

ACT Auditor-General's Office

Performance Audit Report

Bushfire Preparedness

Report No. 5 / 2013

**Justice and Community Safety Directorate
(Emergency Services Agency)**

Territory and Municipal Services Directorate

**Environment and Sustainable Development
Directorate**

July 2013



ACT AUDITOR-GENERAL'S OFFICE



PA11/12

The Speaker
ACT Legislative Assembly
Civic Square, London Circuit
CANBERRA ACT 2601

Dear Madam Speaker

I am pleased to forward to you a Performance Audit Report titled '**Bushfire Preparedness**' for tabling in the Legislative Assembly pursuant to Section 17(5) of the *Auditor-General Act 1996*.

Yours sincerely

Dr Maxine Cooper
Auditor-General
26 July 2013

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1. SUMMARY

INTRODUCTION

- 1.1 This report presents the results of a performance audit of Australian Capital Territory (ACT) Government agencies' preparedness to manage bushfire threats to the ACT.

BUSHFIRES

- 1.2 According to a report of the Council of Australian Governments:

Bushfires are an inherent part of the Australian environment. We cannot prevent them, but we can minimise the risks they pose to life, property and infrastructure, production systems, and the environment.

Australia has a large and very capable force of volunteer and career firefighters, advanced firefighting technologies, and significant firefighting resources. But the geographical scale of our country, the large and expanding rural–urban interface, and the potential for rapid bushfire development and spread under adverse weather conditions mean that individual Australians cannot rely solely on fire agencies to protect their lives and property from bushfires.¹

- 1.3 According to the Emergency Services Agency:

Bushfire has been, and remains, a powerful natural force in the Australian Capital Territory and the surrounding region. It is not a matter of 'if' bushfire will occur, it is a matter of 'when' and 'where'. It is important that the people of the ACT understand that living here means living with bushfire. Some of the most enjoyable features — the warm dry climate and natural landscapes — create some of the most severe bushfire conditions in the world.²

ACT geography and topography

- 1.4 The ACT's geography is a challenge to ACT Government agencies' management of the threat of bushfires.
- 1.5 The total area of the ACT is 236 000 hectares (2 360 km²), which consists of:
- 16 000 hectares of urban area;
 - 169 000 hectares of national parks, nature reserves;
 - 42 500 hectares of rural leasehold land; and

¹ Council of Australian Government National Inquiry on Bushfire Mitigation and Management, March 2004

² Strategic Bushfire Management Plan, October 2009, page v

- 8 500 hectares of Commonwealth land and other leases.
- 1.6 The significant amount of the ACT that is covered by national park and nature reserves (72 per cent) and rural leases (18 per cent) presents a challenge due to them being highly valued natural environments with conservation values, in close proximity to a large urban population.
- 1.7 The topography of the ACT is characterised by rugged mountains in the west and south, and plains and hill country in the north, with approximately 60 per cent of the ACT hilly or mountainous. This makes it difficult to access areas for the purpose of managing fuel loads or fighting fires when they occur.
- 1.8 The ACT is wholly surrounded by New South Wales. There is a risk that bushfires that originate in one jurisdiction may threaten the other.

ACT bushfire history

- 1.9 The Emergency Services Agency's Strategic Bushfire Management Plan states:
- Bushfires have long been part of the ACT landscape. A combination of inherently flammable vegetation, dry summers, periodic drought and lightning ignitions, has resulted in fires of small and large size and of high and low intensity, with periodic conflagrations that have covered the landscape. An understanding of the history of fire in the ACT, and south eastern Australia more broadly, is critical in informing future management decisions.³
- 1.10 The Emergency Services Agency's Strategic Bushfire Management Plan notes that 'since European settlement, the ACT has recorded a history of severe and damaging bushfires, with large areas burnt in the bushfire seasons of 1919-20, 1925-26, 1938-39, 1951-52, 1978-79, 1982-83, 1984-85, 2000-01 and 2002-03.'⁴
- 1.11 In 2002-03 Australia experienced a severe bushfire season, during which the 2003 Canberra bushfires occurred. The McLeod Report stated:
- On Saturday 18 January 2003 the bushfires, which had been burning in the hills to the west and south-west of Canberra for more than a week, reached the perimeter of the city. The result was widespread damage to rural properties, parks and forests, houses and urban infrastructure, estimated at approximately \$300 million. Tragically, four people died.⁵
- 1.12 The Emergency Services Agency considers that the effect of the January 2003 bushfires in the ACT was 'the most serious since the ACT was established'.⁶

³ Strategic Bushfire Management Plan, October 2009, page 8

⁴ Strategic Bushfire Management Plan, October 2009, page 8

⁵ Report of the McLeod Inquiry into the Operational Response to the January 2003 Bushfires in the ACT, Aug 2003

⁶ Strategic Bushfire Management Plan, October 2009, page 8

1.13 The 2003 Canberra bushfires, which were part of a severe fire season across much of Australia, were a catalyst for a range of reforms and additional measures put in place by the ACT Government and ACT Government agencies.

ACT Government actions since 2003

1.14 There has been a significant amount of activity and reforms in the ACT since the 2003 bushfires. These include:

- a number of reports and inquiries into the 2003 bushfires, including the Doogan Inquiry and McLeod Inquiry;⁷
- the passing of the *Emergencies Act 2004*, which established the position of the Emergency Services Agency Commissioner, who is responsible for the coordination and strategic management of the Emergency Services Agency, and clarified roles and responsibilities of the different services within the Emergency Services Agency (e.g. ACT Rural Fire Service and ACT Fire and Rescue);
- an increase in ACT Government revenue funding to the Emergency Services Agency since its establishment in 2004-05 year, from \$44.8 million to \$104.3 million, that is a 133 percent increase;
- the implementation of Community Fire Units in the ACT;
- an upgrade of Emergency Services Agency facilities and equipment, including:
 - a new headquarters at Fairbairn;
 - a new multipurpose training centre at Hume;
 - construction of a heli-base and hangar facility to support rural fire aviation operations (completed in 2010);
 - upgrades of ACT Rural Fire Service sheds at Rivers, Jerrabomberra and Molonglo Brigades;
 - a new ACT Rural Fire station for the Tidbinbilla Brigade (completed in August 2012); and
 - investment in the ACT Rural Fire Service fleet, including 11 new heavy tankers, three new medium tankers and four additional command vehicles.

Community awareness and responsibility

1.15 The importance of community awareness of the threat of bushfires has been highlighted in many reports, including the Victorian Bushfires Royal Commission⁸

⁷ The Canberra Firestorm: Inquests and Inquiry into Four Deaths and Four Fires between 8 and 18 January 2003 (the Doogan Report) and Report of the McLeod Inquiry into the Operational Response to the January 2003 Bushfires in the ACT (the McLeod Report)

⁸ Victorian Bushfires Royal Commission The Fires and Fire-Related Deaths Final Report, July 2010

and McLeod inquiry⁹ reports. Although this report is focused on Government agencies' activities to manage the threat of bushfires to the ACT, the community must also take responsibility. Government agencies have a responsibility to inform and engage with the community to place the community in the best position possible to manage the threat of bushfires.

AUDIT OBJECTIVE

- 1.16 The objective of this performance audit was to provide an independent opinion to the Legislative Assembly on the effectiveness of the ACT Government's approach to bushfire preparedness.
- 1.17 The Government's approach is guided by the Strategic Bushfire Management Plan, which is developed by the Emergency Services Agency. This plan includes the key elements of research, prevention, preparedness, response and recovery. This audit is focused on prevention and preparedness. In particular, the Audit Office has considered the ACT Government's approach to managing bushfire hazards, its work to support the community's preparedness, and its progress in developing its capabilities since the January 2003 bushfires.

CONCLUSIONS

- 1.18 The audit conclusions drawn against the audit objective are set out below.

The ACT Government's bushfire prevention and preparedness activities are informed by legislation and strategic and operational plans. They involve activities to manage fuel loads and develop infrastructure to assist in suppressing bushfires, engage with and raise awareness within the community and maintain a bushfire-fighting capability. While this approach positions the ACT Government and community to meet the challenge of living in an environment that will inevitably have bushfires, there are shortcomings which present a risk to their effectiveness.

Bushfire management governance (Chapter 2)

The ACT Government has a robust governance and planning framework for its bushfire management activities. This includes the *Emergencies Act 2004* which defines responsibilities and sets the context for key plans, the whole-of-government five-year Strategic Bushfire Management Plan, Regional Fire Management Plans and bushfire operational plans for individual land managers.

Notwithstanding the strength of the governance framework, there is a need to review the Justice and Community Safety Directorate and the Territory and Municipal Services Directorate's strategic and accountability indicators for bushfire management activities.

⁹ Report of the McLeod Inquiry into the Operational Response to the January 2003 Bushfires in the ACT, Aug 2003

Planning processes and plans guiding bushfire preparedness (Chapter 3)

The Emergency Services Agency leads in the development of the important, over-arching whole-of-government five-year Strategic Bushfire Management Plan. Regional Fire Management Plans and bushfire operational plans for individual land managers support the Strategic Bushfire Management Plan. While these provide a sound basis for bushfire management in the ACT and are an improvement on what was in place prior to the 2003 bushfires, there are shortcomings in the plans and their supporting processes which impair their effectiveness.

Processes used in the preparation of the 2009 Strategic Bushfire Management Plan met the requirements of the *Emergencies Act 2004*. Most of the plan also meets legislative requirements, although there are some areas in which its content needs to be improved. Monitoring of the implementation of the plan needs to be improved.

Regional Fire Management Plans need to be reviewed more frequently and revised ‘to reflect changes in land use in the ACT, operational considerations and any advances in the knowledge and understanding of bushfire risk’. Clarity is needed on which land managers should be preparing bushfire operational plans. A National Land bushfire management framework is needed to guide bushfire management activities on National Land.

There has been a lack of governance and procedural documentation for the ACT Bushfire Council. In response to this a terms of reference was developed by the Council with the support of the Emergency Services Agency and endorsed at a Council meeting on 3 July 2013.

Territory and Municipal Services Directorate bushfire management activities (Chapter 4)

The Territory and Municipal Services Directorate’s bushfire management activities are important to bushfire preparedness. The Directorate’s Bushfire Operations Plan, which covers at least 72 per cent of the ACT, is strategically critical.

Implementation of the Bushfire Operations Plan generally meets legislative and other governance requirements and times for producing this plan more than meet minimum requirements.

While the Directorate has made some significant achievements in recent years in planning and implementing its Bushfire Operations Plans, only limited assurance can be given on whether these collectively are managing the overall risk of bushfire in the ACT. Information is needed on how the cumulative achievements of the Bushfire Operations Plans relate to, and contribute to, the bushfire management outcomes sought in the Strategic Bushfire Management Plan and the Regional Fire Management Plans.

Community engagement (Chapter 5)

The management of the threat of bushfires is a shared responsibility, involving community members and the ACT Government. Requirements for and expectations on the ACT rural community with respect to bushfire preparedness are unclear, including the extent to which individual rural leaseholders (as land managers) are responsible for preparing bushfire operational plans. The Emergency Services Agency and the Territory and Municipal Services Directorate have limited oversight of the bushfire management activities of rural leaseholders. This presents the risk that some strategic areas may not

be effectively managed.

The Emergency Services Agency currently informs and engages the community through public awareness and information campaigns, and the implementation of the Community Fire Unit Program. There is an opportunity to further engage with groups in the ACT's urban community, including for example members of the community living or working in Ember Zones, who would benefit from more effective information campaigns.

Preparing for bushfire threats (Chapter 6)

Bushfire suppression refers to actions taken in responding to, and containing, bushfires. Bushfire suppression is the primary responsibility of ACT Government land managers and rural leaseholders on their own land, in partnership with the ACT Government through its overarching responsibility to protect life, property and the environment in the ACT.

ACT Fire and Rescue and the ACT Rural Fire Service (including the Parks Brigade in the Territory and Municipal Services Directorate) are primarily responsible for responding to bushfires. The ACT Rural Fire Service (including the Parks Brigade) are continuously improving their capability to respond to bushfires. However, there are some shortcomings in establishing a statement of the strategic bushfire capability to manage bushfire risks, developing competency and training programs, working arrangements between brigades, information capturing and sharing and assurance processes associated with firefighters' fitness and equipment readiness.

The Emergency Services Agency has continuously improved its ability to provide emergency information and alerts to the ACT community in the event of a bushfire, although there is merit in giving further consideration to testing its communication systems.

KEY FINDINGS

1.19 The audit conclusions are supported by the following findings:

ACT bushfire management governance (Chapter 2)

Legislative framework

- The *Emergencies Act 2004* is the principal legislation which shapes bushfire preparedness in the ACT. It establishes the strategic and governance framework for the ACT's overall management and response to bushfire threats. The accountabilities of the various services in the Emergency Services Agency are defined in this Act. The *Emergencies Act 2004* consolidated all previous emergency legislation in the ACT including the *Bushfire Act 1936*.

Agency responsibilities

- A number of ACT Government agencies have responsibilities with respect to bushfire prevention and preparedness. The Emergency Services Agency is principally responsible for the ACT Government's preparation and response to bushfires. The Emergency Services Agency includes the ACT Fire and Rescue and the ACT Rural Fire Service. As the land manager for approximately 72 percent of

the ACT, the Territory and Municipal Services Directorate is responsible for managing the threat of bushfire on its own lands. The Environment and Sustainable Development Directorate has policy and administrative responsibilities for nature conservation, land use and leases and licences.

- The division of responsibilities between the ACT Rural Fire Service and ACT Fire and Rescue is based on the location (or potential location) of a fire threat. ACT Fire and Rescue is responsible for operational planning for fire (bushfire or otherwise) in the Built Up Area and operational planning, in consultation with the ACT Rural Fire Service, for fire in the Bushfire Abatement Zone. The ACT Rural Fire Service is responsible for operational planning, in consultation with ACT Fire and Rescue, for fire outside the city area and fire response in rural areas. The *Emergencies Act 2004* intends that the services will consult and co-operate. This is particularly important given the extensive interface between rural and urban areas.
- The ACT Bushfire Council has been a part of the bushfire management governance arrangements in the ACT for over 75 years. It is primarily an advisory body to the Minister.

Plans guiding bushfire prevention and preparedness

- The ACT Government's bushfire prevention and preparedness activities are guided by the Strategic Bushfire Management Plan, Regional Fire Management Plans and bushfire operational plans.

Agency accountability for performance

- ACT Government agencies report performance against strategic and accountability indicators in their annual reports and budget papers. The Emergency Services Agency's performance is reported in the Justice and Community Safety Directorate's annual report.
- In 2011-12 the Audit Office found issues with respect to three of the seven bushfire management-related accountability indicators in the Directorate's Statement of Performance:
 - desktop audit of bushfire operational plans;
 - field assessment of bushfire operational plans; and
 - percentage of staff and volunteers trained in AIIMS awareness or equivalent Incident Management System training.
- The 'desktop audit of bushfire operational plans' was undertaken on 19 September 2012, following meetings between Emergency Services Agency and Audit Office staff. While it technically occurred and therefore could be recorded as completed, the audit occurred three months after the end of the 2011-12 financial year in which activities being audited should have been implemented. A late audit presents the risk that activities which may need to be implemented are not detected in a timely manner. It would be better to audit

- the implementation of bushfire operational plans in a systematic and timely manner.
- Records for justifying performance against the indicator ‘field assessment of bushfire operational plans’ were inadequate and not able to be independently verified. The Audit Office qualified this accountability indicator. This was a concern as this is a key independent process that holds the Territory and Municipal Services Directorate’s delivery of its Bushfire Operations Plan to account.
 - The ‘field assessment of bushfire operational plans’ indicator has been interpreted by the Emergency Services Agency as relating to the Territory and Municipal Services Directorate’s Bushfire Operations Plan only, and not to the bushfire operational plans of other land managers. While it is recognised that the largest landholder in the ACT is the Territory and Municipal Services Directorate, there was a risk that the Emergency Services Agency was not able to determine if bushfire operational plans for all strategically important areas are being prepared and implemented.
 - The Emergency Services Agency has conducted a review of its strategic and accountability indicators. The strategic and accountability indicators have been revised twice since 2011-12. The way that the indicators have been expressed, including what the accountability indicator is precisely measuring and the numerical target associated with the indicator, has changed each year since 2011-12.
 - There is now greater clarity on the accountability indicators and what they are measuring. The indicators are also more achievable. The review of bushfire operational plans indicator is now clearly restricted to bushfire operational plans prepared by ACT Government directorates. The field assessment of bushfire operational plans indicator is now restricted to access management upgrade and hazard reduction burn activities identified in ACT Government directorate bushfire operational plans. The Farm FireWise indicator does not seek to measure whether rural properties actually adopt the Farm FireWise program, but only whether non-participants have been approached about participating.
 - The Territory and Municipal Services Directorate reports on its bushfire management activities through a single accountability indicator: ‘implement activities identified under the bushfire operational plan’. This indicator is all-encompassing and does not facilitate transparency with respect to whether or not the types of activities have or have not been undertaken, whether the same types of activities each year are not being achieved, or whether or not activities not undertaken were a higher priority or significant.

Planning processes and plans guiding bushfire preparedness (Chapter 3)

The Strategic Bushfire Management Plan

- The *Emergencies Act 2004* provides for the preparation of five-year Strategic Bushfire Management Plans by the Emergency Services Agency. The first Plan was implemented in January 2005. Following a review of its operation, the

second Plan was approved in October 2009. The processes for the preparation of the 2009 Strategic Bushfire Management Plan met the requirements of legislation.

- Subsection 72(2) of the *Emergencies Act 2004* provides a comprehensive list of requirements for the content of the Strategic Bushfire Management Plan. The Strategic Bushfire Management Plan meets the majority of these requirements, except for a statement of resources needed to meet the objectives of the plan and the inclusion of a list of privately-owned assets of public interest that are vulnerable to bushfire.
- The Emergency Services Agency established an inter-agency Strategic Bushfire Management Plan Implementation Working Group to monitor the implementation of the plan. Recently the group has met infrequently and its meetings have been poorly attended. The Group has had limited effect.
- The Emergency Services Agency's reporting on the Plan has not been based on required audit and compliance activity, and has not been coordinated with the ACT Bushfire Council or communicated to the ACT community as originally intended.

Regional Fire Management Plans

- Regional Fire Management Plans set out fuel management treatments, as well as existing and planned developments to strategic access and infrastructure in the form of a set of maps. They address bushfire preparedness needs and activities for a ten-year period to 2019-20. The Plans were jointly developed by the Territory and Municipal Services Directorate and the Environment and Sustainable Development Directorate.
- The Strategic Bushfire Management Plan provides that zones (e.g. asset protection zones) and the Regional Fire Management Plans will be reviewed annually to reflect changes in land use. This has not happened. The Built Up Area and Bushfire Abatement Zone were redefined by the Emergency Services Agency Commissioner in 2012, six years after they were previously updated. The Regional Fire Management Plans have not been updated since 2009. It is important that plans are regularly updated so that they can be more effective in providing input into the development and preparation of bushfire operational plans.

Bushfire operational plans

- Bushfire operational plans should be prepared at least every two years and detail fuel management and other activities that need to be undertaken to manage the threat of bushfires. The *Emergencies Act 2004* and the Strategic Bushfire Management Plan do not sufficiently articulate requirements for bushfire operational plans. It is not possible to identify with certainty whether various land managers and land owners are non-compliant with the *Emergencies Act 2004* or the Strategic Bushfire Management Plan.
- The Emergency Services Agency does not undertake a routine assessment of all

ACT Government agencies and occupiers of Government land that have assets or a role in relation to bushfire risk. Such an approach has been considered, in consultation with the ACT Bushfire Council, but not developed for the purpose of identifying the necessity for bushfire operational plans.

- The Emergency Services Agency has not monitored compliance with bushfire operational plans, except the Bushfire Operations Plan of the Territory and Municipal Services Directorate. This Directorate's Bushfire Operations Plan, is updated and submitted for approval on an annual basis, and is monitored by the Emergency Services Agency.
- Through the Farm FireWise Program, the Emergency Services Agency provides support to rural leaseholders to help them comply with requirements for the preparation of bushfire operational plans. However, there is a lack of clarity in relation to specific requirements of rural leaseholders. The *Emergencies Act 2004* provides for the preparation of bushfire operational plans, while the Strategic Bushfire Management Plan and rural leaseholders' Land Management Agreements provide for bushfire operational plans and Bushfire Action Plans. The terms are used interchangeably and there is a lack of clarity on the requirements for rural leaseholders.
- The Strategic Bushfire Management Plan identifies a high priority requirement for the Emergency Services Agency to work with managers of National Land in developing a framework for bushfire management. While there were examples of the Emergency Services Agency and Commonwealth agencies working co-operatively together, there was no evidence of the development of a framework for bushfire management activities.

ACT Bushfire Council

- The ACT Bushfire Council has performed a role in the bushfire preparedness of the ACT for over 75 years. The Council was established by the *Bushfire Act 1936*. Since the introduction of the *Emergencies Act 2004*, the Council no longer has powers to take action directly to prevent or suppress bushfires. Its primary function is to advise the Minister.
- There has been a lack of governance and procedural documentation in place for the Council. This has increased the risk that the Council is ineffective in fulfilling its role and responsibilities. Draft terms of reference for the Council, prepared with the assistance of the Emergency Services Agency, were circulated at its meeting on 5 June 2013. The terms of reference were formally endorsed by the Council at a meeting on 3 July 2013.
- The *Emergencies Act 2004* requires consultation between the Emergency Services Agency and the Council over the monitoring of the Strategic Bushfire Management Plan. There has been inadequate consultation between the Emergency Services Agency and the Council over the review of the scope and effectiveness of the Strategic Bushfire Management Plan.
- The Strategic Bushfire Management Plan requires the Council to produce an annual report on bushfire preparedness. This report has been welcomed each

year by the Minister although it has not always been available by the beginning of the bushfire season. For the 2007-08 season the report was not sent to the Minister until January 2008, and for the 2011-12 season the report was not sent until 30 November 2011.

- The Strategic Bushfire Management Plan requires the Council to prepare annual audit reports that document compliance with actions identified in the Plan. To date, the Council has not prepared any audit reports and the Audit Office's review of the Council's meeting agendas and minutes for October 2009 to November 2012 did not identify any item, discussion or document that addresses this requirement.

Territory and Municipal Services Directorate bushfire management activities (Chapter 4)

Bushfire Operations Plan

- The Territory and Municipal Services Directorate produces its Bushfire Operations Plan on an annual basis, therefore more than meeting the minimum two-year standard in the Strategic Bushfire Management Plan.
- Bushfire Operations Plans for the three years from 2009-10 to 2012-13 (since the 2009 strategic bushfire management plan was agreed) generally meet the legislated requirements. These plans were discussed with the ACT Bushfire Council, and submitted to, and approved by, the Emergency Services Agency Commissioner within four months of the commencement of each year in five of the past six years.
- The Bushfire Operations Plan is an effective:
 - planning tool that encourages transparency and dialogue between different stakeholders. It is particularly effective in providing a framework for stakeholders to systematically discuss, re-prioritise and refine proposed activities; and
 - mechanism for identifying, defining and scheduling day-to-day tasks.
- However, the Bushfire Operations Plan could be improved if:
 - in reporting progress on its implementation, information was made available on how this also affected the implementation of the ACT Government's two key strategic planning mechanisms for bushfire preparedness (i.e. the Strategic Bushfire Management Plan and the Regional Fire Management Plans); and
 - financial information in the plan was routinely reconciled with that in the Territory and Municipal Services Directorate's financial management system.

Funding for the Bushfire Operations Plan

- The Strategic Bushfire Management Plan was adopted on 1 October 2009. In 2009-10 the Territory and Municipal Services Directorate allocated approximately \$8 million to implement bushfire management activities in its

2009-10 Bushfire Operations Plan.

- In January 2010, following the development of the Strategic Bushfire Management Plan and Regional Fire Management Plans in 2009 the Directorate made a budget submission for additional capital and recurrent funding for the delivery of activities under its Bushfire Operations Plan. The additional funding was for the delivery of activities that were considered ‘essential for providing a reasonable level of bushfire protection to the community and environment of the ACT.’ The initial budget submission was approved by the ACT Government, although capital funding was only approved to 2013-14. Total funding to be delivered on the basis of the 2010 budget submission was recurrent funding (\$11.006 million) covering the ten-year period and capital funding (\$3.798 million) for four years to 2013-14.
- The Directorate’s Bushfire Operations Plans include a ‘resources available’ figure, which provides an indication of expenditure associated with specific Bushfire Operations Plan activities. These figures are rough estimates made at the commencement of the year and do not distinguish between funds (and activities) carried over from previous years. Furthermore, no further consideration is given to the cost estimates set out in the Bushfire Operations Plan, either item by item or by activity type, once the Bushfire Operations Plan has been agreed and is being implemented.
- Despite the large amount of funding being invested in implementing the Territory and Municipal Services Directorate’s Bushfire Operational Plan, and the rationale in the 2010 budget submission to the ACT Government for enhancing activity levels in accordance with the Regional Fire Management Plans, the Directorate could not:
 - relate budgetary provision to expenditure to date, including activity that has been cancelled or deferred, and activities not foreseen in the ten-year plan; and
 - account for the cumulative effect of outcomes achieved and spending in relation to the ten-year goals set out in the budget submission to confirm that a ‘reasonable level of preparedness’ has been achieved.

Delivery of activities in accordance with the annual Bushfire Operations Plans

- Overall there has been a general significant upward trend in the level of Bushfire Operations Plan activity planned and implemented by the Territory and Municipal Services Directorate between 2007-08 and 2011-12. This activity is in relation to fuel load management (slashing, grazing, physical removal, chemical treatment and hazard reduction burning), roads, tracks and trails (upgrading and new construction) and infrastructure (water, signage and helipads). Success with respect to specific activities has varied, primarily due to weather conditions.
- There is a need to clarify funding for slashing. The majority of slashing accounted for has been urban amenity mowing, that is, mowing undertaken in urban areas, which has been deemed as having a fire management purpose. For example, in 2012-13, 52 per cent of the 8,018 hectares proposed for slashing was described

as urban amenity cuts. According to the Directorate's 2010 budget submission to deliver the Regional Fire Management Plans, these amenity cuts are funded by budgets elsewhere in the Territory and Municipal Services Directorate. It is not made clear in the 2010 budget submission whether the 8 000 hectares per year target includes or excludes these amenity cuts. The Audit Office cannot therefore conclude planned and implemented slashing levels meet Regional Fire Management Plans targets.

- The Directorate's Bushfire Operations Plans and the accompanying end-of-year narrative reports do not provide an adequate mechanism for reporting progress in the development of the access network. The reports are inadequate in terms of presenting a comprehensive understanding of the quantity of work undertaken (i.e. kilometres of roads, tracks and trails upgraded) and the cumulative effect on network improvement. Therefore, no reliable conclusion can be drawn about achieving the Regional Fire Management Plan access network goals in relation to the funds and timescales agreed.
- Infrastructure completion rates vary between 25 and 75 per cent of planned activities. The activities vary in scale and cost from \$2 000 for plumbing water troughs to \$250 000 for a dam. Reporting on the percentage of activities completed at year end, with no indication of the size or importance of the activity, can be misleading.

Co-operation across ACT Government agencies for prevention and preparation

- A number of areas of activity (for example, prescribed burns, infrastructure projects and fire fuel management) set out in the Territory and Municipal Services Directorate's Bushfire Operations Plan require collaboration in, and between, ACT Government agencies. While this has been particularly effective for hazard reduction burns, where it is apparent that ACT Government agencies are achieving more effective fire management and ecological outcomes, this is not the case for infrastructure projects.
- Mount Franklin Road runs for 78 kilometres from north to south in Namadgi National Park and crosses the New South Wales border at several places. It is an important strategic road for managing bushfires. In January 2011 the road was approved for construction, with the first of three construction phases due for completion in December 2012. However, the upgrade of the road has encountered major delays and increased costs associated with the management of the development application and environmental approvals process and its construction since 2006.
- The preparation of the environmental impact statement and the development application process took four years longer than originally anticipated by the Territory and Municipal Services Directorate. The Territory and Municipal Services Directorate asserts:
 - administrative costs associated with the approval process increased from an initial estimate of \$120 000 to in excess of \$850 000 over this period; and

- construction costs increased from an initial estimate of \$200 000 in 2006 for the first 42 km of upgrade to an estimate of greater than \$1.8 million based on the construction work to date.
- A range of difficulties associated with the project were apparent including the lack of a shared appreciation between ACT Government directorates at the outset of the project as to how the environmental impact statement and the development application should be managed, changes made to the project by the proponent (Territory and Municipal Services Directorate) after it had been submitted to the Environment and Sustainable Development Directorate; and unrealistic timeframes and an underestimation of the knowledge and expertise required to progress the project through the environmental assessment and development application process.
- There has since been a focus on learning from the difficulties associated with the Mount Franklin Road project. For example, work has begun on developing a pre-appraisal procedure for all of the major projects set out in the 2009 Strategic Bushfire Management Plan and Regional Fire Management Plans, with the purpose of planning for, and coordinating, the likely development application work that will be necessary.
- The development of these measures shows a willingness to learn from previous difficulties and implement practical administrative processes to achieve bushfire management objectives that are compliant with the *Planning and Development Act 2007* and the *Emergencies Act 2004*. However, progress in improving collaboration across directorates has been slow with key initiatives stalling, or being ineffectively implemented.

Community engagement (Chapter 5)

Rural land managers

- Rural leasehold land accounts for approximately 18 per cent of the ACT. It is incumbent on rural leaseholders to have effective arrangements in place to manage the threat of bushfires spreading within and across their leased land and into the urban area.
- All rural leaseholders must have a Land Management Agreement. The main objective of the Agreement is to establish appropriate management controls and practices for the lease that achieve the land management goals of both the leaseholder and the Government. Agreements are an important mechanism for balancing the priorities of leaseholders and the wider community. The Territory and Municipal Services Directorate manages the development and implementation of Agreements.
- Land Management Agreements include a section on bushfire risk management. They refer to both bushfire operational plans and Bushfire Action Plans. The distinction between the two types of plans in the Agreement is generally unclear. The lack of clarity in the Agreement, combined with the lack of clarity in the *Emergencies Act 2004* and the Strategic Bushfire Management Plan with respect to bushfire operational plans, presents a risk that compliance or enforcement

action by the ACT Government over rural leaseholders may not be undertaken effectively.

- Government agencies are not using Land Management Agreements to identify and enforce the fire management responsibilities of rural leaseholders. Approximately one-third of Agreements pre-date the introduction of the *Emergencies Act 2004* and do not reflect the fire management requirements of the legislation or, more recently, the Strategic Bushfire Management Plan.
- The Territory and Municipal Services Directorate has not maintained an up-to-date record of current Agreements and their review dates. This is a shortcoming in administration, which impairs the Directorate's ability to provide information on bushfire preparedness to the Emergency Services Agency for compliance and enforcement action over rural leaseholders.
- Officers at the Territory and Municipal Services Directorate and the Emergency Services Agency asserted that since the *Emergencies Act 2004* provides the legislative basis for requiring the establishment and implementation of bushfire operational plans by rural leaseholders, it was the responsibility of the Emergency Services Agency, through the activities of the ACT Rural Fire Service, to ensure compliance with the requirements.

Farm FireWise Program

- The Emergency Services Agency has been developing and implementing the Farm FireWise Program since 2005. It was modelled on a scheme operating in New South Wales. The Farm FireWise Program aims to enable the Emergency Services Agency to have a dialogue with rural leaseholders about improving bushfire safety and awareness and help rural leaseholders to comply with requirements of Land Management Agreements for bushfire operational plans.
- ACT Rural Fire Service officers identified and prioritised rural leaseholders for participation in the program, rather than relying on the renewal of Land Management Agreements as a trigger for assessment. By the end of 2011-12, 112 rural leaseholders (68 per cent) had completed Farm FireWise assessments, from a total of 164 rural leaseholders known to the ACT Rural Fire Service in 2005. There is a risk that the remaining 52 rural leaseholders do not have some form of Bushfire Action Plan, or bushfire operational plan, in accordance with Land Management Agreement requirements. The ACT Rural Fire Service does not prioritise rural leaseholders that are in the Bushfire Abatement Zone, which is specifically mentioned in the *Emergencies Act 2004* and Strategic Bushfire Management Plan as having a higher level of responsibility.
- The *Emergencies Act 2004* provides the Emergency Services Agency with powers in relation to compliance and enforcement activities. These include powers to undertake inspections (including the conduct of compliance audits) and give direction to rural leaseholders or land managers to comply with requirements set out in the Strategic Bushfire Management Plan, bushfire operational plans or Section 120 of the *Emergencies Act 2004* relating to fire prevention obligations of rural land owners and managers.

- No directions have been given in the last two years, and no monitoring of the implementation of actions arising from Farm FireWise assessments has occurred. Furthermore, no compliance or enforcement action has been undertaken by the Emergency Services Agency on rural leaseholder bushfire management activities since the introduction of the Farm FireWise Program in 2005. Since then, most rural leaseholders in the ACT have voluntarily been involved in the Farm FireWise Program. However its value in raising awareness and addressing bushfire risk by changing land management activity is unknown, as there is no follow-up once assessments are undertaken. The ACT Rural Fire Service considers the Farm FireWise Program to be primarily a community engagement and education program rather than a means of achieving compliance activity.
- There is a lack of clarity in the Farm FireWise Program and its relationship with Land Management Agreements. It is timely for it to be reviewed to, amongst other things, better define its purpose, to whom it applies and how it is managed.

Public awareness and information campaigns

- By virtue of the *Emergencies Act 2004*, both the ACT Rural Fire Service and ACT Fire and Rescue have responsibility for community education and awareness programs associated with bushfire management. The Emergency Services Agency Media Unit is also involved in facilitating community education and awareness campaigns.
- Each year the Emergency Services Agency prepares a Community Education Plan. Key community awareness and information initiatives undertaken by the Emergency Services Agency with respect to bushfire threats are the Bushfire Awareness campaign (*Prepare. Act. Survive.*); the Farm FireWise Program; and Community Fire Units.
- The annual Bushfire Awareness Campaign (*Prepare. Act. Survive.*) is consistent with a national approach to bushfire information and awareness-raising that was implemented after the 2009 Victorian bushfires. The campaign involves the production of a number of brochures and publications, as well as a media and events campaign that is implemented in late October each year, in time for the coming bushfire season.
- The Strategic Bushfire Management Plan specifically requires the Emergency Services Agency to identify groups or individuals with specific needs for bushfire awareness activities. The Emergency Services Agency has specifically targeted the horse agistment community with bushfire-related community information. Additionally, the Community Services Directorate has developed and implemented a broader community awareness campaign associated with preparation for emergencies (not only related to bushfires), through which it has sought to specifically engage with vulnerable members of the ACT community.
- A group of the ACT community that arguably has a specific need for further information are those residents within the Ember Zones. Ember Zones are identified as ‘those urban areas and rural villages specifically identified in the Fire

Management Zoning Maps as subject to a higher level of bushfire risk'. The ACT Community Implementation Plan component of the Strategic Bushfire Management Plan specifically mentions members of the community within Ember Zones as needing to undertake specific actions. In March 2013 ACT Fire and Rescue instigated a community engagement strategy through which it intends to more effectively engage with people in Ember Zones through Community Fire Units.

Community Fire Units

- Section 47 of the *Emergencies Act 2004* provides for the establishment of community fire units by ACT Fire and Rescue. In March 2013 there were 50 Units with approximately 1 086 members across the ACT. A Unit has between eight and 30 members and operates in a designated area of 50 to 80 homes. Each Unit is supplied with a single, distinctive yellow trailer by ACT Fire and Rescue, which is to be placed in an accessible location within the Unit's area of responsibility.
- There is a lack of key governance and administrative documentation associated with the Community Fire Unit program which impairs the management of the program. There are no strategic plans, business plans or other plans associated with the program, nor are there any objectives or key performance indicators associated with the program. The objects and functions in the *Emergencies Act 2004* provide a useful indication of the purpose of the Community Fire Units, but these high-level ideals are not supported by tangible operational objectives.
- Community Fire Unit members are supported by ACT Fire and Rescue in a number of ways, including the provision of training, protective clothing and equipment, stores and equipment for the trailers, and half-yearly program meetings, which represent an opportunity for Unit representatives (elected by their peers) to meet with ACT Fire and Rescue personnel to discuss the program and its implementation.
- For many years, however, ACT Fire and Rescue has maintained inconsistent documentation associated with the training and equipping of members of the Units. ACT Fire and Rescue could not, with any certainty, identify the capability of the Community Fire Units in terms of number of active participants and whether they had participated in relevant training; and whether equipment and stores were available and being maintained.

Preparing for bushfire threats (Chapter 6)

ACT Government resources for bushfire suppression

- Government resources for suppressing bushfires includes 348 ACT Fire and Rescue officers (most of whom are able to be deployed to bushfire duties), 1 086 Community Fire Unit volunteers (all of whom are able to be deployed to bushfire duties within a defined boundary in the urban-rural interface in Ember Zones), the ACT Rural Fire Service (a full-time paid staff of 13 and between 370 and 550 unpaid volunteers from the community in eight brigades) and the ACT Rural Fire Service Parks Brigade (a part-time, paid service of between 140 and 180 officers

from the Territory and Municipal Services Directorate). ACT Fire and Rescue have responded to more bushfire and landscape fires than any other service.

- There have been difficulties between the ACT Rural Fire Service and the Territory and Municipal Services Directorate in accepting each other's roles and responsibilities. The problem is most clearly reflected in the inability of the ACT Rural Fire Service and the Territory and Municipal Services Directorate to reach formal agreement on interagency co-operation through the review and signing of the Memorandum of Understanding. The latest Memorandum of Understanding agreed by both agencies was in November 2007. While multiple versions of draft Memoranda of Understanding have been produced for 2008-09, 2009-10 and 2012-13, these have remained in draft and unsigned. For the 2012-13 year, a first draft was produced in August 2012 and a sixth draft by February 2013. In June 2013, the Audit Office was provided with a draft, which has not been signed by either agency.
- In July 2012, the Emergency Services Agency Commissioner prepared a Concept of Operations Plan for bush and grass fires in the ACT. The Concept of Operations Plan sets out in detail the principles for responding to, and managing, bush and grass fires in the ACT. It provides detail and clarity in relation to command and control matters between the different services of the Emergency Services Agency and is a significant improvement on earlier administrative arrangements.

ACT Rural Fire Service capability

- The Emergency Services Agency has adopted the term 'strategic bushfire capability', rather than 'standard of fire cover' for bushfire risks in the ACT. While it keeps under review its capability, it has not developed a statement of its strategic bushfire capability for addressing bushfire risks.
- The ACT Rural Fire Service has not established a strategic bushfire capability. Establishing a pre-determined standard is important as it provides a target level of service upon which to plan resources. This includes the location, number and type of appliances, the desirable level of volunteering and the need for specific roles, skills, experience and competencies. In the absence of a current statement of the strategic bushfire capability that is required for the ACT, which should lead to a model of service delivery, it is not possible for the ACT Rural Fire Service, or the Audit Office, to provide assurance that there are adequate suppression resources available in the ACT Rural Fire Service to meet the needs of the ACT.
- In the absence of a strategic bushfire capability, the ACT Rural Fire Service has modelled its human resource needs on the 51 appliances in service. There is a target for the total number of volunteers, informed by a training needs analysis model, which is based on full utilisation of the existing 51 appliances. This model identifies a need for 1 139 roles to be filled across seven principal fireground functions to make best use of the ACT Rural Fire Service's 51 appliances. In December 2012 a total number of 344 roles could not be filled. This figure has fallen from 400 in June 2011.

- Greater clarity has been achieved through the Concept of Operations Plan in relation to the formation of Incident Management Teams in the event of a bushfire. In August 2012, the chief officers of the ACT Fire and Rescue and the ACT Rural Fire Service identified officers who could fulfil incident management roles from within their respective services. The Concept of Operations Plan proposes a three-year period to 2016 ‘to fill all required Incident Management Teams positions’ with officers assessed against national units of competency. However, the Emergency Services Agency has not yet identified what this requirement is. There is currently no target level of Incident Management Team capability, and therefore no means to determine how many officers need developing in what roles, and to what level.
- There have been difficulties in maintaining and accessing up to date firefighter personnel records. The ACT Rural Fire Service has a single system that provides the status of all firefighters according to fitness levels and training, but not their experience, or current and prior competencies. The system has also suffered from technical and administrative difficulties. Furthermore, there is no ACT Rural Fire Service electronic management information system that is used to capture which personnel are or were on duty in a fireground situation, in what role, where and under what conditions. Nevertheless, paper-based records could be used to provide evidence of duties performed.

Mapping information

- There have been major advances in the ACT in mapping for fire management purposes in recent years. These developments include the development of the Regional Fire Management Plans (2009), a set of pre-suppression plans that address priority locations identified in the Concept of Operations Plan (2012), territory-wide pre-suppression plans setting out conservation, heritage and key infrastructure assets for all Territory and Municipal Services Directorate managed land (2012), maps associated with 112 Farm FireWise assessments conducted for rural leaseholders and a Territory and Municipal Services Directorate led territory-wide bushfire risk assessment (2012).
- These plans have the potential to improve the effectiveness of fireground operations, assist in targeting investment and identifying accountability for the use of Government resources. However, there is an opportunity to use Farm FireWise maps more effectively. For example, information and images on restricted access, such as gateways, are not effectively stored or retrievable in a way that would best assist fire suppression effort by the ACT Rural Fire Service.

Firefighter and equipment readiness

- Bushfires are seasonal. Fire-fighting services in the ACT go through an annual pre-season preparatory phase (April to September) and a readiness phase (October to March). The Strategic Bushfire Management Plan identifies the need to ensure sufficient skilled and motivated personnel are available to meet bushfire management requirements.
- The ACT Rural Fire Service asserts that it is the only volunteer fire agency in

Australia that has minimum fitness requirements for all firefighters. Each ACT Rural Fire Service volunteer brigade administers its fitness test independently. There is no defined period from which the test must be taken, only that the test needs to be taken before the season starts. This means a test taken in the first half of the previous season could arguably be sufficient to satisfy requirements.

- In 2012-13, a total of 96 ACT Rural Fire Service volunteers and headquarters officers (19 per cent) out of a total 497 had passed a fitness test prior to 1 October. Procedures for the Parks Brigade fitness requirement are more effectively administered than the ACT Rural Fire Service volunteer brigades. A total of 91 Parks Brigade members (60 per cent) of a potential 151 identified in personnel records had passed a fitness test prior to 1 October. Consideration of firefighters that had passed the test in the previous season is likely to have yielded a higher pass rate, but the ACT Rural Fire Service's requirement was that the test be taken before the season starts.
- In addition to continuous checking of vehicles by ACT Rural Fire Service volunteers, in line with firefighter culture and training, there are arrangements in place to perform pre-season checks on all vehicles and units according to a standard checklist. There was evidence of pre-season checks being undertaken each year during the past two years. However, in 2010-11 only 8 (57 per cent) of the 14 units were checked before the season started; in 2011-12 only 7 (50 per cent) of the 14 units were checked before the season started; and in 2012-13 no units were checked before the start of the season. Within the ACT Rural Fire Service there are shortcomings in processes to confirm equipment readiness at the beginning of the season for all brigades.

Whole-of-government emergency response

- The *ACT Emergency Plan* was developed by the Emergency Services Agency and approved by the Minister for Police and Emergency Services in May 2012. The *ACT Emergency Plan* provides for the administration and maintenance of Emergency Coordination Centres in the ACT by the Emergency Services Agency and ACT Policing, either of which could be activated depending on the nature of the emergency.
- The Emergency Services Agency has established a new Emergency Coordination Centre at its headquarters at Fairbairn. The first use of the Centre was in September 2011 when a fire occurred in industrial premises at Mitchell. It has been activated on a small number of occasions since then, for flood and fire-related emergencies, as well as for exercises. The new Centre provides significantly more functionality and capacity than the Centre it replaced.
- Key roles in the Centre are outlined in an *Emergency Coordination Centre Operations Manual* (May 2012). The Emergency Coordination Centre at Fairbairn was activated in January 2013 for four days during a period of severe fire risk. The activation on each occasion was established in a timely manner, with liaison officers in attendance from Government directorates and other agencies such as ACTEW, Telstra, the National Capital Authority, and the Australian Government's Department of Defence and Attorney-General's Department.

Public warnings and emergency alerts

- The *ACT Community Communications and Implementation Plan* (2012) has been established as a sub-plan of the *ACT Emergency Plan*. The purpose of the *Implementation Plan* is to ‘detail the arrangements for effective communication by ACT Government directorates with the public and the media, before, during and after major emergencies and incidents’.
- There is a wide range of communication channels by which the Emergency Services Agency can inform the community. In the event of a bushfire threat, a number of mechanisms are available to provide information to the community. These include the Incident Alert System, media outlets, and the EMERGENCY ALERT telephone warning system. These public warning and emergency alert mechanisms are also used in incidents or emergencies other than bushfires.
- To assist in disseminating accurate and timely information to the ACT community, the Emergency Services Agency follows the principle of *Single Point of Truth (SPOT)*. The SPOT principle provides that the same single message will be disseminated through multiple channels by a single entry on a smartphone or tablet device. This eliminates the need to rewrite or manually republish the same words on multiple platforms and minimises the risk that key messages will not be conveyed accurately.
- The Emergency Services Agency advises that, should there be a failure in existing information and communication technology, particularly the Agency’s public alert, update and warning information distribution system, the Agency intends to use the ACT Government’s information and communication technology systems (the act.gov network) and, as a further backup, a Gmail email account for the distribution of information to pre-defined email addresses. There were minimal administrative procedures for testing of these systems.

RECOMMENDATIONS AND RESPONSE TO THE REPORT

- 1.20 The audit made 24 recommendations to address the audit findings detailed in this report. Six recommendations have been identified as High Priority to assist in prioritising the implementation of the recommendations.
- 1.21 In accordance with Section 18 of the *Auditor-General Act 1996*, a final draft of this report was provided to the Directors-General of the Justice and Community Safety Directorate, Territory and Municipal Services Directorate and Environment and Sustainable Development Directorate for consideration and comments. The Directors-General of the Justice and Community Safety Directorate and the Territory and Municipal Services Directorate provided an overall response.

Justice and Community Safety Directorate overall response:

The ACT Emergency Services Agency (ESA) continually strives to strengthen its relationship with the ACT community to promote resilience and understanding in order to manage the risks associated with living in the bush capital. The

approach of a shared responsibility has been a constant theme since the release of the first Strategic Bushfire Management Plan in 2004, and further developed in the current version.

The Auditor-General's report and recommendations support the ESA's commitment to build a shared responsibility by improving the resilience and capacity of both the community and the Government for bushfire preparedness.

The audit encompasses the important reforms the ACT Government has undertaken since the 2003 bushfires, which include:

- The passing of the Emergencies Act 2004 establishing the ESA and its Services, as well as the detailed requirements for a Strategic Bushfire Management Plan to underpin fire management in the Territory;*
- Significant capital funding for infrastructure including fleet replacement and enhancement, as well as provision for aircraft and heavy plant for fire suppression;*
- Equipment upgrade and enhancement, including the Territory Radio Network;*
- Enhancement of the frontline capability of rural and urban firefighters by increasing personnel and volunteer numbers, as well as the creation of specialist firefighter units such as the Remote Area Fire Teams, Community Fire Units, and the Mapping and Planning Support Group;*
- Construction of the new purpose built Headquarters facility at Fairbairn, which includes Emergency Coordination, Public Information and Incident Management Facilities; and*
- Construction of the new heli-base and hangar facility, and the multipurpose ESA training centre at Hume.*

The development of the Strategic Bushfire Management Plan (Version 2) in 2009 along with consideration of the findings of the Victorian Bushfires Royal Commission, has contributed to strengthening bushfire preparedness in the ACT with:

- improved operational doctrine across services with the development and implementation of the Concept of Operations for bush and grass fires;*
- significant collaboration in Whole-of-Government planning for periods of high fire danger;*
- improved public information and communications capability to the community through the implementation of the new ESA website and the development of the Single Point of Truth concept;*
- enhanced fuel management program;*

- major revision of the ACT Emergency Plan reflecting lessons learned from emergencies in the ACT and elsewhere in Australia; and
- amendments to the Emergencies Act 2004 to consolidate and strengthen the ESA's governance arrangements.

Recent elevated bushfire conditions in January 2013 with fires in and around the ACT and NSW resulted in the activation and implementation of the above arrangements. This demonstrated their effectiveness across the ESA and Whole-of-Government. The successful response to fires in the ACT and timely support in the surrounding NSW region is further evidence of this.

While it is important to recognise past improvements, the ESA must remain dynamic and flexible to respond to change, and seeks to continually improve its provision of bushfire management services for prevention, preparedness and response. The report provides the ESA with the opportunity to do this and to take the next steps to build on the current planning framework, compliance and operational capability.

The ESA has significantly enhanced the provision of information to the community, building a strong relationship with the local media and providing timely and accurate emergency alerts, updates and warnings through its website and increased usage of social media.

The audit process has reinforced that the governance arrangements and framework provided under the Strategic Bushfire Management Plan are sound. The ESA will maintain these arrangements as the foundation for future improvements, and more specifically in the development of the Strategic Bushfire Management Plan version 3.

Bushfire is and will remain an important issue for both the community and the Government. This report will contribute to strengthening bushfire management and preparedness in the ACT.

Territory and Municipal Services Directorate overall response:

The Directorate agrees fully with the recommendations it has been allocated and intends to work collaboratively with the Emergency Services Agency and other stakeholders towards improvement.

The Directorate also notes the recommendations allocated to the Emergency Services Agency and remains committed to working with the Agency to make the necessary improvements to achieve a high level of resilience and capacity for bushfire preparedness in the ACT.

- 1.22 In addition, the Directors-General provided responses to each recommendation. Their responses are presented after each recommendation.

Recommendation 1 (Chapter 2) - ACT Government directorate strategic and accountability indicators

The Justice and Community Safety Directorate should continue to review its strategic and accountability indicators and the Territory and Municipal Services Directorate should commence a review of its strategic and accountability indicators. The directorates should consult to develop complementary measures which better assess their bushfire management activities.

Justice and Community Safety Directorate response:

Agreed

The Emergency Services Agency (ESA) has reviewed and made changes to the Strategic and Accountability Indicators for presentation in the 2013-14 Budget papers. The ESA will work with the Territory and Municipal Services Directorate (TAMS) to further refine the indicators as necessary in order to improve the measurement and assessment of the complementary bushfire management activities.

Territory and Municipal Services Directorate response:

Both Directorates have well established protocols for communication on bushfire management matters which will facilitate the development of complementary measures.

Recommendation 2 (Chapter 3) - Statement of resources in the Strategic Bushfire Management Plan

The Emergency Services Agency should comply with the *Emergencies Act 2004* requirements for the Strategic Bushfire Management Plan by including in this Plan an explicit statement of all resources needed to meet the objectives of the Plan.

Justice and Community Safety Directorate response:

Agreed

This will be included as part of the development of the Strategic Bushfire Management Plan version 3, which has commenced.

Recommendation 3 (Chapter 3) - List of privately-owned assets in the Strategic Bushfire Management Plan

The Justice and Community Safety Directorate, in managing future amendments to the *Emergencies Act 2004*, should propose amendments which require the Emergency Services Agency to maintain information on privately-owned assets of public interest that are vulnerable to bushfire without the need to include this information in the Strategic Bushfire Management Plan.

Justice and Community Safety Directorate response:

Agreed

The ESA will raise this matter for consideration by the ACT Government.

Recommendation 4 (Chapter 3) - The Strategic Bushfire Management Plan Implementation Working Group

The Emergency Services Agency should review the operations of the Strategic Bushfire Management Plan Implementation Working Group to determine if it is the most appropriate mechanism for ‘monitoring the scope and effectiveness’ of the Strategic Bushfire Management Plan. If it is retained, ways to improve its effectiveness should be identified and implemented.

Justice and Community Safety Directorate response:

Agreed

The operation of the Strategic Bushfire Management Plan Implementation Working Group (IWG) will be reviewed. The terms of reference, membership and attendance, and reporting processes will be considered as part of the review.

Recommendation 5 (Chapter 3) - Annual progress reports on the Strategic Bushfire Management Plan

The Emergency Services Agency should undertake audits to meet the requirements in the Strategic Bushfire Management Plan for the preparation, sharing and publication of annual progress reports. Annual progress reports should be made available to the ACT Bushfire Council.

Justice and Community Safety Directorate response:

Agreed

The function of coordinating, auditing, monitoring and reviewing of the Strategic Bushfire Management Plan will be incorporated into the IWG review (see response to

Recommendation 4 above). Annual progress reports will be made available to the ACT Bushfire Council. The provision of annual progress reports to Bushfire Council is reflected in the new Terms of Reference for the Council.

Recommendation 6 (Chapter 3) - Review of fire management zones and Regional Fire Management Plans

The Emergency Services Agency should annually review fire management zones and the Territory and Municipal Services Directorate should subsequently update the Regional Fire Management Plans.

Justice and Community Safety Directorate response:

Agreed

An annual review of fire management zones and Regional Fire Management Plans (RFMP) will be undertaken by the ESA.

Territory and Municipal Services Directorate response:

Agreed

The Directorate has committed to review current Regional Fire Management Plans in co-operation with the Emergency Services Agency in 2013/14.

Recommendation 7 (Chapter 3) - Preparation and approval of bushfire operational plans (High Priority)

The Emergency Services Agency should specify preparation and approval requirements for bushfire operational plans, particularly those for lands in the Bushfire Abatement Zone.

Justice and Community Safety Directorate response:

Agreed

The ESA specified in April 2013 requirements for bushfire operational plans for all relevant ACT Directorates and corporations. The actions under this recommendation, which are linked to recommendation 15c of the audit report, will be conducted in consultation with TAMS.

Recommendation 8 (Chapter 3) - Monitoring of ACT Government bushfire operational plans

The Emergency Services Agency should develop a strategy for monitoring the development and implementation of all Government land managers' operational plans.

Justice and Community Safety Directorate response:

Agreed

The ACT Rural Fire Service (RFS) currently monitor and record TAMS bushfire operational plan (BOP) activities and will continue to do this. The ESA will review and improve governance for BOP monitoring and recording to assess the development and implementation of BOPs for all Government land managers.

Recommendation 9 (Chapter 3) - National Land bushfire management framework

The Emergency Services Agency should continue to work with National Land managers and develop a National Land bushfire management framework to address bushfire risks on National Land.

Justice and Community Safety Directorate response:

Agreed

A strategic framework for bushfire management of National Land will be developed to ensure there is a consistent approach to bushfire planning for these areas. While bushfire plans for National Land are already in place, the ESA will continue to engage and cooperate with National Land managers to enhance their plans.

Recommendation 10 (Chapter 3) - ACT Bushfire Council terms of reference

The Emergency Services Agency, in consultation with the ACT Bushfire Council, should conduct a review of the ACT Bushfire Council against its recently developed terms of reference (July 2013) within two years.

Justice and Community Safety Directorate response:

Agreed

The ESA will undertake a review of the ACT Bushfire Council against the terms of reference within two years.

Recommendation 11 (Chapter 4) - Monitoring and reporting of Territory and Municipal Services Directorate's Bushfire Operations Plan

The Territory and Municipal Services Directorate, as part of its Bushfire Operations Plan monitoring and reporting, should assess and publicly report on cumulative progress against broader outcomes identified in the Regional Fire Management Plans and the Strategic Bushfire Management Plan.

Territory and Municipal Services Directorate response:

Agreed

Systems development over the course of 2013/14 will improve the Directorate's capacity to publicly report against the Regional Fire Management Plans and the Strategic Bushfire Management Plan.

Recommendation 12 (Chapter 4) - Monitoring and reporting of Territory and Municipal Services Directorate's Bushfire Operations Plan

The Territory and Municipal Services Directorate should enhance internal monitoring of its implementation of bushfire management activities and spending under the Bushfire Operations Plan by routinely reconciling figures in this plan with those in the Directorate's corporate financial system.

Territory and Municipal Services Directorate response:

Agreed

Systems development outlined in response to Recommendation 11 will also build capacity to better monitor and report against Bushfire Operations Plans activities.

Recommendation 13 (Chapter 4) - Tracking and reporting on funds allocated and spent on the Territory and Municipal Services Directorate's Bushfire Operations Plan

The Territory and Municipal Services Directorate should annually (and on a cumulative basis) track and report on funds allocated for, and spent on, its Bushfire Operations Plan to the Minister for Police and Emergency Services.

Territory and Municipal Services Directorate response:

Agreed

Reporting will be submitted to the Minister via the Commissioner for Emergency Services.

Recommendation 14 (Chapter 4) - Across-Government project management (High Priority)

The Emergency Services Agency, the Environment and Sustainable Development Directorate and the Territory and Municipal Services Directorate should strengthen across-Government delivery of major projects in the Strategic Bushfire Management Plan and Regional Fire Management Plans by collectively:

- a) monitoring the effect of the 2011 amendments to *Planning and Development Act 2007* and identifying additional changes, if appropriate;
- b) improving information sharing;
- c) finalising the pre-appraisal procedure; and
- d) holding an annual forward planning session for capital works.

Justice and Community Safety Directorate response:

Agreed

The ESA will work closely with TAMS and the Environmental and Sustainable Development Directorate to support the effective delivery of major projects under the Strategic Bushfire Management Plan.

Territory and Municipal Services Directorate response:

Agreed

The Directorate will continue to work with the Emergency Services Agency and the Environment and Sustainable Development Directorate to ensure a timely and financially responsible approach to delivering major works.

Environment and Sustainable Development Directorate response:

Agreed

The Directorate looks forward to continued collaboration with the Territory and Municipal Services Directorate and the Emergency Services Agency to assist in the timely delivery of works supporting the Territory's preparedness for bushfire.

Recommendation 15 (Chapter 5) - Land Management Agreements (High Priority)

The Territory and Municipal Services Directorate, in consultation with the Emergency Services Agency, should improve its management of Land Management Agreements, with respect to rural leaseholders' fire management responsibilities, by:

- a) maintaining an up-to-date record of current Land Management Agreements;
- b) undertaking timely reviews of Land Management Agreements, at least every five years;
- c) clarifying responsibility for identifying and monitoring bushfire risk through Land Management Agreements; and
- d) specifying bushfire management requirements in Land Management Agreements, as required by the Emergencies Act 2004 and the Strategic Bushfire Management Plan, and aligning these with any requirements under the Farm FireWise Program (refer to Recommendation 16).

Justice and Community Safety Directorate response:

Agree

The ESA acknowledges the findings in this recommendation and will undertake to support the Territory and Municipal Services Directorate to undertake improvements with regard to recommendations 15c and 15d.

Territory and Municipal Services Directorate response:

Agreed

The Directorate has already implemented an internal review of the Land Management Agreements protocol.

Recommendation 16 (Chapter 5) - Farm FireWise Program

The Emergency Services Agency, in consultation with the Territory and Municipal Services Directorate, should review the Farm FireWise Program, including:

- a) its purpose;
- b) to whom it applies;
- c) the relationship between this Program and Land Management Agreements; and
- d) planning and implementation processes.

Justice and Community Safety Directorate response:**Agreed**

The ESA acknowledges the findings in this recommendation and will undertake to review the Farm FireWise Program. The Farm FireWise program has been a very successful engagement tool for the farmers in the ACT. Parts of the program have been replicated in other jurisdictions.

Territory and Municipal Services Directorate response:**Agreed**

This work has already commenced in co-operation with the Emergency Services Agency.

Recommendation 17 (Chapter 5) - Community Fire Unit Program

The Emergency Services Agency should improve its management of the Community Fire Unit Program by:

- a) developing governance and administrative documentation for the planning, management, administration and evaluation of the Program;
- b) reviewing and consolidating standard operating procedures and operational guidance for participants in the Program; and
- c) maintaining accurate records of activities, including training undertaken by Program participants and the issuing of stores and equipment to program participants.

Justice and Community Safety Directorate response:

Agreed

The ESA will review and consolidate the current standard operating procedures and operational guidance for participants of the CFU Program. This documentation will be collated into one document. Evaluation of the Community Fire Units (CFU) is included in the ESA Community Evaluation processes.

The ESA will continue to update its records of activities by CFU members and recording the issuing of stores and equipment based on the records captured from the 2012 internal audit of equipment.

Recommendation 18 (Chapter 6) - ACT Rural Fire Service brigades (High Priority)

The Emergency Services Agency and the Territory and Municipal Services Directorate should continue to improve working arrangements between the ACT Rural Fire Service Parks Brigade and the ACT Rural Fire Service headquarters, by:

- a) documenting the responsibilities of the Parks and Conservation Service Branch in its land management role versus Parks Brigade role and conveying this to all brigades; and
- b) updating or replacing the Emergency Services Agency and the Territory and Municipal Services Directorate 2007 Memorandum of Understanding to guide working arrangements for bushfire preparedness and suppression.

Justice and Community Safety Directorate response:

Agreed

The RFS and TAMS have developed a draft MOU, which would reflect the significant improvements in the current working relationship between the two agencies and document the responsibilities of the Parks and Conservation Service Branch in its land management roles.

Territory and Municipal Services Directorate response:

Agreed

Updating of the Memorandum is nearing finalisation and is expected to be completed by the end of July, 2013.

Recommendation 19 (Chapter 6) - 'Strategic bushfire capability' (High Priority)

The Emergency Services Agency and the Territory and Municipal Services Directorate should develop and routinely review a strategic bushfire capability for the ACT. The contribution of ACT Fire and Rescue (including the Community Fire Units) and the ACT Rural Fire Service (including Parks Brigade) should be explicitly stated.

Justice and Community Safety Directorate response:

Agreed

The Strategic Bushfire Management Plan, the ACT Territory Wide Risk Assessment and Concept of Operations for Bush and Grassfires provide the guidance by which the requirements for a strategic bushfire capability can be undertaken. The ESA will develop a framework to enable the RFS, ACT Fire & Rescue and TAMS to report their strategic bushfire capability.

Territory and Municipal Services Directorate response:

Agreed

This will be delivered under the leadership of the Emergency Services Agency.

Recommendation 20 (Chapter 6) - Competency, training and Incident Management Team capability (High Priority)

The Emergency Services Agency should:

- a) review the ACT Rural Fire Service's target for its members holding recognised units of competency, and the timeframe for achieving the target level of competency;
- b) review its training and development activities in order to meet its model of service, and the Rural Fire Service's contribution towards the ACT's strategic bushfire capability (Recommendation 19), taking into account the level of cross crewing that is feasible;
- c) continue liaising and collaborating where possible with the Parks Brigade over the Brigade planning and implementation of its training and development activity;
- d) prepare and maintain medium-term training and development plans for the ACT Rural Fire Service; and
- e) determine a target for incident management team capability and identify how this will be achieved.

Justice and Community Safety Directorate response:

Agreed

The RFS has developed a training and development capability framework, which defines and documents targets for its members holding recognised units of competency. The RFS has undertaken a needs analysis based on this framework, which underpins its training program. This will be reviewed against the ACT Strategic Bushfire Capability when developed. The ESA will also identify minimum levels of Incident Management Team requirements.

Recommendation 21 (Chapter 6) - Information capture and sharing

The Emergency Services Agency and the Territory and Municipal Services Directorate should improve information capture and sharing by:

- a) recording accurately and efficiently personnel information and capabilities in relation to bushfire management; and
- b) improving the coordination of the planning and use of bushfire preparedness maps between ACT Government agencies.

Justice and Community Safety Directorate response:***Agreed in part***

Vetrak is a recognised training and volunteer information reporting database that meets the requirement of record keeping for training activities to Registered Training Organisation standards. It is not intended to be a Human Resources (HR) management system. It is recognised that there may be some HR information that the Territory and Municipal Services Directorate would need to keep separate from RFS requirements.

The new Mobile Data Terminal system also allows tracking and recording of individual activities and the ESA will develop additional reporting from this information.

The ESA proactively coordinates the use of maps between the ESA and TAMS.

Territory and Municipal Services Directorate response:***Agreed***

Work is already underway to ensure compatibility of personnel information and training levels. The Directorate will engage with the Emergency Services Agency to ensure coordination and information sharing with regards to map preparation.

Recommendation 22 (Chapter 6) - Firefighters' fitness

The Emergency Services Agency and the Territory and Municipal Services Directorate should clarify the timing of the requirement for meeting firefighter fitness requirements, as set out in ACT Rural Fire Service operating procedures and the Territory and Municipal Directorate's Enterprise Agreement, and give priority to meeting that requirement.

Justice and Community Safety Directorate response:***Agreed***

The ESA has clarified the timing of the requirement for meeting firefighter fitness with RFS Volunteers.

Territory and Municipal Services Directorate response:

Agreed

Firefighter fitness requirements, particularly timing issues, will be articulated in a mutually agreed policy position for both the Directorate and the Emergency Services Agency.

Recommendation 23 (Chapter 6) - Fire readiness assurance

The Emergency Services Agency (ACT Rural Fire Service headquarters) should implement a system to provide assurance to the Chief Officer of the ACT Rural Fire Service that personnel and equipment readiness meets requirements.

Justice and Community Safety Directorate response:

Agreed

The RFS will include a readiness audit in the pre-season checklist.

Recommendation 24 (Chapter 6) - Testing of public information communication systems

The Emergency Services Agency should develop and test administrative procedures for the communications systems used for the distribution of public warning and emergency alerts.

Justice and Community Safety Directorate response:

Agreed

The ESA has a standard operating procedure dated 27 May 2013 called "Testing of the ESA public alert, update and warning information distribution system". The ESA agrees that a schedule for regular testing should be in place and this has now been developed and implemented.

2. BUSHFIRE MANAGEMENT GOVERNANCE

- 2.1 This chapter examines governance arrangements and in so doing describes the roles and responsibilities of ACT Government agencies with respect to bushfire management.

SUMMARY

Conclusion

The ACT Government has a robust governance and planning framework for its bushfire management activities. This includes the *Emergencies Act 2004* which defines responsibilities and sets the context for key plans, the whole-of-government five-year Strategic Bushfire Management Plan, Regional Fire Management Plans and bushfire operational plans for individual land managers.

Notwithstanding the strength of the governance framework, there is a need to review the Justice and Community Safety Directorate and the Territory and Municipal Services Directorate's strategic and accountability indicators for bushfire management activities.

Key findings

Legislative framework

- The *Emergencies Act 2004* is the principal legislation which shapes bushfire preparedness in the ACT. It establishes the strategic and governance framework for the ACT's overall management and response to bushfire threats. The accountabilities of the various services in the Emergency Services Agency are defined in this Act. The *Emergencies Act 2004* consolidated all previous emergency legislation in the ACT including the *Bushfire Act 1936*.

Agency responsibilities

- A number of ACT Government agencies have responsibilities with respect to bushfire prevention and preparedness. The Emergency Services Agency is principally responsible for the ACT Government's preparation and response to bushfires. The Emergency Services Agency includes the ACT Fire and Rescue and the ACT Rural Fire Service. As the land manager for approximately 72 percent of the ACT, the Territory and Municipal Services Directorate is responsible for managing the threat of bushfire on its own lands. The Environment and Sustainable Development Directorate has policy and administrative responsibilities for nature conservation, land use and leases and licences.
- The division of responsibilities between the ACT Rural Fire Service and ACT Fire and Rescue is based on the location (or potential location) of a fire threat. ACT Fire and Rescue is responsible for operational planning for fire (bushfire or otherwise) in the Built Up Area and operational planning, in consultation with the ACT Rural Fire Service, for fire in the Bushfire Abatement Zone. The ACT Rural Fire Service is responsible for operational planning, in consultation with ACT Fire and Rescue, for fire outside the city area and fire response in rural

areas. The *Emergencies Act 2004* intends that the services will consult and co-operate. This is particularly important given the extensive interface between rural and urban areas.

- The ACT Bushfire Council has been a part of the bushfire management governance arrangements in the ACT for over 75 years. It is primarily an advisory body to the Minister.

Plans guiding bushfire prevention and preparedness

- The ACT Government's bushfire prevention and preparedness activities are guided by the Strategic Bushfire Management Plan, Regional Fire Management Plans and bushfire operational plans.

Agency accountability for performance

- ACT Government agencies report performance against strategic and accountability indicators in their annual reports and budget papers. The Emergency Services Agency's performance is reported in the Justice and Community Safety Directorate's annual report.
- In 2011-12 the Audit Office found issues with respect to three of the seven bushfire management-related accountability indicators in the Directorate's Statement of Performance:
 - desktop audit of bushfire operational plans;
 - field assessment of bushfire operational plans; and
 - percentage of staff and volunteers trained in AIIMS awareness or equivalent Incident Management System training.
- The 'desktop audit of bushfire operational plans' was undertaken on 19 September 2012, following meetings between Emergency Services Agency and Audit Office staff. While it technically occurred and therefore could be recorded as completed, the audit occurred three months after the end of the 2011-12 financial year in which activities being audited should have been implemented. A late audit presents the risk that activities which may need to be implemented are not detected in a timely manner. It would be better to audit the implementation of bushfire operational plans in a systematic and timely manner.
- Records for justifying performance against the indicator 'field assessment of bushfire operational plans' were inadequate and not able to be independently verified. The Audit Office qualified this accountability indicator. This was a concern as this is a key independent process that holds the Territory and Municipal Services Directorate's delivery of its Bushfire Operations Plan to account.
- The 'field assessment of bushfire operational plans' indicator has been interpreted by the Emergency Services Agency as relating to the Territory and Municipal Services Directorate's Bushfire Operations Plan only, and not to the

bushfire operational plans of other land managers. While it is recognised that the largest landholder in the ACT is the Territory and Municipal Services Directorate, there was a risk that the Emergency Services Agency was not able to determine if bushfire operational plans for all strategically important areas are being prepared and implemented.

- The Emergency Services Agency has conducted a review of its strategic and accountability indicators. The strategic and accountability indicators have been revised twice since 2011-12. The way that the indicators have been expressed, including what the accountability indicator is precisely measuring and the numerical target associated with the indicator, has changed each year since 2011-12.
- There is now greater clarity on the accountability indicators and what they are measuring. The indicators are also more achievable. The review of bushfire operational plans indicator is now clearly restricted to bushfire operational plans prepared by ACT Government directorates. The field assessment of bushfire operational plans indicator is now restricted to access management upgrade and hazard reduction burn activities identified in ACT Government directorate bushfire operational plans. The Farm FireWise indicator does not seek to measure whether rural properties actually adopt the Farm FireWise program, but only whether non-participants have been approached about participating.
- The Territory and Municipal Services Directorate reports on its bushfire management activities through a single accountability indicator: ‘implement activities identified under the bushfire operational plan’. This indicator is all-encompassing and does not facilitate transparency with respect to whether or not the types of activities have or have not been undertaken, whether the same types of activities each year are not being achieved, or whether or not activities not undertaken were a higher priority or significant.

LEGISLATIVE FRAMEWORK

Emergencies Act 2004

- 2.2 The *Emergencies Act 2004* is the principal legislation which shapes bushfire preparedness in the ACT. It establishes the strategic and governance framework for the ACT’s overall management and response to bushfire threats. The accountabilities of the various services in the Emergency Services Agency are defined in this Act. The Act consolidated all previous emergency legislation in the ACT including that in the *Bushfire Act 1936* which has been repealed.
- 2.3 The *Emergencies Act 2004* provides for *inter alia*:
- the preparation and implementation of the Strategic Bushfire Management Plan, including requirements for the plan and processes to be followed for its implementation;

- the preparation and implementation of bushfire operational plans by land managers within the ACT, including processes for their review by the Emergency Services Agency;
 - fire prevention activities, including inspection and investigation activities, which give the Emergency Services Agency the opportunity to enter and examine property for the purpose of examining compliance, as well as the ability to issue enforcement notices; and
 - fire response and control activities, including definitions, roles and responsibilities for fires in built-up areas and rural areas, including actions that may be taken.
- 2.4 Specific requirements of the *Emergencies Act 2004* are identified and discussed throughout this report.

Other legislation

- 2.5 The *Planning and Development Act 2007* (ACT), *Nature Conservation Act 1980* (ACT) and *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth) affect land manager responsibilities and therefore fire management.
- 2.6 The ACT Planning and Land Authority's administration and enforcement of land planning and building regulations is outside the scope of this audit. The ACT Planning and Land Authority, in the Environment and Sustainable Development Directorate, administers the 2008 bushfire code building regulations,¹⁰ which are complementary to the Strategic Bushfire Management Plan.

ACT GOVERNMENT AGENCY RESPONSIBILITIES

- 2.7 A number of ACT Government agencies have responsibilities with respect to bushfire management and preparedness.

Emergency Services Agency

- 2.8 The Emergency Services Agency is an executive agency of the Justice and Community Safety Directorate. The Emergency Services Agency serves the Government and the ACT community through its responsibility for protecting life, property and the environment.¹¹
- 2.9 The Emergency Services Agency operates by virtue of the *Emergencies Act 2004*. It has four operational services:
- ACT Ambulance Service;

¹⁰ Planning for Bushfire Mitigation General Code NI 2008-27

¹¹ Justice and Community Safety Directorate Annual Report 2011-12 Section A, page 115

- ACT Fire and Rescue;
 - ACT Rural Fire Service; and
 - ACT State Emergency Service.
- 2.10 The four operational services are supported by the Emergency Services Agency Support Services Branch, which includes *inter alia*:
- the Triple Zero Communications Centre;
 - Emergency Management, Risk and Spatial Services business unit; and
 - Media and Community Information business unit.
- 2.11 Section 7 of the *Emergencies Act 2004* provides for the appointment of the Emergency Services Agency Commissioner, who is responsible for *inter alia* ‘the overall strategic direction and management of the emergency services’ and ‘community education and improving community preparedness for emergencies’.

ACT Rural Fire Service and ACT Fire and Rescue

- 2.12 Section 52 of the *Emergencies Act 2004* provides for the main function of the ACT Rural Fire Service, which is ‘to protect and preserve life, property and the environment from fire in rural areas.’ Accordingly, the ACT Rural Fire Service is responsible for:
- operational planning, in consultation with ACT Fire and Rescue, for fire outside the city area, including fire preparedness; and
 - fire response in rural areas, other than a fire that is in a building.
- 2.13 Section 44 of the *Emergencies Act 2004* provides for the main function of ACT Fire and Rescue, which is ‘to protect and preserve life, property and the environment from fire in built-up areas.’ Accordingly, ACT Fire and Rescue is responsible for:
- operational planning for fire in the Built Up Area, including fire preparedness; and
 - operational planning, in consultation with the ACT Rural Fire Service, for fire in the Bushfire Abatement Zone, including fire preparedness; and
 - fire response in the Built Up Area.
- 2.14 The *Emergencies Act 2004* provides for a division of responsibilities between the ACT Rural Fire Service and ACT Fire and Rescue on the basis of the location (or potential location) of a fire threat. This distinction, and its operational implications, is discussed in Chapter 6. Notwithstanding the division of responsibilities, the Act intends that the services will consult and co-operate. This is particularly important given the topography of Canberra and the ACT and the extensive interface between rural and urban areas.

Territory and Municipal Services Directorate

- 2.15 The ACT Parks and Conservation Service Branch, in the Territory and Municipal Services Directorate, has a significant responsibility as a land manager in the ACT and New South Wales (Googong Foreshores). As a land manager, the Territory and Municipal Services Directorate has a legal responsibility, under the *Emergencies Act 2004*, to manage bushfire fuels on its land and limit the spread of fire on and from its lands. The Territory and Municipal Services Directorate implements an ongoing program of bushfire management activities in the parts of the ACT for which it has responsibility. The Territory and Municipal Services Directorate implements its bushfire fuel management program under its Bushfire Operations Plan, which is discussed in Chapter 4.
- 2.16 The Territory and Municipal Services Directorate has a dedicated fire management and fire suppression capability through its Parks and Conservation Service Branch workforce. The Parks and Conservation Service Branch has approximately 168 staff,¹² most of whom have firefighting duties in addition to other responsibilities and who may be called upon as part of the ACT Rural Fire Service to fight fires.

Environment and Sustainable Development Directorate

- 2.17 The Environment and Sustainable Development Directorate includes business units with nature conservation and land planning responsibilities. Nature conservation responsibilities reside within the Nature Conservation Policy Branch and the Conservation, Planning and Research section which transferred to the Environment and Sustainable Development Directorate from the Territory and Municipal Services Directorate in 2011. In the Conservation, Planning and Research section there are specialists who provide conservation advice on the effects of wildfire and bushfire hazard reduction activity.
- 2.18 The ACT Planning and Land Authority is a business unit of the Environment and Sustainable Development Directorate. It manages the administration of leases within the ACT including rural leases, preparing lease agreements, and licenses for unleased land. However, it does not have a role in monitoring leaseholders' bushfire management responsibilities.

Other ACT Government agencies

- 2.19 A range of agencies are involved in planning and delivering bushfire response and recovery activities, which are not within the scope of this audit.

¹² Full time equivalent figure as at March 2013 supplied by TAMS

ACT Bushfire Council

- 2.20 Section 130 of the *Emergencies Act 2004* provides that the ACT Bushfire Council is responsible for advising the Minister for Police and Emergency Services about matters relating to bushfires.
- 2.21 Section 10 of the *Emergencies Act 2004* requires the Emergency Services Agency Commissioner to ask for, and consider, the ACT Bushfire Council's advice before exercising a function in relation to bushfires prescribed by regulation. The Commissioner may ask for the Council's advice in the exercise of any other functions relating to bushfires.
- 2.22 The ACT Bushfire Council has eleven members who are appointed by the Minister for a term of not longer than four years. The Council is to be comprised of members with skills or experience in a range of disciplines such as fire sciences, land management, fighting fires in built-up and rural areas and Indigenous land management. It also represents rural leaseholder and community interests.
- 2.23 Administrative support and facilities for the ACT Bushfire Council are provided by the Emergency Services Agency (by virtue of Section 131 of the *Emergencies Act 2004*). Section 133 of the *Emergencies Act 2004* provides that the ACT Bushfire Council must meet at least every two months. The Act also provides additional requirements with respect to the nature of meetings and associated procedures, including voting procedures and the requirement to keep minutes.

PLANS GUIDING BUSHFIRE PREPAREDNESS

- 2.24 The ACT Government's bushfire preparation and preparedness activities are guided by plans which include:
 - the Strategic Bushfire Management Plan;
 - Regional Fire Management Plans; and
 - bushfire operational plans.
- 2.25 The development, purpose, implementation, monitoring, review and progress reporting on these plans is set out in legislation, and in agreed guidance developed by the agencies responsible for implementing and overseeing bushfire preparedness.
- 2.26 Other plans that are relevant in the overall governance framework for bushfire management include Bushfire Action Plans required under Land Management Agreements. Land Management Agreements have been appended to all rural leases since 2000.
- 2.27 The following sections set out the purpose of these plans in line with legislation and agreed guidance. Chapter 3 and Chapter 4 of this report discuss the effectiveness of governance and implementation arrangements for these plans.

Strategic Bushfire Management Plan

- 2.28 Sections 72 to 85 of the *Emergencies Act 2004* provide for the preparation, content, monitoring, annual reporting and review of a Strategic Bushfire Management Plan. The Strategic Bushfire Management Plan is a Disallowable Instrument and is the responsibility of the Emergency Services Agency Commissioner to prepare.
- 2.29 The Strategic Bushfire Management Plan ‘has the goal of identifying the necessary strategies and actions which the ACT Government and the community of the ACT will implement to enhance our ability to suppress bushfires and reduce their consequences.’ The Plan is prepared for the ACT Government and the community i.e.:
- the ACT Rural Fire Service, ACT Fire and Rescue, support agencies and ACT Policing;
 - ACT Government agencies that support the community and emergency services;
 - land managers, including ACT Government agencies and rural leaseholders; and
 - urban and rural residents.¹³
- 2.30 The Strategic Bushfire Management Plan provides for *inter alia*:
- objectives and strategies – specific objectives and strategies to reduce bushfire risk, including strategies for research and monitoring, prevention, preparedness, response and recovery;
 - fire management zoning – description of bushfire management zones that guide prevention and preparedness activities;
 - implementation plans for the ACT community and ACT Government, describing actions which the community should, and the Government must, implement; and
 - resource requirements – the resources required to implement the strategies in the Plan.
- 2.31 The first version of the Strategic Bushfire Management Plan under the *Emergencies Act 2004* was approved in January 2005. The current version of the Plan was approved in October 2009.
- 2.32 The Strategic Bushfire Management Plan includes an ACT Government Implementation Plan, which contains 19 strategies and 73 actions under the five elements of the bushfire management framework:
- Research, information and analysis;

¹³ Strategic Bushfire Management Plan, October 2009, page v

- Prevention;
 - Preparedness;
 - Response; and
 - Recovery.
- 2.33 The Strategic Bushfire Management Plan also includes an ACT Community Implementation Plan which has nine strategies and nineteen actions under the five elements of the bushfire management framework.
- 2.34 Action items in both the ACT Government Implementation Plan and ACT Community Implementation Plan are categorised as either a High or Medium priority.
- Regional Fire Management Plans**
- 2.35 Regional Fire Management Plans have been prepared as supporting documents to the 2009 Strategic Bushfire Management Plan. There are ten plans, mapped at a scale of 1:25 000, which cover all of the ACT and adjacent areas in New South Wales.
- 2.36 These plans detail proposed fuel management, access and infrastructure activities which are to be undertaken over a ten-year period. The plans show the following information:
- areas burnt and impacted by fire since 2003;
 - planned fuel load management activities (which may include hazard reduction burning, grazing, physical removal, slashing and chemical treatment);
 - how frequently hazard reduction burns need to be conducted, and areas where no hazard reduction burns should take place;
 - planned access management activities, including existing trails to be maintained at their current standard, fire trails to be upgraded, and new fire trails planned to be constructed;
 - existing fuel breaks planned to be upgraded, and new fire breaks planned to be constructed;
 - existing water points to be maintained, existing water points planned to be upgraded, and new water points planned to be constructed; and
 - existing helipads to be maintained, existing helipads planned to be upgraded, and new helipads planned to be constructed.
- 2.37 Regional Fire Management Plans are dynamic documents. The Strategic Bushfire Management Plan states that they should be reviewed annually to reflect changes that may have occurred in the preceding year.

Bushfire operational plans

- 2.38 Section 78 of the *Emergencies Act 2004* provides for the development of bushfire operational plans by some rural leaseholders (subject to further requirements in the Strategic Bushfire Management Plan). Subsection 78(5) of the Act provides that a bushfire operational plan must be reviewed and updated at least every two years.
- 2.39 The *Emergencies Act 2004* does not define the purpose of a bushfire operational plan or prescribe its content, other than to require that it is in accordance with the Strategic Bushfire Management Plan. Guidance is provided in the Strategic Bushfire Management Plan, which requires that bushfire operational plans must set out fuel load and access management activities that are consistent with Regional Fire Management Plans.

Territory and Municipal Services Directorate Bushfire Operations Plan

- 2.40 As the ACT Government's land manager for approximately 72 per cent of the ACT, the Parks and Conservation Service Branch in the Territory and Municipal Services Directorate has developed a Bushfire Operations Plan, as part of its obligations under section 78 of the *Emergencies Act 2004*.¹⁴ This plan sets out the annual activities that the Territory and Municipal Services Directorate aims to achieve to manage bushfire threats. The Territory and Municipal Services Directorate's Bushfire Operations Plan has nine sections covering a range of activities:
- fuel management (slashing, controlled burning, grazing, physical removal and treatment of fuel by chemicals);
 - access management (construction, upgrade and maintenance of trails);
 - infrastructure (such as helipad development and building water tanks);
 - equipment purchase;
 - training;
 - auditing and monitoring;
 - planning and research;
 - education; and
 - response and standby.

¹⁴ Section 78 of the *Emergencies Act 2004* provides for the preparation of bushfire operational plans by relevant land managers. The Territory and Municipal Services Directorate refers to its bushfire operational plan as the Territory and Municipal Services Directorate Bushfire Operations Plan

Fire management responsibilities in Land Management Agreements

- 2.41 Section 283 of the *Planning and Development Act 2007* sets out *inter alia* the circumstances when a Land Management Agreement is required to be prepared in relation to rural leases. The main objective of the Land Management Agreement is to establish appropriate management controls and practices for a lease that achieve the land management goals of both the leaseholder and the ACT Government.
- 2.42 Land Management Agreements were introduced as part of a new rural land policy introduced in March 2000 which provided for the implementation of 99 year rural leases in the ACT. As part of the new rural land policy, the ACT Government replaced the then Property Management Agreements with Land Management Agreements. The Land Management Agreements were intended to achieve a more flexible arrangement for managing land, which recognised the need to balance environmental objectives with practical issues associated with maintaining a viable rural enterprise. Land Management Agreements are required to address specific fire management objectives and be reviewed at intervals of no more than five years.
- 2.43 Land Management Agreements include a section on bushfire risk management. This section has requirements for those rural leaseholders in the Bushfire Abatement Zone and other specified areas to prepare and implement a Bushfire Action Plan. The agreement makes reference to the *Land (Planning and Environment) Act 1991*, the *Taskforce on bushfire fuel management practices in the ACT*,¹⁵ the *Emergencies Act 2004* and the *Planning and Development Act 2007* in support of this requirement.
- 2.44 Chapter 5 discusses Land Management Agreements in further detail, including the legislative and policy basis for the requirements relating to bushfire risk in them. Chapter 5 also considers the effectiveness of the governance arrangements relating to fire management responsibilities under Land Management Agreements.

ACT GOVERNMENT AGENCY ACCOUNTABILITY FOR PERFORMANCE

Reporting in annual reports and budget papers

- 2.45 As part of annual reporting processes, ACT Government agencies report performance against strategic and accountability indicators in their annual reports and budget papers. According to the Chief Minister and Treasury Directorate:
- strategic indicators are aimed at measuring the Government's performance against longer-term strategic outcomes which impact upon the ACT community. An agency has some accountability for performance against

¹⁵ The ACT Government's Bushfire Taskforce resulted in the Glenn Report, 1995

these indicators, although cannot be held fully responsible for achieving the specified targets, as there are external factors that will influence the result. Strategic indicators, presented in the annual budget papers, are not subject to annual audit; and

- accountability indicators are a measure of an agency's performance in providing each class of the outputs identified in the annual budget papers. These indicators are reported in the annual budget papers and may be measures of outcomes, outputs or inputs. As part of the annual financial statement audit process the Audit Office is required to form an opinion on whether the reported results are a true and fair reflection of the Directorate's performance.¹⁶

Justice and Community Safety Directorate

2.46 The Emergency Services Agency's performance is reported in the Justice and Community Safety Directorate's Statement of Performance.

Accountability indicators

2.47 In recent years the Justice and Community Safety Directorate's Statement of Performance has had seven accountability indicators related to bushfire management. The Emergency Services Agency and Justice and Community Safety Directorate have reviewed their accountability indicators in recent years. The way that the accountability indicators have been expressed, including what the accountability indicator is precisely measuring and the numerical target associated with the indicator, have changed each year since 2011-12. This has made a year on year comparison of progress against the accountability indicators difficult.

2.48 Nevertheless, the seven accountability indicators have been generally associated with:

- desktop audits of bushfire operational plans;
- field assessments of bushfire operational plans;
- the training of staff and volunteers in AIIMS (Australasian Inter-Service Incident Management System);
- volunteer levels;
- annual programs of storm and bushfire media awareness;
- rural properties adopting Farm FireWise; and
- containment of bushfires to areas of less than 5 hectares within the Bushfire Abatement Zone (BAZ) and built up areas.

¹⁶ Strengthening Performance and Accountability: A Framework for the ACT (2011)

2.49 The following table (Table 2.1) shows performance against accountability indicators from 2009-10 to 2011-12.

Table 2.1: Justice and Community Safety Directorate's Statement of Performance accountability indicators relating to bushfire management (2009-10 to 2011-12)

Accountability Indicators	2009-10		2010-11		2011-12	
	Target	Actual	Target	Actual	Target	Actual
Desktop audit of bushfire operational plans (percentage)	100	100	100	100	100	100
Field assessment of bushfire operational plans (percentage)	10	10	10	10	10	16
Percentage of staff and volunteers trained in AIIMS awareness or equivalent Incident Management System training (percentage)	60	74	60	73	75	68
Maintain or increase volunteer levels – percentage change in levels (percentage)	5	1.3	5	6	1.5	11.8
Maintain annual programs of storm and bushfire media awareness – percentage change in number of programs (percentage)	0	0	0	0	0	0
Percentage of rural properties adopting Farm FireWise (percentage) ¹⁷	50	53	65	74	65	76
Unscheduled bushfire contained to less than 5 hectares within the Bushfire Abatement Zone (BAZ) and built up areas (percentage)	100	100	100	99	100	100

Source: Audit Office compilation of information in the Justice and Community Safety Directorate's annual reports

2.50 Table 2.1 shows that the Emergency Services Agency has reported that it has generally met or exceeded most of its Statement of Performance accountability indicators in the three years to 2011-12.

2.51 As part of the annual financial statement audit process the Audit Office is required to form an opinion on whether the reported results are a true and fair reflection of the Directorate's performance. This does not include an assessment of the relevance or appropriateness of the accountability indicators.

¹⁷ Base of 147 rural leaseholders used by the ACT Rural Fire Service

- 2.52 In the review of the Justice and Community Safety Directorate's 2011-12 Statement of Performance the Audit Office found issues with respect to three of the seven bushfire accountability indicators:
- desktop audit of bushfire operational plans;
 - field assessment of bushfire operational plans; and
 - percentage of staff and volunteers trained in AIIMS awareness or equivalent Incident Management System training.
- 2.53 The desktop audit of bushfire operational plans was undertaken on 19 September 2012, following meetings between Emergency Services Agency and Audit Office staff. While it technically occurred and therefore could be recorded as completed, the audit occurred three months after the end of the 2011-12 financial year in which activities being audited should have been implemented.
- 2.54 With respect to the Emergency Services Agency 'field assessment of bushfire operation plans' accountability indicator for 2011-12, the Justice and Community Safety Directorate reported that it had achieved a result of 16 per cent compared with its target of 10 per cent. The records for justifying performance against this indicator were inadequate and could not be independently verified and therefore the Audit Office qualified this accountability indicator. This is a concern as this is the only independent process that holds the Territory and Municipal Services Directorate's delivery of its Bushfire Operations Plan to account. Furthermore, in 2011-12, the 'field assessment of bushfire operational plans' indicator was interpreted by the Emergency Services Agency as relating to the Territory and Municipal Services Directorate's Bushfire Operations Plan only, and not to the bushfire operational plans of other land managers.
- 2.55 The accountability indicator 'percentage of staff and volunteers trained in AIIMS awareness or equivalent Incident Management System training' was also problematic in that there was potential for double counting of trained staff. In this respect it was possible for a staff member of the Emergency Services Agency to also be a volunteer with one of the operational services such as the ACT Rural Fire Service. The Emergency Services Agency's claimed result of 72 percent was revised to 68 percent following the identification of this issue.
- 2.56 The problems that the Audit Office identified in the assessment of the Emergency Services Agency performance indicators, means that the systems used to measure results need to be reviewed so that accurate and independently verifiable data supports any claims about the achievement of accountability indicators.
- 2.57 Furthermore, there is no current procedure for defining what work the Emergency Services Agency is to undertake to verify or assure bushfire

operational plan activities. A procedural manual, *Guidelines for Audit and Compliance of Bushfire Prevention Activities in the ACT*¹⁸ set out a range of audit and monitoring activities to be undertaken by the Emergency Services Agency for the period 2005 to 2010. Officers were not clear about the current status of this guide or its applicability.

Revised accountability indicators

- 2.58 Since 2011-12 the Justice and Community Safety Directorate has twice reviewed and revised its accountability indicators relating to bushfire management. The Justice and Community Safety Directorate revised its accountability indicators relating to bushfire management as part of the 2012-13 ACT Government Budget (Budget Paper No.4), against which it intends to report in its 2012-13 annual report. Most recently the Justice and Community Safety Directorate has further revised its accountability indicators for reporting as part of the 2013-14 ACT Government Budget (Budget Paper No.4).
- 2.59 Key changes to the Justice and Community Safety Directorate's accountability indicators between 2011-12 and 2013-14 are as follows:
- the 'desktop audit of bushfire operational plans' indicator has been revised to 'desktop audit of ACT Government Directorate bushfire operational plans activity reports';
 - the 'field assessment of bushfire operational plans' indicator has been revised to 'field assessment of access management upgrades and hazard reduction burns identified in bushfire operational plans of ACT Government Directorates';
 - the 'percentage of staff and volunteers trained in AIIMS awareness or equivalent Incident Management System training' indicator has been revised to 'percentage of staff who have completed accredited training in AIIMS'. The associated target has been revised from 75 percent in 2011-12 to 30 percent for 2013-14; and
 - the 'percentage of rural properties adopting Farm FireWise' indicator has been revised to 'percentage of non-participating rural properties approached to implement Farm FireWise'. The associated target has been revised from 65 in 2011-12 to 33 percent for 2013-14.
- 2.60 There is now greater clarity associated with the accountability indicators and what they are measuring. However, the accountability indicators are also more achievable. For example, the review of bushfire operational plans indicator is now clearly restricted to bushfire operational plans prepared by ACT Government directorates. This appears to discount the need for the Emergency Services Agency to review bushfire operational plans prepared by other land managers, e.g. rural leaseholders. Bushfire operational plans, including land

¹⁸ ACT Rural Fire Service Guidelines for Audit and Compliance of Bushfire Prevention Activities in the ACT 2005 -2010

managers which may be required to prepare the plans, are discussed in more detail in Chapter 3.

- 2.61 Similarly, the field assessment of bushfire operational plans indicator is now restricted to access management upgrade and hazard reduction burn activities identified in ACT Government directorate bushfire operational plans. As noted in the previous paragraph, this is a significantly narrower focus than what appeared to be previously envisaged by ‘field assessment of bushfire operational plans’.
- 2.62 Furthermore, unlike previously the Farm FireWise indicator does not seek to measure whether rural properties actually adopt the Farm FireWise program, but only whether non-participants have been approached for participation. The Farm FireWise Program is discussed in detail in Chapter 5.

Strategic indicators

- 2.63 The Justice and Community Safety Directorate has a number of strategic indicators relevant to bushfire management and preparedness against which it reports on an annual basis in its annual reports and budget papers. Similar to earlier comments on accountability indicators, the way that strategic indicators have been expressed, including what the strategic indicator is precisely measuring and the numerical target associated with the indicator, has changed in recent years.
- 2.64 The following table (Table 2.2) shows performance against strategic indicators from 2009-10 to 2011-12.

Table 2.2: Justice and Community Safety Directorate’s strategic indicators relating to bushfire management (2009-10 to 2011-12)

	2009-10		2010-11		2011-12	
	Target	Actual	Target	Actual	Target	Actual
Percentage and number of targeted community members aware of hazards (percentage)	None set	90	None set	77	100	84
Percentage and number of targeted community members who report they are prepared for relevant hazards (percentage)	None set	67	None set	67	90	76
Qualitative evaluation of plans, exercises and drills (number)	None set	3	None set	1	3	6
Percentage and number of bushfires kept below five hectares of damage, within bushfire abatement zones and built-up areas (percentage)	None set	99.6	None set	99	100	100

Source: Audit Office compilation of information from the Justice and Community Safety Directorate’s annual reports and budget papers (No. 4, 2009-10 to 2011-12)

- 2.65 The Justice and Community Safety Directorate has identified additional strategic indicators relevant to bushfire management as part of the 2013-14 ACT Government Budget (Budget Paper No.4). These are:
- number of ESA emergency response plans exercised – target of 2;
 - number of sub-plans to the ACT Emergency Plan reviewed – target of 4;
 - ACT Public Information Coordination Centre for ESA lead emergency response – number of exercises conducted – target of 2; and
 - percentage of emergency alerts, updates and warnings to the ACT community through the use of the SPOT system – target of 100 percent.
- 2.66 These strategic indicators are not necessarily restricted to bushfire management outcomes, however, and may be relevant to emergency management more broadly.
- 2.67 There are similar shortcomings in the Emergency Services Agency's strategic indicators to those identified for its accountability indicators. Primarily what the indicator and the target are actually measuring needs to be defined and explained.
- 2.68 Furthermore, targets for strategic indicators have not always been set, refer to Table 2.2. It is stated in the Justice and Community Safety Directorate's budget papers that this is because trends over time are more important.¹⁹ However, the same budget papers also identify that the basis for three of the four strategic indicators is a Statement of Performance accountability indicator (with a supporting target) reported elsewhere. Having indicators that double up as both a strategic and an accountability indicator does not assist in understanding the immediate and longer-term effects of the Emergency Services Agency bushfire management actions.

Territory and Municipal Services Directorate

- 2.69 The Statement of Performance for the Territory and Municipal Services Directorate includes a single accountability indicator related to bushfire management. There is no specific strategic indicator for the Territory and Municipal Services Directorate that is relevant to bushfire management and preparedness.

¹⁹ Justice and Community Safety Directorate Budget Paper No. 4 (2009-10 to 2011-12) Strategic Objective 3

Table 2.3: Territory and Municipal Services Directorate's Statement of Performance accountability indicator relevant to bushfire management

Accountability Indicator	2009-10		2010-11		2011-12	
	Target	Actual	Target	Actual	Target	Actual
Implement activities identified under the bushfire operational plan (BOP) (percentage)	100	100	100	95	100	94

Source: Audit Office compilation of information from the Territory and Municipal Services Directorate's annual reports

- 2.70 The Territory and Municipal Services Directorate has reported 100 per cent performance for 2009-10 and 95 per cent for 2010-11, and 94 per cent for 2011-12 in meeting its 'Implement activities identified under the Bushfire Operational Plan' accountability indicator, refer to Table 2.3.
- 2.71 This indicator is an all-encompassing one which does not facilitate transparency with respect to what types of activities have or have not been undertaken, whether the same types of activities each year are not being achieved, or whether or not the activities not undertaken were a high priority or significant. This indicator is also reported against with respect to activities that are either 'completed' or 'commenced but not completed.'
- 2.72 ACT Government agencies' annual reporting against strategic and accountability indicators is an important accountability mechanism to the ACT community and other stakeholders. It is one mechanism amongst a range of measures that promote accountability. For example, agency annual reports include requirements for reporting on the delivery of activities that support the Strategic Bushfire Management Plan, and both the Justice and Community Safety Directorate and the Territory and Municipal Services Directorate provide regular accounts of activities to the ACT Bushfire Council.
- 2.73 Nevertheless, it is important that the Justice and Community Safety Directorate and Territory and Municipal Services Directorate report against relevant, appropriate and measurable strategic and accountability indicators as part of annual reporting obligations.

Recommendation 1 (Chapter 2) – ACT Government directorate strategic and accountability indicators

The Justice and Community Safety Directorate should continue to review its strategic and accountability indicators and the Territory and Municipal Services Directorate should commence a review of its strategic and accountability indicators. The directorates should consult to develop complementary measures which better assess their bushfire management activities.

3. PLANNING PROCESSES AND PLANS GUIDING BUSHFIRE PREPAREDNESS

- 3.1 This chapter discusses planning processes and plans which guide bushfire preparedness. The ACT Bushfire Council's role is also considered in this chapter.

SUMMARY

Conclusion

The Emergency Services Agency leads in the development of the important, over-arching whole-of-government five-year Strategic Bushfire Management Plan. Regional Fire Management Plans and bushfire operational plans for individual land managers support the Strategic Bushfire Management Plan. While these provide a sound basis for bushfire management in the ACT and are an improvement on what was in place prior to the 2003 bushfires, there are shortcomings in the plans and their supporting processes which impair their effectiveness.

Processes used in the preparation of the 2009 Strategic Bushfire Management Plan met the requirements of the *Emergencies Act 2004*. Most of the plan also meets legislative requirements, although there are some areas in which its content needs to be improved. Monitoring of the implementation of the plan needs to be improved.

Regional Fire Management Plans need to be reviewed more frequently and revised 'to reflect changes in land use in the ACT, operational considerations and any advances in the knowledge and understanding of bushfire risk.' Clarity is needed on which land managers should be preparing bushfire operational plans. A National Land bushfire management framework is needed to guide bushfire management activities on National Land.

There has been a lack of governance and procedural documentation for the ACT Bushfire Council. In response to this a terms of reference was developed by the Council with the support of the Emergency Services Agency and endorsed at a Council meeting on 3 July 2013.

Key findings

The Strategic Bushfire Management Plan

- The *Emergencies Act 2004* provides for the preparation of five-year Strategic Bushfire Management Plans by the Emergency Services Agency. The first Plan was implemented in January 2005. Following a review of its operation, the second Plan was approved in October 2009. The processes for the preparation of the 2009 Strategic Bushfire Management Plan met the requirements of legislation.
- Subsection 72(2) of the *Emergencies Act 2004* provides a comprehensive list of requirements for the content of the Strategic Bushfire Management Plan. The Strategic Bushfire Management Plan meets the majority of these requirements, except for a statement of resources needed to meet the objectives of the plan

and the inclusion of a list of privately-owned assets of public interest that are vulnerable to bushfire.

- The Emergency Services Agency established an inter-agency Strategic Bushfire Management Plan Implementation Working Group to monitor the implementation of the plan. Recently the group has met infrequently and its meetings have been poorly attended. The Group has had limited effect.
- The Emergency Services Agency's reporting on the Plan has not been based on required audit and compliance activity, and has not been coordinated with the ACT Bushfire Council or communicated to the ACT community as originally intended.

Regional Fire Management Plans

- Regional Fire Management Plans set out fuel management treatments, as well as existing and planned developments to strategic access and infrastructure in the form of a set of maps. They address bushfire preparedness needs and activities for a ten-year period to 2019-20. The Plans were jointly developed by the Territory and Municipal Services Directorate and the Environment and Sustainable Development Directorate.
- The Strategic Bushfire Management Plan provides that zones (e.g. asset protection zones) and the Regional Fire Management Plans will be reviewed annually to reflect changes in land use. This has not happened. The Built Up Area and Bushfire Abatement Zone were redefined by the Emergency Services Agency Commissioner in 2012, six years after they were previously updated. The Regional Fire Management Plans have not been updated since 2009. It is important that plans are regularly updated so that they can be more effective in providing input into the development and preparation of bushfire operational plans.

Bushfire operational plans

- Bushfire operational plans should be prepared at least every two years and detail fuel management and other activities that need to be undertaken to manage the threat of bushfires. The *Emergencies Act 2004* and the Strategic Bushfire Management Plan do not sufficiently articulate requirements for bushfire operational plans. It is not possible to identify with certainty whether various land managers and land owners are non-compliant with the *Emergencies Act 2004* or the Strategic Bushfire Management Plan.
- The Emergency Services Agency does not undertake a routine assessment of all ACT Government agencies and occupiers of Government land that have assets or a role in relation to bushfire risk. Such an approach has been considered, in consultation with the ACT Bushfire Council, but not developed for the purpose of identifying the necessity for bushfire operational plans.
- The Emergency Services Agency has not monitored compliance with bushfire operational plans, except the Bushfire Operations Plan of the Territory and Municipal Services Directorate. This Directorate's Bushfire Operations Plan, is

- updated and submitted for approval on an annual basis, and is monitored by the Emergency Services Agency.
- Through the Farm FireWise Program, the Emergency Services Agency provides support to rural leaseholders to help them comply with requirements for the preparation of bushfire operational plans. However, there is a lack of clarity in relation to specific requirements of rural leaseholders. The *Emergencies Act 2004* provides for the preparation of bushfire operational plans, while the Strategic Bushfire Management Plan and rural leaseholders' Land Management Agreements provide for bushfire operational plans and Bushfire Action Plans. The terms are used interchangeably and there is a lack of clarity on the requirements for rural leaseholders.
 - The Strategic Bushfire Management Plan identifies a high priority requirement for the Emergency Services Agency to work with managers of National Land in developing a framework for bushfire management. While there were examples of the Emergency Services Agency and Commonwealth agencies working co-operatively together, there was no evidence of the development of a framework for bushfire management activities.
- ACT Bushfire Council**
- The ACT Bushfire Council has performed a role in the bushfire preparedness of the ACT for over 75 years. The Council was established by the *Bushfire Act 1936*. Since the introduction of the *Emergencies Act 2004*, the Council no longer has powers to take action directly to prevent or suppress bushfires. Its primary function is to advise the Minister.
 - There has been a lack of governance and procedural documentation in place for the Council. This has increased the risk that the Council is ineffective in fulfilling its role and responsibilities. Draft terms of reference for the Council, prepared with the assistance of the Emergency Services Agency, were circulated at its meeting on 5 June 2013. The terms of reference were formally endorsed by the Council at a meeting on 3 July 2013.
 - The *Emergencies Act 2004* requires consultation between the Emergency Services Agency and the Council over the monitoring of the Strategic Bushfire Management Plan. There has been inadequate consultation between the Emergency Services Agency and the Council over the review of the scope and effectiveness of the Strategic Bushfire Management Plan.
 - The Strategic Bushfire Management Plan requires the Council to produce an annual report on bushfire preparedness. This report has been welcomed each year by the Minister although it has not always been available by the beginning of the bushfire season. For the 2007-08 season the report was not sent to the Minister until January 2008, and for the 2011-12 season the report was not sent until 30 November 2011.
 - The Strategic Bushfire Management Plan requires the Council to prepare annual audit reports that document compliance with actions identified in the Plan. To date, the Council has not prepared any audit reports and the Audit Office's

review of the Council's meeting agendas and minutes for October 2009 to November 2012 did not identify any item, discussion or document that addresses this requirement.

THE STRATEGIC BUSHFIRE MANAGEMENT PLAN

Preparing the Strategic Bushfire Management Plan

- 3.2 The first five-year Strategic Bushfire Management Plan was developed and implemented in January 2005. Following a review of its operation, the second five-year Strategic Bushfire Management Plan was approved in October 2009. The Audit Office examined the 2009 Strategic Bushfire Management Plan for the purpose of this performance audit.
- 3.3 Sections 72 and 75 of the *Emergencies Act 2004* outline a range of requirements for the preparation of the Strategic Bushfire Management Plan. In preparing the Strategic Bushfire Management Plan the Emergency Services Agency must:
- prepare a draft version of the Plan for consideration by the Minister for Police and Emergency Services (subsection 72(1) of the *Emergencies Act 2004*);
 - consult with the public (subsection 75(1));
 - consult with the ACT Bushfire Council (subsection 72(2)(a)); and
 - consider the impact of the Plan on any Land Management Agreements and land managers (subsection 72(2)(b)).
- 3.4 The Audit Office reviewed processes for the development of the 2009 Strategic Bushfire Management Plan and considers that these requirements were met.

Content of the Strategic Management Plan

- 3.5 Section 74 of the *Emergencies Act 2004* provides that the Strategic Bushfire Management Plan must provide a basis for:
- bushfire hazard assessment and risk analysis;
 - bushfire prevention, including hazard reduction; and
 - agency and community preparation and response in relation to bushfires.
- 3.6 Subsection 74(2) of the *Emergencies Act 2004* provides that the Strategic Bushfire Management Plan must also include:
- a statement of strategic objectives for the plan;
 - a description of the bushfire environment;
 - a summary of known bushfire causes;
 - a risk assessment of factors contributing to bushfires and the spread of bushfires;

- a list of public assets (including cultural and ecological assets) vulnerable to bushfire;
 - a list of privately-owned assets of public interest vulnerable to bushfire;
 - strategies for prevention of, and preparedness for, bushfires;
 - strategies for access for response and fire management activities;
 - a statement of strategies for research and monitoring of bushfire risk;
 - a statement of strategies for recovery after a bushfire;
 - a statement of resources needed to meet the objectives of the plan; and
 - anything else prescribed by regulation.²⁰
- 3.7 The majority of requirements in the *Emergencies Act 2004* for the 2009 Strategic Bushfire Management Plan have been met. However, two requirements have not:
- a statement of resources is needed to meet the objectives of the plan; and
 - a list of privately-owned assets of public interest vulnerable to bushfire needs to be included in the plan.

Statement of Resources for the Strategic Bushfire Management Plan

- 3.8 The Strategic Bushfire Management Plan does not include a statement of resources needed to meet the objectives of the Plan. Chapter 6 of the Strategic Bushfire Management Plan does, however, outline an intent by the Emergency Services Agency to consider the resources required over the life of the Plan. It notes ‘the resourcing of this Plan may require additional funding and will be determined in the context of whole-of-government budget considerations over the life of the Plan.’
- 3.9 Section 76 of the *Emergencies Act 2004* provides that, after the Strategic Bushfire Management Plan is approved by the Minister for Police and Emergency Services, the Emergency Services Agency must conduct an assessment, based on the Plan, of available resources and capabilities for bushfire prevention and preparedness. This assessment must be given to the ACT Bushfire Council and the Minister for Police and Emergency Services.
- 3.10 The Emergency Services Agency conducted an assessment of additional resources it required to implement specific activities in the Plan. This assessment did not include an assessment of all resources needed, including existing resources, and the assessment was not provided to the ACT Bushfire Council.

²⁰ Limited to *Emergencies Regulation 2004* (SL2004-26) for the purposes of this review

Recommendation 2 (Chapter 3) - Statement of resources in the Strategic Bushfire Management Plan

The Emergency Services Agency should comply with the *Emergencies Act 2004* requirements for the Strategic Bushfire Management Plan by including in this Plan an explicit statement of all resources needed to meet the objectives of the Plan.

Privately owned assets

- 3.11 The Strategic Bushfire Management Plan does not include a ‘list of privately-owned assets of public interest vulnerable to bushfire’ as required by subsection 74(2) of the *Emergencies Act 2004*. The Plan does however include:
- a map of ‘assets at risk from bushfires’, which identifies business and social infrastructure, critical infrastructure, agricultural production areas, water catchments and biodiversity assets; and
 - strategies for the protection of privately-owned assets vulnerable to bushfire, such as asset protection zoning.
- 3.12 The map of ‘assets at risk from bushfires’ in the Strategic Bushfire Management Plan is supported by information in a database that is maintained by the Emergency Services Agency. This information is not publicly available as the Emergency Services Agency asserts that the publication of such data could compromise commercial and security sensitivities. While it does not comply with the legislative requirement to include a ‘list of privately-owned assets of public interest vulnerable to bushfire’ in the Strategic Bushfire Management Plan, the Emergency Services Agency advises that it does have the information needed to achieve the intent of the legislation, that is, a means of identifying privately-owned assets of public interest that are vulnerable to bushfire.
- 3.13 When the *Emergencies Act 2004* is next amended there is merit in reconsidering the requirement for the inclusion of a ‘list of privately-owned assets of public interest vulnerable to bushfire’ to be included in the Strategic Bushfire Management Plan. This requirement may be amended so that the Emergency Services Agency is required to maintain this information in a manner that does not compromise commercial or security sensitivities.

Recommendation 3 (Chapter 3) - List of privately-owned assets in the Strategic Bushfire Management Plan

The Justice and Community Safety Directorate, in managing future amendments to the *Emergencies Act 2004*, should propose amendments which require the Emergency Services Agency to maintain information on privately-owned assets of public interest that are vulnerable to bushfire without the need to include this information in the Strategic Bushfire Management Plan.

Implementing the Strategic Bushfire Management Plan

- 3.14 Subsection 72(5) of the *Emergencies Act 2004* provides that the Emergency Services Agency must, in consultation with the ACT Bushfire Council, monitor the scope and effectiveness of the Strategic Bushfire Management Plan.
- 3.15 Section 73 of the *Emergencies Act 2004* provides that the Emergency Services Agency may also establish a committee to assist in drafting the Strategic Bushfire Management Plan and monitoring its scope and effectiveness. Subsection 73(2) provides that the Emergency Services Agency must ensure that people with experience in land management and bushfire management are among the committee members, while subsection 73(3) provides that the Emergency Services Agency may decide how the committee is to exercise its function and the procedure to be followed for meetings of the committee.

Strategic Bushfire Management Plan Implementation Working Group

- 3.16 In accordance with section 73 of the *Emergencies Act 2004* the Emergency Services Agency established a Strategic Bushfire Management Plan Implementation Working Group as the principal management arrangement to monitor the implementation of the Strategic Bushfire Management Plan. The membership of the Group consists of the Emergency Services Agency Commissioner and officers from the Emergency Services Agency and Parks and Conservation Service Branch of the Territory and Municipal Services Directorate.
- 3.17 While the Strategic Bushfire Management Plan Implementation Working Group was appropriately constituted to meet the requirements of the *Emergencies Act 2004*, it has not been effective in ‘monitoring of the scope and effectiveness’ of the Strategic Bushfire Management Plan. From discussion with agency representatives, a review of the frequency and attendance of meetings and a review of agenda coverage and reports it is apparent that there has been a lack of sustained and rigorous monitoring of the ACT Strategic Bushfire Management Plan by this group. This has been particularly marked in the period from January 2011, which has been characterised by infrequent meetings and poor attendance, and where the quality of the review of actions has been limited.

- 3.18 There was no other mechanism whereby the Emergency Services Agency systematically monitored ‘the scope and effectiveness’ of the Strategic Bushfire Management Plan, as required by the *Emergencies Act 2004*.

Recommendation 4 (Chapter 3) - The Strategic Bushfire Management Plan Implementation Working Group

The Emergency Services Agency should review the operations of the Strategic Bushfire Management Plan Implementation Working Group to determine if it is the most appropriate mechanism for ‘monitoring the scope and effectiveness’ of the Strategic Bushfire Management Plan. If it is retained, ways to improve its effectiveness should be identified and implemented.

Annual reporting and compliance auditing

- 3.19 The Strategic Bushfire Management Plan provides for the preparation of an annual compliance report by the ACT Government. The *Research, information and analysis* element of the ACT Government Implementation Plan component of the Strategic Bushfire Management Plan identifies the following high priority action:

Strategy – undertake monitoring and review of the effects of the operations and activities resulting from this Plan and sub-plans and report back to the community and adjust strategies as necessary

- Annual reports will be prepared to document the ACT Government’s compliance with actions identified under this Plan. (High priority)

- 3.20 The Strategic Bushfire Management Plan (page 54) also states that ‘audit reports document compliance with this Plan’ and provides that audit reports should:
- include an outline of the audit procedure, discussion of findings, conclusions about level of compliance with this Plan and recommendations for improvement;
 - outline agreed management actions, that:
 - address each recommendation made in an audit report;
 - describe the implementation status of previously published agreed management actions, until such time as those actions have been finalised; and
 - contain recommendations for improving the audit function where appropriate.

- 3.21 The Emergency Services Agency has prepared annual progress reports in each of the first three years of operation of the Strategic Bushfire Management Plan (between 2010 and 2012). However, these reports have not been compliance reports based on audit work, which meet the requirements of the Strategic

Bushfire Management Plan. The reports are, in many cases, a compilation of actions reported by the officer directly responsible for the action's implementation. The reports serve as a useful means by which progress on activities is self-reported by responsible officers, but the reports are not independently verified and do not serve a purpose as a mechanism for assurance.

- 3.22 Furthermore, the annual reports have not been made public, which appears to be the intention of this requirement, as demonstrated by the strategy statement 'undertake monitoring and review of the effects of the operations and activities resulting from this Plan and sub-plans and report back to the community and adjust strategies as necessary.' Additionally, the annual reports have not been provided to the ACT Bushfire Council in two of the last three years, as required by subsection 72(5) of the *Emergencies Act 2004*, to facilitate the Council's auditing and annual reporting process.
- 3.23 Accordingly, the Emergency Services Agency's reporting on the Strategic Bushfire Management Plan has not been based on the required audit activity, and its reporting has not been coordinated with the ACT Bushfire Council or communicated to the ACT community as originally intended.

Recommendation 5 (Chapter 3) - Annual progress reports on the Strategic Bushfire Management Plan

The Emergency Services Agency should undertake audits to meet the requirements in the Strategic Bushfire Management Plan for the preparation, sharing and publication of annual progress reports. Annual progress reports should be made available to the ACT Bushfire Council.

Review of the Strategic Bushfire Management Plan

- 3.24 Section 80 of the *Emergencies Act 2004* requires the Minister for Police and Emergency Services to comprehensively review the Strategic Bushfire Management Plan at least every five years, and to have regard for a ten-year period as part of the review.
- 3.25 The current Strategic Bushfire Management Plan (2009) was agreed within five years of the first Strategic Bushfire Management Plan (2005). At the time of audit fieldwork, work has begun on the 2014-18 Strategic Bushfire Management Plan, which will replace the current version. The Audit Office has not considered the work now underway for the 2014-18 Strategic Bushfire Management Plan as part of this performance audit.

REGIONAL FIRE MANAGEMENT PLANS

- 3.26 The Strategic Bushfire Management Plan states:

To assist in the preparation of bushfire operational plans, the SBMP requires the development of Regional Fire Management Plans (RFMPs). RFMPs will provide a link between this Plan and the more detailed BOPs. RFMPs will be prepared to cover the entire ACT. They will include all tenures and reflect boundaries based on bushfire risk and geographic boundaries rather than land tenure boundaries. Once prepared, these RFMPs will be reviewed annually to reflect any changes in the bushfire risk environment (such as the occurrence of large bushfires in that period).²¹

- 3.27 The Regional Fire Management Plans are a set of maps showing fuel management treatments, and existing and planned developments to strategic access and infrastructure. They address bushfire preparedness needs and activities for a ten-year period to 2019-20. The use of regional plans and zoning is an initiative that was strongly promoted in the Council of Australian Governments' 2005 *National Inquiry on Bushfire Mitigation and Management*.
- 3.28 The development of the Regional Fire Management Plans was a joint initiative between the now Conservation, Planning and Research team of the Environment and Sustainable Development Directorate and officers from the Forestry and Fire Management unit in the Territory and Municipal Services Directorate. The Emergency Services Agency was also involved, particularly with respect to coordinating consultation with stakeholders.

Strategic Bushfire Management Plan requirements relating to Regional Fire Management Plans

- 3.29 The *Research, information and analysis* element of the ACT Government Implementation Plan of the Strategic Bushfire Management Plan includes the following strategies and actions:

Strategy – the ACT Government and the community work together to share knowledge and information to prepare and maintain integrated Regional Fire Management Plans
<ul style="list-style-type: none">the ACT Government has prepared Regional Fire Management Plans under this Plan. These plans establish operational objectives for the next ten years and inform the annual Bushfire Operational Plans. These plans will be reviewed annually to reflect seasonal and operational issues that affect the implementation of the plans. (High priority)
Strategy – maintain a network of fire trails and helipads (bushfire management access network) to provide for rapid response to bushfires and to undertake effective bushfire fighting and hazard reduction operations

²¹ Strategic Bushfire Management Plan, Supporting Information Part Two, October 2009, page 3

<ul style="list-style-type: none"> • A bushfire management access network in the ACT is identified in Regional Fire Management Plans. This includes: <ul style="list-style-type: none"> ○ Schedule B [to the Strategic Bushfire Management Plan] identifies classification and performance standards for the bushfire management access network. ○ Review of the fire access network will be undertaken as part of the annual review of Regional Fire Management Plans. (High priority)
<p>Strategy - establish priorities for prevention and preparedness activities which reduce the likelihood and consequences of catastrophic bushfire events</p> <ul style="list-style-type: none"> • Lands in the ACT are classified into Fire Management Zones to assign priorities to implementing the prevention and preparedness activities, including fuel management. These zones are: <ul style="list-style-type: none"> ○ Ember Zone; ○ Inner Asset Protection Zone; ○ Outer Asset Protection Zone; ○ Strategic Firefighting Advantage Zone; ○ Landscape Fire Management Zone; and ○ Agricultural Fire Management Zone. • Zones will be reviewed annually to reflect changes in land use in the ACT, operational considerations and any advances in the knowledge and understanding of bushfire risk.
<p>Strategy – maintain a mosaic of fuel loads at a landscape level, through Strategic Firefighting Advantage Zones that assist in suppressing bushfires and minimise environmental consequences</p> <ul style="list-style-type: none"> • Location and timing of fuel reduction activities in Strategic Firefighting Advantage Zones are identified in Regional Fire Management Plans and reviewed annually. The locations of Strategic Firefighting Advantage Zones may vary between Plans to achieve fire management objectives in the short to medium term and ensure a mosaic of fuel loads over the longer term. (High priority) • The use of planned fire for ecological and environmental management will be identified in Regional Fire Management Plans. (High priority)
<p>Strategy – provide for primary bushfire risk reduction adjacent to assets through Asset protection Zones that assist in reducing the consequences of bushfires</p> <ul style="list-style-type: none"> • Location and timing of fuel management in Inner and Outer Asset Protection Zones are identified in Regional Fire Management Plans and will be reviewed annually. (High priority)

3.30 Collectively, these requirements provide for:

- the identification and classification of zones in the ACT for the purpose of bushfire management;
- the establishment of operational standards that prescribe the minimum requirements for bushfire management activities set out in the Plan. For example, in the case of access tracks this might relate to gradients, width, surface treatments and drainage characteristics and for fuel load

- management this may relate to tonnage per hectare or the height of grass; and
- an annual review of Regional Fire Management Plans and activities associated with these plans, including fuel management and reduction activities and activities associated with the bushfire management access network.
- 3.31 By combining the set of standards in the Strategic Bushfire Management Plan and spatial maps making up the Regional Fire Management Plans, ACT Government agencies have been able to identify specific long-term goals and assess the resources necessary for their delivery. These have, in turn, informed the preparation of the Territory and Municipal Services Directorate Bushfire Operations Plans and, to a lesser extent, bushfire operational plans of other ACT Government agencies and rural leaseholders. This is discussed in more detail in Chapters 4 and 5.
- Establishment and review of fire management zones and update of Regional Fire Management Plans***
- 3.32 Section 71 of the *Emergencies Act 2004* provides that the Emergency Services Agency Commissioner may declare a Bushfire Abatement Zone. The Bushfire Abatement Zone is an important designation as it relates to how fire suppression activity is managed by the ACT Government. It also potentially provides for additional responsibilities on rural leaseholders within the Bushfire Abatement Zone, refer to Chapter 5.
- 3.33 The Strategic Bushfire Management Plan also provides for the identification of zones such as an Ember Zone; Inner Asset Protection Zone; Outer Asset Protection Zone; Strategic Firefighting Advantage Zone; Landscape Fire Management Zone; and Agricultural Fire Management Zone. The identification of these zones is important because:
- ...the use of fire management zones form the cornerstone of the prevention activities identified in this Plan and are important for assisting the community in assessing their vulnerability to bushfires. They inform the development of Regional Fire Management Plans, which are prepared to detail the timing, location and type of specific bushfire prevention actions to be undertaken.²²
- 3.34 The Strategic Bushfire Management Plan provides that ‘zones will be reviewed annually to reflect changes in land use in the ACT, operational considerations and any advances in the knowledge and understanding of bushfire risk.’ Zoning changes are to be approved by the Emergency Services Agency Commissioner.
- 3.35 The Strategic Bushfire Management Plan further provides that ‘...[Regional Fire Management Plans] establish operational objectives for the next ten years and

²² Strategic Bushfire Management Plan 2009, page 20

inform the annual bushfire operational plans. These plans will be reviewed annually to reflect seasonal and operational issues that affect the implementation of the plans.'

- 3.36 A review of Regional Fire Management Plans and the zoning reflected in them has not been undertaken annually. The Built Up Area and Bushfire Abatement Zone were redefined by the Emergency Services Agency Commissioner in 2012, six years after they were previously redefined.
- 3.37 The Regional Fire Management Plans have not been updated since they were implemented in 2009. It is important that plans are regularly updated so that their reliability is guaranteed.
- 3.38 By not reviewing fire management zones and Regional Fire Management Plans on a regular basis there is a risk that the development of bushfire operational plans and other bushfire management activities by land managers is impeded. Land managers may not have sufficient and accurate information on the potential risks associated with bushfires on which to undertake effective bushfire management.

Recommendation 6 (Chapter 3) – Review of fire management zones and Regional Fire Management Plans

The Emergency Services Agency should annually review fire management zones and the Territory and Municipal Services Directorate should update the Regional Fire Management Plans.

BUSHFIRE OPERATIONAL PLANS

- 3.39 Section 78 of the *Emergencies Act 2004* identifies requirements for the preparation of bushfire operational plans and the role of the Emergency Services Agency Commissioner in approving and reviewing plans.
- 3.40 Subsections 78(1) and (2) require the preparation of bushfire operational plans by:
 - the manager of an area of unleased Territory land or land occupied by the Territory (unless the land is exempt from the operation of the Act by the Strategic Bushfire Management Plan); or
 - the owner of an area of land in a Bushfire Abatement Zone if:
 - the Strategic Bushfire Management Plan sets out requirements for a bushfire operational plan for the Bushfire Abatement Zone; and
 - the land is identified in the Strategic Bushfire Management Plan as land for which a bushfire operational plan must be prepared; and
 - there is no land management agreement applying to the land that is consistent with the Strategic Bushfire Management Plan.

- 3.41 The Emergency Services Agency Commissioner must be given a draft bushfire operational plan for the subject area in accordance with the Strategic Bushfire Management Plan.
- 3.42 Under the *Prevention* element of the ACT Government Implementation Plan of the Strategic Bushfire Management Plan, the following strategies and action items have been identified with respect to bushfire operational plans:

Strategy – maintain a network of fire trails and helipads (bushfire management access network) to provide for rapid response to bushfires and to undertake effective bushfire fighting and hazard reduction operations	<ul style="list-style-type: none">• Government land managers will prepare Bushfire Operational Plans consistent with Regional Fire Management Plans which detail works to be carried out on fire management access networks on their land that include:<ul style="list-style-type: none">○ Fire trail maintenance;○ Fire trail upgrades; and○ Fire trail construction.• Bushfire Operational Plans will be prepared every two years, or less as required. (High priority)
Strategy – maintain a mosaic of fuel loads at a landscape level, through Strategic Firefighting Advantage Zones that assist in suppressing bushfires and minimise environmental consequences	<ul style="list-style-type: none">• Land managers will prepare Bushfire Operational Plans that detail fuel management works in Strategic Firefighting Zones to meet the standards identified in this Plan.• Bushfire Operational Plans will be prepared every two years, or less as required. (High priority)
Strategy – provide for primary bushfire risk reduction adjacent to assets through Asset Protection Zones that assist in reducing the consequences of bushfires	<ul style="list-style-type: none">• Land managers will prepare Bushfire Operational Plans that detail fuel management works in the Inner and Outer Asset Protection Zones to meet the standards identified in this Plan.• Bushfire Operational Plans will be prepared every two years, or less as required. (High priority)
Strategy – reduce bushfire risk in areas subject to ember attack, radiant heat and flame contact through effective urban planning, design and construction	<ul style="list-style-type: none">• Where identified, managers of ACT Government properties in Ember Zones and rural areas (and elsewhere as appropriate) will prepare Bushfire Operational Plans to reduce vulnerability to the impacts of bushfire.• Bushfire Operational Plans will be prepared every two years, or less as required. (High priority)

- 3.43 The Audit Office considers that the *Emergencies Act 2004* and the Strategic Bushfire Management Plan do not sufficiently articulate requirements for bushfire operational plans and this creates ambiguity.
- 3.44 Subsection 78(1) of the *Emergencies Act 2004* appears to apply to all ACT Government land managers, as they are responsible for 'land occupied by the Territory'. This appears to be supported by the requirement of the Strategic Bushfire Management Plan that 'Government land managers will prepare bushfire operational plans consistent with the Regional Fire Management Plans'. However, parts of the Strategic Bushfire Management Plan appear to suggest that the preparation of bushfire operational plans by ACT Government land managers is conditional on being notified by the Emergency Services Agency. For example, the requirement for ACT Government agencies with land management responsibilities in Ember Zones to produce bushfire operational plans appears to be conditional on them being identified to produce such a plan, presumably by the Emergency Services Agency.
- 3.45 Furthermore, the requirement for land managers in the Bushfire Abatement Zone is arguably ambiguous. Paragraph 78(2)(b) of the *Emergencies Act 2004* appears to establish a set of circumstances in which the owner of land (e.g. a rural leaseholder) should prepare a bushfire operational plan if the Strategic Bushfire Management Plan sets out a requirement for a bushfire operational plan for the Bushfire Abatement Zone. No such requirement is made in the Strategic Bushfire Management Plan, although the Strategic Bushfire Management Plan does set out requirements for land managers in Strategic Firefighting Advantage Zones and Inner and Outer Asset Protection Zones. These zones are not incompatible with the Bushfire Abatement Zone, i.e. there is considerable overlap, but there is insufficient clarity in the legislation and the Strategic Bushfire Management Plan with respect to this requirement.
- 3.46 The lack of clarity in the *Emergencies Act 2004* and the Strategic Bushfire Management Plan has meant that it is not possible to identify with certainty whether various land managers and owners of land are non-compliant with the legislation or the Strategic Bushfire Management Plan.
- 3.47 Given the ambiguity that is apparent in legislation and in Strategic Bushfire Management Plan on the need to prepare a bushfire operational plan, further guidance is warranted.

Recommendation 7 (Chapter 3) - Preparation and approval of bushfire operational plans (High Priority)

The Emergency Services Agency should specify preparation and approval requirements for bushfire operational plans, particularly those for lands in the Bushfire Abatement Zone.

ACT Government land managers

- 3.48 The Audit Office reviewed the extent to which the Emergency Services Agency has played a role in:
- strategically determining the need for bushfire operational plans by ACT Government land managers;
 - requesting, requiring and supporting ACT Government land managers to provide a bushfire operational plan where such a need exists;
 - receiving and approving plans submitted to the Emergency Services Agency Commissioner; and
 - monitoring the bushfire operational plan activities of ACT Government land managers in order to determine whether actions are effective.
- 3.49 There was a lack of clarity as to what was required of ACT Government agencies with respect to providing bushfire operational plans. There was also a lack of an administrative process for requesting or supporting ACT Government agencies to produce a bushfire operational plan.
- 3.50 There is no definitive list of ACT Government land managers that should be developing and implementing bushfire operational plans for any given year. In this respect, the Emergency Services Agency does not undertake a routine assessment of all ACT Government agencies and occupiers of ACT Government land that have assets or a role in relation to bushfire risk. Such an approach has been considered, in consultation with the ACT Bushfire Council, but not developed for the purpose of identifying the necessity for bushfire operational plans. Accordingly, the Emergency Services Agency is not in a position to confirm which agencies, if not all agencies, it expects to prepare a bushfire operational plan.
- 3.51 Nevertheless, the Emergency Services Agency advised that, in 2010-11 and 2011-12 it had:
- requested, and was provided with, bushfire operational plans from the Land Development Agency and the Territory and Municipal Services Directorate;
 - requested, but was not provided with bushfire operational plans from two other ACT Government agencies; and
 - did not request, but was provided with, a bushfire operational plan from the Education and Training Directorate.
- 3.52 However, the Emergency Services Agency was unable to provide evidence of correspondence with ACT Government land managers, other than the Territory and Municipal Services Directorate, requesting the preparation of bushfire operational plans. On 26 March 2013 the Audit Office requested evidence of correspondence with ACT Government land managers, other than the Territory and Municipal Services Directorate, for the period 2010-11 and 2011-12. The

Audit Office was subsequently provided with a series of letters that were sent between 5 April 2013 and 12 April 2013.

- 3.53 Furthermore, the Emergency Services Agency has poor oversight of the implementation of ACT Government land manager bushfire operational plans. With the exception of the Territory and Municipal Services Directorate Bushfire Operations Plan, the Emergency Services Agency does not review ACT Government land managers' implementation of bushfire operational plans. The Emergency Services Agency's oversight of the Territory and Municipal Services Directorate's Bushfire Operations Plan is discussed in further detail in Chapter 4 of this report.

Recommendation 8 (Chapter 3) - Monitoring of ACT Government bushfire operational plans

The Emergency Services Agency should develop a strategy for monitoring the development and implementation of all Government land managers' operational plans.

Rural leaseholder responsibilities

- 3.54 As discussed in paragraph 3.45, the requirement for rural leaseholders in the Bushfire Abatement Zone to produce bushfire operational plans is unclear. The implementation of Recommendation 7 should address the ambiguity and uncertainty in the requirements.
- 3.55 The Strategic Bushfire Management Plan makes a distinction between bushfire operational plans and Bushfire Action Plans²³ and makes a requirement for 'rural landholders' in general to prepare Bushfire Action Plans via a program referred to as Farm FireWise. Land Management Agreements, on the other hand, refer to both bushfire operational plans and Bushfire Action Plans, and use the terms interchangeably.
- 3.56 Whether or not all rural leaseholders or those in the Bushfire Abatement Zone are required to prepare bushfire operational plans or Bushfire Action Plans, the ACT Rural Fire Service has developed, and is implementing, the Farm FireWise Program as an initiative to target all rural leaseholders. The program seeks to facilitate bushfire risk assessments for rural leaseholders. The ACT Rural Fire Service has contacted all rural leaseholders and has assisted willing participants to prepare Farm FireWise assessments. These cover the essential components, as set out in the Strategic Bushfire Management Plan, of a Bushfire Action Plan focused on firefighting, and of a bushfire operational plan focused on:
- fuel management requirements;
 - asset protection requirements; and

²³ Strategic Bushfire Management Plan Bushfire Policy and Management Framework - Supporting Information: Part Two, page 1

- strategic fire management access requirements.
- 3.57 The Audit Office considers that the Emergency Services Agency is meeting the requirements set out in the Strategic Bushfire Management Plan to provide a mechanism to support rural leaseholders to meet their obligations. The quality and purpose of this support, its outcomes and the level of monitoring and compliance of rural leaseholders with their legislated responsibility are considered in Chapter 5.

Commonwealth land manager responsibilities

- 3.58 The *Emergencies Act 2004* does not apply to land in the ACT managed by the Commonwealth, for example, the Australian Government Department of Defence or National Capital Authority land. The Strategic Bushfire Management Plan does, however, require that the Emergency Services Agency work with managers of National Land in developing a framework for bushfire management that complements the Strategic Bushfire Management Plan.

Strategy – actively work with other fire agencies to develop bushfire management strategies that are aligned and acknowledge the level of bushfire risk to each jurisdiction

- Work with managers of National Land in the ACT (including the National Capital Authority and Department of Defence) in areas identified as Co-operative Management Areas, to provide for:
 - advice in relation to bushfire risk to assets;
 - a framework for bushfire management in these areas complementary to this Plan; and
 - strategies and actions for mitigation of bushfire risk which are integrated and consistent with the strategies of this Plan. (High priority)

- 3.59 Although this is a high priority, there was no evidence available to show that the Emergency Services Agency or its Commonwealth counterparts, were working together on developing ‘a framework for bushfire management in these areas complementary to [the Strategic Bushfire Management Plan]’.
- 3.60 In this respect, the Emergency Services Agency has not undertaken a routine or rigorous assessment of Commonwealth Government agencies with a significant land management role in the ACT. This potentially represents a risk, and an opportunity, for the management of bushfires in the ACT. This issue has been raised by the ACT Bushfire Council on several occasions in recent years, specifically with respect to which entities are required to, or should be encouraged to, prepare a bushfire operational plan.

Recommendation 9 (Chapter 3) - National Land bushfire management framework

The Emergency Services Agency should continue to work with National Land managers and develop a National Land bushfire management framework to address bushfire risks on National Land.

ACT BUSHFIRE COUNCIL

- 3.61 The ACT Bushfire Council has performed a role in the bushfire preparedness of the ACT for over 75 years. The Council was first established under the *Bushfire Act 1936* and re-established under the *Emergencies Act 2004*.

Powers and responsibilities of the ACT Bushfire Council

- 3.62 Until its repeal in 2004, the *Bushfire Act 1936* provided for an ACT Bushfire Council to be established as ‘a body corporate, with perpetual succession and a common seal’ that ‘may acquire, hold and dispose of real and personal property and shall be capable of suing and being sued’. It held substantial powers to:

Take the action that it considers necessary to prevent or control the outbreak or spread of fire and to protect from the outbreak or spread of fire life and property in any part of the ACT, other than a part that is a built-up area, and may, in particular, acquire firefighting equipment, employ workers, organise fire prevention and control associations and distribute literature relating to fire prevention and control.²⁴

- 3.63 Since the introduction of the *Emergencies Act 2004*, however, the ACT Bushfire Council no longer has powers to take action directly to prevent or suppress bushfires. Its primary function is to advise the Minister for Police and Emergency Services and to be consulted and to advise on bushfire-related matters in the ACT. For example, section 10 of the Act requires the Emergency Services Agency Commissioner to ask for, and consider, the Council’s advice before exercising a function in relation to bushfires prescribed by regulation. The Commissioner may ask for the Council’s advice in the exercise of any other functions relating to bushfires.

Governance

- 3.64 The *Emergencies Act 2004* sets out the constitution of the ACT Bushfire Council and how it should govern its business, including:
- an appointment system for new members of the Council;
 - arrangements for the disclosure of interests; and
 - voting and resolution processes.

²⁴ *Bushfire Act 1936*, section 5H

- 3.65 The Audit Office reviewed these aspects of the governance of the ACT Bushfire Council and established that the appointments system was effectively administered. Nevertheless, a number of shortcomings in relation to other aspects of the governance of the Council were identified.

Procedural documentation

- 3.66 While the *Emergencies Act 2004* provides a basic constitution for the ACT Bushfire Council, good practice cited in the *ACT Boards and Committees Handbook (2009)* identifies basic areas where there should be written guidance for all boards and committees. The audit found that there was a lack of governance and procedural documentation in place for the Council, e.g. a charter or terms of reference.
- 3.67 There were important areas of procedure not covered by the *Emergencies Act 2004* and not covered in other forms of written documentation prepared for or by the ACT Bushfire Council. This is discussed in the following sections of the report. The lack of governance and procedural documentation in relation to the Council's operations increased risks associated with its management and administration.
- 3.68 A draft terms of reference for the ACT Bushfire Council was circulated at its meeting on 5 June 2013. The Emergency Services Agency supports the terms of reference, which were formally endorsed by the ACT Bushfire Council at a meeting on 3 July 2013. It would be beneficial for a review to be undertaken on the operation of the Council with respect to its terms of reference.

Recommendation 10 (Chapter 3) - ACT Bushfire Council Charter terms of reference

The Emergency Services Agency, in consultation with the ACT Bushfire Council, should conduct a review of the ACT Bushfire Council against its recently developed terms of reference (July 2013) within two years.

Conflicts of interest

- 3.69 The extensive local experience members bring to bushfire management is in part the reason for their appointment to the ACT Bushfire Council, but this also presents the potential for conflicts of interest. The management of such potential conflicts of interest is important to retain public and ACT Government confidence with the work of the Council. This is particularly the case where there is the possibility of current or ex-ACT Government employees being on the Council, as is often the case.
- 3.70 There are instances on record where potential conflicts of interest were not managed effectively. These include instances where current and former employees of an ACT Government agency became directly involved in discussions within, and on behalf of, the ACT Bushfire Council about restructures that would affect current colleagues or former colleagues. These members of

the Council did not disclose these potential conflicts of interest, nor did they withdraw from any discussions.

Resolution processes

- 3.71 There have been several incidents in recent years where individual members of the ACT Bushfire Council have provided public comment or opinion on a variety of matters, without seeking endorsement or approval from the Council. The views of the individual members have not been discussed and passed as a resolution of the Council.
- 3.72 The Audit Office also found instances where:
- annual reports were not collectively agreed to and endorsed prior to circulation; and
 - individual members undertook work on behalf of the ACT Bushfire Council prior to the Council resolving a position on the issue.
- 3.73 There is a risk that individual ACT Bushfire Council members act in isolation, and possibly contrary to a collective approach of the Council.

Funding and budgetary arrangements

- 3.74 The *Emergencies Act 2004* makes no reference to payments to ACT Bushfire Council members, or to the financial resources at the disposal of the Council to undertake its business, other than that the ‘Director-General must provide administrative support and facilities’ for the Council. However, in line with many other boards and committees undertaking Government business, Council members are offered remuneration for attending sittings in line with the *ACT Boards and Committees Handbook (2009)*.
- 3.75 The Emergency Services Agency allocates to the ACT Rural Fire Service a budget to meet the costs associated with the ACT Bushfire Council’s business. In recent years this has been between \$15 000 and \$50 000 a year reflecting the attendance costs of members and additional costs of work generated by the ACT Bushfire Council’s work program. Emergency Services Agency officer time in support for the Council is not budgeted for or recorded, but it is estimated to between \$10 000 and \$15 000 a year.
- 3.76 There is a lack of clarity regarding arrangements for funding work that is undertaken by or on behalf of the ACT Bushfire Council in order to fulfil the Council’s objectives. The Audit Office identified:
- a lack of procedure for establishing, agreeing and monitoring the budget of the Council;
 - a lack of awareness amongst members of the Council about the budget, what it is for, and how it should be used to further the aims of the Council; and

- members seeking or receiving payments for additional work outside Council meetings. Council members have sought payment for work undertaken on behalf of the Council, without evidence of an agreed, transparent and appropriate mechanism for determining how or by whom work was to be conducted.

3.77 The July 2013 terms of reference for the ACT Bushfire Council provides a framework whereby these issues can be addressed.

ACT Bushfire Council activities

3.78 Under the *Research, information and analysis* element of the ACT Community Implementation Plan in the Strategic Bushfire Management Plan the following strategy and associated actions have been identified, which are relevant to the ACT Bushfire Council:

Strategy – the ACT Bushfire Council will provide oversight and review of bushfire management in the ACT
<ul style="list-style-type: none">• The ACT Bushfire Council will monitor and review implementation of actions established under this Plan.• Audit reports will be prepared annually to document compliance with actions identified in this Plan. Audit reports will include an outline of the audit procedure, any necessary discussion of findings, and conclusions about level of compliance with this Plan. (High priority)
<ul style="list-style-type: none">• The ACT Bushfire Council will provide advice to the Minister on matters relating to bushfire management in the ACT, including:<ul style="list-style-type: none">○ the level of preparedness;○ prevention activities;○ the response capability of fire services; and○ the implementation of recommendations from the inquiries into the 2003 Canberra bushfires, and other major bushfire events.• This advice will be prepared annually, and provided to the Minister prior to the commencement of the bushfire season for the year.

Emergency Services Agency consultation with ACT Bushfire Council

3.79 Subsection 72(5) of the *Emergencies Act 2004* also requires consultation between the Emergency Services Agency Commissioner and the ACT Bushfire Council over the monitoring of the Strategic Bushfire Management Plan. The Strategic Bushfire Management Plan states (at page 5):

This Plan supports the roles and functions of the ACT Bushfire Council to advise [the Minister] on any matters relating to bushfire management in the ACT. It provides the Council with a clear framework and measurable outcomes by which it can seek and analyse information and undertake audits on bushfire preparedness in the ACT.

- 3.80 The Emergency Services Agency has produced three annual reports on Strategic Bushfire Management Plan (2009) implementation so far, but only one of these reports has been provided to the ACT Bushfire Council for consultation.
- 3.81 From a review of ACT Bushfire Council minutes since October 2009, the Audit Office identified that there has been a very limited focus by the Council on the Strategic Bushfire Management Plan and its use as an accountability framework. The Strategic Bushfire Management Plan is occasionally referred to by Emergency Services Agency officers during Council meetings and it does not strongly influence the Council's discussion, work program or annual reports.
- 3.82 The Audit Office concludes the consultation requirement is clear in legislation, but that there has been inadequate:
- consultation between the Emergency Services Agency and the ACT Bushfire Council over the review of the scope and effectiveness of the Strategic Bushfire Management Plan; and
 - review of the scope and effectiveness of the Strategic Bushfire Management Plan by the ACT Bushfire Council.

Annual work program

- 3.83 Since 2010 the ACT Bushfire Council has set out an annual program of the work it intends to undertake. This provides clarity and guides Council time, and allows the Minister for Police and Emergency Services to see what topics the Council is likely to rely upon in order to provide advice. However, the items in the work program are not discussed in relation to the resources necessary to deliver them, including the implications for members' workloads and that of the Emergency Services Agency. The work program is not agreed at the outset by the Minister, and tasks have been introduced into the work program, without being brought to the attention of the Minister for Police and Emergency Services in a timely way.
- 3.84 Furthermore, ACT Bushfire Council meeting minutes over the past six years suggest that there have been periods where the Council has struggled with setting a clear, agreed direction. Minutes reflect that the Council has found it difficult to strike a balance between being strategic and undertaking detailed work on specific issues. Minutes nevertheless also identify that the work of the Council has been recognised as of importance to the Minister, particularly in relation to overseeing the follow up of the Government's response to the recommendations arising from the McLeod and Doogan reports following the Canberra 2003 fires.
- 3.85 The Strategic Bushfire Management Plan requires the ACT Bushfire Council to produce an annual report on bushfire preparedness. This report has been welcomed each year by the Minister although it has not always been available by the beginning of the bushfire season, as requested. For the 2007-08 season the

report was not sent to the Minister until January 2008, and for the 2011-12 season the report was not sent until 30 November 2011.

- 3.86 The Strategic Bushfire Management Plan requires the ACT Bushfire Council to prepare annual audit reports to document compliance with actions identified in the Plan. To date, the Council has not prepared any audit reports and a review of the agenda and minutes of the Council's meetings for the period October 2009 to November 2012 did not identify any item, discussion or document that addresses the requirement to prepare audit reports on the implementation of the Strategic Bushfire Management Plan

4. TERRITORY AND MUNICIPAL SERVICES DIRECTORATE BUSHFIRE MANAGEMENT ACTIVITIES

- 4.1 This chapter considers the bushfire management responsibilities and activities of the Territory and Municipal Services Directorate, in particular its delivery of activities under its Bushfire Operations Plan and the assurance mechanisms that are in place with respect to these activities.

SUMMARY

Conclusion

The Territory and Municipal Services Directorate's bushfire management activities are important to bushfire preparedness. The Directorate's Bushfire Operations Plan, which covers at least 72 per cent of the ACT, is strategically critical.

Implementation of the Bushfire Operations Plan generally meets legislative and other governance requirements and times for producing this plan more than meet minimum requirements.

While the Directorate has made some significant achievements in recent years in planning and implementing its Bushfire Operations Plans, only limited assurance can be given on whether these collectively are managing the overall risk of bushfire in the ACT. Information is needed on how the cumulative achievements of the Bushfire Operations Plans relate to, and contribute to, the bushfire management outcomes sought in the Strategic Bushfire Management Plan and the Regional Fire Management Plans.

Key findings

Bushfire Operations Plan

- The Territory and Municipal Services Directorate produces its Bushfire Operations Plan on an annual basis, therefore exceeding the minimum two-year standard in the Strategic Bushfire Management Plan.
- Bushfire Operations Plans for the three years from 2009-10 to 2012-13 (since the 2009 strategic bushfire management plan was agreed) generally meet the legislated requirements. These plans were discussed with the ACT Bushfire Council, and submitted to, and approved by, the Emergency Services Agency Commissioner within four months of the commencement of each year in five of the past six years.
- The Bushfire Operations Plan is an effective:
 - planning tool that encourages transparency and dialogue between different stakeholders. It is particularly effective in providing a framework for stakeholders to systematically discuss, re-prioritise and refine proposed activities; and
 - mechanism for identifying, defining and scheduling day-to-day tasks.

- However, the Bushfire Operations Plan could be improved if:
 - in reporting progress on its implementation, information was made available on how this also affected the implementation of the ACT Government's two key strategic planning mechanisms for bushfire preparedness (i.e. the Strategic Bushfire Management Plan and the Regional Fire Management Plans); and
 - financial information in the plan was routinely reconciled with that in the Territory and Municipal Services Directorate's financial management system.

Funding for the Bushfire Operations Plan

- The Strategic Bushfire Management Plan was adopted on 1 October 2009. In 2009-10 the Territory and Municipal Services Directorate allocated approximately \$8 million to implement bushfire management activities in its 2009-10 Bushfire Operations Plan.
- In January 2010, following the development of the Strategic Bushfire Management Plan and Regional Fire Management Plans in 2009 the Directorate made a budget submission for additional capital and recurrent funding for the delivery of activities under its Bushfire Operations Plan. The additional funding was for the delivery of activities that were considered 'essential for providing a reasonable level of bushfire protection to the community and environment of the ACT.' The initial budget submission was approved by the ACT Government, although capital funding was only approved to 2013-14. Total funding to be delivered on the basis of the 2010 budget submission was recurrent funding (\$11.006 million) covering the ten-year period and capital funding (\$3.798 million) for four years to 2013-14.
- The Directorate's Bushfire Operations Plans include a 'resources available' figure, which provides an indication of expenditure associated with specific Bushfire Operations Plan activities. These figures are rough estimates made at the commencement of the year and do not distinguish between funds (and activities) carried over from previous years. Furthermore, no further consideration is given to the cost estimates set out in the Bushfire Operations Plan, either item by item or by activity type, once the Bushfire Operations Plan has been agreed and is being implemented.
- Despite the large amount of funding being invested in implementing the Territory and Municipal Services Directorate's Bushfire Operational Plan, and the rationale in the 2010 budget submission to the ACT Government for enhancing activity levels in accordance with the Regional Fire Management Plans, the Directorate could not:
 - relate budgetary provision to expenditure to date, including activity that has been cancelled or deferred, and activities not foreseen in the ten-year plan; and
 - account for the cumulative effect of outcomes achieved and spending in relation to the ten-year goals set out in the budget submission to confirm

that a ‘reasonable level of preparedness’ has been achieved.

Delivery of activities in accordance with the annual Bushfire Operations Plans

- Overall there has been a general significant upward trend in the level of Bushfire Operations Plan activity planned and implemented by the Territory and Municipal Services Directorate between 2007-08 and 2011-12. This activity is in relation to fuel load management (slashing, grazing, physical removal, chemical treatment and hazard reduction burning), roads, tracks and trails (upgrading and new construction) and infrastructure (water, signage and helipads). Success with respect to specific activities has varied, primarily due to weather conditions.
- There is a need to clarify funding for slashing. The majority of slashing accounted for has been urban amenity mowing, that is, mowing undertaken in urban areas, which has been deemed as having a fire management purpose. For example, in 2012-13, 52 per cent of the 8,018 hectares proposed for slashing was described as urban amenity cuts. According to the Directorate’s 2010 budget submission to deliver the Regional Fire Management Plans, these amenity cuts are funded by budgets elsewhere in the Territory and Municipal Services Directorate. It is not made clear in the 2010 budget submission whether the 8 000 hectares per year target includes or excludes these amenity cuts. The Audit Office cannot therefore conclude planned and implemented slashing levels meet Regional Fire Management Plans targets.
- The Directorate’s Bushfire Operations Plans and the accompanying end-of-year narrative reports do not provide an adequate mechanism for reporting progress in the development of the access network. The reports are inadequate in terms of presenting a comprehensive understanding of the quantity of work undertaken (i.e. kilometres of roads, tracks and trails upgraded) and the cumulative effect on network improvement. Therefore, no reliable conclusion can be drawn about achieving the Regional Fire Management Plan access network goals in relation to the funds and timescales agreed.
- Infrastructure completion rates vary between 25 and 75 per cent of planned activities. The activities vary in scale and cost from \$2 000 for plumbing water troughs to \$250 000 for a dam. Reporting on the percentage of activities completed at year end, with no indication of the size or importance of the activity, can be misleading.

Co-operation across ACT Government agencies for prevention and preparation

- A number of areas of activity (for example, prescribed burns, infrastructure projects and fire fuel management) set out in the Territory and Municipal Services Directorate’s Bushfire Operations Plan require collaboration in, and between, ACT Government agencies. While this has been particularly effective for hazard reduction burns, where it is apparent that ACT Government agencies are achieving more effective fire management and ecological outcomes, this is not the case for infrastructure projects.
- Mount Franklin Road runs for 78 kilometres from north to south in Namadgi National Park and crosses the New South Wales border at several places. It is an

important strategic road for managing bushfires. In January 2011 the road was approved for construction, with the first of three construction phases due for completion in December 2012. However, the upgrade of the road has encountered major delays and increased costs associated with the management of the development application and environmental approvals process and its construction since 2006.

- The preparation of the environmental impact statement and the development application process took four years longer than originally anticipated by the Territory and Municipal Services Directorate. The Territory and Municipal Services Directorate asserts:
 - administrative costs associated with the approval process increased from an initial estimate of \$120 000 to in excess of \$850 000 over this period; and
 - construction costs increased from an initial estimate of \$200 000 in 2006 for the first 42 km of upgrade to an estimate of greater than \$1.8 million based on the construction work to date.
- A range of difficulties associated with the project were apparent including the lack of a shared appreciation between ACT Government directorates at the outset of the project as to how the environmental impact statement and the development application should be managed, changes made to the project by the proponent (the Territory and Municipal Services Directorate) after it had been submitted to the Environment and Sustainable Development Directorate; and unrealistic timeframes and an underestimation of the knowledge and expertise required to progress the project through the environmental assessment and development application process.
- There has since been a focus on learning from the difficulties associated with the Mount Franklin Road project. For example, work has begun on developing a pre-appraisal procedure for all of the major projects set out in the 2009 Strategic Bushfire Management Plan and Regional Fire Management Plans, with the purpose of planning for, and coordinating, the likely development application work that will be necessary.
- The development of these measures shows a willingness to learn from previous difficulties and implement practical administrative processes to achieve bushfire management objectives that are compliant with the *Planning and Development Act 2007* and the *Emergencies Act 2004*. However, progress in improving collaboration across directorates has been slow with key initiatives stalling, or being ineffectively implemented.

TERRITORY AND MUNICIPAL SERVICES DIRECTORATE BUSHFIRE OPERATIONS PLAN

- 4.2 The Territory and Municipal Services Directorate has land management responsibilities for at least 72 per cent of the ACT. Given this, and the nature of its land, primarily national parks and nature reserves, its Bushfire Operations Plan is a key mechanism for managing the threat of bushfires to the ACT.

Meeting the requirements for a Bushfire Operational Plan

- 4.3 The Territory and Municipal Services Directorate Bushfire Operations Plan is presented in an Excel workbook. It has ten sections which outline activities relating to reducing fuel loads, improving access management, maintaining and improving infrastructure and developing and maintaining a firefighting capability. The sections relate to the required content of a bushfire operational plan as set out in the Strategic Bushfire Management Plan. Each section of the Territory and Municipal Services Directorate's Bushfire Operations Plan includes:
- a list of activities and their location, e.g. 'physical removal of vegetation, Tuggeranong Nature Reserve, 0.5 hectares';
 - the priority of each activity, e.g. priority 1, 2 or 3; and
 - the estimated cost of each activity, with these costs aggregated up to totals presented in a section in the workbook titled 'resource requirements'.
- 4.4 The Territory and Municipal Services Directorate produces its Bushfire Operations Plan on an annual basis. This more than meets the two-year minimum standard requirement provided for by the Strategic Bushfire Management Plan. The Bushfire Operations Plan has been drafted, consulted upon and approved between June and November each year it has been produced. The approved Plan has not as a matter of routine been made public, but in 2012 it was published, along with a set of detailed maps showing proposed fuel and access management treatments, on the Territory and Municipal Services Directorate website. There is no requirement to make public a bushfire operational plan under the *Emergencies Act 2004* or the Strategic Bushfire Management Plan.
- 4.5 The Audit Office examined the Territory and Municipal Services Directorate's Bushfire Operations Plans for the three years from 2009-10 to 2012-13. The Territory and Municipal Services Directorate's Bushfire Operations Plans have been discussed with the ACT Bushfire Council, and have been submitted to, and approved by, the Emergency Services Agency Commissioner within four months of the commencement of each year in five of the past six years.
- 4.6 The Audit Office considers that the Territory and Municipal Services Directorate Bushfire Operations Plans have met the requirements outlined in the Strategic Bushfire Management Plan and *Emergencies Act 2004*.

Use of the Bushfire Operations Plan

- 4.7 The Audit Office broadly considered the use of the Territory and Municipal Services Directorate Bushfire Operations Plan as a mechanism for:
- planning and consultation;
 - managing day-to-day operations;
 - monitoring and reporting; and

- financial accountability.

Bushfire Operations Plans - planning and consultation

- 4.8 The Territory and Municipal Services Directorate's Bushfire Operations Plan provides an indication of proposed individual activities, their purpose, cost, location, priority and how they relate to zoning in the Strategic Bushfire Management Plan. There are more than 500 individual activities in the Territory and Municipal Services Directorate Bushfire Operations Plan.
- 4.9 The Audit Office reviewed recent Bushfire Operations Plans and their use in the consultation process between community members with land interests and the ACT Government, including its land managers, the ACT Rural Fire Service and the ACT Bushfire Council. The Territory and Municipal Services Directorate Bushfire Operations Plan represents an effective planning tool that encourages transparency and dialogue between different stakeholders. The Bushfire Operations Plan is particularly effective in providing a framework for stakeholders to systematically discuss, re-prioritise and refine proposed activities. These stakeholders may be in the Territory and Municipal Services Directorate or in other ACT Government agencies, for example the Conservation, Planning and Research team in the Environment and Sustainable Development Directorate and the ACT Rural Fire Service.

Bushfire Operations Plans - managing day to day operations

- 4.10 The Territory and Municipal Services Directorate Bushfire Operations Plan provides a mechanism for diverse operational areas in ACT Government agencies to plan and schedule work and to record and communicate work done on activities.
- 4.11 Primary responsibility for the bushfire preparedness of land for which the Territory and Municipal Services Directorate is the land manager lies with the Forestry and Fire Management unit in the Parks and Conservation Service Branch. Forestry and Fire Management staff record work done on activities in the master Bushfire Operations Plan Excel workbook. Line items in the Bushfire Operations Plan workbook become units of activity for which work plans are developed and implemented and officers update the workbook as work is completed.
- 4.12 Communication on work done on activities is facilitated through the sharing of records of activities from the Bushfire Operations Plan Excel workbook between staff from different operational areas including:
- the Forestry and Fire Management unit in the Parks and Conservation Service Branch of the Territory and Municipal Services Directorate;
 - other business units within the Parks and Conservation Service Branch, e.g. Rural Leases and Land Management Agreements units;
 - the ACT Rural Fire Service; and

- the Conservation Planning and Research unit in the Environment and Sustainable Development Directorate.
- 4.13 Accordingly, the Audit Office considers that the Bushfire Operations Plan is an effective mechanism for identifying, defining and scheduling tasks and communicating work done on activities between key operational areas.

Bushfire Operations Plans - monitoring and reporting

- 4.14 Monitoring and reporting on progress against the Bushfire Operations Plan is primarily achieved through:
- a regular quarterly narrative report informed by the task-by-task status of activities in the Bushfire Operations Plan Excel workbook; and
 - an end-of-year report.
- 4.15 While useful, the quarterly and end-of-year reports only provide a partial picture of effectiveness. Shortcomings of these reports are:
- they rely on the status of in-year tasks in the Excel workbook to be kept up to date by relevant officers, which is not always achieved;
 - summary reporting of task progress includes tasks marked as ‘commenced but not completed’ as well as ‘completed’ tasks, which potentially overstates achievement;
 - until recently (i.e. the 2012-13 year) activities have been reported according to the number of tasks and not the volume of activity per task. This can distort the reporting of progress where there are one or two large projects and many small ones; and
 - there is no in-year reporting of the progress of planned work according to the seasonal timescales set out for specific activities in the Bushfire Operations Plan.
- 4.16 Furthermore, the reports do not facilitate an assessment of progress against the ACT Government’s two key strategic planning mechanisms for bushfire preparedness: the Regional Fire Management Plans and the Strategic Bushfire Management Plan. In this respect, there is no outcome reporting or statement of progress in relation to:
- the phasing of work and the aggregate achievement of standards with respect to the ten-year Regional Fire Management Plans; or
 - the broader objectives of the Strategic Bushfire Management Plan.
- 4.17 While this may not necessarily be the purpose of the quarterly narrative report and end-of-year report, there is a missed opportunity to use the information in these period-specific reports to assess cumulative progress against broader outcomes.

Recommendation 11 (Chapter 4) – Monitoring and reporting of Territory and Municipal Services Directorate’s Bushfire Operations Plan

The Territory and Municipal Services Directorate, as part of its Bushfire Operations Plan monitoring and reporting, should assess and publicly report on cumulative progress against broader outcomes identified in the Regional Fire Management Plans and the Strategic Bushfire Management Plan.

Bushfire Operations Plans - financial accountability

- 4.18 Proposed activities in each year’s Bushfire Operations Plan are guided by Strategic Bushfire Management Plan treatment standards and the Regional Fire Management Plans. Proposed activities include:
- work yet to be started or incomplete;
 - work carried forward from previous years; and
 - to some degree, new work that was not anticipated in the Regional Fire Management Plans in 2009.
- 4.19 The estimated costs of individual activities are identified in the Bushfire Operations Plan, and are aggregated to represent the estimated total cost of implementing the Territory and Municipal Services Directorate’s bushfire management activities. This represents the ‘resourcing requirement’ figure in the Bushfire Operations Plan, which is then the subject of discussion and negotiation in the Parks and Conservation Service Branch in the Territory and Municipal Services Directorate. There are two main difficulties in basing resourcing decisions on this information:
- item by item cost estimates are rough estimates at the beginning of the year and there is some flexibility in how or even whether each task is actually undertaken or implemented. The scale of activity may change substantially when crew leaders design individual work plans or the mechanism for delivery of the task may change, from contract to in-house use of crew members; and
 - there is no mechanism in the Bushfire Operations Plan for distinguishing between funding for new activity and funding for work carried over from previous years. While the resources allocated identify rollovers, recurrent and new one-off funding, there is no clear link between rolled-over resources and rolled-over activity. This means it is very difficult to identify what the estimated cost is of new activity each year. A simple assessment of the scale of new operations and funding is not possible.
- 4.20 Territory and Municipal Services Directorate officers advised that no further consideration is given to the cost estimates set out in the Bushfire Operations Plan, either item by item or by activity type, once the Bushfire Operations Plan has been agreed and is being implemented. In this respect there is no reporting

of actual costs of the implementation of the activities identified in the Bushfire Operations Plan against initial cost estimates.

- 4.21 Furthermore, spending on specific projects, spending by the activity types, or on the Bushfire Operations Plan as a whole is not always reconciled with the Territory and Municipal Services Directorate's corporate finance system. For the 2011-12 year, only in May 2012 was a reconciliation undertaken for the year to date. Such a reconciliation is needed to ensure that underspending or overspending is being effectively identified and managed. Corporate Finance and Forestry and Fire Management unit officers within the Directorate identified this shortcoming at that time and have identified a need to address this. There is an intention to develop a management information system that achieves the necessary transparency required for management, forecasting and reporting purposes. At the time of the audit, this has yet to be achieved.

Recommendation 12 (Chapter 4) Monitoring and reporting of Territory and Municipal Services Directorate's Bushfire Operations Plan

The Territory and Municipal Services Directorate should enhance internal monitoring of its implementation of bushfire management activities and spending under the Bushfire Operations Plan by routinely reconciling figures in this plan with those in the Directorate's corporate financial system.

FUNDING FOR ACTIVITIES UNDER THE PLAN

- 4.22 The Strategic Bushfire Management Plan was adopted on 1 October 2009. In 2009-10 the Territory and Municipal Services Directorate allocated approximately \$8 million to implement bushfire management activities identified in the 2009-10 Bushfire Operations Plan.
- 4.23 In January 2010 the Territory and Municipal Services Directorate made a budget submission for a total of \$21 million in additional capital (\$10.013 million) and recurrent (\$11.006 million) funding for the ten-year period to 2019-20. The funding was sought for the delivery of additional bushfire prevention and mitigation measures, in addition to what was already being delivered through the Territory and Municipal Services Directorate's Bushfire Operations Plan at the time.
- 4.24 The January 2010 budget submission followed the development of the Strategic Bushfire Management Plan and the Regional Fire Management Plans in late 2009. The initial budget submission was approved by the ACT Government, although capital funding was only approved to 2013-14. Total funding to be delivered on the basis of the 2010 budget submission was recurrent funding (\$11.006 million) covering the ten-year period and capital funding (\$3.798 million) for four years to 2013-14.

4.25 The January 2010 budget submission makes a number of important statements with respect to the outcomes sought from the additional appropriation including:

- funding was sought to achieve a ‘reasonable level of bushfire protection’. Activities contained in the budget submission were considered ‘essential’ to achieve this;
- without the additional funding it was stated in the submission that it ‘would not be possible’ to achieve the standards and strategies specified in the Strategic Bushfire Management Plan;
- the Regional Fire Management Plans identified that meeting the Strategic Bushfire Management Plan standards required a ‘significant increase’ in active fire management. These resources and activity categories were set out in the proposal;
- the ability of the Government to meet its obligations under the *Emergencies Act 2004* was ‘dependent’ on the proposal; and
- the increase in funding was necessary to maintain the existing standard of bushfire protection. The greater activity levels proposed were due to climate change leading to greater risk, the increase length of the urban curtilage requiring protection and mitigation activities, and fuel accumulation rate over time.

4.26 The submission sets out enhanced levels of bushfire management activity that will provide this ‘reasonable level of bushfire protection.’ A selection of the recurrent funded activities outlined in the January 2010 budget submission is presented in Table 4.1.

Table 4.1: Recurrent funded bushfire management activities that will achieve a ‘reasonable level of preparedness’ for the ACT to June 2020

Activity	Strategic Bushfire Management Plan (Oct 2009) proposed activities (to June 2020)	Budget submission proposed activities (to June 2020)	Frequency / Period
Fire trails	4 500 km	4 500 km	Over ten years
Slashing	3 674 hectares	8 000 hectares	Annually
Grazing	8 677 hectares	16 000 hectares	Annually
Prescribed burning	44 20 hectares	53 000 hectares	Over ten years
Physical removal	2 030 hectares	4 500 hectares	Over ten years

Source: Extract from Territory and Municipal Services Directorate January 2010 budget submission and Strategic Bushfire Management Plan *Facts and figures at a glance* (October 2009)

4.27 The submission also sets out the bushfire management activity to be capital funded that will provide this ‘reasonable level of preparedness’.

Table 4.2: Capital funded bushfire management activities that will achieve a 'reasonable level of preparedness' for the ACT to June 2020

Project type	Activity	Budget submission proposed activities (to June 2020)
Water Points	Upgrade	3
	Construction	22
Helipads	Construction	3
Fuel Breaks	Upgrade	14 km
	Construction	37 km
Fire Trails	Upgrade	127 km
	Construction	8 km
Grazing infrastructure	Construction	26 troughs and 87 km fencing
Equipment	New	1 tanker, 4 light units, 5 other items

Source: Extract from Territory and Municipal Services Directorate January 2010 budget submission

4.28 Table 4.2 identifies those projects to be funded by \$10.013 million in capital funding over the ten years to June 2020. While the ACT Government has only confirmed capital funding for four years to 2013-14, no re-profiling of the proposed activities was undertaken at the time, or has been undertaken since by the Territory and Municipal Services Directorate to establish what activities as set out in Table 4.2 should be achieved over the four years of the existing capital funding commitment. It is important to align outcomes to funding commitments to provide effective accountability for the appropriation, particularly when capital funding is rolled forward from year to year, and where the appropriation spans multiple years.

Territory and Municipal Services Directorate funding for its bushfire management activities

4.29 Resourcing for the Territory and Municipal Services Directorate Bushfire Operations Plans for the period before and after 2010-11 (the first year for which the additional funding was approved) was considered as part of this performance audit.

4.30 The examination was undertaken because:

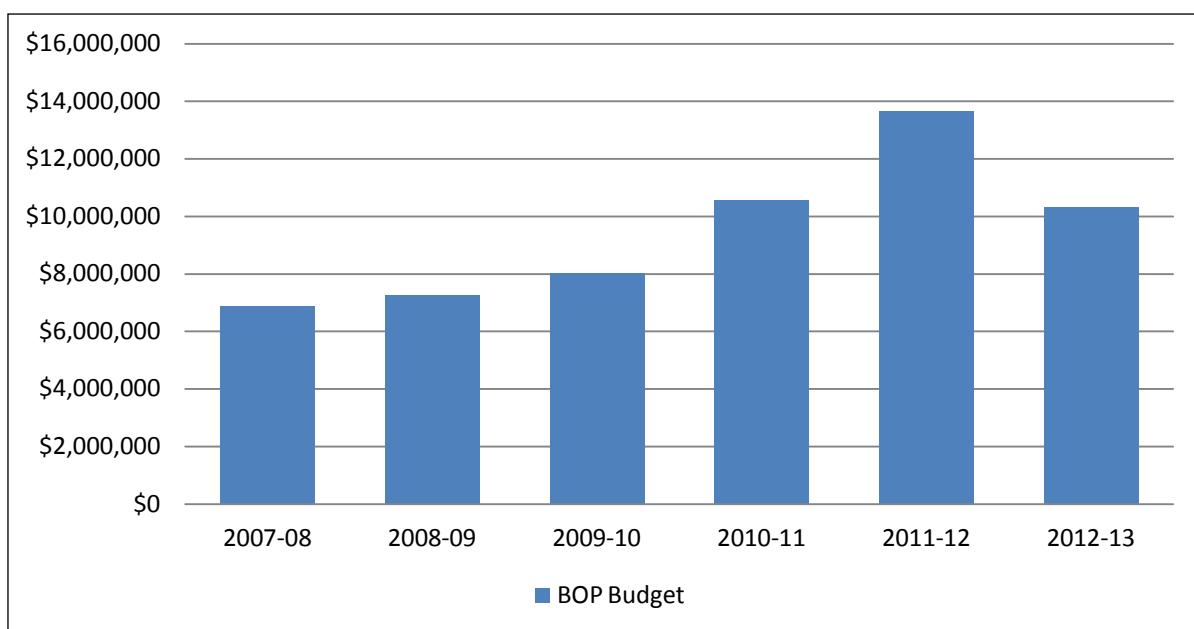
- it is considered important to identify the level of resources provided by the ACT Government to the Territory and Municipal Services Directorate for bushfire management activities, and to determine how these resources were allocated in the Territory and Municipal Services Directorate;
- there has been much discussion in the Territory and Municipal Services Directorate, the Emergency Services Agency and the ACT Bushfire Council over the level of resources made available to deliver the Bushfire Operations Plan; and

- one source of funding available to the Territory and Municipal Services Directorate which came from insurance payments following the 2003 Canberra bushfire will shortly be exhausted (in 2012-13), thereby placing additional pressure on other sources of funding.

Bushfire Operations Plan funds

- 4.31 The cost estimates of activities as set out in the 'resources available' section of the approved Territory and Municipal Services Directorate's Bushfire Operations Plans for each of the years 2007-08 to 2012-13 were examined. These are shown in Figure 4.1.

Figure 4.1: Territory and Municipal Services Directorate's Bushfire Operations Plan statement of resources available 2007-08 to 2012-13



Source: Approved Territory and Municipal Services Directorate's Bushfire Operations Plans

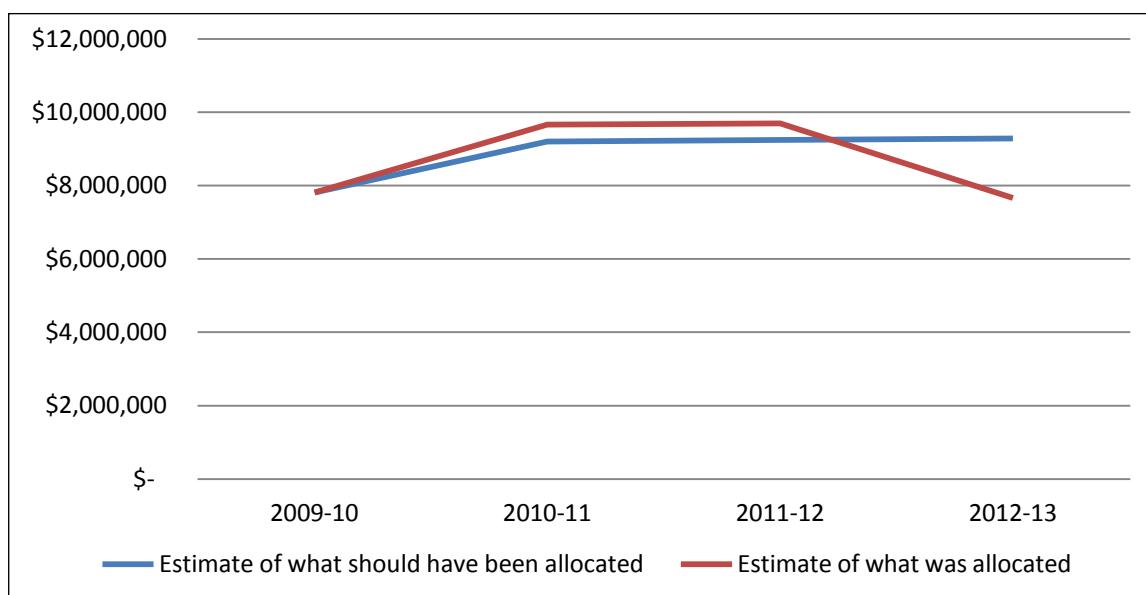
- 4.32 There has been significant variability in the 'resources available' figures in the Bushfire Operations Plans between 2007-08 and 2012-13, with a comparatively large increase in 'resources available' in 2010-11 and 2011-12, before the 'resources available' figure declined in 2012-13, refer Figure 4.1.
- 4.33 While useful, there are a number of factors which prevent a year-on-year comparison being made for the information presented in Figure 4.1. For example, there was a change in the budget method from 2010-11, which led to the inclusion of a new budgetary heading (called 'business operating costs') not previously attributed to the Bushfire Operations Plan. Additionally, resources available totals include:
- roll-overs of previous years' underspends in both capital and recurrent expenditure;

- additional expenditure associated with higher than normal levels of storm damage to the access network in the last two years. This resulted in additional income from one-off storm insurance payments; and
 - additional bushfire protection work in response to the development of new suburbs, which had not been factored into the 2010 budget submission. This accounts for an additional \$1.65 million in the last two years' Bushfire Operations Plans (2011-12 and 2012-13).
- 4.34 The 'resources available' figures presented in the Territory and Municipal Services Directorate's Bushfire Operations Plans alone do not provide an effective means of identifying the scale of resources made available for the delivery of the activities as set out in the January 2010 budget submission.

Financial information

- 4.35 Based on information provided by the Territory and Municipal Services Directorate from its financial information system, and the January 2010 budget submission, the Audit Office has estimated the funds made available for the purpose of implementing bushfire management activities under the Territory and Municipal Services Directorate's Bushfire Operations Plan.
- 4.36 Figure 4.2 shows what should have been allocated for bushfire management activities (based on resources allocated in 2009-10 for the delivery of the Bushfire Operations Plan and the additional funds allocated as a result of the January 2010 Territory and Municipal Services Directorate budget submission) and what was allocated according to the Territory and Municipal Services Directorate's financial management information.

Figure 4.2: Estimate of proposed level of funding including appropriations, versus estimate of funds allocated



Source: Audit Office, based on the Territory and Municipal Services Directorate's Bushfire Operations Plan, budgets and Parks and Conservation Service Branch internal finance team December 2012

- 4.37 From 2010-11 to 2012-13 a total of approximately \$27 million was allocated to support the implementation of the annual Bushfire Operations Plans. Approximately \$9.6 million was allocated each year in 2010-11 and 2011-12 and \$7.7 million was allocated in 2012-13. Based on the level of funding in 2009-10, and the additional funding received as a result of the 2010 budget submission, the Audit Office estimates that approximately \$9.2 million should have been allocated for each of the three years to 2012-13, i.e. a total of \$27.7 million, refer to Figure 4.2. This means there is likely to have been a cumulative shortfall in the allocation of funding, of around \$700 000 over the three years, or around \$230 000 a year compared to the resources that should have been allocated.
- 4.38 An estimated under-allocation by the Territory and Municipal Services Directorate of this magnitude over the first three years of the current Strategic Bushfire Management Plan is considered to be a tolerable variance given a total budget commitment of \$27 million over the same period. The variance equates to 2.6 per cent.
- 4.39 As the January 2010 Territory and Municipal Services Directorate budget submission provided for a ten-year planning period, it is reasonable for resources to be increased or decreased each year according to, for example, the impact of extreme weather. Furthermore, it is acknowledged that the Directorate's circumstances and priorities may have changed, and continue to change, since 2010. This analysis (Figure 4.2) is provided to illustrate that the 'resources available' funding figure as set out in Figure 4.1 drawn from Bushfire Operations Plans is an unreliable means of determining activity levels year on year, or the level of funding allocated in relation to Government commitments.

Bushfire Operations Plan funding accountability

- 4.40 A significant amount of funding has been, and continues to be, provided to the Territory and Municipal Services Directorate to implement activities under its Bushfire Operations Plan. Given the large amount of funding under consideration, and the rationale put forward in the January 2010 Budget submission for enhancing activity levels in accordance with the Strategic Bushfire Management Plan and Regional Fire Management Plans over a ten-year period 'to achieve a reasonable level of bushfire protection to the community and environment of the ACT', the Territory and Municipal Services Directorate should be able to:
- relate budgetary provision to expenditure to date, including activity that has been cancelled or deferred, and activities not foreseen in the ten-year plan; and
 - account for the cumulative effect of outcomes achieved and spending in relation to the ten-year goals set out in the Budget submission.
- 4.41 If the Territory and Municipal Services Directorate is unable to implement, or is unable to account for the implementation of this quantum of activity and funding over the ten-year period, then it is not in a position to confirm that a

'reasonable level of bushfire protection' has been achieved in accordance with the Regional Fire Management Plans, and the Government's commitment to implementing these plans.

- 4.42 The Territory and Municipal Services Directorate's annual reports and reporting against Statement of Performance accountability indicators, as well as its reports to the ACT Bushfire Council and the Emergency Services Agency, provide a number of complementary mechanisms for accountability for the delivery of activities under its Bushfire Operations Plan. However, these accountability mechanisms do not explicitly account for both the delivery and cost of activities under the Bushfire Operations Plan.
- 4.43 Given the level of resources that have been directed to the Territory and Municipal Services Directorate to assist it in implementing its bushfire management activities, in accordance with long term Regional Fire Management Plans, there is merit in more clearly reporting against, and being accountable for, the cost of the delivery of activities under the Bushfire Operations Plan.

Recommendation 13 (Chapter 4) - Tracking and reporting on funds allocated and spent on the Territory and Municipal Services Directorate's Bushfire Operations Plan

The Territory and Municipal Services Directorate should annually (and on a cumulative basis) track and report on funds allocated for, and spent on, its Bushfire Operations Plan to the Minister for Police and Emergency Services.

DELIVERY OF ACTIVITIES IN ACCORDANCE WITH ANNUAL PLANS

- 4.44 The 2009 Regional Fire Management Plans, and the 2010 budget submission that supported the delivery of these plans, identified the need for an increase in activities that were to be undertaken by the Territory and Municipal Services Directorate in the ten years to 2019-20, refer to Table 4.1.
- 4.45 The Audit Office examined planning for, and implementation of the Territory and Municipal Services Directorate's Bushfire Operations Plans over six years; 2007-08 to 2012-13. The purpose of this examination of the Territory and Municipal Services Directorate's Bushfire Operations Plan activity is to establish whether:
 - there has been a general upward trend in the level of activity planned between 2007-08 and 2012-13;
 - there has been a general upward trend in the level of activity implemented between 2007-08 and 2011-12; and
 - there is an increase in planned and implemented activity from 2010-11 onwards that broadly reflects the increase in activity required by the Regional Fire Management Plans.
- 4.46 The following broad activity groupings were examined by the Audit Office:
 - fuel load management;

- roads, tracks and trails; and
- infrastructure e.g. for water, signage and helipads.

Fuel load management

4.47 The Strategic Bushfire Management Plan and supporting documents outline the five fuel load management techniques: slashing, grazing, physical removal, chemical treatment and burning and the rationale for modifying fuel loads:

Fuel management includes a range of activities that modify fuel characteristics (including fuel load, vertical and horizontal arrangement and continuity, and live to dead fuel ratio) thereby reducing the rate of spread, flame height, intensity and spotting potential of subsequent wildfires. This reduction in fire behaviour increases the range of weather conditions under which subsequent wildfires are able to be contained and controlled.²⁵

4.48 The Strategic Bushfire Management Plan details bushfire history in the ACT, and outlines the science behind fuel load management that supports the strategy and action plans. The Audit Office did not review or challenge the strategy or evidence base, but sought to understand how the strategy is delivered and whether its aims are being met.

4.49 The strategy for managing fuel loads outlined in the 2009 Strategic Bushfire Management Plan represents a substantial change in emphasis from the 2005 Strategic Bushfire Management Plan. The 2009 Strategic Bushfire Management Plan and the Regional Fire Management Plans have a stronger emphasis on prescribed burns and the need to carefully balance ecological considerations.

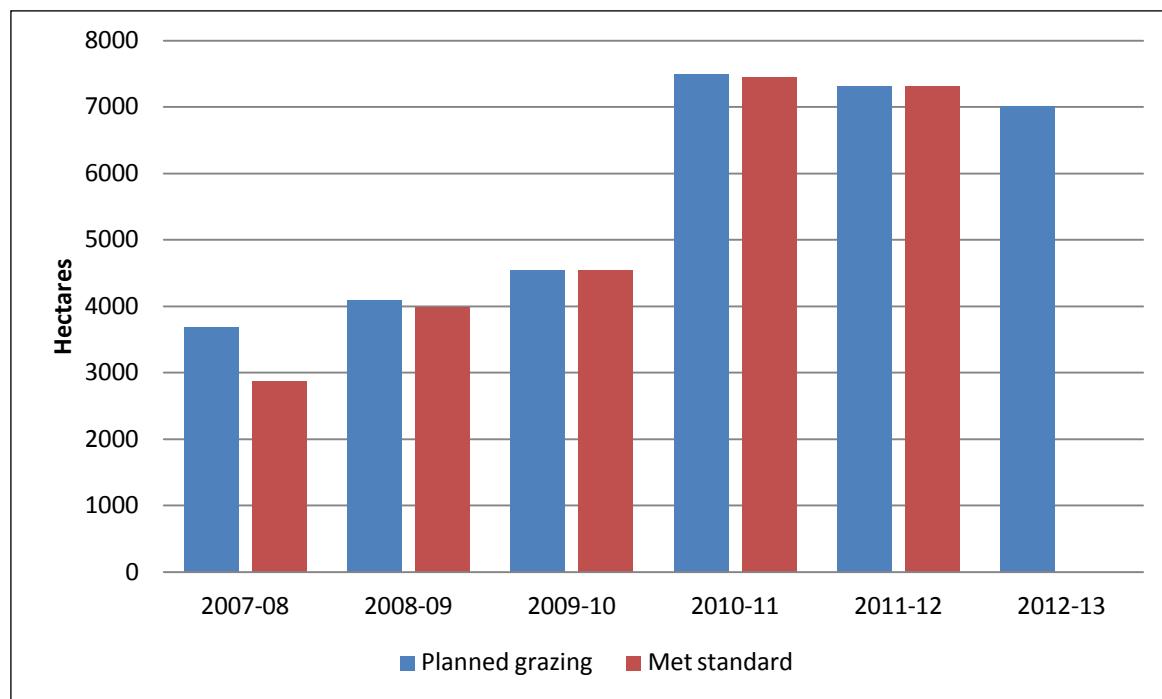
Grazing and slashing

4.50 The 2010 TAMS budget submission sought additional funding for a total of 16 000 hectares of grazing and 8 000 hectares of slashing annually in accordance with Regional Fire Management Plan requirements.

Grazing

4.51 The following graph shows the total planned, and actual, amount of land grazed since 2007-08.

²⁵ Strategic Bushfire Management Plan for the ACT (2009) - Supporting Information Part Two, Chapter 6, page 56

Figure 4.3: Planned and actual levels of grazing to standard (hectares)

Source: Agreed Territory and Municipal Services Directorate's Bushfire Operations Plans and end-of-year annual reports to the ACT Bushfire Council

- 4.52 A significant increase in grazing has occurred in the last five years from 2007-08 to 2012-13, refer to Figure 4.3. Figure 4.3 shows:
- the Territory and Municipal Services Directorate has reported between 78 and 100 per cent achievement (by hectarage) of its planned grazing levels in the five years to 2011-12; and
 - there has been a significant increase in land that was planned to be grazed in the three years to 2012-13 compared to the three previous years. However, even with this increase, the area under grazing is less than half that anticipated in the 2009 Regional Fire Management Plans.
- 4.53 The Territory and Municipal Services Directorate's reports to the ACT Bushfire Council note that in the two recent wet summers (2010-11 and 2011-12) in general much grassland did not dry out, or sufficiently 'cure', for it to become a fire hazard. While the level of grazing was insufficient to bring fuel loads down to within the standards set out in the Strategic Bushfire Management Plan, no fuel management standard was required to be met in many cases as grasslands were too wet. As a result, reports identified that grazing, or an alternative fuel modification technique such as slashing, was 100 per cent successful where standards needed to be applied.
- 4.54 In 2012-13 the Audit Office identified that the Territory and Municipal Services Directorate has demonstrated a greater emphasis on achieving effective grazing outcomes. Since August 2012, there has been earlier monitoring of grass growth and stocking levels through the use of expert advice. This has been accompanied

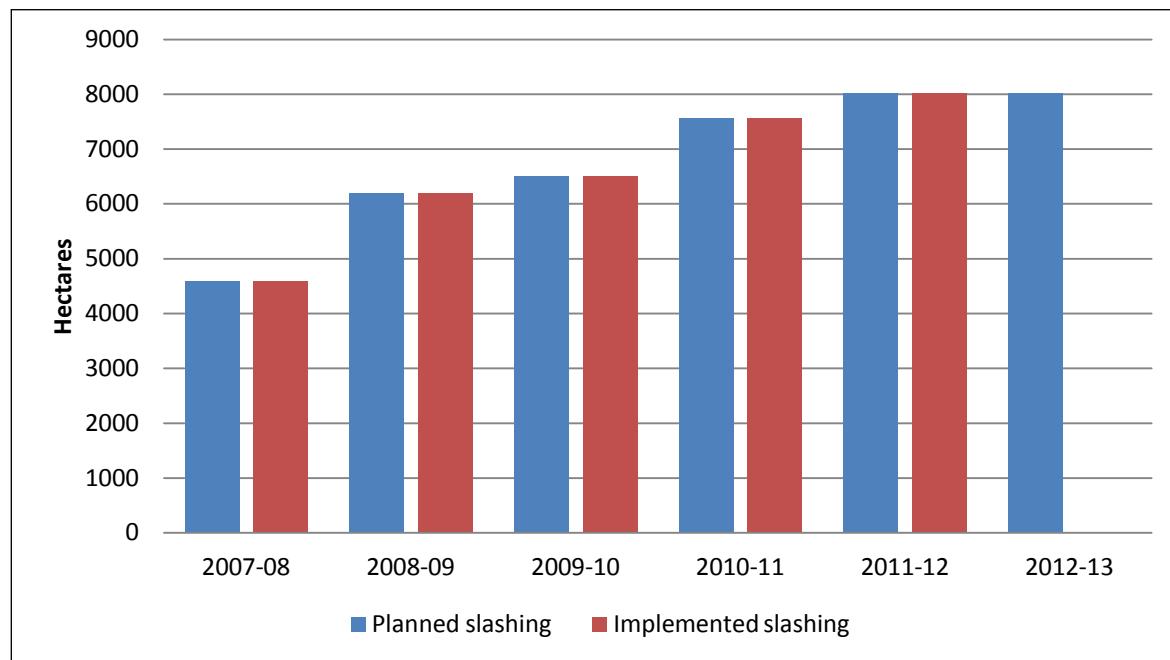
by additional work to: improve engagement with licensed graziers; assess prospects for fuel management objectives being met; and put in place alternative treatments, where needed, to meet fuel management standards.

- 4.55 The Audit Office concludes that there is a general upward trend in the level of planned and achieved grazing activity between 2007-08 and 2012-13, but that this does not yet reflect the level of grazing activity anticipated by the Regional Fire Management Plans. Furthermore, while the Territory and Municipal Services Directorate has strengthened its management of grazing, at this stage it is difficult to predict the likelihood of success in facilitating the annual grazing of 16 000 hectares to the appropriate fuel management standards, in a dry season, when the greatest grazed area to date has been 4 500 hectares in a dry summer (2009-10).

Slashing

- 4.56 Figure 4.4 shows the total planned and actual amount of land slashed since 2007-08.

Figure 4.4: Proposed and implemented levels of slashing (hectares)



Source: Agreed Territory and Municipal Services Directorate's Bushfire Operations Plans and end-of-year annual reports to the ACT Bushfire Council

- 4.57 There has been a steady increase in the amount of land subject to slashing since 2007-08, refer to Figure 4.4, and the Territory and Municipal Services Directorate has reported 100 per cent achievement of planned slashing levels in the five years to 2011-12.
- 4.58 While the Audit Office concludes that there has been a general upward trend in the level of slashing activity planned and implemented in the six years to 2012-13, it should be noted that the majority of slashing accounted for in these years

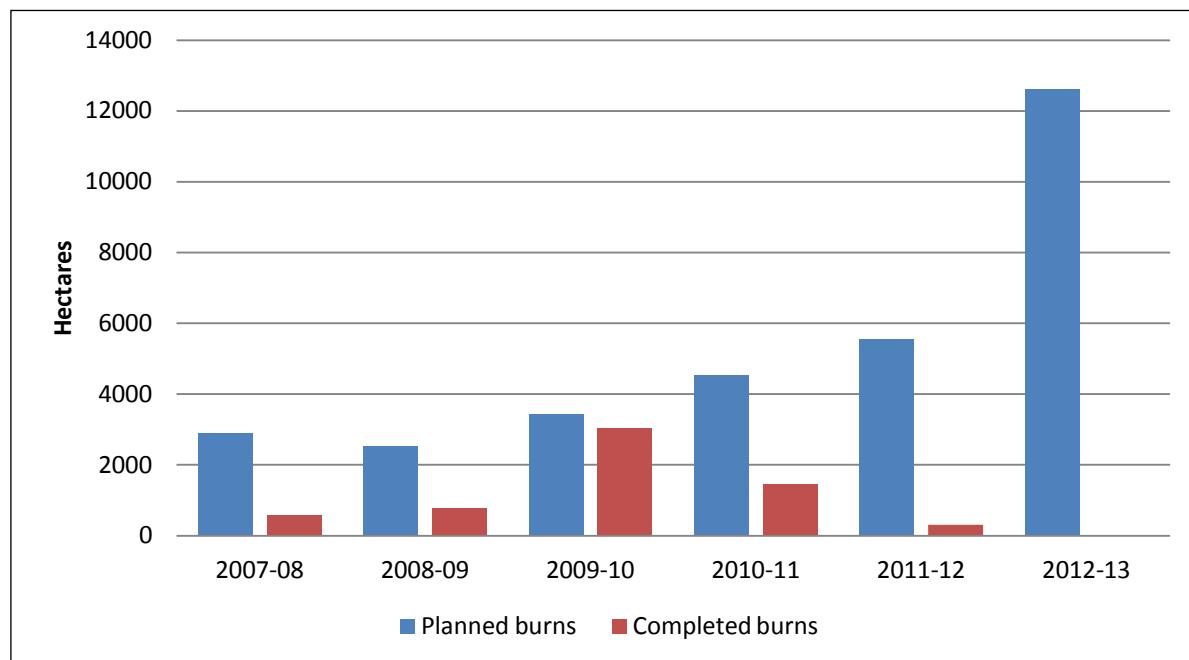
relates to urban amenity mowing, i.e. mowing undertaken in urban areas, which has been deemed as having a fire management purpose. For example, in 2012-13, 52 per cent of the 8 018 hectares proposed for slashing was described as urban amenity cuts.

- 4.59 According to the 2010 Territory and Municipal Services Directorate budget submission, these amenity cuts are funded by budgets elsewhere in the Territory and Municipal Services Directorate. It is not made clear in the submission whether the 8 000 hectares per year target includes or excludes these amenity cuts. The Audit Office cannot therefore conclude planned and implemented slashing levels meet Regional Fire Management Plans targets.

Hazard reduction burns (also called ‘prescribed burns’)

- 4.60 The 2010 Territory and Municipal Services Directorate budget submission identifies a need for 53 000 hectares of hazard reduction burns (prescribed burns) in 390 locations in the period between 2009-10 and 2019-20.
- 4.61 Figure 4.5 shows the total planned and actual area of land subject to prescribed burns since 2007-08.

Figure 4.5: Total planned and actual area of land subject to hazard reduction burns



Source: Agreed Territory and Municipal Services Directorate’s Bushfire Operations Plans and end-of-year annual reports to the ACT Bushfire Council

- 4.62 There has been a steady increase in the amount of land subject to prescribed burns in the five years to 2011-12, before a significant increase in 2012-13, refer to Figure 4.5. The Territory and Municipal Services Directorate has not been successful in meeting its planned targets for prescribed burns in the five years to 2011-12. In the five years to 2011-12 the Territory and Municipal Services Directorate has completed an average of 33 per cent of planned prescribed

burns, except for 2009-10 when approximately 90 per cent of prescribed burns were completed.

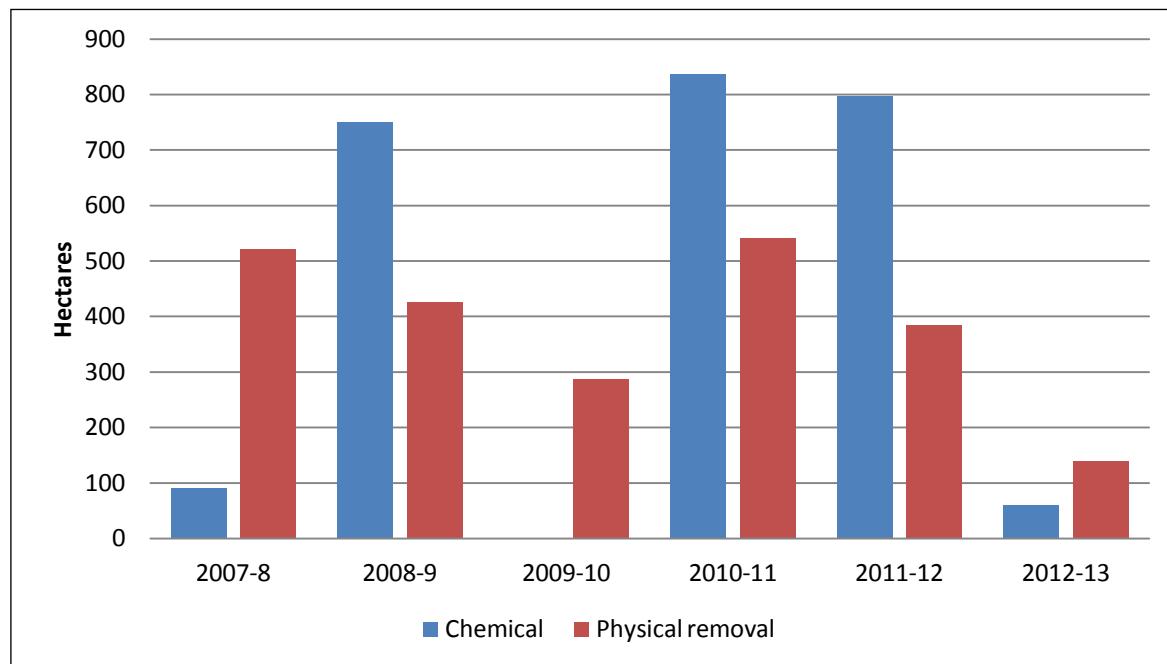
- 4.63 The level of prescribed burning has increased since 2009 to a level broadly in line with the expectations of the 2010 Territory and Municipal Services Directorate budget submission, which is approximately 5 000 hectares a year.
- 4.64 Territory and Municipal Services Directorate officers identified that the recent wet summers in 2010-11 and 2011-12 severely affected the prospects of commencing prescribed burns, and therefore the planned level of burns in 2012-13 in part reflects a carry-forward of this backlog. However, with respect to 'catching up' on the prescribed burns not undertaken in previous years, Territory and Municipal Services Directorate officers note that it is not 'environmentally acceptable to simply continue to add these burns to an ever increasing list to undertake as soon as the weather permits'.
- 4.65 Territory and Municipal Services Directorate officers identified:
- the wide range of stakeholders that needed to be taken into consideration in planning and implementing burns;
 - public anxieties about smoke and environmental damage;
 - the practical limitations of available burn windows. The Strategic Bushfire Management Plan indicates this may be as little as 16 to 25 days a year; and
 - the demands of mobilising sufficient resources at short notice or over the long period that some burns require. For example, the 6 000 hectare Corin prescribed burn in the 2012-13 Bushfire Operations Plan anticipates 300 person days' work between March and May 2013.
- 4.66 The resulting 12 500 hectares of prescribed burns in the 2012-13 Bushfire Operations Plan is proposed as an effective solution to meeting the requirements to develop a mosaic of fuel age classes across the ACT given the resources available, environmental acceptability and opportunities available to achieve a successful burn.
- 4.67 In all years reviewed, anywhere between one and three large-scale prescribed burns (i.e. burns over 500 hectares) were planned each year. These were mostly conducted in Namadgi National Park. In 2012-13 three prescribed burns were planned in Namadgi National Park, which accounts for 10 950 hectares (more than 10 per cent of the Park's area). These large-scale planned burns account for between 50 to 80 per cent of the total planned burns each year and their success or failure therefore has a significant effect on fuel load management outcomes.
- 4.68 To deliver the level of planned burns in line with the longer-term Regional Fire Management Plans, for each year between 2012-13 and 2019-20 the Territory and Municipal Services Directorate would need to achieve every year more than double the level of the most successful year for prescribed burns to date (2009-

10). Given the possibility of seasonal variation in weather, it would be necessary in some years to exceed this level to compensate for wetter years. According to reports from the Territory and Municipal Service Directorate's Forestry and Fire Management unit, early indications are that the 2012-13 year has been a successful year with up to 90 per cent of the hazard reduction burn hectares planned being achieved.

Physical removal and chemical treatment

- 4.69 The physical removal and use of chemical herbicides to reduce and kill vegetation accounts for a smaller hectarage of fuel load management than each of the three other fuel load management techniques. Physical removal is labour intensive and is usually only undertaken in small areas. In 2011-12, 80 per cent of the locations where physical removal was planned were under four hectares in size. Most physical removal activity takes place in the asset protection zones, with an increasing amount in Strategic Firefighting Advantage Zones in recent years.
- 4.70 The 2010 Territory and Municipal Services Directorate budget submission identified a need for 450 hectares of physical removal activity per year and 15 hectares of chemical treatment per year on average across the ten years of the Regional Fire Management Plans.
- 4.71 Figure 4.6 shows the total planned area of land subject to physical removal by chemical treatment since 2007-08.

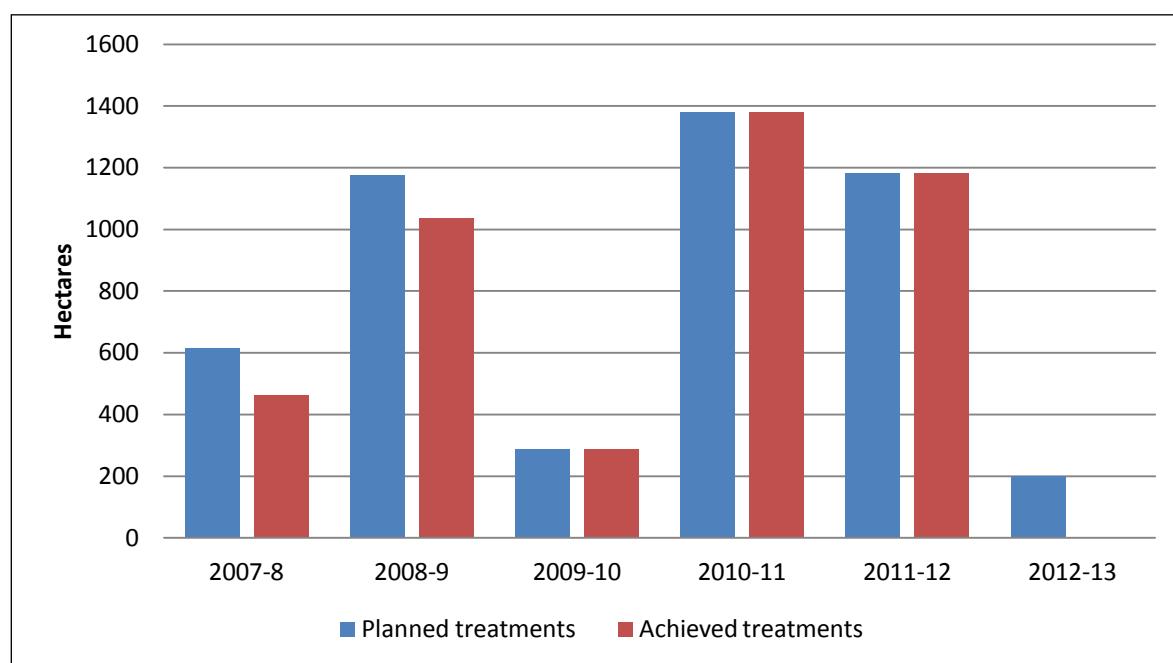
Figure 4.6: Planned hectares of physical removal and chemical treatments



Source: Agreed Territory and Municipal Services Directorate's Bushfire Operations Plans and end-of-year annual reports to the ACT Bushfire Council

- 4.72 Planned hectareage of chemical treatments in general have greatly exceeded those proposed for the future, refer to Figure 4.6. Also, the level of physical removal activity planned for the period 2010-11 to 2019-20, according to the 2010 budget submission, is broadly in line with the level planned in the six years to 2012-13. As evident in Figure 4.6, chemical treatments (typically boom spraying of herbicides) generally accounted for the largest proportion of planned activity in 2008-09, 2010-11 and 2011-12.
- 4.73 Figure 4.7 shows the total area of physical removal and chemical treatments planned and implemented since 2007-08.

Figure 4.7: The total area of planned and achieved treatments (for physical removal and chemical treatments combined)



Source: Agreed Territory and Municipal Services Directorate's Bushfire Operations Plans and end-of-year annual reports to the ACT Bushfire Council

- 4.74 There has been significant variability in the planned levels of activity for physical removal and chemical treatment in the six years to 2012-13, refer to Figure 4.7. However, planned activity levels since 2010 are broadly in line with, or exceed, the planning assumptions in the 2010 Territory and Municipal Services Directorate budget submission. The Directorate has been generally successful in achieving its planned levels of physical removal and chemical treatment of land in the five years to 2011-12.

Assessing the Territory and Municipal Services Directorate's compliance with standards

- 4.75 The Emergency Services Agency is responsible for independently auditing and verifying the quality of the Territory and Municipal Services Directorate's activities undertaken as part of its Bushfire Operations Plan each year. This is consistent with the *Emergencies Act 2004* and the Strategic Bushfire Management Plan, which separates the Emergency Services Agency roles of

approving, monitoring and assuring plans from the roles of land managers, such as the Territory and Municipal Services Directorate, who are responsible for bushfire prevention and mitigation activities, as set out in bushfire operational plans.

- 4.76 However, Territory and Municipal Services Directorate Forestry and Fire Management officers have also undertaken an annual program of fuel hazard assessments since 2005-06. As part of this program approximately 600 locations within the two asset protection zones and the Strategic Firefighting Advantage Zone have been revisited and actions in these areas have been assessed against Strategic Bushfire Management Plan standards. The results of these assessments are presented in Table 4.2.

Table 4.3: Percentage of assessments that meet the Strategic Bushfire Management Plan standards

	2008-09	2009-10	2010-11	2011-12
Inner Asset Protection Zone	85%	94%	96%	80%
Outer Asset Protection Zone	87%	89%	58%	25%
Strategic Fire Fighting Adv. Zone	94%	90%	80%	69%
Overall ²⁶	87%	93%	90%	73%

Source: The Territory and Municipal Services Directorate's Forestry and Fire Management officers' fuel hazard assessment results 2008-09 to 2011-12

- 4.77 The Territory and Municipal Services Directorate has identified variable success in meeting the standards outlined in the Strategic Bushfire Management Plan and Regional Fire Management Plans, refer to Table 4.2. In some areas in some years the success rate has been very low (e.g. 25 per cent in the Outer Asset Protection Zone in 2011-12), while in other areas and years the success rate has been comparatively high (e.g. 96 per cent in the Inner Asset Protection Zone in 2010-11).
- 4.78 Overall the results indicate that the level of compliance with standards is high in both relatively wet and dry years, with the exception of 2011-12 when nearly three in ten locations did not meet relevant standards. Levels of compliance with the standards are generally higher in the Inner Asset Protection Zone than in other zones.
- 4.79 However, Territory and Municipal Services Directorate officers asserted that drawing conclusions based on the accuracy of such assessments to date is subject to two practical limitations:
- as the dryness or 'cure rate' of grass is not recorded in the assessment, in some cases 'failure' to meet the standard is not relevant as the grass in

²⁶ Overall percentage is weighted to reflect the number of plot assessments undertaken in each zone

- some locations may not have reached the trigger cure rate at which a standard is then applied; and
 - the assessment outcome does not take into account at what point in the season the assessment is made. In some cases assessments are likely to be prior to a planned fuel modification treatment. Some assessments classed as a failure to meet standards may have been resolved quite soon after the assessment, by for example, subsequent slashing, grazing or physical removal activities.
- 4.80 The fuel hazard assessment is a fair and useful mechanism for gauging the impact of fuel management activities across higher risk areas of the ACT. However, its reliability could be improved by addressing the above limitations raised by officers.
- ### Roads, tracks and trails
- 4.81 An additional major component of the annual Territory and Municipal Services Directorate's Bushfire Operations Plan is the maintenance, upgrade and construction of roads, tracks and trails. The network of roads, tracks and trails provides access for fuel management activities and access to bushfires that may be underway. Parts of the network also function as control lines for prescribed burns.
- 4.82 Following the 2003 Canberra bushfires and the reorganisation of ACT Government services, ACT Government land management responsibilities were consolidated so that most of the ACT's unleased land, public land, parks and reserves were to be managed by the Territory and Municipal Services Directorate. At the same time, administrative responsibilities for much of the rural road network were consolidated and moved to a single budget and single network management approach. As a result, 4 500 km of tracks and trails in the ACT have since been managed by Forestry and Fire Management officers in the Territory and Municipal Services Directorate's Parks and Conservation Service Branch, with the primary purpose of providing an access network for fire management.
- 4.83 Territory and Municipal Services Directorate officers identified that the change to a single program with all 4 500 km of these rural roads, tracks and trails under one program managed by Forestry and Fire Management has provided the opportunity for a return rate method to be adopted for roads maintenance. A return rate method means that roads and trails are identified for longer or shorter cyclical maintenance periods, based on soil types and other characteristics of the roads.
- 4.84 The benefit of a return rate method is that maintenance work can be undertaken on a predictive basis, i.e. according to when the road is likely to be due for maintenance, rather than on a reactive basis, i.e. when problems are identified. Although all rural roads are managed under a single program for fire

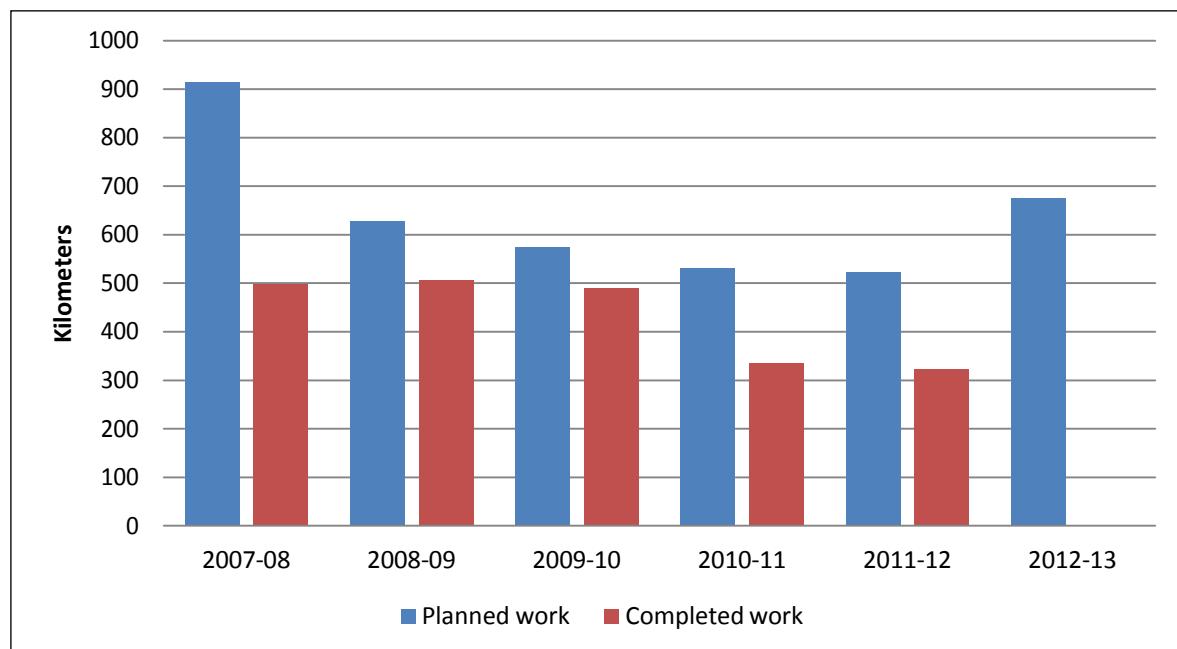
management purposes, officers identified that the goal of implementing a return-rate based maintenance program has not yet been achieved.

- 4.85 Officers identified that this was close to being achieved at the end of 2009-10 but extreme erosion in the two recent storm-affected years (i.e. 2010-11 and 2011-12) have led to the management focus shifting to more urgent, remedial work. In the continued absence of a return rate method for roads maintenance, there is a risk that the access network is not as effective, and maintenance is not as efficient, as it should be.

Maintenance

- 4.86 The 2010 Territory and Municipal Services Directorate's budget submission identified that an average of 450 km per year of road, track and trail maintenance was to occur over the ten years to 2019-20, in accordance with Regional Fire Management Plan requirements.
- 4.87 Figure 4.8 shows the total planned and actual amount of roads, tracks and trails maintenance since 2007-08.

Figure 4.8: Planned and achieved, excluding remedying storm damage



Source: Agreed Territory and Municipal Services Directorate's Bushfire Operations Plans and end-of-year annual reports to the ACT Bushfire Council

- 4.88 There has been some variability in the planned levels of activity for roads, tracks and trails maintenance in the six years to 2012-13, refer to Figure 4.8. Planned levels of maintenance throughout the six-year period have been in excess of the 450 km per year expected in the Regional Fire Management Plans. However, the Territory and Municipal Services Directorate has been generally unsuccessful in achieving its planned levels of activity for roads, tracks and trails maintenance in the five years to 2011-12.

- 4.89 Territory and Municipal Services Directorate officers' reports to the Emergency Services Agency and to the ACT Bushfire Council identify that planned trail maintenance activities in 2010-11 and 2011-12 Bushfire Operations Plans were disrupted by storm events as well as significantly higher levels of rainfall. This had not been foreseen when the Bushfire Operations Plan was developed at the commencement of these years. This has necessarily had a significant effect on the ability of the Territory and Municipal Services Directorate to deliver its original planned work program in those years.
- 4.90 The Territory and Municipal Services Directorate's Bushfire Operations Plan monitoring reports identify that additional remedial work was completed in 2010-11 and 2011-12 (343 km and 271 km respectively) and a further 763 km has been planned for 2012-13. This means that in the three years since the Territory and Municipal Services Directorate's 2010 budget submission was made and agreed to, 1 377 km of additional maintenance work has been identified in addition to that proposed in the initial budget submission. While total roads, tracks and trails maintenance activity has been well above the level anticipated in the Regional Fire Management Plans, overall progress against the Regional Fire Management Plan targets has been less than planned. Overall progress against Regional Fire Management Plan targets is behind by a cumulative total of 200 km to 300 km, as at the end of 2011-12, as a result of the severe storms during the summers of 2010-11 and 2011-12.
- 4.91 Territory and Municipal Services Directorate officers asserted that due to sustained investment in roads, tracks and trails maintenance over the past eight years the access network was generally better than it was prior to the 2003 fires. Officers also confirmed that the wet conditions of 2010-11 and 2011-12 had displaced planned maintenance work and that the steady improvement of previous years has been halted since 2010-11.
- 4.92 The Audit Office is unable to identify any means of confirming the overall state or effectiveness of the network that is managed by the Territory and Municipal Services Directorate, or the extent to which the outcomes sought from the Strategic Bushfire Management Plan and Regional Fire Management Plans have been achieved. There is no mechanism for confirming the overall state of the access network from one year to the next, and therefore whether it is more or less effective than in previous years. The implementation of Recommendation 11 should assist in addressing this issue.

Upgrades, and new tracks and trails

- 4.93 Following the 2003 Canberra bushfires, the McLeod Report and Doogan Report made recommendations relating to the maintenance and upgrading of a strategic fire access network.
- 4.94 The McLeod Report proposed that 'clear guidelines should be developed and implemented to support the identification of a strategic network of fire tracks

and trails, and their establishment and maintenance'. The McLeod Report also proposed that:

- a risk assessment should be conducted by the Emergency Services Agency to assist in determining access needs across the ACT, linked to interstate requirements; and
- an audit process should be instituted to ensure that the policy's effectiveness is regularly monitored.

- 4.95 The 2009 Regional Fire Management Plans set out the strategic access network, including new and upgraded roads, tracks and trails. However, the Audit Office considers that weaknesses remain in the arrangements for monitoring and reporting progress on the development of the access network.
- 4.96 Prior to the adoption of the Regional Fire Management Plans in 2009, in the years 2007-08 to 2009-10, the Territory and Municipal Services Directorate's Bushfire Operations Plan reports identified the completion of 30 km of newly constructed and 102 km of upgraded roads, tracks and trails. The 2009 Regional Fire Management Plans identify an additional 135 km of upgraded and newly constructed roads, tracks and trails to be undertaken between 2009-10 and 2019-20.
- 4.97 The Territory and Municipal Services Directorate's Bushfire Operations Plans for 2010-11 and 2011-12 identify that 10 km of upgraded trails had been completed by July 2012 out of a planned total of at least 76 km. No new roads, tracks or trails were planned or completed between 2010-11 and 2011-12. The Territory and Municipal Services Directorate's Bushfire Operations Plan monitoring reports indicate that the vast majority of work planned for this period was either displaced by the need to remedy storm damage or postponed due to wet weather making road operations difficult to achieve.
- 4.98 For the years 2007-08 to 2011-12 the Audit Office considers it is difficult to assess achievements versus planned activities for new and upgraded roads, tracks and trails because:
- the Territory and Municipal Services Directorate's Bushfire Operations Plan reports sometimes incorporate 'commenced but not completed' as well as 'completed' work, thereby making it difficult to make an appropriate assessment of progress;
 - at the detailed planning stage some work is deemed unnecessary and has dropped out of the program, and this will affect long term plans as set out in the Regional Fire Management Plan; and
 - there are many instances of work carried forward from one year to the next, so totals each year are not wholly new works.
- 4.99 The Audit Office therefore concludes that the Territory and Municipal Services Directorate's Bushfire Operations Plans and the accompanying end-of-year narrative reports prepared by Forestry and Fire Management officers do not

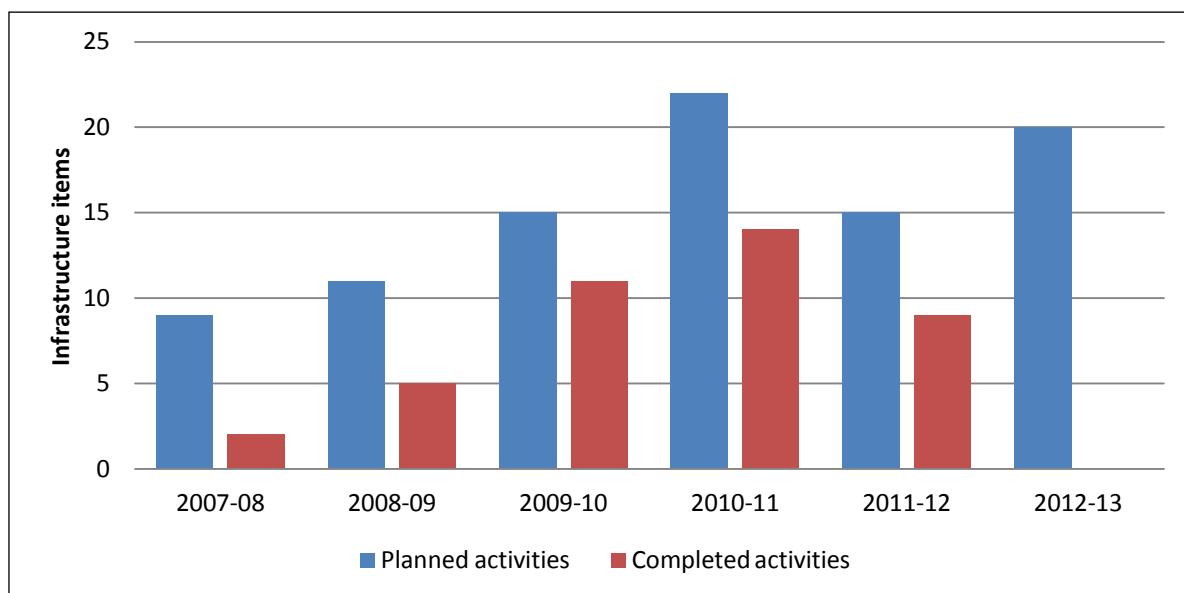
provide an adequate mechanism for reporting progress in the development of the access network. The reports are inadequate in terms of presenting a comprehensive understanding of the quantity of work undertaken (i.e. kilometres of roads, tracks and trails upgraded) and the cumulative effect on network improvement. Therefore, no reliable conclusion can be drawn about the achievability of Regional Fire Management Plan access network goals in relation to the funds and timescales agreed. The implementation of Recommendation 11 should assist in addressing this issue.

Infrastructure: water, signage and helipads

- 4.100 The Territory and Municipal Services Directorate's 2010 budget submission identifies maintenance and upgrade activities associated with bushfire preparedness infrastructure, such as new fences, signage, water availability and helipads for the ten-year period to 2019-20. Budgeted expenditure on bushfire preparedness infrastructure in Territory and Municipal Services Directorate's Bushfire Operations Plans between 2007-08 and 2012-13 ranged between \$171 000 and \$817 000 a year.

- 4.101 Figure 4.9 shows the planned and actual number of activities since 2007-08.

Figure 4.9: Infrastructure items planned and completed²⁷



Source: Territory and Municipal Services Directorate's Bushfire Operations Plans 2007-8 to 2012-13 (proposed and year end)

- 4.102 There has been a general increase in planned infrastructure activity since 2007-08, with comparatively higher levels of planned infrastructure activity since 2009-10. However, the Territory and Municipal Services Directorate has

²⁷ Completed activities have been assessed by reviewing each line of activity in the bushfire operations plan rather than the reported figures in the end-of-year narrative reports to the ACT Bushfire Council

consistently fallen short of meeting planned infrastructure activities in the five years to 2011-12, refer to Figure 4.9. Completion rates vary between 25 and 75 per cent of planned activities.

- 4.103 Territory and Municipal Services Directorate's Forestry and Fire Management officers advised that:

....the implementation of infrastructure activities has been significantly affected by the past two very wet years. For example, it is not possible to install new fence posts if ground is too wet and unable to support vehicles to carry those fence posts. Likewise, digging dams in a wet year is not possible.

- 4.104 The activities vary in scale and cost from \$2 000 for plumbing water troughs to \$250 000 for a dam to be constructed. Reporting on the percentage of activities completed at year end can be misleading since, hypothetically, one activity not completed at year end may be the largest and potentially most important. Furthermore, dollar values do not necessarily reflect the strategic value of infrastructure projects.

- 4.105 It is not clear from reviewing activities, line by line, in each year's Bushfire Operations Plan which activities are new, ongoing, or rolled over. Some activities initially proposed in the Bushfire Operations Plan are later deemed as unnecessary, while others are added to the plan during the year. While it is clearly important to be responsive to changing circumstances, it also means any summary reporting based on the Bushfire Operations Plan activity completion rates does not necessarily reflect progress towards implementing long term infrastructure goals.

Conclusions on the Territory and Municipal Services Directorate's delivery of activities under its annual Bushfire Operations Plans

- 4.106 Table 4.3 summarises preceding comments on the Territory and Municipal Services Directorate's completion of activities under its annual Bushfire Operations Plans.

Table 4.4: Summary of planned activities and achievements over five years addressing bushfire prevention or preparedness

Activity	Summary
Grazing	Success rates reported as high. The Territory and Municipal Services Directorate has been increasing the area under grazing. However, planned and achieved levels are well below the level anticipated in the Regional Fire Management Plan (50 per cent)
Slashing	Success rates reported as 100 per cent. The Territory and Municipal Services Directorate has been increasing the area being slashed. The Audit Office is unable to confirm whether planned and completed levels meet the Regional Fire Management Plan requirements.
Prescribed burns	The planned area for burns has been increasing so that since 2009-10 it is at or above the annualised level necessary to deliver the requirements of the Regional Fire Management Plan. Although success rates were increasing, weather significantly affected the program in the last two years which led to low levels of completion. There is a large discrepancy between the best year in terms of achievements and the large area identified for burns in 2012-13 (a fourfold difference).
Physical removal and chemical treatments	Planned activity levels since 2010 are broadly in line with or exceed the planning assumptions in the Regional Fire Management Plan. The Territory and Municipal Services Directorate has been generally successful in achieving its planned levels of physical removal and chemical treatment of land
Roads maintenance	Planned maintenance levels have fallen but remain at or above the annualised level required in the Regional Fire Management Plan. Achievement levels were above the requirement until 2010-11 and 2011-12 when completion rates declined by about a third as large amounts of remedial work not foreseen in the Regional Fire Management Plan was undertaken.
New and upgrading roads	The past record until 2009-10 identifies that between 20 to 40 km of new and upgraded road can be achieved per year on average. Regional Fire Management Plan requirements seek around 15 km per year. However, only limited physical progress (5 km per year) has been made in the last two years (2010-11 and 2011-12).
Infrastructure	Success rates have been mixed. The Audit Office is unable to identify whether planned activity levels or completed tasks address the needs of the Regional Fire Management Plan.

Source: Audit Office analysis of the Territory and Municipal Services Directorate's Bushfire Operations Plans

- 4.107 The 2009 Regional Fire Management Plans identified a range of anticipated activities that were to be undertaken in the ten years to 2019-20 and additional funding was provided to the Territory and Municipal Services Directorate to undertake these activities. The preceding sections of the chapter show that there has been a general increase in planned activities in recent years, in accordance with requirements in the 2009 Regional Fire Management Plans.
- 4.108 However, the Territory and Municipal Services Directorate has had variable success in completing the planned activities identified in the annual Bushfire Operations Plans. Comparatively wet summers in 2010-11 and 2011-12 have affected the Territory and Municipal Services Directorate's ability to conduct various fuel management activities, particularly hazard reduction burns, while severe storms in 2011 have affected its maintenance of roads, tracks and trails.

- 4.109 While the Territory and Municipal Services Directorate has made some significant achievements in recent years in planning and implementing its Bushfire Operations Plan activities, only limited assurance can be given with respect to whether these collectively are managing the overall risk of bushfire in the ACT. Information is needed on how the cumulative achievements relate to all major objectives in the Strategic Bushfire Management Plan and the Regional Fire Management Plans.
- 4.110 The implementation of Recommendations 1, 11 and 13 should assist in addressing this issue.

CO-OPERATION ACROSS ACT GOVERNMENT AGENCIES

- 4.111 A number of areas of activity set out in the Territory and Municipal Services Directorate's Bushfire Operations Plans require collaboration between ACT Government agencies. The Audit Office sought to understand the effectiveness of inter-agency working and co-operative arrangements. The areas considered by the Audit Office were prescribed burns, and infrastructure projects.

Ecological burns and hazard reduction burns

- 4.112 The ACT Government's emphasis on large-scale prescribed burns as a method to reduce fuel loads has increased, according to the Strategic Bushfire Management Plan, as large parts of the ACT's national parks and nature reserves recover from the 2001 and 2003 fires. The Regional Fire Management Plans identify an increase in planned hazard reduction burns of 80 per cent over the levels planned in the three years prior to the adoption of the Regional Fire Management Plans in 2009.
- 4.113 The McLeod Report and Doogan Report both highlight the need for increased hazard reduction burning, and greater clarity in responsibilities and management arrangements.
- 4.114 The ACT Government has invested additional funds to:
- increase the capacity and capability to deliver greater levels of hazard reduction burns anticipated in the Regional Fire Management Plans; and
 - achieve higher quality burns in terms of conservation and fire management aims.
- 4.115 This increased investment has lead to increased co-operation between ACT Government agencies.

Environment and Sustainable Development Directorate involvement

- 4.116 The Conservation Planning and Research unit in the Environment and Sustainable Development Directorate now has greater expertise in fire ecology than it did ten years ago. The unit has been a strong proponent and stakeholder in the development of the 2010-19 Regional Fire Management Plans. The pattern of

prescribed burns in the Regional Fire Management Plans is considerably influenced by the need to achieve conservation objectives. The Conservation Planning and Research unit annually produces ecological guidelines for land managers' fuel management activities.

- 4.117 The Conservation Planning and Research unit also:
- provides advice on all proposed hazard reduction burns in the Territory and Municipal Services Directorate's Bushfire Operations Plan; and
 - works with officers in the Territory and Municipal Services Directorate's Forestry and Fire Management unit on prescribed burns that have the goal of conserving and protecting the ACT's flora and fauna. These 'ecological burns' are now planned in conjunction with the Territory and Municipal Services Directorate's hazard reduction burns. This results in greater efficiency in operational practices, and has increased awareness amongst the Directorate's fire management officers of the benefits of burns, for example, where appropriate levels of 'patchiness' deliver favourable ecological outcomes.
- 4.118 As a result of the Conservation Planning and Research unit's involvement, grassland nature reserve areas with high ecological value that may have previously been identified for hazard reduction burns are now being targeted with alternative fuel modification strategies.
- 4.119 The Conservation Planning and Research unit aims to monitor 10 per cent of hazard reduction burns and all ecological burns for a period of five years. The 10 per cent objective, at the pre and post burn stage, is largely being achieved as shown in Table 4.5. The team has also recently developed a consistent and quantitative assessment method that will establish the success of burns according to each burn's ecological aims and the published ecological guidelines.

Table 4.5: Conservation Planning and Research unit hazard reduction burn monitoring

Year	Monitored	Total burns
2009-10	14%	21 burns
2010-11	8.5%	35 burns
2011-12	12%	26 burns

Source: Conservation Planning and Research unit records, March 2013

ACT Rural Fire Service involvement

- 4.120 Hazard reduction burns are a growing area of collaboration between the ACT Rural Fire Service and Forestry and Fire Management officers of the Territory and Municipal Services Directorate. Since 2011-12, the Territory and Municipal Services Directorate's Bushfire Operations Plans have included a small number of burns allocated to the ACT Rural Fire Service to conduct, refer to Table 4.5.

Table 4.6: Planned prescribed burns (hectares)

Year	Forestry and Fire Management	ACT Rural Fire Service	(Ecological burns)
2011-12	5 316 ha (51 sites)	231 ha (19 sites)	19 ha (4 sites)
2012-13	12 452 ha (44 sites)	159 ha (11 sites)	2 ha (3 sites)

Source: Agreed Bushfire Operations Plans

- 4.121 The allocation of prescribed burns to the ACT Rural Fire Service is an important development as it provides opportunities for ACT Rural Fire Service volunteers to maintain and develop fire ground experience in the absence of bushfire incidents. The Territory and Municipal Services Directorate's Fire, Forestry and Fire Management officers have provided training to ACT Rural Fire Service volunteers in how to plan such burns, and have facilitated access to the Territory and Municipal Services Directorate's managed land in a timely way. These burns provide potential cost savings as managing the burns would otherwise use the Territory and Municipal Services Directorate's Forestry and Fire Management unit resources.
- 4.122 The activity of planning and implementing burns prescribed for fuel management and for ecological purposes is a successful and growing area of collaboration between different agencies in the Government and with the Rural Fire Service.

Infrastructure projects

- 4.123 The Territory and Municipal Services Directorate's Bushfire Operations Plans have included a number of major infrastructure projects, particularly in response to the 2003 Canberra fires. Bushfire management-related infrastructure projects are, like any other major infrastructure project, subject to environmental assessment and development application approval processes. The Environment and Sustainable Development Directorate is the ACT Government entity with responsibility for overseeing environmental assessment and development application approval processes. Environmental assessment processes are affected by a mixture of ACT legislation and Commonwealth legislation (*Environment Protection and Biodiversity Conservation Act 1999*).
- 4.124 One specific infrastructure project, the upgrade of Mount Franklin Road and Cotter Hut Road in the Namadgi National Park, has been a particularly difficult infrastructure project that has experienced a significant delay in implementation and an increase in cost.

Mount Franklin Road and Cotter Hut Road

- 4.125 In response to the McLeod Inquiry into the 2003 Canberra fires, the ACT Government proposed major upgrades to Mount Franklin Road and Cotter Hut Road to enable firefighting equipment to access remote areas of the ACT more quickly. These two roads are strategically important since they provide access for firefighters in order to protect Canberra's two main water catchment areas.

Mount Franklin Road runs for 78 kilometres from north to south in Namadgi National Park and crosses the New South Wales border on several occasions. The Cotter Hut Road runs from Orroral Road in the east to join up with Mount Franklin Road in the west.

- 4.126 The total length of these roads to be upgraded is 65 km, to be completed in three stages:
- Mount Franklin Road, from Bulls Head gate through to the Mount Ginini car park (21 km);
 - Cotter Hut Road, from Orroral Road gate through to the Mount Franklin Road intersection (21 km); and
 - Mount Franklin Road, from Cotter Hut Road to Mount Ginini car park (23km).
- 4.127 The planning for the upgrading of the two roads began in 2006, with the engineering assessment for the upgrading of the Cotter Hut Road, heritage and environmental surveys and development approvals (if required) anticipated to be completed by the summer of 2006-07. The environmental impact statement, required for the combined scheme, took two years to prepare (September 2008 to September 2010). Because the proposal was to be undertaken in an environmentally sensitive area, the statutory requirement for an environmental impact statement was triggered. The environmental impact statement statutory process is designed to ensure that the level of environmental impact, and the extent of avoidance, mitigation and remediation that is required, is considered prior to the proposal being assessed for development approval. The project also required referral to the Commonwealth under the *Environment Protection and Biodiversity Conservation Act 1999*. The development application was approved on 11 January 2011.
- 4.128 Construction began in April 2012, and the first two stages were completed in January 2013, with delays in part attributed to the wet summers of 2010-11 and 2011-12. While there is a need to strike a careful balance between the needs of bushfire management and the long term management of environmentally sensitive areas, taking six years to progress these strategically important fire access road upgrades from initial planning through to construction is a serious concern.
- 4.129 The preparation of the environmental impact statement and the development application process took up to four years longer than originally anticipated by the Territory and Municipal Services Directorate. The Territory and Municipal Services Directorate asserts:
- administrative costs associated with the approval process increased from an initial estimate of \$120 000 to in excess of \$850 000 over this period; and

- construction costs increased from an initial estimate of \$200 000 in 2006 for the first 42 km of upgrade to an estimate of greater than \$1.8 million based on the construction work to date.
- 4.130 There were a range of difficulties encountered with the planning and approval of the Mount Franklin Road and Cotter Hut Road projects, including:
- the lack of a shared appreciation between ACT Government directorates at the outset of the project as to how the environmental impact statement and the development application should be managed;
 - changes made to the project by the proponent (the Territory and Municipal Services Directorate) after it had been submitted to the Environment and Sustainable Development Directorate; and
 - unrealistic timeframes and an underestimation of the knowledge and expertise required to progress the project through the environmental assessment and development application process.
- 4.131 The delays and the increase in costs were known to executives and senior managers in the Territory and Municipal Services and Environment and Sustainable Development Directorates and the ACT Bushfire Council. Executives in the two agencies and the Minister were all involved in seeking to resolve difficulties.
- 4.132 The difficulties encountered with the Mount Franklin Road and Cotter Hut Road infrastructure project have resulted in the postponement of other infrastructure projects that would otherwise have been programmed for implementation.

Improvements to processes

- 4.133 ACT Government agencies have taken a number of steps to improve inter-agency co-operative arrangements and avoid the potential for the same problems experienced in the implementation of the Mount Franklin Road and Cotter Hut Road project to occur again. There have been legislative changes and administrative changes, which are expected to facilitate more effective collaboration on major infrastructure projects.
- 4.134 The Environment and Sustainable Development Directorate advised that amendments made to the *Planning and Development Act 2007* in February 2011 provide flexibilities and exemptions which may reduce the regulatory approval steps required, particularly in relation to the need for an environmental impact statement. The flexibilities and exemptions can apply to a range of activities in the Strategic Bushfire Management Plan. The effects of the amendments need to be monitored, and if needed, further changes made. The Environment and Sustainable Development Directorate also continues to engage with relevant agencies to encourage early engagement on assessment and approval processes to ensure that realistic estimations may be made on the time required to complete projects.

- 4.135 Within the Territory and Municipal Services Directorate's Parks and City Services Division, the Design and Development unit was established in 2007 as a dedicated major projects team which has a role in providing additional expertise and capacity in developing and progressing major capital projects. The team has substantially more capacity now than it did when established.
- 4.136 However, there has been inadequate exchange of information relating to the project management of infrastructure works between the Forestry and Fire Management unit and the Design and Development unit within the Parks and City Services Division. For example, while the Design and Development unit was established in 2007, there have not been regular planning meetings between the two units about proposed Bushfire Operations Plan infrastructure projects. The first such meeting occurred in January 2013. Improving information sharing not only between these units but more generally between all key parties would offer advantages for integrating the activities and improving project delivery.
- 4.137 In October 2011 the Emergency Services Agency and Environment and Sustainable Development Directorate began working together on a pre-appraisal procedure for all of the major projects identified in the 2009 Strategic Bushfire Management Plan and Regional Fire Management Plans, with the purpose of planning for, and coordinating, the likely environmental assessment and development application work that will be necessary.
- 4.138 While pre-appraisal is highly advantageous in order to determine what flexibilities or exemptions may apply, efforts to develop a pre-appraisal procedure have since stalled. Given the importance of progressing infrastructure projects in a timely and cost efficient manner while concurrently meeting environmental imperatives, it would seem prudent that an annual forward planning session for capital works be held between the Emergency Services Agency, the Environment and Sustainable Development Directorate and the Territory and Municipal Services Directorate. At this session environmental and planning requirements could be specified with timing and costs predictions being confirmed.

Recommendation 14 (Chapter 4) - Across-Government project management (High Priority)

The Emergency Services Agency, the Environment and Sustainable Development Directorate and the Territory and Municipal Services Directorate should strengthen across-Government delivery of major projects in the Strategic Bushfire Management Plan and Regional Fire Management Plans by collectively:

- a) monitoring the effect of the 2011 amendments to *Planning and Development Act 2007* and identifying additional changes, if appropriate;
- b) improving information sharing;
- c) finalising the pre-appraisal procedure; and
- d) holding an annual forward planning session for capital works.

5. COMMUNITY ENGAGEMENT

5.1 This chapter describes ACT Government agencies' activities to engage with, inform and assist the ACT community to prepare for the threat of bushfires. The chapter describes ACT Government agencies' activities with respect to a number of key stakeholder groups within the community including rural leaseholders, the urban ACT community and licensed graziers.

SUMMARY

Conclusion

The management of the threat of bushfires is a shared responsibility, involving community members and the ACT Government. Requirements for and expectations on the ACT rural community with respect to bushfire preparedness are unclear, including the extent to which individual rural leaseholders (as land managers) are responsible for preparing bushfire operational plans. The Emergency Services Agency and the Territory and Municipal Services Directorate have limited oversight of the bushfire management activities of rural leaseholders. This presents the risk that some strategic areas may not be effectively managed.

The Emergency Services Agency currently informs and engages the community through public awareness and information campaigns, and the implementation of the Community Fire Unit Program. There is an opportunity to further engage with groups in the ACT's urban community, including for example members of the community living or working in Ember Zones, who would benefit from more effective information campaigns.

Key findings

Rural land managers

- Rural leasehold land accounts for approximately 18 per cent of the ACT. It is incumbent on rural leaseholders to have effective arrangements in place to manage the threat of bushfires spreading within and across their leased land and into the urban area.
- All rural leaseholders must have a Land Management Agreement. The main objective of the Agreement is to establish appropriate management controls and practices for the lease that achieve the land management goals of both the leaseholder and the Government. Agreements are an important mechanism for balancing the priorities of leaseholders and the wider community. The Territory and Municipal Services Directorate manages the development and implementation of Agreements.
- Land Management Agreements include a section on bushfire risk management. They refer to both bushfire operational plans and Bushfire Action Plans. The distinction between the two types of plans in the Agreement is generally unclear. The lack of clarity in the Agreement, combined with the lack of clarity in the *Emergencies Act 2004* and the Strategic Bushfire Management Plan with respect

to bushfire operational plans, presents a risk that compliance or enforcement action by the ACT Government over rural leaseholders may not be undertaken effectively.

- Government agencies are not using Land Management Agreements to identify and enforce the fire management responsibilities of rural leaseholders. Approximately one-third of Agreements pre-date the introduction of the *Emergencies Act 2004* and do not reflect the fire management requirements of the legislation or, more recently, the Strategic Bushfire Management Plan.
- The Territory and Municipal Services Directorate has not maintained an up-to-date record of current Agreements and their review dates. This is a shortcoming in administration, which impairs the Directorate's ability to provide information on bushfire preparedness to the Emergency Services Agency for compliance and enforcement action over rural leaseholders.
- Officers at the Territory and Municipal Services Directorate and the Emergency Services Agency asserted that since the *Emergencies Act 2004* provides the legislative basis for requiring the establishment and implementation of bushfire operational plans by rural leaseholders, it was the responsibility of the Emergency Services Agency, through the activities of the ACT Rural Fire Service, to ensure compliance with the requirements.

Farm FireWise Program

- The Emergency Services Agency has been developing and implementing the Farm FireWise Program since 2005. It was modelled on a scheme operating in New South Wales. The Farm FireWise Program aims to enable the Emergency Services Agency to have a dialogue with rural leaseholders about improving bushfire safety and awareness and help rural leaseholders to comply with requirements of Land Management Agreements for bushfire operational plans.
- ACT Rural Fire Service officers identified and prioritised rural leaseholders for participation in the program, rather than relying on the renewal of Land Management Agreements as a trigger for assessment. By the end of 2011-12, 112 rural leaseholders (68 per cent) had completed Farm FireWise assessments, from a total of 164 rural leaseholders known to the ACT Rural Fire Service in 2005. There is a risk that the remaining 52 rural leaseholders do not have some form of Bushfire Action Plan, or bushfire operational plan, in accordance with Land Management Agreement requirements. The ACT Rural Fire Service does not prioritise rural leaseholders that are in the Bushfire Abatement Zone, which is specifically mentioned in the *Emergencies Act 2004* and Strategic Bushfire Management Plan as having a higher level of responsibility.
- The *Emergencies Act 2004* provides the Emergency Services Agency with powers in relation to compliance and enforcement activities. These include powers to undertake inspections (including the conduct of compliance audits) and give direction to rural leaseholders or land managers to comply with requirements set out in the Strategic Bushfire Management Plan, bushfire operational plans or Section 120 of the *Emergencies Act 2004* relating to fire prevention obligations of

rural land owners and managers.

- No directions have been given in the last two years, and no monitoring of the implementation of actions arising from Farm FireWise assessments has occurred. Furthermore, no compliance or enforcement action has been undertaken by the Emergency Services Agency on rural leaseholder bushfire management activities since the introduction of the Farm FireWise Program in 2005. Since then, most rural leaseholders in the ACT have voluntarily been involved in the Farm FireWise Program. However its value in raising awareness and addressing bushfire risk by changing land management activity is unknown, as there is no follow-up once assessments are undertaken. The ACT Rural Fire Service considers the Farm FireWise Program to be primarily a community engagement and education program rather than a means of achieving compliance activity.
- There is a lack of clarity in the Farm FireWise Program and its relationship with Land Management Agreements. It is timely for it to be reviewed to, amongst other things, better define its purpose, to whom it applies and how it is managed.

Public awareness and information campaigns

- By virtue of the *Emergencies Act 2004*, both the ACT Rural Fire Service and ACT Fire and Rescue have responsibility for community education and awareness programs associated with bushfire management. The Emergency Services Agency Media Unit is also involved in facilitating community education and awareness campaigns.
- Each year the Emergency Services Agency prepares a Community Education Plan. Key community awareness and information initiatives undertaken by the Emergency Services Agency with respect to bushfire threats are the Bushfire Awareness campaign (*Prepare. Act. Survive.*); the Farm FireWise Program; and Community Fire Units.
- The annual Bushfire Awareness Campaign; *Prepare. Act. Survive* is consistent with a national approach to bushfire information and awareness-raising that was implemented after the 2009 Victorian bushfires. The campaign involves the production of a number of brochures and publications, as well as a media and events campaign that is implemented in late October each year, in time for the coming bushfire season.
- The Strategic Bushfire Management Plan specifically requires the Emergency Services Agency to identify groups or individuals with specific needs for bushfire awareness activities. The Emergency Services Agency has specifically targeted the horse agistment community with bushfire-related community information. Additionally, the Community Services Directorate has developed and implemented a broader community awareness campaign associated with preparation for emergencies (not only related to bushfires), through which it has sought to specifically engage with vulnerable members of the ACT community.
- A group of the ACT community that arguably has a specific need for further information are those residents within the Ember Zones. Ember Zones are

identified as ‘those urban areas and rural villages specifically identified in the Fire Management Zoning Maps as subject to a higher level of bushfire risk’. The ACT Community Implementation Plan component of the Strategic Bushfire Management Plan specifically mentions members of the community within Ember Zones as needing to undertake specific actions. In March 2013 ACT Fire and Rescue instigated a community engagement strategy through which it intends to more effectively engage with people in Ember Zones through Community Fire Units.

Community Fire Units

- Section 47 of the *Emergencies Act 2004* provides for the establishment of community fire units by ACT Fire and Rescue. In March 2013 there were 50 Units with approximately 1 086 members across the ACT. A Unit has between eight and 30 members and operates in a designated area of 50 to 80 homes. Each Unit is supplied with a single, distinctive yellow trailer by ACT Fire and Rescue, which is to be placed in an accessible location within the Unit’s area of responsibility.
- There is a lack of key governance and administrative documentation associated with the Community Fire Unit program which impairs the management of the program. There are no strategic plans, business plans or other plans associated with the program, nor are there any objectives or key performance indicators associated with the program. The objects and functions in the *Emergencies Act 2004* provide a useful indication of the purpose of the Community Fire Units, but these high-level ideals are not supported by tangible operational objectives.
- Community Fire Unit members are supported by ACT Fire and Rescue in a number of ways, including the provision of training, protective clothing and equipment, stores and equipment for the trailers, and half-yearly program meetings, which represent an opportunity for Unit representatives (elected by their peers) to meet with ACT Fire and Rescue personnel to discuss the program and its implementation.
- For many years, however, ACT Fire and Rescue has maintained inconsistent documentation associated with the training and equipping of members of the Units. ACT Fire and Rescue could not, with any certainty, identify the capability of the Community Fire Units in terms of number of active participants and whether they had participated in relevant training; and whether equipment and stores were available and being maintained.

IMPORTANCE OF COMMUNITY AWARENESS AND ENGAGEMENT

- 5.2 The importance of community awareness and engagement with respect to the threat of bushfires has been highlighted in many bushfire-related reports. Although this report is focused on ACT Government agencies’ activities to manage the threat of bushfires to the ACT, it is acknowledged that the community must also take some responsibility for managing the threat of bushfires.

- 5.3 ‘Shared responsibility’ was discussed in the aftermath of the 2003 Canberra bushfires in the McLeod Report which states:

One theme that runs through this report is the need for a greater involvement of the ACT community in helping itself with personal and property protection. This involves the authorities working in a closer partnership with the community, helping citizens to better understand the nature of the fire risks they face, what they can do about improving their personal and property protection, and what kind of assistance they can expect from government agencies.

...changing the focus from reliance solely or largely on the government to provide full protection against the ravages of fire, to a shared arrangement, whereby the public is helped to have a better sense of fire awareness and encouraged to take on a greater measure of self protection, with government providing the protective back-up through the professional services it will continue to maintain.²⁸

- 5.4 The report of the 2009 Victorian Bushfires Royal Commission also discussed ‘shared responsibility’:

Pervading the Commission’s report is the idea that responsibility for community safety during bushfires is shared by the State, municipal councils, individuals, household members and the broader community. A fundamental aspect of the Commission’s recommendations is the notion that each of these groups must accept increased responsibility for bushfire safety in the future and that many of these responsibilities must be shared.²⁹

- 5.5 ACT Government agencies have a responsibility to inform and engage with the community to place the community in the best position possible to manage the threat of bushfires.

- 5.6 Subsection 8(2) of the *Emergencies Act 2004* explicitly states that the Emergency Services Agency Commissioner is responsible for ‘community education and increasing community preparedness for emergencies’.

- 5.7 Chapter 4 of this report focused on the Territory and Municipal Services Directorate and whether it was meeting its responsibilities under the *Emergencies Act 2004*. This chapter considers other significant stakeholder groups including:

- rural leaseholders. There are between 180 and 190 rural leasehold agreements in place.³⁰ These leaseholders are responsible for managing approximately 18 per cent of the ACT; and

²⁸ Report of the McLeod Inquiry into the Operational Response to the January 2003 Bushfires in the ACT

²⁹ Report of the Victorian Bushfires Royal Commission July 2010, Chapter 9 Volume 2, page 352

³⁰ Based upon figures obtained from Environment and Sustainable Development Directorate, July 2011

- the ACT urban community. The majority of the ACT's 149 000³¹ households are in the Built Up Area of Canberra, and occupy the greater proportion of the remaining 6.5 per cent of the ACT.

STRATEGIC BUSHFIRE MANAGEMENT PLAN

- 5.8 The Emergency Services Agency's Strategic Bushfire Management Plan sets out the strategies and initiatives by which the ACT Government engages with, and informs, the community about the threat of bushfires.

ACT Government Implementation Plan

- 5.9 In the ACT Government Implementation Plan component of the Strategic Bushfire Management Plan, under the *Research, information and analysis, Prevention and Preparedness* elements of the framework, nine actions are identified in relation to community education and awareness, eight of which are a high priority. A summary of the nine actions is as follows:

Strategy – the ACT Government and the community work together to share knowledge and information to prepare and maintain integrated Regional Fire Management Plans
<ul style="list-style-type: none">• the ACT Government will assist the community in their understanding of fire management practices in Regional Fire Management Plans through awareness and education programs. (Medium priority)
Strategy – undertake monitoring and review of the effects of the operations and activities resulting from this Plan and sub-plans and report back to the community and adjust strategies as needed
<ul style="list-style-type: none">• regular and ongoing assessment of the effectiveness of community education and awareness programs will be undertaken and where appropriate, these programs will be reviewed in consideration of this assessment, best practice and national standards to ensure they remain current and effective. (High priority)
Strategy – undertake targeted programs to reduce the number of unplanned ignitions
<ul style="list-style-type: none">• targeted awareness and education programs will be provided to assist the community in understanding its legal obligations and social responsibilities in relation to bushfire ignitions. (High priority)
Strategy – maintain a network of fire trails and helipads (bushfire management access network) to provide for rapid response to bushfires and to undertake effective bushfire fighting and hazard reduction operations
<ul style="list-style-type: none">• through Farm FireWise, the Emergency Services Agency will assist landholders in identifying strategic fire management access on rural land. (High priority)

³¹ Territory and Municipal Services Directorate Annual Report 2011-12 Volume One, page 35

<p>Strategy – maintain a mosaic of fuel loads at a landscape level, through Strategic Firefighting Advantage Zones that assist in suppressing bushfires and minimise environmental consequences</p>
<ul style="list-style-type: none"> through Farm FireWise the Emergency Services Agency will assist landholders in identifying fuel management requirements on rural land. (High priority)
<p>Strategy – provide for primary bushfire risk reduction adjacent to assets through Asset Protection Zones that assist in reducing the consequences of bushfires</p>
<ul style="list-style-type: none"> through Farm FireWise the Emergency Services Agency will assist landholders to identify asset protection requirements on rural land. (High priority)
<p>Strategy – provide support to the community to enhance its awareness and capacity to <i>Prepare, Act and Survive</i> the threat of bushfire</p>
<ul style="list-style-type: none"> develop and implement an integrated Bushfire Education and Awareness Program consistent with the <i>National framework for scaled bushfire advice and bushfire warnings</i>, which includes: <ul style="list-style-type: none"> information that reflects the current knowledge and understanding of how the community should prepare for and respond to bushfires; information and advice that is targeted for communities and individuals, particularly in rural areas and Ember Zones; the necessary information for the preparation of a home emergency plan; information on the Fire Danger Rating system and the manner in which it will be used; utilisation of a range of mediums for the dissemination of information; and the use of the Standard Emergency Warning Signal (SEWS) and the use of the telephony systems. (High priority) provide support to community members to participate in an integrated bushfire education and awareness program. (High priority) undertake planning to identify groups or individuals who have specific needs. (High priority)

- 5.10 The ACT Government Implementation Plan clearly identifies a role for the ACT Government in assisting and educating the ACT community to prepare for the threat of bushfires. Key points in the ACT Government Implementation Plan are:
- the need for broad and targeted community awareness and education programs, including the need to identify groups or individuals who may have specific needs; and
 - the use of the Farm FireWise Program as a means of engaging with rural leaseholders.

ACT Community Implementation Plan

- 5.11 The Strategic Bushfire Management Plan contains an ACT Community Implementation Plan, which ‘asks the community of the ACT to increase its

knowledge of bushfires and to take personal actions to minimise the risk and consequences of bushfire events'.³²

- 5.12 The ACT Community Implementation Plan contains nine strategies and 19 actions under the five elements of the bushfire management framework (Research, information and analysis, Prevention, Preparedness, Response and Recovery).
- 5.13 Under the *Prevention* and *Preparedness* elements of the framework eight actions are identified, seven of which are a high priority. A summary of the eight actions follows:

Strategy – community members prepare their properties and their business to reduce the impacts of bushfire
<ul style="list-style-type: none">• community members consider what level of bushfire threat the property is capable of withstanding and undertake actions to prepare their properties to reduce the effects of bushfires. This should be a continuous and ongoing process and should form part of a home emergency plan. (High priority)• rural landholders take active and regular measures to prevent damage to critical infrastructure, production and agricultural assets of their business enterprises. (High priority)
Strategy – community members prepare themselves and their families to take action to avoid loss of life and reduce property damage, with the limited support of emergency services
<ul style="list-style-type: none">• community members determine how they will prepare themselves for bushfire incidents. This should be a continuous and ongoing process and should form part of a home emergency plan. (High priority)• community members actively seek to understand the Fire Danger Rating system that is applied and the levels and types of messages used by emergency services and their purpose in alerting the community. (High priority)• community members assess the need and necessary coverage of insurance against the risk of bushfires. (Medium priority)• rural landholders prepare and annually review Bushfire Action Plans that consider the necessary skills and resources to respond to bushfires. (High priority)
Strategy – community members support the emergency services as an integrated part of the coordinated response efforts
<ul style="list-style-type: none">• individuals consider their ability to contribute to their community through voluntary services. (High priority)• individuals should be aware of their responsibility to report bushfires or suspicious activity. (High priority)

³² Strategic Bushfire Management Plan October 2009, page 26

Community awareness and engagement with responsibilities

- 5.14 Actions and responsibilities in the ACT Community Implementation Plan component of the Strategic Bushfire Management Plan are assigned to members of the ACT community. This accords with the concept of 'shared responsibility' for managing the threat of bushfires, which was discussed in the report of the 2009 Victorian Bushfires Royal Commission.
- 5.15 While actions and responsibilities are assigned to members of the community and are largely outside the control of the Emergency Services Agency and ACT Government agencies, ACT Government agencies have a responsibility to monitor and understand the level of community engagement and awareness.
- 5.16 At present, the Emergency Services Agency has minimal understanding of how prepared the community at large is for the threat of bushfires. There has been limited action undertaken by the Emergency Services Agency to identify the level of awareness, understanding or compliance in the community with actions and responsibilities identified in the ACT Community Implementation Plan component of the Strategic Bushfire Management Plan. An exception to this relates to an annual survey that is conducted on the community's awareness and attitudes to bushfire preparedness and emergency communications.
- 5.17 The Emergency Services Agency's lack of understanding of the level of awareness, understanding or compliance in the community with actions and responsibilities identified in the ACT Community Implementation Plan component of the Strategic Bushfire Management Plan contrasts, to some extent, with the various initiatives that are underway with respect to the monitoring of actions under the ACT Government Implementation Plan, which were highlighted previously in this report. The extent to which the Emergency Services Agency understands the level of community preparedness for the threat of bushfires, is discussed in further detail throughout this chapter, specifically with reference to rural leaseholders and the ACT urban community.

RURAL LEASEHOLDERS

- 5.18 Rural leasehold land accounts for approximately 18 per cent of the ACT, generally located adjacent to the urban Canberra area, and to the south and west of Canberra adjacent to the Namadgi National Park. As fires affecting the ACT have historically moved from west to east, rural leaseholders have an important role in managing the threat of bushfires to Canberra. It is incumbent on rural leaseholders to have effective arrangements in place to manage the threat of bushfires spreading into Canberra.
- 5.19 As discussed in Chapter 3, the Emergency Services Agency supports rural leaseholders, in accordance with the legislation, to prepare Bushfire Action Plans through the Farm FireWise Program. Chapter 3 flagged the potential ambiguity in relation to the requirements, specifically with respect to:

- whether a bushfire operational plan or a Bushfire Action Plan is required of land managers or land owners; and
- whether rural leaseholders in general are required to prepare plans, or whether they are only required to do so if their leasehold land is within the Bushfire Abatement Zone.

5.20 The extent to which the Farm FireWise Program is assisting rural leaseholders in meeting their legislative requirements is discussed with reference to Land Management Agreements.

Land Management Agreements

5.21 Section 283 of the *Planning and Development Act 2007* sets out the circumstances when a Land Management Agreement is required to be prepared in relation to rural leases. The main objective of the Land Management Agreement is to establish appropriate management controls and practices for the lease that achieve the land management goals of both the leaseholder and the ACT Government. Land Management Agreements are an important mechanism for balancing the priorities of rural leaseholders and the wider community.

5.22 In December 1996 a Rural Policy Taskforce was convened to consider and provide advice on the appropriateness of rural land management policies. The Rural Policy Taskforce's report made key recommendations in relation to:

- providing rural leaseholders with greater certainty over leaseholder tenure;
- offering most rural leaseholders the option of a 99 year lease;
- strengthening the use of property management agreements, so that 'changing land management practices, land uses and conservation requirements can be readily accommodated'; and
- further emphasising bushfire fuel management requirements in property management agreements.³³

5.23 In addition the report recommended that 'legislation should also provide an avenue for review and for sanctions which are appropriate for proven breaches of agreements'.³⁴ In its response to the report, the ACT Government stated it:

... has foregone market revenue for the new lease incentives. In return it will secure entitlements and rights including measures to secure responsibility for care of the natural environment.³⁵

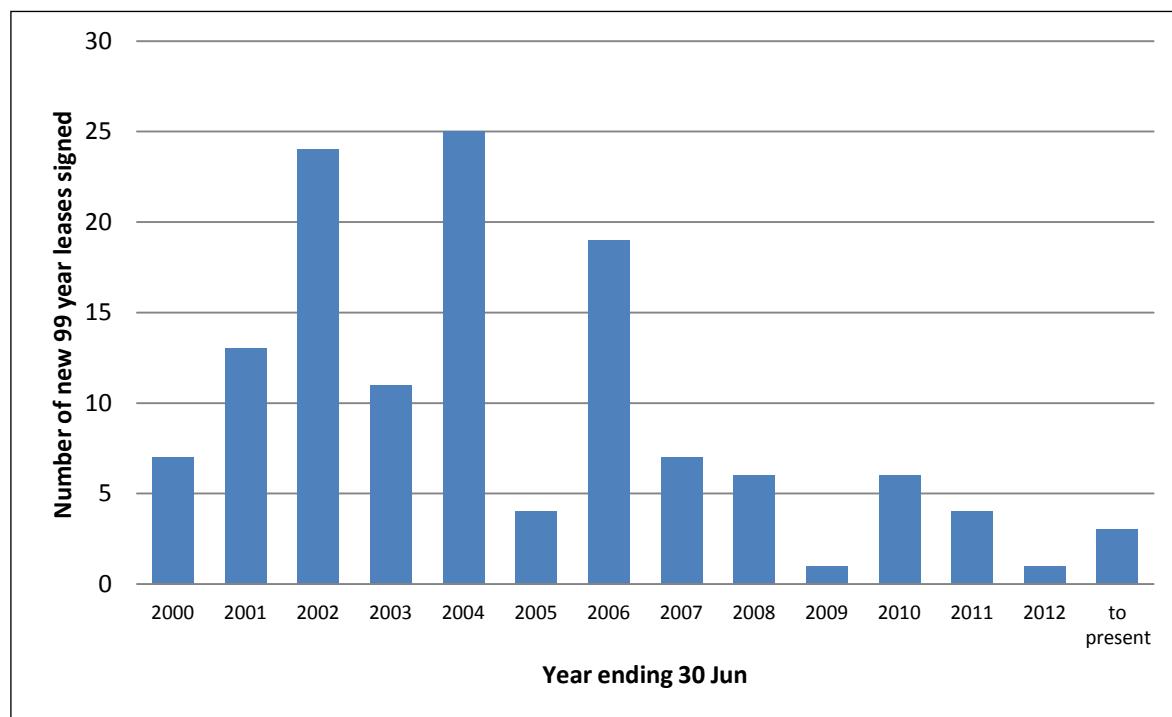
³³ Rural Policy Taskforce's Towards a sustainable future

³⁴ Rural Policy Taskforce's Towards a sustainable future page ix paragraph 13

³⁵ Farming in the ACT (2000) - Implementation of the ACT Government's Rural Policy

- 5.24 A new rural land policy, implemented in March 2000, provided for the implementation of further rural leases in the ACT and the introduction of Land Management Agreements to replace Property Management Agreements. In 2000 the ACT Government wrote to rural leaseholders offering 99 year leases. Since then all but a small minority have taken up 99 year leases. Figure 5.1 presents the number of new rural leasehold arrangements of 99 years that have been entered into since 2000.

Figure 5.1: Rural leases of 99 years entered into since 2000



Source: Environment and Sustainable Development Directorate rural leaseholders June 2013

- 5.25 There are 187 rural leases that have been signed since the introduction of the Government's rural policy in 2000.³⁶ Of these, 131 are 99 year leases, refer to Figure 5.1. The remainder (56) are leases signed prior to 2000, or are leases for a period of less than 99 years. The number of rural leaseholders is likely to be fewer than 187 as some leaseholders have multiple leases.
- 5.26 Over 160 Land Management Agreements have been agreed since March 2000. The ACT Government made the signing of the Land Management Agreement a prerequisite for securing a new or renewed rural lease. Officers in the Environment and Sustainable Development Directorate confirmed that all new and renewed rural leases since 2000 have been accompanied by a Land Management Agreement. The drafting and signing of Land Management Agreements by rural leaseholders provides an opportunity for the ACT

³⁶

Environment and Sustainable Development Directorate Rural Leaseholder database, July 2011

Government to balance the priorities of rural leaseholders and the wider community.

Land Management Agreement requirements

- 5.27 Land Management Agreements include a section on bushfire risk management. This section requires the preparation of a Bushfire Action Plan by all rural leaseholders.
- 5.28 An additional requirement of the Land Management Agreement is that agreements are to be reviewed at intervals of no more than five years.³⁷ This means recently legislated requirements such as in the *Emergencies Act 2004* or the Strategic Bushfire Management Plan (2005 and 2009) have the potential to be included in agreements.
- 5.29 The scope of this performance audit did not include an examination of the effectiveness of support and compliance arrangements for all aspects of Land Management Agreements. Nevertheless, previous internal³⁸ and external³⁹ reviews of the Territory and Municipal Services Directorate's land management activities have highlighted a lack of ACT Government attention to:
- the five-year review process;
 - effective co-operation and coordination in preparing agreements; and
 - enforcement of the provisions within Land Management Agreements.
- 5.30 The Audit Office reviewed the bushfire management section of Land Management Agreements signed between 2000 and 2012 and notes that the agreements:
- require all rural leaseholders, not just those in the Bushfire Abatement Zone, to prepare and implement a Bushfire Action Plan, as 'a requirement of the *Planning and Development Act 2007*';
 - require all rural leaseholders in the Bushfire Abatement Zone to prepare and implement a bushfire operational plan, as 'a requirement of the *Emergencies Act 2004*'. As discussed in Chapter 4, there is ambiguity as to whether the preparation of a bushfire operational plan by rural leaseholders in the Bushfire Abatement Zone is a specific requirement of the legislation or the Strategic Bushfire Management Plan; and
 - are unclear as to whether a rural leaseholder that has a bushfire operational plan or a Bushfire Action Plan in place is sufficiently compliant with the Land Management Agreement, or whether the management and implementation of specific requirements in plan is what is important.

³⁷ Section 2.6 of the LMA 2010-92

³⁸ TAMS Parks, Conservation and Lands Sept 2009 Report on the review of Land Management Agreements

³⁹ Commissioner for Sustainability and the Environment, ACT lowland native grassland investigation Mar 2009

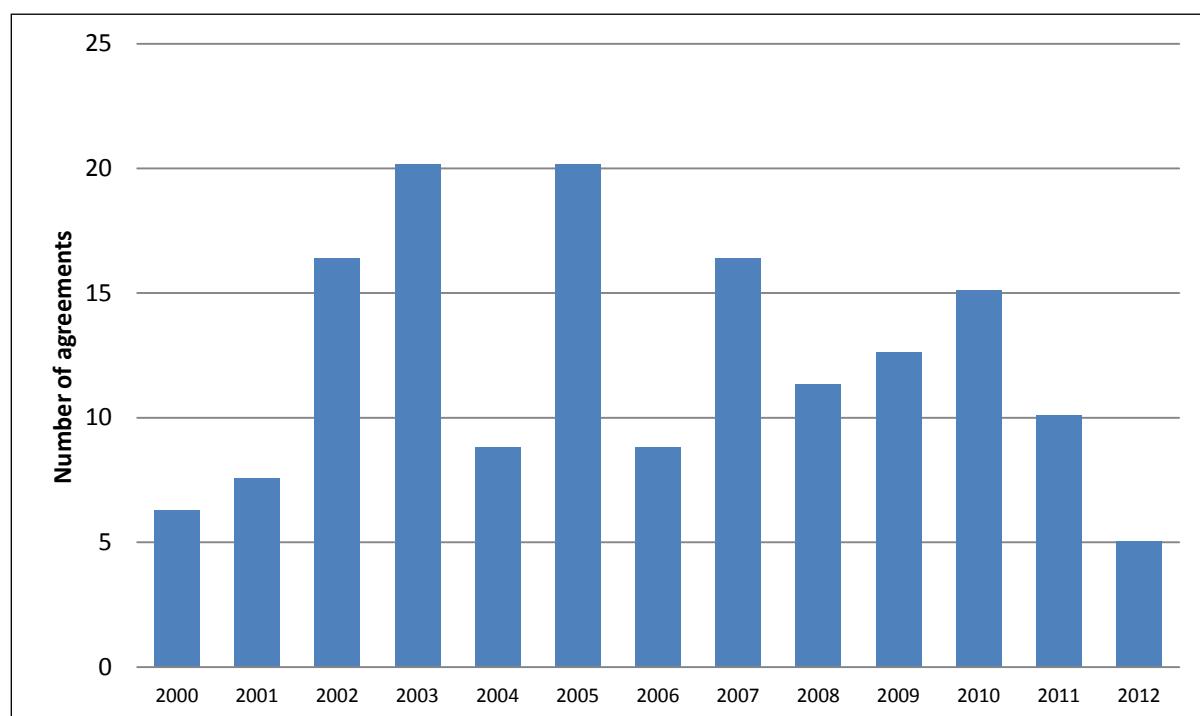
5.31 Land Management Agreements refer to both bushfire operational plans and Bushfire Action Plans. The distinction between the two types of plans in the Land Management Agreement is unclear. Combined with a lack of clarity in the *Emergencies Act 2004* and the Strategic Bushfire Management Plan with respect to bushfire operational plans, there is a risk that compliance or enforcement action by the ACT Government over rural leaseholders may not be undertaken effectively.

Administration of Land Management Agreements

- 5.32 The process for preparing Land Management Agreements with rural leaseholders involves the Territory and Municipal Services Directorate:
- consulting with the rural leaseholder;
 - receiving a draft Land Management Agreement for consideration, prepared by the leaseholder;
 - consulting with other stakeholders in Government, conservation officers (in the Environment and Sustainable Development Directorate) and the ACT Rural Fire Service; and
 - ensuring that agreements are signed by the Government's Conservator of Flora and Fauna.
- 5.33 Administrative procedures have been developed and agreed for the development of draft agreements. However, these have not been followed with respect to:
- a review of existing Land Management Agreements which should be triggered by the maximum period of five years being reached, or on leasehold renewal, whichever comes sooner. This is not happening in many cases; and
 - procedures are not being followed in relation to consultation with the ACT Rural Fire Service with respect to the bushfire risk management element of agreements.
- 5.34 An up-to-date record of current Land Management Agreements and their review dates has not been maintained by the Territory and Municipal Services Directorate. This is a shortcoming in administration, which impairs the Territory and Municipal Services Directorate's ability, and that of other agencies, to undertake compliance and enforcement action over rural leaseholders. The Territory and Municipal Services Directorate advised in June 2013 that a database was being developed that would provide an updated record of Land Management Agreements.
- 5.35 Nevertheless, the Audit Office reviewed paper copies of 126 Land Managements, which is likely to represent the majority of existing Land Management Agreements, refer to Figure 5.2. Based on this review, it was found that:

- 80 percent of Land Management Agreements predate the adoption of the Strategic Bushfire Management Plan, October 2009, and so cannot reflect current ACT Government requirements for bushfire management;
- 61 percent of Land Management Agreements are more than five years old and therefore non-compliant with the requirement to be updated at least every five years; and
- 33 percent of Land Management Agreements predate the enactment of the *Emergencies Act 2004*. These Land Management Agreements do not reflect any of the key requirements in legislation or, most recently, the Strategic Bushfire Management Plan.

Figure 5.2: Land Management Agreement commencement dates by year



Source: Parks and Conservation Service Branch of Territory and Municipal Services Directorate information

- 5.36 Since the majority of Land Management Agreements do not meet the agreed five-year review timeframe and a significant proportion predate the *Emergencies Act 2004*, these agreements cannot be relied upon to ensure bushfire risk management requirements under current legislation are being effectively communicated. In turn, this provides a weak foundation for subsequent monitoring and compliance.

Monitoring Land Management Agreements – bushfire risk

- 5.37 The Territory and Municipal Services Directorate and the Emergency Services Agency assert that since the *Emergencies Act 2004* provides the legislative basis for requiring the establishment and implementation of bushfire operational plans by rural leaseholders, it is the responsibility of the Emergency Services Agency, through the activities of the ACT Rural Fire Service, to ensure

compliance. The Territory and Municipal Services Directorate does not undertake any systematic monitoring of the implementation of bushfire risk management activities by rural leaseholders.

Recommendation 15 (Chapter 5) - Land Management Agreements (High Priority)

The Territory and Municipal Services Directorate, in consultation with the Emergency Services Agency, should improve its management of Land Management Agreements, with respect to rural leaseholders' fire management responsibilities, by:

- a) maintaining an up-to-date record of current Land Management Agreements;
- b) undertaking timely reviews of Land Management Agreements, at least every five years;
- c) clarifying responsibility for identifying and monitoring bushfire risk through Land Management Agreements; and
- d) specifying bushfire management requirements in Land Management Agreements, as required by the Emergencies Act 2004 and the Strategic Bushfire Management Plan, and aligning these with any requirements under the Farm FireWise Program (refer to Recommendation 16).

FARM FIREWISE PROGRAM

- 5.38 The Emergency Services Agency has been developing and implementing the Farm FireWise Program since 2005. It was modelled on a scheme that was operating in New South Wales. The Farm FireWise Program aims to enable the Emergency Services Agency to have a dialogue with rural leaseholders about improving bushfire safety and awareness and help rural leaseholders to comply with requirements of Land Management Agreements for bushfire operational plans.
- 5.39 The Farm FireWise Program is primarily based on a risk assessment worksheet. This is a tool to guide community members through a set process to develop a Bushfire Action Plan and identify mitigation and response measures for their property. The worksheet also acts as a checklist for those already undertaking the necessary bushfire planning and preparations. Additional elements of the program include:
- a comprehensive bushfire 'Stay or Go' kit, which the ACT Rural Fire Service has adopted from the Western Australian Fire and Emergency Services Authority; and
 - a map that is developed for each leaseholder. ACT Rural Fire Service officers identified that a map adds value for both the rural leaseholder and the Emergency Services Agency as it may identify access and fuel load risks that may inform fire fighting strategies.

- 5.40 Funding of \$50 000 a year was secured by the Emergency Services Agency from 2010-11 to support the implementation of the Farm FireWise Program and to undertake some fire prevention or mitigation works identified from Farm FireWise assessments. However, the ACT Rural Fire Service was not able to identify the extent of spending on the implementation of fire prevention or mitigation activities, or the costs of providing administrative support for undertaking assessments.
- 5.41 The Strategic Bushfire Management Plan provides that through the Farm FireWise Program, the Emergency Services Agency will assist rural leaseholders to identify:
- the necessary resources and skills to control and extinguish bushfires on their property;
 - asset protection requirements on rural land;
 - fuel management requirements on rural land;
 - fuel management standards applicable in the Agricultural Fire Management Zone; and
 - strategic fire management access on rural land.⁴⁰
- 5.42 The Strategic Bushfire Management Plan further provides that rural leaseholders should engage with the Farm FireWise Program to prepare ‘plans, which would meet requirements of their Land Management Agreements’.⁴¹
- 5.43 The Audit Office reviewed the extent to which the Farm FireWise Program was being implemented to enable rural leaseholders to comply with such requirements. It was found that:
- ACT Rural Fire Service officers identified and prioritised rural leaseholders for participation in the program, rather than relying on the renewal of Land Management Agreements as a trigger for assessment. The Audit Office estimates that this has led to twice as many Farm FireWise assessments being in place as would have been in place if officers had relied on the Land Management Agreement renewals process to trigger engagement with rural leaseholders;
 - 112 rural leaseholders (68 per cent) had completed Farm FireWise assessments by the end of 2011-12, from a total of 164 rural leaseholders known to the ACT Rural Fire Service in 2005. There is a risk that the remaining 52 rural leaseholders do not have some form of Bushfire Action Plan, or bushfire operational plan, in accordance with Land Management Agreement requirements;

⁴⁰ Strategic Bushfire Management Plan, pages 30, 39, 40 and 60

⁴¹ Strategic Bushfire Management Plan, page 30

- 65 (58 per cent) of the 112 Farm FireWise assessments had been completed by 2009-10. None of the Farm FireWise assessments examined by the Audit Office had been reviewed or updated since they were completed. By not reviewing or updating these on a regular basis, their use as a means by which to comply with rural leaseholders' Land Management Agreements is limited; and
 - while the ACT Rural Fire Service states it is able to do so, it does not specifically target or monitor the proportion of rural leaseholders with assessments that are in the Bushfire Abatement Zone. This is important since the *Emergencies Act 2004*, the Strategic Bushfire Management Plan and Land Management Agreements may intend to establish a specific requirement on rural leaseholders in the Bushfire Abatement Zone. As discussed in Chapter 3, this requirement is unclear.
- 5.44 The Farm FireWise program has not been successful in reaching all rural leaseholders in a timely way, and the program cannot be relied upon by rural leaseholders or the Government as a mechanism for ensuring compliance with *Emergencies Act 2004* requirements.
- Monitoring the implementation of Farm FireWise assessments**
- 5.45 The *Emergencies Act 2004* provides the Emergency Services Agency with powers in relation to compliance and enforcement activities. These include powers to:
- undertake inspections including the conduct of compliance audits (section 103); and
 - give direction to rural leaseholders or land managers to comply with requirements set out in the Strategic Bushfire Management Plan, bushfire operational plans or section 120 of the *Emergencies Act 2004*, relating to fire prevention obligations of rural land owners and managers (section 109).
- 5.46 The Audit Office reviewed a sample of Farm FireWise assessments and considers that the assessments do not go into sufficient detail about fuel load, fire breaks and access, nor do the assessments prioritise risks and follow up actions that may be required. It is therefore difficult to identify how:
- assessments are capable of contributing to broader knowledge and understanding of fire management risks in rural areas, specifically areas within the Bushfire Abatement Zone, Strategic Firefighting Advantage Zones or asset protection zones; and
 - follow up, or compliance action by the ACT Government could be pursued, for example, in relation to enforceable Strategic Bushfire Management Plan fuel management standards in Strategic Fire Fighting Advantage Zones or asset protection zones.
- 5.47 The Audit Office found that no directions have been given in the last two years, nor monitoring of the implementation of actions arising from Farm FireWise

assessments undertaken. Furthermore, no compliance or enforcement action has been undertaken by the Emergency Services Agency in relation to rural leaseholder bushfire management activities since the introduction of the Farm FireWise Program in the ACT in 2005.

- 5.48 The Audit Office considers that the Farm FireWise Program represents a useful mechanism by which potential compliance activity might, in the first instance, be identified and, if necessary, implemented. However, the ACT Rural Fire Service is not currently using the Farm FireWise Program as the basis for undertaking compliance and enforcement action.
- 5.49 ACT Rural Fire Service officers expressed the view that the Farm FireWise Program is likely to be a more effective scheme if based on the consent of rural leaseholders, as opposed to being an enforceable requirement of Land Management Agreements. Officers also asserted that the next phase of the Farm FireWise Program, from 2012 onwards (following the first five years of the program) is designed to be focused on improvement planning and implementation. Nevertheless, ACT Rural Fire Service officers also acknowledged that there is still a need to secure initial commitment from all rural leaseholders, as up to a third of rural leaseholders are yet to participate at all in the Farm FireWise Program.

Use of Farm FireWise maps

- 5.50 Chapter 6 of this report discusses the extent to which the individual spatial maps produced as part of the Farm FireWise Program were available for use in pre-suppression planning, and suppression response, as well as for testing the fire access network between leased and unleased land. The maps had been used to plot tracks and trails in the Emergency Service Agency's electronic mapping system, but other potentially useful information from these maps, for example, information and images relating to restricted access, such as gateways, was not available in a format that made it easily accessible to the eight ACT Rural Fire Service volunteer brigades. Furthermore, the Territory and Municipal Service Directorate, as the Government's largest land manager of unleased land, only developed a facility by which Farm FireWise information can be shared between the Emergency Services Agency and the Directorate in May 2013. Privacy matters have limited opportunities for sharing.

Farm FireWise Program conclusion

- 5.51 There appears to be a lack of a shared understanding in the Emergency Services Agency and the Territory and Municipal Services Directorate about the purpose of the program, about its relationship with Land Management Agreement obligations and the timeframes in which the program needs to be progressed.
- 5.52 In addition, some of the major intended benefits of the Farm FireWise Program are not being realised in that:

- while mapping is taking place, the maps do not serve all the purposes for which they were originally intended; and
- the content of the Farm FireWise assessments serves a minimal purpose as a means of providing a framework for implementing mitigation measures and therefore any monitoring or enforcement.

5.53 Furthermore:

- there has been a relatively low take-up of the Farm FireWise program with only 112 (68 per cent) completed assessments from a total of 164 rural leaseholders in the first five years, given the initial aim of full coverage of all rural leaseholders in this period; and
- at least 65 assessments (58 per cent) under the Farm FireWise Program are now more than two years old, and have a limited ability to contribute to the preparation of a Bushfire Action Plan or bushfire operational plan, which needs to be produced every two years by virtue of the Strategic Bushfire Management Plan.

5.54 While the Farm FireWise Program has the aims of enabling the Emergency Services Agency to have a dialogue with rural leaseholders about improving bushfire safety and of assisting rural leaseholders to comply with requirements of Land Management Agreements for bushfire operational plans, the degree to which it has been successful in doing this is questionable. Not all rural leaseholders participate in the program, and of those who do, many have assessments that are over two years old. Given this, and the lack of clarity in its relationship with Land Management Agreements, it is timely for it to be reviewed to, amongst other things, better define its purpose, to whom it applies and how it is managed.

Recommendation 16 (Chapter 5) - Farm FireWise Program

The Emergency Services Agency, in consultation with the Territory and Municipal Services Directorate, should review the Farm FireWise Program, including:

- a) its purpose;
- b) to whom it applies;
- c) the relationship between this Program and Land Management Agreements; and
- d) planning and implementation processes.

FIRE MANAGEMENT OBJECTIVES FOR UNLEASED LANDS

5.55 There are co-operative arrangements between ACT Government agencies for reducing fuel loads through managing grazing on the Territory and Municipal Services Directorate's unleased lands. Chapter 2 outlined the range of land

ownership and land management interests in the ACT. While around 90 per cent of the ACT is beyond the Built Up Area of Canberra, the majority (72 per cent of the ACT) is managed by the Territory and Municipal Services Directorate. Most of this land is protected land, designated as national park or nature reserve, but a small proportion is unleased land, known as public land.

- 5.56 The Territory and Municipal Services Directorate manages this land to achieve a range of objectives. In many cases the land has future development value, but in the short term, the land is managed to satisfy a balance of amenity, income generation, fire management and conservation objectives. Some lands are designated as government horse paddocks.
- 5.57 In recent years the Territory and Municipal Services Directorate Bushfire Operations Plans have identified approximately 7 000 hectares of land to be grazed under licence. Approximately 300 hectares of Government horse paddock has been grazed under contract, which has a fuel management purpose. Areas designated as ACT Government horse paddocks were previously directly managed by the ACT Government, but these are now managed under contract.
- 5.58 The Audit Office reviewed documentation that relates to the management of unleased, public land, focusing on grazing licences and Government horse paddocks. Where the Strategic Bushfire Management Plan identifies fire management objectives on the Territory and Municipal Services Directorate's unleased public lands, fuel and access management activities are included in the Territory and Municipal Services Directorate's Bushfire Operations Plan. These are planned, implemented and monitored in the same way as other Bushfire Operations Plan activities.
- 5.59 In 2010, the Territory and Municipal Services Directorate developed a *Grazing licensing allocation policy* for the purpose of informing activities to manage grazing on its lands.⁴² The policy (and subsequent licensing agreements) has resulted in:
- a clearer recognition that the purpose of grazing is to meet the standards set out in the Strategic Bushfire Management Plan;
 - the prioritisation of the allocation of grazing land to rural leaseholders in order to provide more effective stocking options for licensees; the move to open-ended grazing licences from fixed term licences; and
 - the need for the licensee to provide evidence of insurance at commencement of the agreement and then subsequently if there are changes in circumstances.
- 5.60 Procedures for ensuring licensed grazing meets fuel management objectives were discussed in Chapter 4. However, Territory and Municipal Services

⁴² TAMS Grazing licensing allocation policy, January 2010, marked 'draft policy'

DIRECTORATE OFFICERS WERE NOT ABLE TO IDENTIFY ANY ADMINISTRATIVE SYSTEM IN PLACE FOR:

- overseeing fixed term licences approaching their end date. However, this is a diminishing risk as the number of open-ended licences increases;
 - confirming insurance arrangements remain in place, or whether changes have been notified. Some open-ended licences have been in place for four years with an insurance ‘certificate of currency’ only produced at the outset of the licence; and
 - confirming grazing does not continue once a licence has lapsed, or been terminated. However, this is a diminishing risk as more licences become open ended.
- 5.61 As discussed in Chapter 4 of this report, the Territory and Municipal Services Directorate has established procedures to assist in identifying whether licensed grazing arrangements are meeting the fuel management objectives of the Strategic Bushfire Management Plan.

PUBLIC AWARENESS AND INFORMATION CAMPAIGNS

- 5.62 While the community has a responsibility to prepare for and contribute to the management of bushfire risks, ACT Government agencies have a responsibility to inform and engage with the community to facilitate their preparedness. The Council of Australian Governments has stated:

A comprehensive program of community education and public information is needed in all areas that are subject to the risk of bushfire. This education and information should focus on awareness of the nature and risk of bushfires, measures for preparing and protecting lives, property and the environment, and the timely provision of operational and safety information to the public in the event of a bushfire.⁴³

- 5.63 Furthermore, the McLeod Report stated:

Many submissions noted the need for better public education on preparing for bushfire, especially for people living in rural areas or on the urban–rural interface. People acknowledged that heavy property losses were inevitable because of the nature of the fires but felt the losses would not have been so extensive had people been better prepared.

Submissions reflected that people generally considered ESB should emphasise that individuals have primary responsibility for preparing their property for a bushfire threat. Householders should be provided with information about minimising fuel levels around their homes and making homes more fire resistant; for example, many people observed that timber fences acted like fuses in the face of the fire front. It was proposed that they

⁴³ Council of Australian Governments National Inquiry on Bushfire Mitigation and Management, March 2004

should also be encouraged to develop a fire plan and to have fire kits of appropriate equipment prepared—as well as be better informed about the role of emergency service agencies. Some submissions called for the introduction of strong penalties for not carrying out fire preparation tasks. Importantly, people felt that they should be well informed about how to deal with an approaching fire.

While many submissions relayed stories of successful property protection, others commented on the inability to adequately protect their property as a result of age or disability. Suggestions were put forward for better community support for people who are unable to cope in emergency situations; examples are the introduction of a neighbourhood fire prevention component to the Neighbourhood Watch scheme and the introduction of community fire units. The latter proposal would see local communities having access to hydrants and hoses and being trained in their use.⁴⁴

- 5.64 As discussed earlier in this chapter, a number of strategies and actions have been identified in the Emergency Services Agency's Strategic Bushfire Management Plan with respect to community information and awareness. Accordingly, the Audit Office examined ACT Government agencies' efforts to inform and engage with the community to assist it to manage the threat of bushfires.

Emergency Services Agency community awareness and engagement activities

- 5.65 Subsection 8(2) of the *Emergencies Act 2004* explicitly states that the Emergency Services Agency Commissioner is responsible for ‘community education and increasing community preparedness for emergencies’.
- 5.66 Sections 52 and 44 of the *Emergencies Act 2004* provide for the respective roles and responsibilities of the ACT Rural Fire Service and ACT Fire and Rescue with respect to operational planning and preparedness for fire threats. In practice, this has lead to two distinct arms of the Emergency Services Agency with responsibility for community education and awareness programs. The Emergency Services Agency Media and Community Information business unit has also been involved in facilitating community education and awareness campaigns and this has added an additional layer of complexity.

Education and awareness programs

- 5.67 Each year the Emergency Services Agency prepares an annual Community Education Plan. The Community Education Plan ‘outlines the strategic direction for the delivery of community education within the Emergency Services Agency in a coordinated approach’. The Community Education Plan notes that ‘full information of each initiative will be detailed in individual campaign plans developed by the lead agency/agencies in consultation with the Emergency Services Agency Media and Community Information business unit’.

⁴⁴ Report of the McLeod Inquiry into the Operational Response to the January 2003 Bushfires in the ACT, Aug 2003

5.68 The Community Education Plan has the following guiding principles for community information and awareness campaigns:

- Emergency Services Agency community education campaigns and initiatives are delivered in a coordinated approach across the whole organisation;
- delivery of community education campaigns is targeted to the Emergency Services Agency business unit responsible for the hazard;
- Emergency Services Agency business units allocate appropriate resourcing to work with the Emergency Services Agency Media and Community Information business unit to plan for and deliver community education campaigns and initiatives;
- Emergency Services Agency business units liaise with the Emergency Services Agency Media and Community Information business unit before making any spending commitments to be paid for with the whole of Emergency Services Agency Community Education budget allocation; and
- Emergency Services Agency business units monitor operational activities to identify key messaging opportunities.

5.69 The Community Education Plan provides for a joint agency campaign for the bushfire season between the ACT Rural Fire Service and ACT Fire and Rescue. The Community Education Plan states:

The Emergency Services Agency conducts an annual community awareness campaign to highlight the dangers of the bushfire season in the Territory.

The ACT Rural Fire Service (ACTRFS) is the lead agency responsible for the preparation of the ACT community for the threat of bushfire each summer.

The ACTRFS conducts an annual bushfire season community awareness campaign to encourage householders to mitigate their risk from the impact of bush and grass fires during the summer months.

The ACTRFS works with ACT Fire and Rescue to deliver the annual bushfire awareness campaign. ACT F&R targets its efforts on the urban/rural interface mainly through Community Fire Units.

5.70 Key community awareness and information initiatives of the Emergency Services Agency with respect to bushfire threats are:

- the Bushfire Awareness campaign (*Prepare. Act. Survive.*);
- Farm FireWise Program (as discussed in paragraphs 5.38 to 5.54); and
- Community Fire Units.

5.71 More broadly the Emergency Services Agency has provided input and support to the Community Services Directorate's *Think Ahead, Be Ready, Stay Safe* campaign, which was developed in 2010. This campaign provides support and

guidance to vulnerable members of the ACT community in the event of an emergency. A range of community services organisations assisted in widely disseminating campaign information. This campaign does not specifically focus on the threat of bushfires

Bushfire Awareness Campaign

- 5.72 Under the *Prevention* and *Preparedness* element of the Strategic Bushfire Management Plan, a specific action to undertake a bushfire awareness campaign is identified as follows:

<p>Strategy – provide support to the community to enhance its awareness and capacity to <i>Prepare, Act and Survive</i> the threat of bushfire</p>
<ul style="list-style-type: none">• develop and implement an integrated Bushfire Education and Awareness Program consistent with the <i>National framework for scaled bushfire advice and bushfire warnings</i>, which includes:<ul style="list-style-type: none">○ information that reflects the current knowledge and understanding of how the community should prepare for and respond to bushfires;○ information and advice that is targeted for communities and individuals, particularly in rural areas and Ember Zones;○ the necessary information for the preparation of a home emergency plan;○ information on the Fire Danger Rating system and the manner in which it will be used;○ utilisation of a range of mediums for the dissemination of information; and○ the use of the Standard Emergency Warning Signal (SEWS) and the use of the telephony systems. (High priority)
<ul style="list-style-type: none">• provide support to community members to participate in an integrated bushfire education and awareness program. (High priority)
<ul style="list-style-type: none">• undertake planning to identify groups or individuals who have specific needs. (High priority)

- 5.73 The Emergency Services Agency implements an annual Bushfire Awareness Campaign; *Prepare. Act. Survive.* This campaign is consistent with a nationally adopted approach to bushfire information and awareness-raising that was implemented after the 2009 Victorian bushfires.
- 5.74 As part of the *Prepare. Act. Survive.* campaign a number of brochures and publications are available for download from the Emergency Services Agency website. These include a *Prepare. Act. Survive.* brochure, a pro forma Bushfire Survival Plan and various fact sheets.
- 5.75 In addition to these activities a significant media and events campaign is implemented in late October, at the beginning of the fire season. In 2012, the campaign launched on Sunday 28 October and ran for nine days. The annual *Prepare. Act. Survive.* campaign message is disseminated through a number of community engagement activities including:

- an ACT Rural Fire Service Open Day at the Hume Emergency Services Agency Training Facility;
 - media advertising (including print and radio and ACTION bus advertising); and
 - media coverage of events.
- 5.76 A draft campaign plan was prepared for 2012-13 activities. The draft plan was not finalised and many details of the document, including a campaign budget, had not been finalised or completed. The lack of a finalised campaign plan for the annual Bushfire Awareness Campaign impairs the ability of the Emergency Services Agency to demonstrate that it is meeting the requirements of the Strategic Bushfire Management Plan.

Evaluation of community awareness and attitudes

- 5.77 In 2011 and 2012 the Emergency Services Agency conducted a telephone survey to gauge the community's awareness and attitudes to bushfire preparedness and emergency communications.
- 5.78 The 2012 survey was conducted in November 2012, after the week-long campaign in October, and prior to the formal commencement of summer. The 2012 survey identified:
- one in ten people (9.4 per cent) claimed to know the ACT Government's bushfire slogan, and very few of them could recall it correctly (0.7 per cent out of the 9.4 per cent);
 - while unaided awareness of the slogan was low, knowledge of its key elements and underlying messages was quite high once people were reminded of its wording. The slogan meant 'prepare a bushfire survival plan' or words to that effect to 78 per cent of people, 'seeking out and acting on the daily fire danger ratings' to 43 per cent of people, 'activating your bushfire survival plan' to 33 per cent of people and 'the safest place is away from the fire' to 27 per cent of people;
 - 47 per cent of people say they have taken some type of action, although less than half of these people (19 per cent out of the 47 per cent) say they took action directly as a result of hearing the *Prepare. Act. Survive.* message. The rest mainly took action as a result of living through the 2003 bushfires, (20 per cent) or claim 'always' to have done it wherever they lived (6 per cent);
 - the proportion saying they have taken some kind of action in the 2012 survey is significantly higher than the proportion saying so in the April 2011 survey (47 per cent versus 32 per cent); and
 - one in five people claim to have a Bushfire Survival Plan (22 per cent), which is lower than the April 2011 survey when around one-third (34 per cent) claimed to have one.

- 5.79 It is a useful process to conduct an evaluation of community awareness and attitudes. The 2012 survey suggests that there are shortcomings in community awareness and attitudes and the effectiveness of the Emergency Services Agency's activities to disseminate information to the community.
- 5.80 The telephone survey does not seek to establish the extent to which the community is compliant with, or otherwise adopting, the activities and initiatives identified in the *ACT Community Implementation Plan* component of the *Strategic Bushfire Management Plan*.

Engagement with community members with specific needs

- 5.81 The Strategic Bushfire Management Plan specifically requires the Emergency Services Agency to identify groups or individuals with specific needs for bushfire awareness activities:
- Specific needs includes those members of the community who may require specialist support, information or advice in relation to bushfires and may include the schools and community care facilities, physically and intellectually disabled, supported care, elderly, and culturally and linguistically diverse communities.
- 5.82 The Emergency Services Agency has specifically targeted the horse agistment community with community information associated with bushfires. The Emergency Services Agency prepared a report in 2011 which outlines a series of recommendations and guidance for people who own or maintain horses.⁴⁵ The report is available on the Emergency Services Agency's website.
- 5.83 The *Prepare. Act. Survive.* campaign is the key bushfire management campaign of the Emergency Services Agency. It is directed at a wide audience and not tailored towards any specific members of the ACT community, as required and listed in the Strategic Bushfire Management Plan (i.e. schools, community care facilities, physically and intellectually disabled, supported care, elderly and culturally and linguistically different communities).
- 5.84 Nevertheless, as noted earlier the Community Services Directorate, in 2010, developed the *Think Ahead, Be Ready, Stay Safe* campaign to provide support and guidance to vulnerable members of the ACT community in the event of an emergency. A range of community services organisations assisted in widely disseminating campaign information. This campaign does not specifically focus on the threat of bushfires.
- 5.85 A group of the ACT community that arguably has a specific need for targeted information are those residents within the Ember Zones.

⁴⁵ Emergency Services Agency Hightailing into the fires: bushfire planning on ACT horse agistment centres, 2011

Members of the community in Ember Zones

- 5.86 Ember Zones are discussed in the Emergency Services Agency's Strategic Bushfire Management Plan. Ember Zones are identified as 'those urban areas and rural villages specifically identified in the Fire Management Zoning Maps as subject to a higher level of bushfire risk'. When discussing actions to be taken by the community in managing the threat of bushfires, the ACT Community Implementation Plan component of the Strategic Bushfire Management Plan, specifically identifies members of the community within Ember Zones as needing to undertake specific actions.
- 5.87 Residents in the Ember Zones are an important community group that should be targeted for information on bushfire preparedness.
- 5.88 Mapped locations of Ember Zones in the ACT are available on the Emergency Services Agency website. Ember Zones are located throughout all of Canberra, including areas that are not located on the fringes of the city.
- 5.89 The Emergency Services Agency has not undertaken any targeted information and awareness-raising activities directed at members of the community in Ember Zones. However, the Emergency Services Agency advises that a number of initiatives will be commenced. For example, in March 2013 ACT Fire and Rescue instigated a community engagement strategy to engage with community members in Ember Zones across Canberra. ACT Fire and Rescue asserts that bushfire-related information will be delivered by Community Fire Unit volunteers and will target different areas of Canberra in coming years. Similarly, ACT Fire and Rescue asserts that it is seeking to progress partnerships with ACT Policing as part of the *Neighbourhood Watch Program*, although at this stage it is unclear as to how this will ultimately proceed.
- 5.90 It is also acknowledged that the Community Services Directorate's *Think Ahead, Be Ready, Stay Safe* campaign for vulnerable people will reach some but not necessarily all members of the ACT community in these zones.

COMMUNITY FIRE UNITS

- 5.91 The *Emergencies Act 2004*, section 47, provides for the establishment of community fire units by ACT Fire and Rescue. The Community Fire Unit Program is a community safety initiative, which was initially based on a program developed by the New South Wales Fire Brigade in 1994.
- 5.92 In March 2013 there were 50 Community Fire Units with approximately 1 086 members across the ACT. Community Fire Units typically consist of a team of local residents who live close to bushland. A Community Fire Unit may consist of anywhere between eight to 30 members and operates in a designated area encompassing 50 to 80 homes. Community Fire Units are supplied with a single, distinctive yellow trailer by ACT Fire and Rescue, which is to be placed in an accessible location in the Community Fire Unit's area of responsibility. The

trailer contains a range of equipment and stores, which may be accessed by team members as required.

- 5.93 Subsection 49(1) of the *Emergencies Act 2004* provides that the object of a Community Fire Unit is to assist people in the area for which the unit is established to learn how to:
- assist with defensive protection of property from fire; and
 - use equipment for fire prevention work and fire fighting.
- 5.94 Subsection 49(2) of the *Emergencies Act 2004* provides that the functions of a Community Fire Unit are to:
- undertake fire prevention work;
 - assist with fire fighting during a fire emergency; and
 - assist with recovery operations after a fire emergency.
- 5.95 Subsection 49(3) of the *Emergencies Act 2004* provides that a Community Fire Unit must exercise its functions:
- only in the area for which the unit is established;
 - in accordance with the standards and protocols for ACT Fire and Rescue; and
 - under the direction of ACT Fire and Rescue.

Planning for the Community Fire Units

- 5.96 There are no strategic plans, business plans or other plans associated with the Community Fire Unit program, nor are there any objectives or key performance indicators specified for the program. The objects and functions of Community Fire Units, as established in the *Emergencies Act 2004*, provide an indication of the legislative purpose of the Community Fire Units, but these high-level ideals are not supported by tangible operational objectives.
- 5.97 The lack of key governance, administrative and planning documentation impairs the management of the program. For example, there is no documented rationale or objectives associated with the identification of a need for a Community Fire Unit. Most Community Fire Units are located in areas on the western fringe of Canberra, although there are some Community Fire Units in areas of Canberra that are well within the urban fringe, e.g. the neighbourhoods of Aranda and Cook. ACT Fire and Rescue officers identified that Community Fire Units are identified and placed in areas of need, which includes areas adjacent to bushland and in areas where the topographical features mean that a Community Fire Unit will be of most value.
- 5.98 There is minimal documentation related to the planning for, and placement of, Community Fire Units or the criteria associated with their placement. The Audit Office was not provided with any documentation associated with the

establishment of the initial Community Fire Units in 2005. However, while the following statement was made by the Emergency Services Agency with respect to the establishment of new Community Fire Units in 2007, it was not able to be supported by documentation:

The locations for the proposed units have been selected based on risk, and the filling of identified operational gaps. The criteria for assessing risk were developed in conjunction with the ESA risk management section, and include elements such as exposure to bush land vegetation, topography, exposure to prevailing wind and historical fire patterns.

- 5.99 Furthermore, there is no documentation or objectives associated with the level of capability of Community Fire Units. Community Fire Units consist of a wide range of ACT community members, with different backgrounds, skills and capabilities. There is no clear identification of what is sought, including the level of capability, from a Community Fire Unit

Operational guidance

- 5.100 There is a lack of clarity associated with procedural and operational guidance for Community Fire Units. The Audit Office was provided with different documents relating to standards and protocols and standard operating guidelines for the Community Fire Units:
- *Standards and Protocols for Community Fire Units* (October 2011); and
 - *Community Fire Units Training Manual – Section 1.1 Standard Operating Guidelines* (undated).
- 5.101 Only one of these documents was dated (October 2011). It is not clear how often the documentation is reviewed or updated or how the *Standards and Protocols for Community Fire Units* document aligns with the *Standard Operating Guidelines* document.
- 5.102 The Audit Office was also provided with different training and operational support documents including:
- *Community Fire Units – Recruit and Skills Maintenance Drills* (undated); and
 - *Basic Wildfire Awareness – ACT Fire and Rescue Community Fire Units Learners Guide* (November 2011).
- 5.103 Only one of these documents was dated (November 2011) and it is not clear how often these documents are reviewed or updated. The *Basic Wildfire Awareness – ACT Fire and Rescue Community Fire Units Learners Guide* addresses activities to be undertaken in dealing with, and responding to, wildfires more broadly, including in a bush setting. This is a much broader scope of responsibility than that of the Community Fire Units, whose responsibility ‘ends’ at the urban fence-line.

- 5.104 Community Fire Units are not referenced in the Concept of Operations Plan for bush and grass fires in the ACT.⁴⁶ The Concept of Operations Plan (discussed in Chapter 6) sets out in detail the principles for responding to and managing bush and grass fires in the ACT.
- 5.105 The Audit Office was advised that, practically, Community Fire Units have no responsibility for fighting bushfires and the Community Fire Units' responsibilities effectively 'end' at the urban fence line. However, the Audit Office was also advised that Community Fire Units may, if necessary, have a role in establishing and running fire hoses from water sources to bushland 'beyond' the urban fence line for the benefit of ACT Fire and Rescue or the ACT Rural Fire Service. These operational considerations and constraints are not adequately documented in current operational procedures or guidelines.
- 5.106 It is critically important that operational guidance be prepared and maintained on an ongoing basis for the Community Fire Units. Given that the Community Fire Units are comprised of members of the community with diverse backgrounds and capabilities it is critical that operational roles and responsibilities of the Community Fire Units are well-understood and documented. Operational documents and guidance should be consistent and not give rise to uncertainty with respect to roles and responsibilities.

Support for Community Fire Units

- 5.107 Community Fire Unit members are supported by the ACT Fire and Rescue in a number of ways, including:
- the provision of training;
 - the provision of protective clothing and equipment;
 - the provision of stores and equipment for the trailers; and
 - half-yearly program meetings, which represent an opportunity for selected Community Fire Unit representatives (elected by their peers) to meet with ACT Fire and Rescue personnel to discuss the program and its implementation.
- 5.108 For many years, however, the ACT Fire and Rescue has had inconsistent documentation associated with the training and equipping of members of the Community Fire Units. This has meant that, for this period, ACT Fire and Rescue could not, with any certainty:
- identify the capability of the Community Fire Units in terms of number of active participants and whether they had participated in relevant training; and
 - whether equipment and stores were available and being maintained.

⁴⁶ Notifiable Instrument 2012-400 Emergencies (Concept of operations for bush and grass fires in the Australian Capital Territory) Commissioner's Guidelines 2012

5.109 Information associated with the training and equipping of Community Fire Unit members has been maintained through the Vetrack information system and separate spreadsheets maintained by program managers. In 2012, because of a lack of reliable information, program managers initiated a series of audits to ascertain and confirm participants' skills and capabilities and the state of allocated equipment.

Recommendation 17 (Chapter 5) - Community Fire Unit Program

The Emergency Services Agency should improve its management of the Community Fire Unit Program by:

- a) developing governance and administrative documentation for the planning, management, administration and evaluation of the Program;
- b) reviewing and consolidating standard operating procedures and operational guidance for participants in the Program; and
- c) maintaining accurate records of activities, including training undertaken by Program participants and the issuing of stores and equipment to program participants.

6. PREPARING FOR BUSHFIRE THREATS

6.1 This chapter discusses ACT Government agencies' readiness and capabilities with respect to fighting bushfires. It also examines arrangements between agencies, including the ACT Rural Fire Service and ACT Fire and Rescue in the Emergency Services Agency, and the Parks and Conservation Service Branch in the Territory and Municipal Services Directorate. The administrative arrangements for providing emergency information to the ACT community in the event of a bushfire threat are also considered.

SUMMARY

Conclusion

Bushfire suppression refers to actions taken in responding to, and containing, bushfires. Bushfire suppression is the primary responsibility of ACT Government land managers and rural leaseholders on their own land, in partnership with the ACT Government through its overarching responsibility to protect life, property and the environment in the ACT.

ACT Fire and Rescue and the ACT Rural Fire Service (including the Parks Brigade in the Territory and Municipal Services Directorate) are primarily responsible for responding to bushfires. The ACT Rural Fire Service (including the Parks Brigade) is continuously improving their capability to respond to bushfires. However, there are some shortcomings in establishing a statement of the strategic bushfire capability to manage bushfire risks, developing competency and training programs, working arrangements between brigades, information capturing and sharing and assurance processes associated with firefighters' fitness and equipment readiness.

The Emergency Services Agency has continuously improved its ability to provide emergency information and alerts to the ACT community in the event of a bushfire, although there is merit in giving further consideration to testing its communication systems.

Key findings

ACT Government resources for bushfire suppression

- Government resources for suppressing bushfires includes 348 ACT Fire and Rescue officers (most of whom are able to be deployed to bushfire duties), 1 086 Community Fire Unit volunteers (all of whom are able to be deployed to bushfire duties within a defined boundary in the urban-rural interface in Ember Zones), the ACT Rural Fire Service (a full-time paid staff of 13 and between 370 and 550 unpaid volunteers from the community in eight brigades) and the ACT Rural Fire Service Parks Brigade (a part-time, paid service of between 140 and 180 officers from the Territory and Municipal Services Directorate). ACT Fire and Rescue have responded to more bushfire and landscape fires than any other service.
- There have been difficulties between the ACT Rural Fire Service and the Territory and Municipal Services Directorate in accepting each other's roles and

responsibilities. The problem is most clearly reflected in the inability of the ACT Rural Fire Service and the Territory and Municipal Services Directorate to reach formal agreement on interagency co-operation through the review and signing of the Memorandum of Understanding. The latest Memorandum of Understanding agreed by both agencies was in November 2007. While multiple versions of draft Memoranda of Understanding have been produced for 2008-09, 2009-10 and 2012-13, these have remained in draft and unsigned. For the 2012-13 year, a first draft was produced in August 2012 and a sixth draft by February 2013. In June 2013, the Audit Office was provided with a draft, which has not been signed by either agency.

- In July 2012, the Emergency Services Agency Commissioner prepared a Concept of Operations Plan for bush and grass fires in the ACT. The Concept of Operations Plan sets out in detail the principles for responding to, and managing, bush and grass fires in the ACT. It provides detail and clarity in relation to command and control matters between the different services of the Emergency Services Agency and is a significant improvement on earlier administrative arrangements.

ACT Rural Fire Service capability

- The Emergency Services Agency has adopted the term 'strategic bushfire capability', rather than 'standard of fire cover' for bushfire risks in the ACT. While it keeps under review its capability, it has not developed a statement of its strategic bushfire capability for addressing bushfire risks.
- The ACT Rural Fire Service has not established a strategic bushfire capability. Establishing a pre-determined standard is important as it provides a target level of service upon which to plan resources. This includes the location, number and type of appliances, the desirable level of volunteering and the need for specific roles, skills, experience and competencies. In the absence of a current statement of the strategic bushfire capability that is required for the ACT, which should lead to a model of service delivery, it is not possible for the ACT Rural Fire Service, or the Audit Office, to provide assurance that there are adequate suppression resources available in the ACT Rural Fire Service to meet the needs of the ACT.
- In the absence of a strategic bushfire capability, the ACT Rural Fire Service has modelled its human resource needs on the 51 appliances in service. There is a target for the total number of volunteers, informed by a training needs analysis model, which is based on full utilisation of the existing 51 appliances. This model identifies a need for 1 139 roles to be filled across seven principal fireground functions to make best use of the ACT Rural Fire Service's 51 appliances. In December 2012 a total number of 344 roles could not be filled. This figure has fallen from 400 in June 2011.
- Greater clarity has been achieved through the Concept of Operations Plan in relation to the formation of Incident Management Teams in the event of a bushfire. In August 2012, the chief officers of the ACT Fire and Rescue and the ACT Rural Fire Service identified officers who could fulfil incident management roles from within their respective services. The Concept of Operations Plan

proposes a three-year period to 2016 ‘to fill all required Incident Management Teams positions’ with officers assessed against national units of competency. However, the Emergency Services Agency has not yet identified what this requirement is. There is currently no target level of Incident Management Team capability, and therefore no means to determine how many officers need developing in what roles, and to what level.

- There have been difficulties in maintaining and accessing up to date firefighter personnel records. The ACT Rural Fire Service has a single system that provides the status of all firefighters according to fitness levels and training, but not their experience, or current and prior competencies. The system has also suffered from technical and administrative difficulties. Furthermore, there is no ACT Rural Fire Service electronic management information system that is used to capture which personnel are or were on duty in a fireground situation, in what role, where and under what conditions. Nevertheless, paper-based records could be used to provide evidence of duties performed.

Mapping information

- There have been major advances in the ACT in mapping for fire management purposes in recent years. These developments include the development of the Regional Fire Management Plans (2009), a set of pre-suppression plans that address priority locations identified in the Concept of Operations Plan (2012), territory-wide pre-suppression plans setting out conservation, heritage and key infrastructure assets for all Territory and Municipal Services Directorate managed land (2012), maps associated with 112 Farm FireWise assessments conducted for rural leaseholders and a Territory and Municipal Services Directorate led territory-wide bushfire risk assessment (2012).
- These plans have the potential to improve the effectiveness of fireground operations, assist in targeting investment and identifying accountability for the use of Government resources. However, there is an opportunity to use Farm FireWise maps more effectively. For example, information and images on restricted access, such as gateways, are not effectively stored or retrievable in a way that would best assist fire suppression effort by the ACT Rural Fire Service.

Firefighter and equipment readiness

- Bushfires are seasonal. Fire-fighting services in the ACT go through an annual pre-season preparatory phase (April to September) and a readiness phase (October to March). The Strategic Bushfire Management Plan identifies the need to ensure sufficient skilled and motivated personnel are available to meet bushfire management requirements.
- The ACT Rural Fire Service asserts that it is the only volunteer fire agency in Australia that has minimum fitness requirements for all firefighters. Each ACT Rural Fire Service volunteer brigade administers its fitness test independently. There is no defined period from which the test must be taken, only that the test needs to be taken before the season starts. This means a test taken in the first half of the previous season could arguably be sufficient to satisfy requirements.

- In 2012-13, a total of 96 ACT Rural Fire Service volunteers and headquarters officers (19 per cent) out of a total 497 had passed a fitness test prior to 1 October. Procedures for the Parks Brigade fitness requirement are more effectively administered than the ACT Rural Fire Service volunteer brigades. A total of 91 Parks Brigade members (60 per cent) of a potential 151 identified in personnel records had passed a fitness test prior to 1 October. Consideration of firefighters that had passed the test in the previous season is likely to have yielded a higher pass rate, but the ACT Rural Fire Service's requirement was that the test be taken before the season starts.
- In addition to continuous checking of vehicles by ACT Rural Fire Service volunteers, in line with firefighter culture and training, there are arrangements in place to perform pre-season checks on all vehicles and units according to a standard checklist. There was evidence of pre-season checks being undertaken each year during the past two years. However, in 2010-11 only 8 (57 per cent) of the 14 units were checked before the season started; in 2011-12 only 7 (50 per cent) of the 14 units were checked before the season started; and in 2012-13 no units were checked before the start of the season. Within the ACT Rural Fire Service there are shortcomings in processes to confirm equipment readiness at the beginning of the season for all brigades.

Whole-of-government emergency response

- The *ACT Emergency Plan* was developed by the Emergency Services Agency and approved by the Minister for Police and Emergency Services in May 2012. The *ACT Emergency Plan* provides for the administration and maintenance of Emergency Coordination Centres in the ACT by the Emergency Services Agency and ACT Policing, either of which could be activated depending on the nature of the emergency.
- The Emergency Services Agency has established a new Emergency Coordination Centre at its headquarters at Fairbairn. The first use of the Centre was in September 2011 when a fire occurred in industrial premises at Mitchell. It has been activated on a small number of occasions since then, for flood and fire-related emergencies, as well as for exercises. The new Centre provides significantly more functionality and capacity than the Centre it replaced.
- Key roles in the Centre are outlined in an *Emergency Coordination Centre Operations Manual* (May 2012). The Emergency Coordination Centre at Fairbairn was activated in January 2013 for four days during a period of severe fire risk. The activation on each occasion was established in a timely manner, with liaison officers in attendance from Government directorates and other agencies such as ACTEW, Telstra, the National Capital Authority, and the Australian Government's Department of Defence and Attorney-General's Department.

Public warnings and emergency alerts

- The *ACT Community Communications and Implementation Plan* (2012) has been established as a sub-plan of the *ACT Emergency Plan*. The purpose of the *Implementation Plan* is to 'detail the arrangements for effective communication

- by ACT Government directorates with the public and the media, before, during and after major emergencies and incidents'.
- There is a wide range of communication channels by which the Emergency Services Agency can inform the community. In the event of a bushfire threat, a number of mechanisms are available to provide information to the community. These include the Incident Alert System, media outlets, and the EMERGENCY ALERT telephone warning system. These public warning and emergency alert mechanisms are also used in incidents or emergencies other than bushfires.
 - To assist in disseminating accurate and timely information to the ACT community, the Emergency Services Agency follows the principle of *Single Point of Truth (SPOT)*. The SPOT principle provides that the same single message will be disseminated through multiple channels by a single entry on a smartphone or tablet device. This eliminates the need to rewrite or manually republish the same words on multiple platforms and minimises the risk that key messages will not be conveyed accurately.
 - The Emergency Services Agency advises that, should there be a failure in existing information and communication technology, particularly the Agency's public alert, update and warning information distribution system, the Agency intends to use the ACT Government's information and communication technology systems (the act.gov network) and, as a further backup, a Gmail email account for the distribution of information to pre-defined email addresses. There were minimal administrative procedures for testing of these systems.

ACT GOVERNMENT RESOURCES FOR BUSHFIRE SUPPRESSION

- 6.2 Bushfire suppression refers to actions taken in responding to, and containing, the threat of bushfires. Bushfire suppression is the primary responsibility of rural leaseholders on their own land, in partnership with the Government through its overarching responsibility to protect life, property and the environment within the ACT.
- 6.3 The Emergency Service Agency advised that in extreme bushfire situations it must be recognised that it will not be possible for it to provide protection to the whole community. Fire fighting and public safety will take highest priority and information, advice and warnings provided by the Emergency Services Agency to the community aims to be timely, clear and accurate to ensure appropriate responses by individuals.
- 6.4 The *Emergencies Act 2004*, section 120, places primary responsibility with the land manager or land owner for preventing the outbreak and spread of fire. Subsection 120(1) of the *Emergencies Act 2004* provides that the owner or manager of land in a rural area must take all reasonable steps to prevent and inhibit the outbreak and spread of fire on the land and to protect property from fire on the land or spreading from the land.
- 6.5 Within the ACT resources for suppressing bushfires includes:

- ACT Fire and Rescue. A full time paid service that provides ACT Fire and Rescue services 24 hours a day. There are 348 officers in the ACT Fire and Rescue Service, most of whom are able to be deployed to bushfire duties;
- ACT Rural Fire Service. The ACT Rural Fire Service comprises a full-time paid staff of 13 and between 370 and 550 unpaid volunteers from the community in eight brigades;
- ACT Rural Fire Service Parks Brigade. This Brigade is a part-time, paid service of between 140 and 180 officers from, principally from the Parks and Conservation Service Branch of the Territory and Municipal Services Directorate; and
- 1 086 Community Fire Unit volunteers, all of whom are able to be deployed to bushfire duties within a defined boundary in the urban-rural interface in Ember Zones.

6.6 Table 6.1 shows the total number of bushfires in the ACT between 2008-09 and 2011-12, and the different services that have been involved in responding.

Table 6.1: Bushfire incidents and response 2008-09 to 2011-12

	ACT Rural Fire Service response to grass and bushfires	ACT Fire and Rescue response to landscape fires	Parks Brigade response to bushfires
2008-09	123	337	19
2009-10	112	267	44
2010-11	26	204	12*
2011-12	40	208	19*

Source: The Justice and Community Safety Directorate, and the Territory and Municipal Services Directorate's annual reports 2009-12 and from the Emergency Services Agency's Computer Aided Dispatch system*

6.7 There has been significant variation in the number of fires between 2008-09 and 2011-12, refer to Table 6.1. Some fires are attended to by more than one brigade:

- in 2010-11 and 2011-12 there was approximately half the number of fires of the previous two years. The recent two years were comparatively wet; and
- between 2008-09 and 2011-12, ACT Fire and Rescue attended 1 012 landscape fires and the ACT Rural Fire Service volunteer brigades attended 301 fires, and the Parks Brigade s attended 94 fires.

6.8 The majority of bushfires have been attended by the ACT Fire and Rescue Service. This reflects the proximity, readiness and preparedness of a full-time, paid fire-fighting service.

The need for working together

- 6.9 Many of the recommendations in the McLeod and Doogan reports following the 2003 Canberra fires relate to, or depend upon, improving how ACT Government agencies and other entities work together.
- 6.10 There are a range of circumstances that affect the planning and management of bushfires in the ACT:
- the comparatively small scale of operations makes working together essential in order to provide services effectively and efficiently;
 - the ACT capacity to fight major bushfires is dependent on other jurisdictions for assistance in certain circumstances, as do all other jurisdictions in Australia;
 - the ACT Government's ability, through the leasehold system to potentially secure better land uses and land management practices for the wider public benefit than a freehold tenure system would provide in other jurisdictions;
 - a pattern of land ownership by the Commonwealth, next to and within the Built Up Area of the ACT, over which the ACT Government has no direct control;
 - an extensive interface between what is defined as rural and urban areas of the ACT, and the rapid expansion of the urban area into the rural area in recent years; and
 - three separate fire fighting entities each reflecting differences in their structures, culture and operational procedures.
- 6.11 The following sections of this chapter describe the administrative arrangements that have been established that address these circumstances and promote co-operation and working relationships.

Legislative requirements for working together for bushfire suppression

- 6.12 The *Emergencies Act 2004* establishes the overarching responsibility of the ACT Government, which is to protect life, property and the environment in the ACT.⁴⁷ The Chief Officers of the ACT Rural Fire Service and ACT Fire and Rescue are responsible for different geographical areas.
- 6.13 Geographic areas of responsibility referred to in the *Emergencies Act 2004* are the City Area, Built Up Area, Rural Area and Bushfire Abatement Zone. Sections 65 and 71 of the *Emergencies Act 2004* provide that the Emergency Services Agency Commissioner may declare such areas. Such declarations are notifiable

⁴⁷ Emergency Act 2004 Objects of the Act (Section 3) and General Powers of Chief Officers (Section 34)

instruments and provide the basic framework for which service leads operations in particular areas. The areas are defined as follows:

- ‘City Area’ means any area that is a Built Up Area, and any area in the Bushfire Abatement Zone;
- ‘Built Up Area’ is any area that is not a ‘Rural Area’; and
- ‘Bushfire Abatement Zone’ is not defined in the *Emergencies Act 2004* or the Strategic Bushfire Management Plan (2009), but is defined in the Canberra Spatial Plan as a zone ‘to protect the city from the possible impacts of major bushfire events.’

6.14 The Audit Office identified that the ACT Government has invested considerable time and effort over many years to clarify responsibilities in relation to these geographic areas. It is important to do so because:

- it is essential in the ‘command and control’ environment of emergency management to have clarity on geographic responsibilities;
- the Bushfire Abatement Zone, which is an area outside the Built Up Area is rural in character, but it is ACT Fire and Rescue, rather than the ACT Rural Fire Service, which has operational planning responsibility in the Bushfire Abatement Zone;
- the response capability of the Government’s two fire services is very different due to scale of operations, experience, locations of stations, and readiness of officers. This means in practice that it is often ACT Fire and Rescue that is first on the fire ground in the event of bushfire in most parts of the ACT, regardless of area responsibility.

6.15 The Emergency Services Agency Commissioner, using powers set out in the *Emergencies Act 2004* to ‘make guidelines for the strategic operation of each service’ made three notifiable instruments in 2004, 2006 and 2011 for the ACT Rural Fire Service and ACT Fire and Rescue and how operational control in the event of bushfire would be achieved in the Bushfire Abatement Zone.

Roles and responsibilities of ACT Rural Fire Service brigades

- 6.16 The *Emergencies Act 2004*, section 54, provides the Chief Officer of the ACT Rural Fire Service with powers to establish brigades, and to determine their name and how many are necessary. The *Emergencies Act 2004* does not recognise a distinction between brigades led and staffed by volunteers (i.e. ACT Rural Fire Service volunteer brigades) and brigades comprising paid officers from the ACT Public Service (i.e. the ACT Rural Fire Service’s Parks Brigade).
- 6.17 As the principal land manager of Government land, the Territory and Municipal Services Directorate has established a capability to meet its responsibility for preventing the outbreak and spread of fire on the land it manages. It has done this by establishing that most of its Parks and Conservation Services Branch are

recruited to ‘fire designated’ posts. Officers within these posts form the ACT Rural Fire Service Parks Brigade whose role is to:

- fulfil the ACT Government’s responsibility as a land manager to stop fire breaking out or spreading (section 120 of the *Emergencies Act 2004*), and to protect the environment in accordance with the *Environment Protection and Biodiversity Conservation Act 1999* and the *Nature Conservation Act 1980*; and
- provide capacity in the ACT Rural Fire Service to operate in a suppression role across the area in which the ACT Rural Fire Service operates.

- 6.18 In the first role the Parks Brigade oversees more than the 72 per cent of land in the ACT for which the Territory and Municipal Services Directorate is the Government’s land manager. In the second role, it provides a firefighting capability for Territory and Municipal Services Directorate managed lands, as well as other land as required. The distinction between the two roles is important since the Parks Brigade has different interests and responsibilities in these two roles.
- 6.19 Officers from the Territory and Municipal Services Directorate advised that ...the Directorate [as a Government land manager], and rural leaseholders have a clear fire suppression responsibility under legislation, and that in certain circumstances, responsibility transfers to the Emergency Services Agency. However, there is ambiguity about what this means in practice and whether or not legislative change is required to achieve the desired level of clarity.
- 6.20 The Territory and Municipal Services Directorate’s Parks and Conservation Service Branch, and before it the ACT Forestry Service, has developed a fire suppression capability as land management custodians. This capability complements and enhances the wider community capability provided by the largely voluntary ACT Rural Fire Service.
- 6.21 The number of fire designated posts in the Territory and Municipal Services Directorate’s Parks and Conservation Service Branch is defined in the Territory and Municipal Services Directorate’s Enterprise Agreement.⁴⁸ The Territory and Municipal Services Directorate’s Enterprise Agreement (2011-13) provides that the Director-General will designate no fewer than 140 positions in the Parks and Conservation Service Branch to undertake fire management duties. In practice, the number of designated posts may be as high as 209, according to training records.⁴⁹

⁴⁸ Territory and Municipal Services Directorate’s Enterprise Agreement 2011-2013 Clause N3.2

⁴⁹ Fire Training Database 2012-13 TAMS Personnel subdirectory in Parks Conservation and Land, extracted 8 April 2013

ACT Rural Fire Service brigades working together

- 6.22 The Audit Office has considered how the Parks Brigade and the eight volunteer brigades of the ACT Rural Fire Service are managed to ensure effective co-operation and working arrangements. There are major interdependencies between ACT Rural Fire Service volunteers, the paid officer cohort of the ACT Rural Fire Service staff at Emergency Services Agency headquarters and the Parks Brigade. Furthermore, it is also important to establish incident control responsibilities and determine at what point the Territory and Municipal Services Directorate's duties as a land manager are superseded by the Emergency Services Agency's duties to the ACT to protect life, property and the environment.
- 6.23 There have been difficulties between the ACT Rural Fire Service and the Territory and Municipal Services Directorate in accepting each other's fire suppression roles and responsibilities. Officers from the Territory and Municipal Services Directorate and from the ACT Rural Fire Service emphasised to the Audit Office different aspects of legislation as the basis for their response to bushfire incidents.
- 6.24 Officers gave examples that indicated that there have been tensions between the ACT Rural Fire Service and the Territory and Municipal Services Directorate. The ACT Bushfire Council's ten year report (December 2012) identified:
- In general, firefighting relationships between various organisations involved in this unified arrangement are good, although because of the different cultures in different organisations some tensions exist.⁵⁰
- 6.25 The tension is most clearly reflected in the inability of the ACT Rural Fire Service and the Territory and Municipal Services Directorate to reach formal agreement on interagency arrangements through the review and signing of a Memorandum of Understanding.
- 6.26 The working arrangements between the Territory and Municipal Services Directorate as a land manager, the ACT Rural Fire Service Parks Brigade and the ACT Rural Fire Service, including defining the capability that the ACT Rural Fire Service can call upon, should be set out in a Memorandum of Understanding between the Territory and Municipal Services Directorate and the Emergency Services Agency. The Memorandum of Understanding should, amongst other things, set out incident management capability, a mutually agreed capability from the Parks Brigade for the bushfire season and arrangements for having officers on standby, known as 'stand up', according to different fire danger levels.
- 6.27 The latest Memorandum of Understanding agreed by both agencies was in November 2007. The Audit Office was told by officers that the relationship

⁵⁰ ACT Bushfire Council A review of fire management arrangements in the ACT 10 years after the 2003 bushfires, December 2012

between the Territory and Municipal Services Directorate and the ACT Rural Fire Service had from then on become too difficult to enable Memorandum of Understanding discussions to be productive and, while various drafts of Memoranda of Understanding were produced for 2008-09 and 2009-10 these remained in draft and unsigned.

- 6.28 For the 2012-13 year, the first draft Memorandum of Understanding was developed in August 2012 and a sixth draft by February 2013. An area of contention has been the figure proposed for the Parks Brigade's core primary response. In drafts of the Memorandum of Understanding since 2008 this has varied between 72 to 134 firefighters. As at June 2013 the Memorandum of Understanding remained unsigned.
- 6.29 The Parks Brigade and the ACT Rural Fire Service advised that over recent years action has been undertaken to resolve the differences in viewpoints, both professional and personal, and that this is resulting in more co-operative and productive working relationships. Nevertheless, the lack of an agreed Memorandum of Understanding between the Parks Brigade and the ACT Rural Fire Service remains a risk.

Recommendation 18 (Chapter 6) – ACT Rural Fire Service brigades (High Priority)

The Emergency Services Agency and the Territory and Municipal Services Directorate should continue to improve working arrangements between the ACT Rural Fire Service Parks Brigade and the ACT Rural Fire Service headquarters, by:

- a) documenting the responsibilities of the Parks and Conservation Service Branch in its land management role versus Parks Brigade role and conveying this to all brigades; and
- b) updating or replacing the Emergency Services Agency and the Territory and Municipal Services Directorate 2007 Memorandum of Understanding to guide working arrangements for bushfire preparedness and suppression.

Working together within the Emergency Services Agency

- 6.30 It is important that the ACT Rural Fire Service and ACT Fire and Rescue co-operate and have effective working arrangements. This is particularly important in determining first response and which service takes command and control in different zones, as set out in the *Emergencies Act 2004*.
- 6.31 Operations in the Bushfire Abatement Zone have been the subject of much discussion for many years between the two services. ACT Fire and Rescue has responded to a significantly greater number of landscape fires than the ACT Rural Fire Service, refer to Table 6.1. There are also many instances where members from two brigades are in attendance at the same bushfire and there is a handover of fireground control from one brigade to the other.

- 6.32 In July 2012, the Emergency Services Agency Commissioner prepared a Concept of Operations Plan for bush and grass fires in the ACT.⁵¹ The Concept of Operations Plan sets out in detail the principles for responding to and managing bush and grass fires in the ACT. It identifies *inter alia*:
- the triggers for a pre-formed incident management team, that is, a management and coordination team, which is brought together in anticipation of a bushfire;
 - a process for building a pool of officers with specific skills and training that can be brought together as an incident management team;
 - first response arrangements and incident control, regardless of jurisdiction or service, in and beyond the Bushfire Abatement Zone; and
 - management arrangements for an incident, scaled to three levels according to the intensity and size of the incident, including establishment of an emergency coordination centre and emergency controller.
- 6.33 The Concept of Operations Plan provides detail and clarity in relation to command and control matters between the different services of the Emergency Services Agency. The Concept of Operations Plan is a significant improvement on earlier administrative arrangements, which were previously outlined in three notifiable instruments relating to the Bushfire Abatement Zone (2004, 2006 and 2011). The Audit Office also recognises that while governance arrangements for developing, and potentially implementing, the Concept of Operations Plan are in place, it is too early to identify the effectiveness of the Concept of Operations Plan in relation to bushfire suppression. At present, there is no:
- implementation plan for the Concept of Operations Plan; or
 - evaluation framework, to ensure that the impact of the Concept of Operations Plan can be assessed.

Working across jurisdictions

- 6.34 The Concept of Operations Plan recognises that ACT Fire and Rescue and the ACT Rural Fire Service have a large immediate first response capability but that arrangements need to be in place to secure fire services from other jurisdictions. The Concept of Operations Plan recognises the need for Memoranda of Understanding and Mutual Aid Agreements to ensure there are swift and effective responses to bush and grass fires that may affect either jurisdiction:
- New South Wales ACT Rural Fire Service (Memorandum of Understanding);
 - New South Wales ACT Rural Fire Service, the four teams and zones surrounding the ACT (Mutual Aid Agreement);
 - ACT Fire and Rescue New South Wales (Mutual Aid Agreement);

⁵¹ Notifiable Instrument 2012-400 Emergencies (Concept of operations for bush and grass fires in the Australian Capital Territory) Commissioner's Guidelines 2012

- Aviation Fire Fighting Service (Mutual Aid Agreement); and
 - New South Wales National Parks and Wildlife Service (Memorandum of Understanding).
- 6.35 A review of these agreements was undertaken by the Emergency Services Agency in July 2012. The review identified that some agreements at that time were in need of review, or were in the process of being reviewed, including:
- ACT Fire and Rescue New South Wales (Mutual Aid Agreement); and
 - New South Wales ACT Rural Fire Service (Memorandum of Understanding).
- 6.36 The review also noted that some agreements have recently been re-signed, for example, that with the New South Wales National Parks and Wildlife Service (Memorandum of Understanding) and New South Wales ACT Rural Fire Service (Mutual Aid Agreement).

ACT RURAL FIRE SERVICE CAPABILITY

- 6.37 In this section of the audit report the following is considered:
- the capability of the ACT Rural Fire Service; and
 - governance arrangements for the ACT Rural Fire Service
- 6.38 Key documentation associated with the ACT Rural Fire Service which was reviewed in this audit included:
- business plans (2008-2011 and 2011-2014);
 - Standard Operating Procedures;
 - the Concept of Operations Plan and the ACT Rural Fire Service field operations guide; and
 - ACT Rural Fire Service quarterly management reports.
- 6.39 The *Emergencies Act 2004*, section 54, provides the Chief Officer of the ACT Rural Fire Service with powers to establish brigades, and to determine their name and how many are necessary. In achieving this, there are a number of cultural and organisational factors that need to be taken into consideration, particularly with respect to differences between the eight part-time volunteer brigades and the part-time paid Parks Brigade. These include:
- differences in personal motivation that affect recruitment and retention and morale across the brigades;
 - the availability of personnel during the day time, evening and weekends;
 - the need for those serving in brigades to undertake administrative tasks; and
 - differences in perception as to the nature of the ACT Rural Fire Service and whether it operates as a single entity.

Determining overall capability

- 6.40 The Territory and Municipal Services Directorate's Parks Brigade has a target level of 72 firefighters to be made available at any one time for ACT Rural Fire Service duty drawn from a greater capability of at least 140 personnel in fire management designated posts. These posts are available for the purpose of bushfire prevention work, such as undertaking prescribed burns and for controlling and extinguishing fires on the Territory and Municipal Services Directorate's managed land.
- 6.41 There is no target level established for the other eight ACT Rural Fire Service brigades. Nevertheless, the Justice and Community Safety Directorate reports the level of volunteering achieved for the ACT Rural Fire Service in its annual reports, and this has fluctuated between 374 and 480 in the four years to 2011-12.
- 6.42 ACT Rural Fire Service officers identified that the quantum of volunteers alone was not a reliable measure of service capability, because not all members were active or currently available. Additionally, agreed command and control structures require specific combinations of roles, based on training and experience, and shortages in certain roles will limit the overall capability of the ACT Rural Fire Service.
- 6.43 The combination of staffing levels and roles, as well as the provision of equipment and other resources, is referred to as a 'model of service'. The Audit Office understands that the 'model of service' should be designed and implemented to meet a pre-determined 'standard of fire cover' that addresses bushfire risks. Establishing a pre-determined 'standard of fire cover' is important as it provides a target level of service to plan for and resource. This includes the location, number and type of appliances, the desirable level of volunteering and the need for specific roles, skills experience and competencies.
- 6.44 The Emergency Services Agency advised that it has adopted the term 'strategic bushfire capability' rather than 'standard of fire cover.' It also advised that while it keeps under review its capability, it has not developed a statement of its strategic bushfire capability for addressing bushfire risks. Accordingly, there is no mention of such a statement in the Concept of Operations Plan, ACT Rural Fire Service business and operational plans or standard operating procedures.
- 6.45 The Emergency Services Agency made an attempt in 2006 to develop and agree a model identifying the number of personnel, roles and training requirements but that this exercise was inconclusive. On that occasion, the model was based on planning assumptions about the number, intensity and duration of bushfire events, and the level of assistance from non ACT Rural Fire Service personnel. The exercise did not result in or inform an agreed statement of strategic bushfire capability for bushfire risks in the ACT.
- 6.46 Considerable investment has been made in the ACT Rural Fire Service, particularly following the 2003 Canberra bushfires. While this is the case, in the absence of a strategic bushfire capability for bushfire risks, it is not possible for the ACT Rural

Fire Service, or the Audit Office, to provide assurance that there are adequate suppression resources available in the ACT Rural Fire Service to meet the needs of the ACT.

- 6.47 The Parks Brigade of the ACT Rural Fire Service has established a target capability to manage bushfire risks. This was derived from the level of fire cover necessary to respond to the December 2001 bushfires in the ACT.⁵² This has enabled it to determine a requirement for the number of primary and secondary roles it needs to meet its responsibilities as a land manager and as a brigade of the Rural Fire Service. These are set out in the *TAMS Fire Management Role Requirements Manual* (2007).⁵³
- 6.48 Any statement of strategic bushfire capability for the ACT would need to respect the dual roles of the Parks Brigade in relation to its land management role and its territory-wide suppression role. It would also need to respect the role of ACT Fire and Rescue.

Recommendation 19 (Chapter 6) – ‘Strategic bushfire capability’ (High Priority)

The Emergency Services Agency and the Territory and Municipal Services Directorate should develop and routinely review a strategic bushfire capability for the ACT. The contribution of ACT Fire and Rescue (including the Community Fire Units) and the ACT Rural Fire Service (including Parks Brigade) should be explicitly stated.

Developing ACT Rural Fire Service capability

- 6.49 In the absence of a statement of strategic bushfire capability, the ACT Rural Fire Service has modelled its human resource needs on the number of appliances in service, i.e. 51 appliances. There is a target for the total number of volunteers, informed by a training needs analysis model, which is based on full utilisation of the existing 51 ACT Rural Fire Service appliances. This model identifies a need for 1 139 roles to be filled across seven principal fireground functions to make best use of the ACT Rural Fire Service’s 51 appliances.⁵⁴ One person may undertake multiple roles, so that the total number of roles may, and does, exceed the actual number of volunteer members. The approach includes:
 - the adoption of a training needs model based on the holding of current units of competence;
 - the development of annual training plans for the ACT Rural Fire Service;
 - the mapping of training pathways for specific roles and responsibilities; and

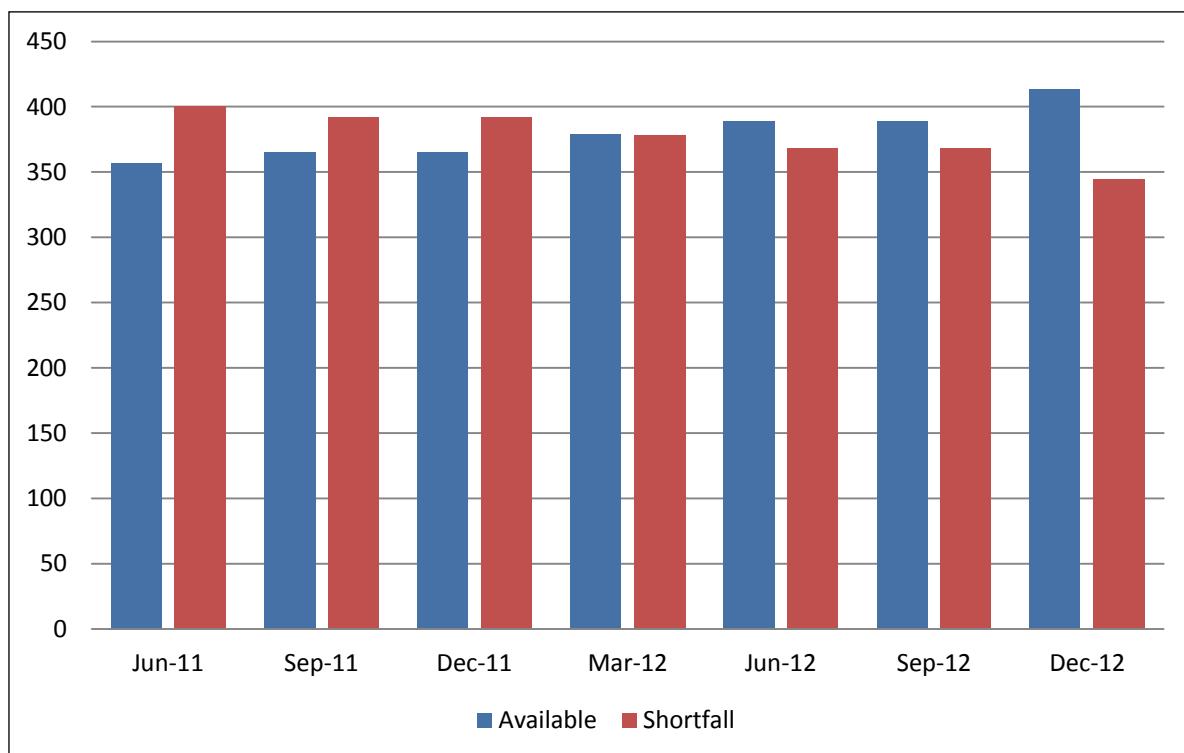
⁵² Territory and Municipal Services Parks, Conservation and Lands Training Needs Analysis for Fire Management and Emergency Services Agency Support 2007, page 14

⁵³ Territory and Municipal Services Parks, Conservation and Lands Fire management Role Requirements (2007)

⁵⁴ Basic Firefighter, Village Firefighter, Advanced Firefighter, Crew Leader, Group Leader, 4 Wheel Drive, and Remote Area Firefighter

- quarterly monitoring and reporting on the number of roles required, and filled.
- 6.50 Since 2011 the ACT Rural Fire Service has increased its training and development activity with a focus on its members obtaining recognised and accredited units of competency. The ACT Rural Fire Service has been successful in steadily reducing the shortfall between the number of roles potentially available from ACT Rural Fire Service members and the number of roles needed to maximise the use of the ACT Rural Fire Service's 51 appliances.
- 6.51 Figure 6.1 focuses on four of the seven principal fireground functions where there remains a shortfall in what is needed and what can be provided by currently trained members holding the appropriate units of competence. For these four functions, the total number of roles required is 757.

Figure 6.1: Total number of roles where there is a shortfall (Village and Advanced Firefighters, Crew Leaders and Group Leaders)



Source: Emergency Services Agency quarterly report data on ACT Rural Fire Services roles (March 2011 to Dec 2012)

- 6.52 Since June 2011, the ACT Rural Fire Service has steadily increased the number of roles it can fill (of the target number of 757 required) from 357 to 413. In doing so, it has reduced the shortfall in these four functions from 400 in June 2011, to 344 in December 2012, refer to Figure 6.1.
- 6.53 These results can be disaggregated into the current numbers of roles filled by each brigade. This analysis shows that there is a concentration of the more senior fireground roles of Crew Leader and Group Leader in the Parks Brigade. Despite

being one of nine brigades, 40 per cent of Crew Leader roles and 60 per cent of Group Leader roles are filled by members of the Parks Brigade.

6.54 There are shortcomings and a lack of clarity with respect to other areas of ACT Rural Fire Service capability development. These include:

- crewing arrangements are determined by brigade officers making the best use of the members available to them, including members with experience, but without reference to accredited units of competence. In this respect, there is a lack of clarity as to whether the ACT Rural Fire Service intends to move towards a model where only personnel with requisite competencies have a role, and if so, over what time period this is to occur;
- training planning is undertaken annually. There is no medium to long term workforce development or training and development plan. Such a plan might address goals that are less affected by season-specific limitations; and
- the training needs model is based on the ability to cross-crew between brigades, so that a brigade with insufficient numbers of qualified crew can use crew members from other brigades who may have a surplus. However, ACT Rural Fire Service officers advised that cross-crewing only occurs in a limited number of circumstances. The training needs model should take into account the reduction in available roles due to the inability to cross-crew in all situations.

6.55 The Parks Brigade has designed and developed its own training and development program since 2005. It does so in consultation with, and with the support of, the broader ACT Rural Fire Service. The Parks Brigade undertook its own training needs analysis (2007), developed and began implementation of its own Brigade training plan in 2009 and runs its own annual pre-season training and fitness testing processes.

6.56 Training and development activity for the Parks Brigade is determined by pathways which Brigade members discuss and agree to, in order that skills development collectively meets the needs of the Brigade's target bushfire capability, as well as members' interests. Bushfire Operations Plans set out the desired themes and number of training places each year. A review of the Brigade training plan is currently underway. However, the momentum behind these developments has not always been maintained in recent years. For 2011-12 and 2012-13, the Audit Office found that:

- there was no up-to-date brigade-wide medium-term training plan;
- there were some gaps in training plans for individual firefighters; and
- there was no reporting on whether the training and development needs that address firefighters' roles had been met (or exceeded).

Incident Management Team capability

6.57 Paragraph 6.33 identifies that greater clarity has been achieved through the Concept of Operations Plan in relation to the formation of Incident Management Teams in the event of a bushfire. In August 2012, the chief officers of the ACT Fire and Rescue and the ACT Rural Fire Service identified officers that could fulfil incident management roles from within their respective services. The Concept of Operations Plan proposes a three-year period to 2016 ‘to fill all required Incident Management Teams positions’, with officers assessed against national units of competency.⁵⁵ However, the Emergency Services Agency has not yet identified what this requirement is. There is currently no target level of Incident Management Team capability, and therefore no means to determine how many officers need developing in what roles, and to what level.

Recommendation 20 (Chapter 6) – Competency, training and Incident Management Team capability

The Emergency Services Agency should:

- a) review the ACT Rural Fire Service’s target for its members holding recognised units of competency, and the timeframe for achieving the target level of competency;
- b) review its training and development activities in order to meet its model of service, and the Rural Fire Service’s contribution towards the ACT’s strategic bushfire capability (Recommendation 19), taking into account the level of cross crewing that is feasible;
- c) continue liaising and collaborating where possible with the Parks Brigade over the Brigade planning and implementation of its training and development activity;
- d) prepare and maintain medium-term training and development plans for the ACT Rural Fire Service; and
- e) determine a target for incident management team capability and identify how this will be achieved.

MANAGEMENT INFORMATION

6.58 The Audit Office considered how information relevant to the management and review of bushfire operations is captured and shared. This included discussions with officers relating to incident management and communications within the service and between services.

⁵⁵ Public Safety Training Package unit competencies PUAOPE018A and PUAOPE019A

- 6.59 While it was beyond the scope of this audit to undertake a detailed review of operational communication systems, it is noted that concerns have been expressed by brigade members with respect to two-way communication coverage, redundancy and interoperability. Emergency Services Agency officers advised that developments have been implemented that address shortcomings in the way the ACT Rural Fire Service and its brigades, the Emergency Service Agency and more widely, emergency services in neighbouring New South Wales communicate with each other. These developments include:
- adopting the UHF trunked radio network as the primary fireground system (2006) permitting whole of service and inter-jurisdictional interoperability;
 - within the UHF trunked radio network, use of multiple channels, and vehicle-based and handheld equipment providing facility for concurrent fireground and command communications;
 - increasing trunked radio network coverage through the use of a mobile repeater in remote areas (2010);
 - a new central communications protocol for securing a quicker response from and greater availability of ACT Rural Fire Service firefighters, and a new protocol designed to improve radio communication on the fireground and with central communications (2012); and
 - ACT Rural Fire Service duty officer support during all stand up hours in order to ensure specialist advice is available (2012).
- 6.60 Officers responsible for record keeping for the Parks Brigade, and for the ACT Rural Fire Service as a whole identified difficulties in maintaining and accessing up-to-date firefighter personnel records. The ACT Rural Fire Service has an electronic database system that provides the status of all firefighters according to fitness levels and training, but not their experience, or current and prior competencies. The system has also suffered from technical and administrative difficulties.
- 6.61 As a result the ACT Rural Fire Service as a whole, and the Parks Brigade specifically:
- do not have a single management information system that maintains accurate and current information on personnel details and capabilities; and
 - have developed separate databases, as a solution to this difficulty, and this is acknowledged as requiring additional administrative effort.
- 6.62 It is important for senior managers and for those with the authority to deploy or determine crewing arrangements to be able to identify brigade members' capability and suitability for deployment. Management information systems currently do not easily provide or facilitate the retrieval of this information.
- 6.63 The Emergency Services Agency's Central Communications team, referred to as COMCEN, is based at the Emergency Services Agency's headquarters at Fairbairn.

Concept of Operations Plan requires all bushfire incidents identified by firefighting agencies to be notified to COMCEN, regardless of location or land tenure.⁵⁶ COMCEN also receives notification of appliances that are able to be deployed. Officers' interaction with COMCEN and the use of mobile data terminals in vehicles mean that much incident-specific information is captured, as an incident unfolds.

- 6.64 There are currently limitations as to how COMCEN-derived data can be used for personnel management, for confirming accountability or for the post-event review of use of resources. For example:
- ACT Rural Fire Service appliance crew members are not readily identifiable from COMCEN records as a matter of routine;
 - ACT Rural Fire Service incident controllers are not consistently identifiable; and
 - the crew of the first arriving ACT Rural Fire Service appliance is unable to update the COMCEN system with the type of fire they encounter. Officers identified that this technical limitation may lead to inaccurate reporting of bushfires in the Australian Incident Reporting System which provides a means of annually reporting bushfire data on a national basis.
- 6.65 There is no ACT Rural Fire Service electronic management information system that captures which personnel are or were on duty in a fireground situation, in what role, where and under what conditions. Officers identified that paper-based records could be used to provide evidence of duties performed. However these paper-based systems:
- make remote capture of information difficult;
 - make a contemporaneous overview of personnel resources in use difficult; and
 - provide a limited means of assurance that fatigue management strategies are effectively applied in accordance with relevant standard operating procedures.

Sharing of mapping capabilities and products

- 6.66 There is a digital mapping capability in the Emergency Services Agency and the Territory and Municipal Services Directorate. In relation to bushfire preparedness, mapping is an important tool for:
- spatially representing locations of fuel load risk;
 - demonstrating fuel load planned and achieved treatments;
 - locating assets that need protection; and

⁵⁶ Concept of Operations Plan Section 5.3.2 Duty to Notify

- showing the access network.
- 6.67 Mapping also contributes to the development of location-specific pre-suppression plans and suppression incident management.
- 6.68 There have been major advances in the ACT in mapping for fire management purposes in recent years, including the development of:
- Regional Fire Management Plans (2009);
 - a set of pre-suppression plans that address priority locations identified in the Concept of Operations Plan (2012);
 - territory wide pre-suppression plans setting out conservation, heritage and key infrastructure assets for all of the Territory and Municipal Services Directorate managed lands (2012);
 - maps associated with 112 Farm FireWise assessments conducted for rural leaseholders; and
 - territory-wide bushfire risk assessment (2012) by the Parks and Conservation Service Branch of the Territory and Municipal Services Directorate.
- 6.69 These plans have the potential to improve the effectiveness of fireground operations and the targeting of investment and accountability of ACT Government resources. The 2007 Memorandum of Understanding between the Territory and Municipal Services Directorate and the Emergency Services Agency emphasises the importance of sharing maps. While the rationale for undertaking the various mapping tasks is clear, the agencies responsible for developing these mapping tools have not always been fully successful in using and sharing mapping materials, as specified in the draft Memorandum of Understanding.
- 6.70 For example, with respect to Farm FireWise maps, these maps are a spatial expression of Farm FireWise assessments conducted for rural leaseholders. Where the Farm FireWise maps are in place (for approximately 70 per cent of rural leases), the value of these maps is not maximised since some important aspects, for example, information and images relating to restricted access, such as gateways, are not effectively stored, or retrievable in a way that would best assist fire suppression effort by the ACT Rural Fire Service.
- 6.71 Furthermore, as Farm FireWise maps have been produced over the past five years, they have not been effectively shared with the Territory and Municipal Services Directorate. Sharing such information is important because rural leasehold land may be adjacent to unleased land which is managed by the Territory and Municipal Services Directorate, and much of the rural leasehold land is in close proximity to, or within, asset protection zones and the Strategic Fire Fighter Advantage Zone. Managers of neighbouring land under different tenures must work co-operatively to achieve fire management goals.

- 6.72 The Territory and Municipal Services Directorate advises that a facility for sharing computerised map data between the Emergency Services Agency and the Directorate was implemented in May 2013. This facility was not in place in time for the Territory-wide pre-suppression plans published in December 2012 (see paragraph 6.68) to reflect the content of the 112 Farm FireWise maps at the time.
- 6.73 In 2012 the Territory and Municipal Services Directorate undertook a risk mapping exercise across the ACT, with map layers identifying bushfire risk, and known prevention and mitigation activities. The assessment identified 29 locations, principally surrounding the suburbs of Canberra, where a high or extreme residual risk remained, that is, either where there was a known unmitigated risk or mitigation factors were unknown.
- 6.74 Of the 29 locations, 27 (93 per cent) were on lands other than those directly managed by the Territory and Municipal Services Directorate. While this mapping exercise gave assurance to the Territory and Municipal Services Directorate in its land custodianship role, the value of the mapping exercise was not maximised. The ACT Rural Fire Service did not work with the Territory and Municipal Services Directorate on this risk management mapping exercise, nor did the Rural Fire Service use the information from the mapping, for example, by exploring the risk areas the maps identified. No similar cross-tenure risk mapping has been undertaken by the ACT Rural Fire Service.

Recommendation 21 (Chapter 6) - Information capture and sharing

The Emergency Services Agency and the Territory and Municipal Services Directorate should improve information capture and sharing by:

- a) recording accurately and efficiently personnel information and capabilities in relation to bushfire management; and
- b) better coordinating their planning and use of bushfire preparedness maps.

SUPPRESSION READINESS

- 6.75 The incidence of bushfire in the ACT follows a distinct pattern of seasonality. Although active and available throughout the year, bushfire-fighting services in the ACT go through an annual pre-season preparatory phase (April to September) and a readiness phase (October to March).
- 6.76 The Strategic Bushfire Management Plan identifies the need to ensure sufficient skilled and motivated personnel are available to meet bushfire management requirements.⁵⁷

⁵⁷ Strategic Bushfire Management Plan 2009, page 42

- 6.77 The Audit Office sought to examine what fire-fighting resources are capable of being deployed. To achieve this the level of personnel and equipment ‘readiness’ for deployment to a fire-ground or for training on the first day of the season was assessed. The Audit Office focused on personnel in the ACT Rural Fire Service, as the ACT Rural Fire Service’s primary role is to suppress bushfires. While the ACT Fire and Rescue typically responds to most bushfires in the ACT, refer to Table 6.1, its readiness is not primarily determined by the risk of bushfire.
- 6.78 The Audit Office considered the following key readiness tests:
- the readiness of fire-fighting personnel, as determined by the successful completion of a physical fitness test (a requirement for all ACT Rural Fire Service brigades, including the Parks Brigade); and
 - the readiness of equipment, according to whether pre-season checks have been undertaken.
- 6.79 There are other aspects to firefighter readiness, such as attendance at pre-season briefings, and completion of required training in order to fulfil specific fireground, administrative or managerial roles. The Audit Office did not consider the assurance mechanisms relating to these other aspects that determine firefighter readiness.
- 6.80 The *Emergencies Act 2004* determines the start of the bushfire season to be 1 October, unless otherwise declared by the Emergency Services Agency Commissioner. Such a declaration was made in 2010 when the Emergency Services Agency Commissioner declared 1 November as the start of the 2010-11 bushfire season. Notwithstanding this announcement, the Audit Office has taken 1 October as the date of assessment for firefighting readiness tests. This is because pre-season preparatory work takes time, typically three months or more, and the Rural Fire Service cannot fully anticipate a change in the commencement to the bushfire season months in advance.

Firefighter readiness

- 6.81 The requirements for firefighters in the ACT Rural Fire Service to pass an annual, pre-season fitness test are set out in:
- *Work Capacity Test* (Standard Operating Procedure no. 4.3) for members of the eight ACT Rural Fire Service volunteer brigades;
 - *ACT Rural Fire Service Field Operations Manual (2012-13)*; and
 - the Territory and Municipal Services Directorate’s Enterprise Agreement relating to the designated posts in the Parks Brigade.⁵⁸

⁵⁸ Enterprise Agreement 2011-13, Clause N3.2 to 3.10, page 99

- 6.82 The various documents require *inter alia* that all ACT Rural Fire Service volunteer brigades and Parks Brigade members ‘undertake training and meet minimum fitness standards’. The ACT Rural Fire Service asserts that it is the only volunteer fire agency in Australia that has minimum fitness requirements for all firefighters.
- 6.83 A review of ACT Rural Fire Service volunteer brigade arrangements for implementing the fitness test found:
- each volunteer brigade administers its fitness test independently;
 - in 2012-13, a total of 96 (19 per cent) ACT Rural Fire Service volunteers and Headquarters officers out of a total 497 had passed a fitness test prior to 1 October;
 - brigades send in their test results to ACT Rural Fire Service headquarters. This can take time, with some being outstanding for up to two months after the beginning of the season. The Audit Office considers that what is sent in is inadequate for ACT Rural Fire Service headquarters staff to confirm compliance with *Work Capacity Test* (Standard Operating Procedure number 4.3); and
 - within *Work Capacity Test* (Standard Operating Procedure number 4.3), there was no defined period from which the test must be taken, only that the test needs to be taken before the season starts. This means a test taken in the first half of the previous season could arguably be sufficient to satisfy requirements.
- 6.84 The Audit Office considered management arrangements and compliance for the Parks Brigade. Procedures for the Parks Brigade fitness requirement are more effectively administered than the volunteer brigades. However, it was found that:
- a range of test dates are offered to accommodate personnel both before and after the beginning of the season. A significant proportion of the tests are planned to be undertaken after the beginning of the season and therefore cannot be described as ‘pre-season’ fitness tests; and
 - a total of 91 (60 per cent) Parks Brigade members out of a potential 151 identified in personnel records had passed a fitness test by 1 October. The figure of 91 exceeds the requirement established in the draft Memorandum of Understanding (i.e. 72) between the Emergency Services Agency and the Territory and Municipal Services Directorate, but does not meet the requirement for 140 as set out in the Territory and Municipal Services Directorate’s *Enterprise Agreement 2011-13*.
- 6.85 A higher percentage of the Territory and Municipal Services Directorate Parks Brigade personnel pass the fitness test prior to the beginning of the season compared to ACT Rural Fire Service volunteer brigades.

- 6.86 The ACT Rural Fire Service's overall suppression capability for fighting bushfires is significantly reduced if the number of brigade members who have not passed a fitness test at the start of the fire season, according to the established policy, is discounted. While the Parks Brigade exceeds its agreed minimum obligations to the Emergency Services Agency, there is considerable suppression capability lost across all brigades of the ACT Rural Fire Service. Nevertheless, in recognition of the fact that the fitness test was to be conducted on an annual basis, consideration of the number of personnel who had passed a fitness test in the previous 12 months is likely to have yielded a higher pass rate. While it is widely accepted in the Rural Fire Service, and especially in the Parks Brigade, that a fitness test remains current for 12 months regardless of when it was undertaken, this was not the policy.
- 6.87 A key risk for the ACT Government is that ACT Rural Fire Service firefighters are engaged in training or deployed to a fireground in the absence of a required fitness test. Due to shortcomings in information systems and administrative processes, and the lack of alignment between policy and practice, it is difficult for assurance to be given as to whether each firefighter is capable of deployment.

Recommendation 22 (Chapter 6) - Firefighters' fitness

The Emergency Services Agency and the Territory and Municipal Services Directorate should clarify the timing of the requirement for meeting firefighter fitness requirements, as set out in ACT Rural Fire Service operating procedures and the Territory and Municipal Directorate's Enterprise Agreement, and give priority to meeting that requirement.

Equipment checks

- 6.88 The *ACT Rural Fire Service Equipment Officers' Handbook* identifies the need for an equipment officer to be designated in each brigade and for routine checks of equipment to be undertaken.⁵⁹ This requirement is supported by individual brigade constitutions. The Emergency Services Agency asserts that the culture of firefighters, both paid and volunteer, means that brigades ensure (and if necessary) demand, that vehicles are fully equipped at all times, and that there are processes in place for any damage to equipment to be replaced as soon as possible.
- 6.89 However, the Audit Office identified that:
- there is no requirement for a specific pre-season check on the equipment that fire vehicles or 'units' carry;

⁵⁹ ACT Rural Fire Service Equipment Officers' Handbook 2010 Version 5 (acknowledgement given to NSW ACT Rural Fire Service)

- each volunteer brigade determines its own regime for equipment checking;
 - there is no centralised assurance or recording mechanism for volunteer brigades;
 - following a recent request by ACT Rural Fire Service headquarters, only one of the eight brigades provided evidence of any pre-season checks for the 2012-13 season; and
 - although there may be regular checks by individual brigades, without any monitoring or assurance arrangements in place, ACT Rural Fire Service headquarters is unable to confirm the state of equipment safety and readiness at the beginning of the season.
- 6.90 The Parks Brigade has arrangements in place to perform pre-season checks on all units according to a standard checklist. There was evidence of pre-season checks being undertaken each year during the past two years, although there were no specific requirements for when such checks had to occur. The Audit Office identified that:
- in 2010-11 only 8 (57 per cent) of the 14 units were checked prior to the commencement of the fire season;
 - in 2011-12 only 7 (50 per cent) of the 14 units were checked prior to the commencement of the fire season; and
 - in 2012-13 no units were checked prior to the commencement of the fire season.
- 6.91 ACT Rural Fire Service officers advised that there is a culture in all fire services that is instilled from recruitment about checking the vehicle before all activities and replacing any missing or damaged equipment as soon as possible. ACT Rural Fire Service officers also advised that vehicle and equipment checks are undertaken on a regular basis throughout the season, including checks at the start of any shifts.
- 6.92 While cultural practices mitigate against the risk of poor equipment, the Audit Office found overall that the ACT Rural Fire Service has shortcomings in its processes to confirm equipment readiness at the beginning of the season for all brigades, and while Parks Brigade processes are more effective, equipment has not routinely been checked at the beginning of each season.
- 6.93 There are shortcomings in:
- the level of compliance with obligations set out in procedures and agreements in the case of the fitness test; and
 - the reliability of administrative arrangements to ensure pre-season preparation is effective.
- 6.94 This means the Chief Officer, ACT Rural Fire Service cannot confirm with certainty the scale and state of preparedness of the ACT's suppression capability,

at the beginning of the fire season. Apart from bushfire preparedness, this information is important to ensure that the risk of harm to employees and volunteers is minimised.

Recommendation 23 (Chapter 6) - Fire readiness assurance

The Emergency Services Agency (ACT Rural Fire Service headquarters) should implement a system to provide assurance to the Chief Officer of the ACT Rural Fire Service that personnel and equipment readiness meets requirements.

WHOLE-OF-GOVERNMENT EMERGENCY RESPONSE

ACT Emergency Plan

- 6.95 The *Emergencies Act 200*, section 147, requires the preparation of an emergency plan for the ACT, to be prepared by the Emergency Services Agency Commissioner and endorsed by the Minister for Police and Emergency Services. This provides a basis for emergency management and the coordination of emergency services agencies, government entities (ACT or Commonwealth) and other entities.
- 6.96 In response to this requirement, the *ACT Emergency Plan* was developed by the Emergency Services Agency and approved by the Minister for Police and Emergency Services in May 2012.⁶⁰ The *ACT Emergency Plan* is an overarching plan, which is relevant to any type of emergency, irrespective of whether it relates to bushfires or otherwise.
- 6.97 The *ACT Emergency Plan* ‘describes the responsibilities, authorities and the mechanisms to prevent, or if they occur, manage emergencies and their consequences within the Australian Capital Territory.’ The objectives of the *ACT Emergency Plan* are to:
- outline the principles for emergency management in the ACT;
 - describe how the components of emergency management in the ACT work together under a single, comprehensive and flexible framework;
 - identify roles and responsibilities related to identified hazards and associated emergencies;
 - identify, in relation to each different form of hazard, the lead agency primarily responsible for controlling the response to the emergency;
 - provide for the coordination of the activities of other agencies in the Territory and elsewhere in support of a lead response agency in the event of an emergency; and

⁶⁰ NI2012-225 Emergencies (Emergency Plan) 2012

- identify the key roles and responsibilities that may be activated during an emergency.
- 6.98 The *ACT Emergency Plan* provides for the appointment of an Emergency Controller, which is responsible for *inter alia* ‘managing the response to, and recovery from, the emergency by ensuring that entities dealing with the emergency are appropriately deployed’ and ‘coordinating the disposition of other resources to manage the emergency.’
- 6.99 The *ACT Emergency Plan* also provides for the administration and maintenance of Emergency Coordination Centres in the ACT by the Emergency Services Agency and ACT Policing, either of which could be activated depending on the nature of the emergency. The *ACT Emergency Plan* provides:
- ... the activation of the Emergency Coordination Centre will be at the discretion of the Emergency Controller (if appointed) or Lead Response Agency Controller. When activated, the Emergency Coordination Centre will initially include, as a minimum, representatives from ACT Government Directorates with further activation of Liaison Officers dependent on the scale of the emergency and the functions that may need to be undertaken.
- 6.100 The functions of the Emergency Coordination Centre are ‘to provide for the coordination of resources required to support the operations of the Lead Response Agency Controller or Emergency Controller (if appointed) and to manage the consequences of an emergency’.
- 6.101 The Emergency Services Agency has established a new Emergency Coordination Centre at the Emergency Services Agency headquarters at Fairbairn. The Emergency Coordination Centre was re-opened after flooding in 2010 in August 2011. The first use of the Emergency Coordination Centre at Fairbairn was in September 2011 when a fire occurred in an industrial premise at Mitchell. It has been activated on a small number of occasions since then, for flood and fire-related emergencies, as well as for exercises. The new Emergency Coordination Centre provides significantly more functionality and capacity than the Curtin-based Emergency Coordination Centre that it replaced.
- 6.102 Key roles associated with the Emergency Coordination Centre are outlined in an *Emergency Coordination Centre Operations Manual (May 2012)*. The Manual aims to:
- facilitate the activities of key personnel from government agencies, emergency services and others as required to assist in supporting emergency response;
 - bring together key agencies to coordinate the provision of government and community resources during an emergency for the response and recovery effort;
 - promote consistency and standards in the approach the ACT takes to operating an Emergency Coordination Centre; and

- promote consistency in the issue of public information regarding the ACT's response and recovery efforts during an emergency.
- 6.103 Emergency Services Agency officers confirmed routine testing takes place on infrastructure and equipment, and directorate liaison officer contact details are regularly reviewed and updated. A debriefing process also occurs following major emergencies and the activation of the Emergency Coordination Centre, where lessons learnt on its use are discussed and potential improvements identified.
- 6.104 Most recently, the Emergency Services Agency Emergency Coordination Centre at Fairbairn was activated in January 2013 for four days during a period of severe fire risk. The activation on each occasion was established in a timely manner, with liaison officers in attendance from ACT Government directorates and other agencies such as ACTEW, Telstra, the National Capital Authority, the Australian Government Department of Defence and the Australian Government Attorney-General's Department.
- 6.105 Although the whole-of-government capacity for the Emergency Coordination Centre is developing, the Emergency Coordination Centre has not yet been activated continuously for a long period of time, similar to the situation experienced in the January 2003 bushfires, which lasted for 22 days. The Emergency Services Agency has identified that there is a risk that there may not be sufficient capacity in the availability of liaison officers from other ACT Government agencies and other external agencies to sustain the Emergency Coordination Centre for such a period. However it is also recognised that should this scale of emergency occur, it is likely to result in a considerable re-allocation of whole of government resources.

Elevated Fire Danger Plan

- 6.106 The *ACT Emergency Plan* sets out 21 hazard-specific plans and supporting sub-plans, including a *Storm Plan*, an *Animal Disease Plan* and an *Elevated Fire Danger Plan*. The objectives of the *Elevated Fire Danger Plan* are to:
- minimise the risk to life during elevated fire danger conditions in the ACT;
 - provide for a coordinated whole-of-government approach to elevated fire danger conditions in the ACT;
 - promote ongoing liaison and information sharing between stakeholders involved in elevated fire danger conditions; and
 - describe the roles and responsibilities of organisations involved in elevated fire danger conditions.
- 6.107 The *Elevated Fire Danger Plan* sets out for the first time in the ACT a framework for taking action in the face of escalating levels of bushfire danger for key ACT Government agencies to take in relation to individual communities and

vulnerable people. This reflects recommendations from the 2009 Victorian Bushfire Royal Commission.⁶¹

- 6.108 Since the *Elevated Fire Danger Plan* was agreed in January 2011, a range of whole-of-government tasks have been undertaken to support the plan, including:
- developing agency by agency maps of assets and sites where proactive steps should be taken for elevated fire danger levels;
 - ACT Rural Fire Service field visits to key assets of five ACT Government agencies with specific roles in the plan, with a view to assessing the risks and suitability of the assets from the perspective of personal safety in the event of elevated fire danger levels being reached;
 - checking the suitability of evacuation centres managed by relevant ACT Government agencies, by assessing these sites from the perspective of bushfire risk; and
 - information-sharing between agencies for the purpose of identifying agency interdependencies, expected responses to elevated fire danger levels and recognising how they must work together.
- 6.109 While the *Elevated Fire Danger Plan* identifies a five-yearly review cycle there is a risk that momentum will be lost on key tasks to implement the plan in the absence of whole-of-government continuing involvement, such as through the Security and Emergency Management Senior Officials Group.⁶² For example, two years after the plan's initial agreement, the Audit Office was unable to identify that the whole-of-government site and asset assessments undertaken by the ACT Rural Fire Service in 2010 have been added to, maintained or used for related purposes, such as informing the need to prepare bushfire operational plans. It was originally intended that these assessments would form the basis for a whole-of-government risk matrix.

PUBLIC WARNINGS AND EMERGENCY ALERTS

- 6.110 The *Report of the McLeod Inquiry into the Operational Response to the January 2003 Bushfires in the ACT* (the McLeod Report) stated:

By far the strongest and most frequent criticism expressed in public submissions to the Inquiry concerned the lack of early warning to the community about the fire threat. Many submitters drew attention to the contrast between the dearth of information provided in the period before 18 January and the large amount provided to Belconnen residents during the following week.

⁶¹ Victorian Bushfire Royal Commission (2009) final recommendations 1 and 3

⁶² Emergency Services Agency Elevated Fire Danger Plan, page 10

Information given to the public during an emergency can serve a number of purposes:

- provide an honest and realistic assessment of what has occurred and what more to expect
- give the community the best possible indication of precautions they should be taking if there is the possibility that the threat will be ongoing and may escalate
- inform the community of immediate relief activities
- warn the community of post-disaster hazards
- motivate a required public response to the emergency
- provide direct assistance to those adversely affected
- assist with evacuation and other recovery procedures.

6.111 Accordingly, the *Report of the McLeod Inquiry into the Operational Response to the January 2003 Bushfires in the ACT* (the McLeod Report) made recommendations with respect to public warnings and emergency alerts:

The Media Sub-Plan of the ACT Emergency Plan should be reviewed to include a greater focus on the provision of community information.

Well-defined, well-practised processes should be developed to support the delivery of information to the public. This includes improving the alert mechanisms for residents prior to an emerging danger period.

Media communications systems and facilities at ESB headquarters should be improved.

There should be greater coordination of the content of whole-of-government media releases and messages.

The Community Information Sub-Plan of the ACT Emergency Plan should be reviewed to reflect needs broader than just media arrangements.

Before each bushfire season familiarisation briefing sessions should be held for the media.

ESB should have the capacity to engage an experienced media director to be available in an emergency, to coordinate the provision of information to the media and for general public information purposes.

6.112 Paragraph 8(4)(h) of the *Emergencies Act 2004* emphasises the role of the Emergency Services Agency Commissioner in ‘communicating information, advice and warnings to the community during an emergency.’

ACT Community Communications and Information Plan (2012)

6.113 The *Emergencies Act 2004*, section 149, provides that the *ACT Emergency Plan* ‘must include a community communication and information plan for communicating information to the community during an emergency’.

6.114 The *ACT Community Communications and Implementation Plan (2012)* has been established as a sub-plan of the *ACT Emergency Plan*. The purpose of the *ACT Community Communications and Implementation Plan* is to ‘detail the arrangements for effective communication by ACT Government directorates with the public and the media, before, during and after major emergencies and incidents’.

Information and communication

6.115 The *ACT Emergency Plan* also provides guidance for the provision of information and communication in the event of an emergency. The *ACT Emergency Plan* provides for:

- a Public Information Coordinator; and
- a Public Information Coordination Centre.

6.116 The Public Information Coordinator is ‘responsible for oversight of public and media information activities for emergencies in the ACT.’ According to the *ACT Emergency Plan*:

The scaling up of the Public Information Coordination Centre will be at the discretion of the Public Information Coordinator in consultation with the Emergency Controller (if appointed) or Lead Response Agency Controller. The level of activation of the Public Information Coordination Centre is determined by the scale of the emergency and the functions that may need to be undertaken as a consequence of the emergency.

The Public Information Coordination Centre will be maintained in readiness to coordinate the development, clearance and delivery of information to the community through multiple channels, including forward media briefing sites, internet, media/social media and Canberra Connect.

6.117 The Public Information Coordination Centre was initiated during January 2013 during the four-day period of elevated fire danger days.

Public warnings and emergency alerts

6.118 In the event of a bushfire threat to the ACT, a number of mechanisms will be available to provide information to the community. These include:

- Emergency Services Agency public alert, update and warning information distribution system;
- media outlets; and

- the EMERGENCY ALERT telephone warning system.
- 6.119 These public warning and emergency alert mechanisms apply to bushfires and other incidents or emergencies that are of relevance to the ACT community.
- 6.120 As previously mentioned, in certain circumstances the Emergency Coordination Centre at Fairbairn may also be activated and, with it, the Public Information Coordination Centre. The Public Information Coordination Centre has typically been staffed by personnel from the Emergency Services Agency Media and Community Information business unit. The methods of delivery associated with public warnings and emergency alerts apply irrespective of whether the Public Information Coordination Centre has been activated as part of the Emergency Coordination Centre, or whether the threat of a bushfire or other emergency is being managed by routine or operational practices.
- 6.121 In the ordinary course of operations, the Emergency Services Agency Media and Community Information business unit is responsible for making information available to the public through the various mechanisms. In the event that a Public Information Coordinator is identified in response to an emergency, the Public Information Coordinator is responsible for making information available to the public.
- 6.122 Emergency Services Agency public alert, update and warning information distribution system In the event of a bushfire threat, the Emergency Services Agency expects to provide information directly to the broader public through a range of its own mechanisms including its website, Twitter and Facebook. This is to be achieved through the Emergency Services Agency public alert, update and warning information distribution system.
- 6.123 To assist in this process, the Emergency Services Agency has established guidance documents:
- *Emergencies (Emergency Services Agency Incident Notification Procedure) Commissioner's Guidelines* (October 2011);
 - *Emergencies (Emergency Services Agency Social Media Policy) Commissioner's Guidelines* (October 2011); and
 - *Publishing 'Emergency Services Agency News Alerts' on the Emergency Services Agency website and social media accounts* (November 2011) Standard Operating Procedure.
- 6.124 Information on bushfires (and any other incidents covered by the relevant policies and procedures) is communicated to the Emergency Services Agency Public Information Coordinator in the first instance. By virtue of the *Emergencies (Emergency Services Agency Incident Notification Procedure) Commissioner's Guidelines* (October 2011) the Emergency Services Agency Public Information Coordinator is required to be notified of a range of incidents, including grassfire and bushfire, by Emergency Services Agency personnel, including operational personnel or personnel within the Triple Zero Communications Centre. Following

this notification, the Guidelines provide that the Emergency Services Agency Public Information Coordinator ‘will publish appropriate information from incident notifications through media outlets’.

- 6.125 The *Publishing ‘Emergency Services Agency News Alerts’ on the Emergency Services Agency website and social media accounts* (November 2011) Standard Operating Procedure provides:

The Emergency Services Agency Duty Media Liaison Officer is required to publish the following types of content to the ‘ESA News Alert’ section on the Emergency Services Agency website:

- alerts to the ACT community about any known threats where a warning is possible (e.g. bushfire, storm etc);
- alerts and updates to the ACT community about current emergency incidents; and
- alerts to the community about planned emergency activities (e.g. exercises) and hazard reduction burns.

The Single Point of Truth

- 6.126 To assist in disseminating accurate and timely information to the ACT community, the Emergency Services Agency follows the principle of *Single Point of Truth (SPOT)*. The SPOT principle recognises and provides that information on emergency threats and situations in the ACT may be obtained and provided by the operational areas of the Emergency Services Agency (e.g. the ACT Rural Fire Service or ACT Fire and Rescue). The SPOT principle provides that information from Emergency Services Agency operational areas is provided to the dedicated Public Information Coordination Officer 24 hours a day, seven days a week.

- 6.127 The Public Information Coordination Officer may then prepare an alert/update, verify the information in the alert and have it approved, and then disseminate the information through the Incident Alert System using an online application. The SPOT principle provides that the same single message will be disseminated through multiple channels, by a single entry on a smartphone or tablet device. This eliminates the need to rewrite or manually republish the same words on multiple platforms and minimises the risk that key messages will not be conveyed accurately.

Media outlets

- 6.128 Media outlets, including radio and television, can play an important role in informing the community of the threat of bushfires.
- 6.129 The Emergency Services Agency has established procedures by which ACT media outlets may be informed of emergencies, such as bushfire threats. This includes:

- a dedicated Emergency Services Agency Duty Media Liaison Officer, who is contactable during business hours and may be contactable out of business hours if there is an identified need;
 - an Emergency Services Agency 24 hour media line;
 - used by operational areas to alert the Emergency Services Agency Duty Media Liaison Officer to emergency incidents; and
 - used by media outlets to contact the Emergency Services Agency to seek information and comment and/or interviews about operations, including emergency incidents.
- 6.130 The Emergency Services Agency has developed Memoranda of Understanding with a range of local radio and television outlets. The purpose of the Memoranda of Understanding is to formalise the relationship between the Emergency Services Agency and the media outlet, and facilitate planning by the Emergency Services Agency and the media outlet ‘to help create a safer, more informed community’.
- 6.131 The Memoranda of Understanding provide *inter alia*:
- the Emergency Services Agency will provide a single point of contact for all media enquiries during an emergency;
 - the Emergency Services Agency and the media outlet will maintain up-to-date contact lists;
 - the media outlet will ensure that it has the capacity to switch from network to local radio and TV programming and broadcast TV “crawl” messages;
 - the media outlet will broadcast the Standard Early Warning Signal (SEWS) on radio and/or TV when advised to do so by the Emergency Services Agency, ensuring that staff understand the protocols;
 - the media outlet will help Emergency Services Agency test its emergency communications capabilities by participating in exercises when invited, and able to do so.
- EMERGENCY ALERT telephone warning system**
- 6.132 The EMERGENCY ALERT telephone warning system was implemented as a result of the *National Partnership Agreement on the Development of a Telephone-Based National Emergency Warning System (November 2009)*. The National Partnership Agreement derived from an April 2009 agreement by the Council of Australian Governments (COAG) to:
- ...enhance Australia’s disaster management arrangements through the development of a telephone-based National Emergency Warning System (NEWS) that will enable the States and Territories to deliver warnings to landline and mobile telephones based on the service and billing address of the subscriber respectively.
- 6.133 This initiative emerged from the experiences of the 2009 Victorian bushfires.

- 6.134 The actual EMERGENCY ALERT telephone warning system has been implemented, and is managed, by the Victorian Department of Justice on behalf of all states and territories (except Western Australia).
- 6.135 The EMERGENCY ALERT telephone warning system provides the capability to send warning messages to individuals within a particular geographic location. The EMERGENCY ALERT telephone warning system is capable of:
- defining an emergency incident area on a map by using a Geographic Information System (GIS) product;
 - identifying phone services located within the incident area;
 - sending a voice message to all identified landline telephone services;
 - sending a test message to all identified mobile phone services; and
 - reporting on the delivery of the messages.
- 6.136 It should be noted, however, that the EMERGENCY ALERT telephone warning system is a means by which the public may be warned of an emergency, in addition to existing communication channels described earlier. Some limitations of the EMERGENCY ALERT telephone warning system as a means by which to communicate with the public include:
- no guarantee that recipients of the messages will actually access the message;
 - no guarantee that recipients of the messages are actually in the affected area at the time;
 - the need to make voicemail messages less than 35 seconds in duration (longer messages will cost more and will impact on the message delivery time); and
 - the need to make text messages less than 160 characters.
- 6.137 Persons who live out of the area (who have telephone services registered to another location) who are in the incident area at the time will not receive the messages from the EMERGENCY ALERT telephone warning system. Notwithstanding these limitations, the EMERGENCY ALERT telephone warning system is another means by which the community may be made aware of an emergency threat.
- 6.138 The Emergency Services Agency has developed *Emergencies (Emergency Alert) Commissioner's Guidelines* (January 2012) to guide staff in the use of the EMERGENCY ALERT telephone warning system. The Guidelines are a useful document, which articulate principles for using the EMERGENCY ALERT telephone warning system, roles and responsibilities for the use of the EMERGENCY ALERT telephone warning system and operational procedures for the use of the EMERGENCY ALERT telephone warning system.

6.139 The ACT Government pays an annual fee for facility and access charges, which is based on the ACT's population as a proportion of the total Australian population (less Western Australia), as well as incident charges, incurred on the basis of the calls that are actually made to landlines and messages sent to mobile phones.

Mitchell fire

6.140 The EMERGENCY ALERT telephone warning system has only been used once in the ACT, in September 2011, when a hazardous material fire occurred in an industrial estate in Mitchell.

6.141 Some shortcomings were identified in the use of the EMERGENCY ALERT telephone warning system in the Mitchell fire, including:

- the existence of spelling errors in text messages sent to mobile telephones, which lead some recipients to question the authenticity of the messages;
- insufficient time being allowed for all telephone calls to be made. Notwithstanding the automated nature of the system, it takes time for all of the telephone calls to be made and many telephone calls were not successfully completed during the nominated time-period; and
- a high number of invalid telephone calls being met, due to customer records not being updated.

6.142 Following the Mitchell fire, the Emergency Services Agency conducted a debriefing on the use of the EMERGENCY ALERT telephone warning system. The shortcomings in the use of the system were identified and documented. The shortcomings identified in the system were used to inform the development of the *Emergencies (Emergency Alert) Commissioner's Guidelines*, January 2012.

6.143 The Emergency Services Agency wrote to the Commonwealth Attorney-General in relation to the use of the EMERGENCY ALERT telephone warning system during the Mitchell fire to highlight issues for consideration by the appropriate national committees. System improvements have since been made in light of this feedback, including extending the default campaign time from 30 minutes to 60 minutes, reducing the number of 'retries' to numbers from two to one and adjusting business rules, where possible, to exclude invalid numbers or multiple calls to the same street address.

Testing of alert systems and back-up systems

6.144 The Emergency Services Agency did not have any policies and administrative procedures for the testing of the Emergency Services Agency public alert, update and warning information distribution system. It is considered to be a business-as-usual system, which is used on a daily basis.

6.145 By way of contrast, there is a policy and associated procedures which support the EMERGENCY ALERT telephone warning system. Two tests of the EMERGENCY ALERT telephone warning system have been conducted. These were conducted

under controlled conditions and did not identify the problems associated with the capacity of the system to cope with the volume of telephone calls and messages, which became apparent during the Mitchell fire in September 2011. There is arguably a similar risk for the Emergency Services Agency public alert, update and warning information distribution system during intense and sustained periods of elevated fire danger conditions.

6.146 The Emergency Services Agency advises that, should there be a failure in existing information and communication technology, particularly the Agency's public alert, update and warning information distribution system, it intends using a range of back up systems. These include:

- the system that was previously in place, which used Blackberry devices for bulk SMS and email distribution groups. The Blackberry system was used for more than three years and is the primary back up if the SPOTapplication is unavailable. This system is still used when the SPOT application is undergoing maintenance or having new features added;
- a combination of Gmail and WEBSMS; and
- AAP MediaNet distribution.

Recommendation 24 (Chapter 6) - Testing of public information communications systems

The Emergency Services Agency should develop and test administrative procedures for the communications systems used for the distribution of public warning and emergency alerts.

6.147 In the event of a bushfire threat to the ACT, there is a wide range of communication channels by which the Emergency Services Agency can inform the community. Noting that individual members of the community will demonstrate a preference for a particular type of communication channel, e.g. local radio or the Emergency Services Agency website, it is important that a consistent message is provided irrespective of which communication channel is employed. The Emergency Services Agency has established roles and responsibilities, e.g. the Public Information Coordination Centre and the Public Information Coordinator, and policies and procedures, to manage the risk of incorrect and inconsistent information being provided to the community.

APPENDIX A: AUDIT CRITERIA, APPROACH AND METHOD

AUDIT OBJECTIVE

The objective of this Audit was to provide an independent opinion to the Legislative Assembly on the effectiveness of the ACT Government's approach to bushfire preparedness.

AUDIT SCOPE

In conducting the audit, the ACT Government's approach to managing bushfire hazards in the ACT, its work to support the community in relation to preparedness, and its progress in developing its capabilities since the last major bushfire in the ACT in January 2003 have been considered.

The audit did not examine the broader activities of the ACT Government agencies that are not related to bushfire management. This includes, for example:

- ACT Fire Brigade operations in urban Canberra, relating to house fires, road traffic accidents, and other incidents (unless related to bushfires);
- ACT State Emergency Services activity, unless related to supporting bushfire incidents or preparedness;
- other minor or major emergency events that ACT Government agencies plan for or respond to (e.g. flooding); and
- ACT Government agencies' broader governance and management arrangements, including the management of organisational resources (e.g. physical equipment or infrastructure), unless specifically relevant to examination of the criteria.

AUDIT CRITERIA

Key issues to be determined included:

The ACT Government's preparedness for bushfire hazard is effectively planned, managed and monitored

- The roles and responsibilities of each agency involved in bushfire management are clearly defined and understood;
- Governance, management and administrative arrangements facilitate effective planning, implementation and review of bushfire related operations (e.g. research, prevention, preparedness, response and recovery);
- Resources are managed according to established priorities;
- Staff (paid and volunteer) professional and development needs are recognised and addressed; and
- Equipment and infrastructure needs are recognised and addressed.

The ACT Government enhances community preparedness

- Education and awareness programmes are developed and implemented that sustain the community's focus on bushfire preparedness over time;
- Arrangements ensure that there is a co-ordinated effort between the Government and the community in relation to bushfire hazard prevention and reduction, and in response to bushfires; and
- The ACT Government effectively supports the community's bushfire emergency plans.

The ACT Government's inter-agency and inter-jurisdictional coordination is effective and efficient

- Policies and procedures are in place to enable services to implement plans appropriately;
- The Emergency Services Agency, and the Parks and Conservation Services Branch provide effective coordination and communication within their respective Directorates (i.e. the Justice and Community Safety Directorate and the Territory and Municipal Services Directorate) in relation to the key bushfire hazards that have been planned for; and
- Appropriate arrangements for cross agency and cross border co-operation are established and are secure and reliable.

The ACT Government's communication strategies enhance community preparedness in relation to bushfire

- There are arrangements in place to ensure the ACT Government effectively communicates with the community, according to escalating levels of bushfire risk;
- Communication systems, used during bushfire emergencies, are effectively managed, maintained, and regularly tested;
- Systems ensure internal and external media are effectively engaged and coordinated; and
- The ACT Government's communication planning relating to bushfire preparedness recognises the specific needs of vulnerable communities and individuals.

AUDIT APPROACH AND METHOD

The performance audit was conducted under the authority of the *Auditor-General Act 1996*, and in accordance with the principles, procedures, and guidance contained in Australian Auditing Standards relevant to performance auditing. These standards prescribe the minimum standards of professional audit work expected of performance auditors. Of particular relevance is the professional standard on assurance engagements - *ASAE 3500 Performance Engagements*.

The audit approach and method consisted of:

- interviews and discussions with key personnel from the Emergency Services Agency, Territory and Municipal Services Directorate and Justice and Community Services Directorate;
- consultation with other ACT Government directorates and agencies with roles defined in the *Emergencies Act 2004*;
- consultation with the ACT Bushfire Council; and
- a review of relevant planning, governance and administrative documentation.

The Audit Office engaged Ms Narelle Rawnsley from Leading Emergency Services as a subject matter expert. Ms Rawnsley provided advice to the Audit Office on the soundness of the findings, conclusions and recommendations made in the Draft Report.

The Audit Office also engaged Mr Graham Smith from Numerical Advantage to provide quality assurance with respect to the Draft Report and the audit evidence supporting findings, conclusions and recommendations.

APPENDIX B: BUSHFIRES

The following information in relation to bushfires was provided by the Emergency Services Agency.

WHAT IS A BUSHFIRE?

A bushfire is a fire that burns in grass, bush or woodland and can threaten life, property and the environment. Here in the ACT, which is also nicknamed the “bush capital”, we have encouraged the “bush” to grow within our city so this means we will experience bushfire both in the farm lands (or what we term the rural areas), as well as inside our suburbs. Where the suburbs or urban development meet the rural lands is of particular concern to fire services as it places a great number off our community at high risk from bushfire each year.

FACTORS THAT AFFECT A BUSHFIRE

Fuel

Anything that burns is fuel for a fire, in particular leaf litter (which is the accumulation of leaves, twigs, bark and rubbish on the ground), undergrowth (shrubs, grass, seedlings), trees and other vegetation. We also include structures (such as houses, stables, sheds etc.) as fuel and any other object that will burn when exposed to flames; such as gas bottles, piles of firewood, tyres, etc.

When we talk about fuels we often refer to their height. This is because fuels are found on the ground and all the way up to the top of the trees, and where there are fuels fire can burn so fires can be quite small but can also reach up to 30 metres. An important term to understand is ladder fuels, which is any vegetation that grows between the ground fuel up to about 2 metres. This vegetation provides a path, or ladder, for a fire to travel up, taking the flames from the ground right up into the tree tops, essentially growing the fire from 1-2 metre flames right up to 30 metre flames.

Weather

Weather plays a major role in the severity of bushfires. The hotter and dryer the weather is, the more likely it is for a bushfire to start and spread quickly. Most bushfires start in the afternoon, when it is driest and hottest.

Wind speed and humidity

Wind speed can influence a bushfire by pushing the fire forward, the stronger the wind the faster the bushfire can spread. Wind can also dry out the air by reducing the moisture, and this is called “low humidity”. When there is low humidity the danger of dry lightning (lightning from a storm that brings little or no rain) starting a bushfire is very high.

Topography / slope

Topography is the slope of the land and it plays a major factor in bushfire behaviour. Very simply, a bushfire will move much faster up a slope and slow down as it goes down a slope. With all factors being equal, a bushfire will actually double the rate at which it spreads for each 10 degrees that a slope increases.

BUSH AND FOREST FIRE

The Australian bush can, very generally, be described as shrubs, bushes and small trees from ankle or knee height right up to the tallest of trees. The term we use for bush here on the east coast of Australia is, “Sclerophyll forest”, and it covers much of the coastal and mountainous areas in and around New South Wales and the ACT.

The most common species in these forests are eucalypt trees and as such, fire in a sclerophyll forest is what most Australians probably think of when they hear the words “bushfire”. The leaves of eucalyptus contain flammable oils that burn extremely well in a fire. But it is also important to remember that fire is a natural part of the environment and not only are many of the species fire resistant, but some actually depend on fire to trigger new growth and to germinate seeds.

The ACT is surrounded by bush or forest, particularly in the Brindabella mountains to the west and north, where our greatest fire threat comes from. However, there are large tracks of what we call lowland or open woodland that surround the rural and suburban areas of Canberra where both grassland and scattered shrubs and trees grow.

Bush or forest fires are quite different to grassfire because:

- there is typically more fuel (leaf and bark litter on the ground, shrubs, grasses, trees etc.) for the fire to consume in the bush;
- the height of the fire is much greater because the flames can reach well into the tree canopy above the tree tops; and
- as a result, of the above two characteristics the heat is far greater.

Bush or forest fires can be difficult for fire fighters to control and they are the most destructive of any fire and usually consume all in its path.

As a general rule, flame height is between three (3) to five (5) times the height of the fuel that is burning. So, if one (1) metre grass is burning then the height of the flame could possibly be between 3 to 5 metres high, but if you had a 10 metre tall tree burning the height of the flames could be 30 metres or greater.

Another point of difference between grassfire and bush or forest fire is that trees and shrubs drop leaves, bark and twigs (fine fuels) down to the ground underneath them. Over time this fine fuel gets thicker and deeper. Fire needs fine fuel to start and burn well, so the more that accumulates underneath vegetation the hotter and more dangerous a fire can become. If a fire was to start or an ember was to land in this fine

fuel it would burn very well and would help the fire to climb up the bark and branches of a tree into the tree tops or canopy.

When a fire gets up into the canopy it is very hot and dangerous and is called a crown fire. This type of fire was experienced in the Canberra 2003 bushfires and is beyond the direct control of our fire fighters.

Bush and forest fires also create larger and longer lasting embers than from a grassfire. These embers can travel over many kilometres before landing and starting another, new spot fire well ahead of the main fire front. Falling material from a crown fire can also start new surface fires below.

In a severe fire, the heavier fuels such as branches, logs and tree trunks can become involved in fire, particularly if they are already dead and dried out.

GRASSFIRE

Grass is a fine vegetation type and fire burns through it faster than forest. Grassfires travel and spread very quickly, at times travelling more than 25km an hour.

- They can generate enormous amounts of heat. The taller and drier the grass, the more intensely it burns.
- An average flame height from a grassfire would be between 2 to 5 metres.
- Living in a grassland area with dried-out, brown or gold coloured grass over 10cm high can be a bushfire risk.
- Short grass under 10cm is a much lower risk. The shorter the grass the lower the flame height and the easier the fire is to control.
- Grassland includes pasture, crops, open native grassy woodland as well as those areas of open space in and around the suburbs.
- Grassfires can start accidentally when using machinery such as chainsaws, lawnmowers, tractors, grinders and welders.
- The hot exhaust of a vehicle parked on a road verge or driving through long, dry grass can start a grassfire.

AUDIT REPORTS

Reports Published in 2012-13	
Report No. 4 – 2013	National Partnership Agreement on Homelessness
Report No. 3 - 2013	ACT Government Parking Operations
Report No. 2 - 2013	Executive Remuneration Disclosed in ACTEW Corporation Limited's (ACTEW) 2010-11 Financial Statements and Annual Report 2011
Report No. 1 -2013	Care and Protection System
Report No. 10 - 2012	2011-12 Financial Audits
Report No. 9 - 2012	Grants of Legal Assistance
Report No. 8 - 2012	Australian Capital Territory Public Service Recruitment Practices
Report No. 07 - 2012	Annual Report 2011-12
Report No. 6 - 2012	Emergency Department Performance Information
Reports Published in 2011-12	
Report No. 5 - 2012	Management of Recycling Estates and E-Waste
Report No. 4 - 2012	Development Application and Approval System for High Density Residential and Commercial Developments
Report No. 3 - 2012	Early Childhood Schooling
Report No. 2 - 2012	Whole-of-Government Information and ICT Security Management and Services
Report No. 1 - 2012	Monitoring and Minimising Harm Caused by Problem Gambling in the ACT
Report No. 06 - 2011	Management of Food Safety in the Australian Capital Territory
Report No. 05 - 2011	2010-11 Financial Audits
Report No. 04 - 2011	Annual Report 2010-11
Reports Published in 2010-11	
Report No. 03 - 2011	The North Weston Pond Project
Report No. 02 - 2011	Residential Land Supply and Development
Report No. 01 - 2011	Waiting Lists for Elective Surgery and Medical Treatment
Report No. 10 - 2010	2009-10 Financial Audits
Report No. 09 - 2010	Follow-up audit – Courts Administration
Report No. 08 - 2010	Delivery of Mental Health Services to Older Persons
Report No. 07 - 2010	Management of Feedback and Complaints
Report No. 06 - 2010	Annual Report 2009-10
Report No. 05 - 2010	Delivery of ACTION Bus Services

Details of reports published prior to 2010-11 can be obtained from the ACT Auditor-General's Office or the ACT Auditor-General's homepage: <http://www.audit.act.gov.au>.

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