to use the signal when local communities were threatened by bushfire had led to the signal being virtually ineffective as a national warning measure. The Inquiry considered that regular use of the signal during periods of bushfire threat was warranted and should be adopted.

The Inquiry also supported an ongoing project on *Communicating Risk to Communities and Others* by BCRC.

COAG 2004 recommendation 8.5

The Inquiry endorses the recommendations on warning systems in the report *Natural Disasters in Australia*. In addition, it recommends that all fire ban advice and subsequent ‘bushfire threat warnings’ related to specific fires be conveyed consistently in all states and territories, including the use of the Standard Emergency Warning Signal when lives or property are threatened.

5.3.2 Our finding

COAG update 2007 noted that the National Emergency Management Committee was currently looking at options for the re-launch of the standard emergency warning signal.

At a state level, TFS advised that warning systems were in place and had been largely tested. TFS uses emergency warning messages in line with a national framework, other than minor differences. Also developed is an Emergency Alert Protocol for telephone-based messaging to communities at risk.

Forestry noted that warning signals are a TFS matter, but that warning signals had been rarely used in Tasmania. It also noted that the text of warnings was consistent within Tasmania but not across jurisdictions.

In summary, the COAG 2004 recommendation has been implemented in all substantial respects and we accept the TFS assessment.

Our assessment: 90 per cent implementation.

Recommendation 11

We recommend that Tasmania’s entities with responsibilities for bushfire management actively pursue national consistency of warning systems and emergency warning signals through national bodies such as the National Emergency Management Committee.

5.4 *Media protocols*

5.4.1 COAG 2004

Electronic and print media were considered to 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, radio was the fastest and most flexible medium available to fire and police agencies and had the widest coverage.

The Inquiry also noted the importance of the media providing timely and comprehensive operational information to the public during actual fire events. This information should cover the status of the fire, the response measures being taken, a realistic assessment of areas potentially at risk and preparations that members of the public can make.

At the national level, the Australian Broadcasting Corporation (ABC) had an agreement with Emergency Management Australia. Separate non-exclusive agreements existed between the ABC and agencies in Victoria and South Australia. Although a formal agreement did not exist in Tasmania, a clear understanding existed that the ABC was the main provider of extensive community service announcements during a bushfire.

The Inquiry supported the continuing development of agreements and arrangements with the ABC. Relationships with commercial radio stations were also encouraged, in order to provide the widest possible delivery of emergency messages to the public.

COAG 2004 recommendation 7. 1

... 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.

5.4.2 Our finding

TFS has a formal, non exclusive, Memorandum of Understanding with the ABC to facilitate the distribution of emergency warnings and community information during bush fires. This agreement was signed by the ABC and TFS in November, 2004 and acknowledges the role of the ABC as the primary agent for the distribution of information.

Similarly, DPEM had a non-exclusive information distribution agreement with the ABC. This agreement sought to ensure a ready, reliable and timely facility to communicate messages to the public regarding major emergencies.

TFS and DPEM were also developing agreements with commercial broadcasting organisations in Tasmania to facilitate the delivery of emergency information to the general public. Documents have been

presented to major broadcasting organisations for comment and arrangements were tested during the 2009–10 bush fire season.

Our assessment: 90 per cent implementation.

5.5 *'Prepare, stay and defend or leave early' policy*

5.5.1 *COAG 2004*

COAG 2004 recognised that the question of allowing people to decide whether to go when confronted by a major bushfire threat or to stay with their home or property was contentious in the community and among emergency agencies.

However, COAG 2004 noted that a 2001 AFAC position paper advocating 'Prepare, stay and defend or leave early' had the support of police commissioners with the exception of Queensland. AFAC's approach was based on the idea that people have an excellent chance of surviving the fire and saving their home when they:

- have properties that are well prepared and defensible
- are fit and mentally prepared
- take shelter in their homes while the fire front is passing.

COAG 2004 also noted that deciding to go early rather than stay and defend is also a valid response to a bushfire threat. On the other hand, evacuations during the approach of a bushfire are unsafe and greatly increase the risk of death or injury for residents and fire, police and emergency services personnel.

The Inquiry considered that an established policy position such as 'Prepare, stay and defend or leave early' was necessary to enable fire, police, emergency services personnel and the community to make plans for the event a bushfire. COAG 2004 also emphasised the importance of community education and information and stressed that relevant materials be tested with the public before hand.

COAG 2004 recommendation 8.7

... that the approach that gives residents the option of leaving when confronted by a major bushfire threat or making an informed decision to stay and defend their home or property be adopted as a common national policy and that there be:

- effective community education programs to improve preparedness
- provision of training for fire, police and emergency services personnel in the application of the policy.

5.5.2 Our finding

TFS confirmed that ‘Prepare, stay and defend or leave early’ was still AFAC’s position on evacuation. States and territories, including Tasmania, had endorsed that position and each jurisdiction had adopted the policy with local modifications. TFS and emergency services personnel had been trained in the policy.

Community education programs had been developed based on that policy. Implementation has had mixed success and it has been recognised that the provision of information in the form of brochures and the like had not been overly effective. TFS had recently developed, or was developing, a number of strategies including regular forums. In addition, a project was being implemented to prepare protection plans for every community in Tasmania. The plans were to inform brigade response planning, reassure communities about whom and what will be protected, provide a range of safe community response options and inform mitigation plans. TFS had also updated and provided comprehensive information including a downloadable pamphlet on its website.

It was noted that at the national level the ‘Prepare, stay and defend or leave early’ approach was under attack after the 2009 Victorian bushfires. The 2009 Victorian Bushfires Royal Commission concluded that the central tenets of the ‘Prepare, stay and defend or leave early’ policy remained sound, but that the Victorian bushfires had exposed weaknesses in the application of that policy, namely:

- It failed to allow for extreme fire severity as experienced on ‘Black Saturday’.
- Warnings were directed at getting people to enact their fire plans, rather than giving more specific directions or advice. But many people did not have a well-thought-out plan and were left to make their own decisions without specific direction.
- It needed to encourage people to adopt the lowest risk option available to them, which is to leave well before a bushfire arrives in the area.
- It failed to recognise people’s indecisiveness and provide fall back options, such as provision of shelters or evacuation processes.
- People needed better education and advice as to whether their house was defendable and in what circumstances.

The Royal Commission ultimately supported the policy subject to changing the slogan. It recommended that Victoria revise its bushfire safety policy within the newly developed national ‘Prepare.

Act. Survive’ framework to overcome the weaknesses outlined by the Commission¹⁰.

That recommendation has been adopted in some jurisdictions, including Tasmania. TFS was critical that the policy was often ‘dumbed down’ to ‘stay or go’, and the important elements of ‘prepare’ (both in a physical and mental sense) and the decision on ‘leaving early’ became lost in the translation.

Accordingly, TFS had been very proactive in promoting ‘Prepare Act Survive’ in its advertising and other promotional materials and no longer promoted the ‘Prepare, stay and defend or leave early’ mantra. TFS had also led development of a more detailed AFAC ‘position’.

In summary, the ‘Prepare, stay and defend or leave early’ approach has been adopted as national policy. However, that approach has been modified in the face of criticism and the ‘Prepare. Act. Survive’ framework was being promoted at the time of the audit. Despite concerns about the effectiveness of previous approaches to community education, good progress appeared to have been made in Tasmania.

Our assessment: 75 per cent implementation.

5.6 Financial support for rural fire service volunteers

5.6.1 COAG 2004

While emergency service volunteering saves governments and the community many millions of dollars a year, it is not without cost to volunteers. A typical view expressed to the Inquiry was:

Volunteers are firm in their view that they don’t want to be paid for their services because it undermines the volunteer ethos ... on the other hand, volunteers don’t want to be out of pocket.

Submissions and advice to the Inquiry overwhelmingly endorsed the approach that volunteers not bear the cost of out-of-pocket expenses. A number of fire agencies have established procedures for volunteers, to claim those expenses, although few volunteers appear to have actually made claims. Possible reasons were uncertainty as to the reimbursement process, concerns about peer perceptions of ‘robbing the system’ or, more likely, a culture of not seeking any form of payment. Recent volunteer forums had recommended that

¹⁰ To clarify, the ‘Prepare, Act, Survive’ framework does not replace the ‘Prepare, stay and defend or leave early’ policy. Rather, it is a framework for implementation of the policy.

out-of-pocket expenses that were not reimbursed be dealt with under the taxation system as tax deductions.

COAG 2004 recommendation 12.1

... that an opportunity for reimbursement of out-of-pocket expenses should be available for each volunteer rural fire agency. In addition, the Council of Australian Governments should decide on the question of tax concessions as raised in the paper prepared by PKF Chartered Accountants on behalf of the Western Australian Government.

5.6.2 Our finding

COAG update 2007 stated that the Australian Government did not support the provision of tax concessions to volunteers. It also considered the matter of recognition for volunteers to be a general issue for consideration by individual governments.

At a state level, TFS indicated that no consensus on volunteer reimbursement had emerged across agencies. Forestry noted that AFAC discontinued its efforts because of difficulties defining entitlement criteria. Nonetheless, TFS and the State Emergency Service had provided a system for recompense of volunteers' out-of-pocket expenses, although volunteers continue to be reluctant to pursue reimbursement for some expenses.

At larger incidents, state entities cater for volunteer needs, e.g. food and accommodation, so that there is little or no expense for volunteers.

Our assessment: 75 per cent implementation.

5.7 Conclusion

Incident control was well covered with solid progress towards achievement of a common system that included effective flow of information and made good use of local knowledge.

Despite TFS rating implementation of the recommendation concerning warning systems at a high level, we were not persuaded that national consistency in the form and substance of warning systems had been achieved.

In relation to media involvement, arrangements were tested during the 2009–10 bush fire season. TFS and DPEM were also developing MOUs with commercial broadcasting organisations in Tasmania to facilitate the delivery of emergency information.

The 'Prepare, stay and defend or leave early' policy appears consistent with the recommendation as revised by the 2009

Victorian Bushfires Royal Commission, but there is still more to do in the areas of education and training.

Some entities have provided a system to reimburse volunteers' out-of-pocket expenses. However, it was not clear to us that cultural impediments that might dissuade volunteers from seeking recompense had been addressed.

Overall, our assessment of bushfire operations: 85 per cent implementation.

Independent auditor's conclusion

Independent auditor's conclusion

This independent conclusion is addressed to the President of the Legislative Council and the Speaker of the House of Assembly. It relates to my compliance audit assessing whether or not a number of responsible entities were keeping up to date with contemporary knowledge and practice as this related to managing bushfires. I made this assessment by determining the extent to which recommendations from COAG's 2004 report *National inquiry on bushfire mitigation and management* ('COAG 2004') had been taken up by relevant state entities with an emergency management, land management or a fire fighting role, including:

- Tasmania Fire Service
- Department of Primary Industries, Parks, Water and Environment
- Forestry Tasmania
- Department of Premier and Cabinet
- Department of Police and Emergency Management
- Aurora Energy Pty Ltd
- Transend Networks Pty Ltd
- Forest Practices Authority
- selected local government councils, namely:
 - Hobart City
 - Launceston City
 - Circular Head
 - Waratah–Wynyard
 - Sorell
 - Break O'Day
 - Central Highlands
 - Tasman.

The audit criteria that I applied were the COAG 2004 recommendations I saw as relevant to Tasmania.

In developing the scope of this audit and completing my work, the parties interviewed provided me with all of the information that I requested. There was no effort by any party to the audit to limit the scope of my work. This Report is a public document and its use is not restricted in any way by me or by any other person or party.

Responsibility of the accountable authorities included in this audit

The accountable authorities selected for audit have differing responsibilities for managing bushfires and, therefore, for responding to the COAG 2004 recommendations. Collectively, however, the State is responsible for ensuring responsible entities were keeping up to date with contemporary knowledge and practice as this relates to managing bushfires.

Auditor-General's responsibility

In the context of this compliance audit, my responsibility was to express a conclusion as to whether respective state entities had implemented relevant recommendations from COAG 2004 as a guide to assessing whether or not they were keeping up to date with contemporary knowledge and practice.

I conducted my audit in accordance with Australian Auditing Standard ASAE 3100 *Compliance Engagements* which requires me to comply with relevant ethical requirements relating to audit engagements. I planned and performed the audit to obtain reasonable assurance as to whether or not, collectively, state entities are keeping up to date with contemporary bushfire management knowledge and practice.

My work was based on findings from audit evidence collected from respective state entities through survey questionnaires that gauged the extent to which those entities had implemented the COAG 2004 recommendations. Those surveys were backed-up by supporting data and documentation and discussions with entity staff as necessary to verify the reasonableness of entities' self-assessments. I also reviewed national follow-ups of COAG 2004 by COAG itself in 2007 and took into account some of the findings of the 2009 Victorian Bushfires Royal Commission where there was possible conflict with COAG 2004.

I believe that the evidence I have obtained was sufficient and appropriate to provide a basis for my conclusion.

Auditor-General's conclusion

Based on the audit objectives and scope, and for reasons outlined in the remainder of this Report, it is my conclusion that the levels of implementation of relevant COAG 2004 recommendations, grouped as outlined in the following table, are:

Grouped recommendations	Degree of implementation
Bushfire education	50%
Risk management and performance indicators	40%
Research and information	50%
Building in bushfire-prone areas	50%
Bushfire operations	85%

Overall, I found reasonable evidence to conclude that state entities with a responsibility for bush fire management were committed to keeping pace with contemporary knowledge and practice.

I made 11 recommendations aimed at:

- addressing the need for additional funding for, and coordination and availability of, training and professional development
- greater coordination of bushfire risk management and mitigation, recording of bushfire risk assets and the development of a state-wide position on performance indicators
- adoption by local government councils of relevant State guidelines and policies
- implementation by local government councils of measures aimed at increasing buffers, auditing impacted properties, issuing abatement notices where relevant and COAG 2004's zoning approach to fuel management
- actively pursuing national consistency of warning systems.

H M Blake
Auditor-General
21 June 2011

Recent reports

Recent reports

	Tabled	Special Report No.	Title
	Apr 2008	72	Public sector performance information
	Jun 2008	73	Timeliness in the Magistrates Court
	Jun 2008	74	Follow up of performance audits April–October 2005
	Sep 2008	75	Executive termination payments
	Nov 2008	76	Complaint handling in local government
	Nov 2008	77	Food safety: safe as eggs?
	Mar 2009	78	Management of threatened species
	May 2009	79	Follow up of performance audits April–August 2006
	May 2009	80	Hydro hedges
	Jun 2009	81	Contract management
	Aug 2009	82	Head of Agency contract renewal
	Oct 2009	83	Communications by Government and The Tasmanian Brand project
	Oct 2009	84	Funding the Tasmanian Education Foundation
	Nov 2009	85	Speed-detection devices
	Nov 2009	86	Major works procurement: Nation Building projects, Treasurer's Instructions 1299 and 1214
	Jun 2010	87	Employment of staff to support MPs
	Jun 2010	88	Public Trustee — management of deceased estates
	Jun 2010	89	Post-Year 10 enrolments
	Jul 2010	90	Science education in public high schools
	Sep 2010	91	Follow of special reports: 62–65 and 70
	Oct 2010	92	Public sector productivity: a ten-year comparison
	Nov 2010	93	Investigations 2004–2010
	Nov 2010	94	Election promise: five per cent price cap on electricity prices
	Feb 2011	95	Fraud control
	Apr 2011	96	Appointment of the Commissioner for Children
	May 2011	97	Follow up of Special Reports 69–73
	Jun 2011	98	Premier's Sundry Grants Program and Urban Renewal and Heritage Fund

Current projects

Current projects

Performance and compliance audits that the Auditor-General is currently conducting:

Title	Subject
Profitability, and economic benefits to Tasmania, of Forestry Tasmania	Evaluates Forestry Tasmania's long-term financial and economic performance.
Tourism Tasmania	Examines the effectiveness of Tourism Tasmania with respect to: promotions and advertisements; websites and implementation of planned strategies and initiatives.
Out-of-home care	Assesses the effectiveness of some aspects of the efficiency of out-of-home care as an element of child protection.
Follow up of Special Reports 75–81	Ascertains the extent to which recommendations from Special Reports 75–81 (tabled from September 2008 to June 2009) have been implemented.
Planning approvals in Tasmania	Examines the current planning approval process used in Tasmania.
TasPorts amalgamation	Evaluates whether the promised benefits of amalgamation have been realised.