

Review of the Emergency Services Levy

Final Report

29 September 2017

Economic Regulation Authority

WESTERN AUSTRALIA

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Executive summary

Emergency services protect and preserve the lives, livelihoods and properties of Western Australians. The Emergency Services Levy (ESL) funds many of these services. The levy began in July 2003 to ensure a fair and adequate funding system. It replaced a mix of insurance levies, state and local government rates, and volunteer fundraising. Funding for emergency services is now derived from all land owners.

The Treasurer asked the Economic Regulation Authority (ERA) to review arrangements for managing and distributing ESL funds to emergency services in the State. The review was in response to findings from Mr Euan Ferguson's Report of the Special Inquiry into the January 2016 Waroona Fire. The State Government asked the ERA to look at options to improve the allocation of ESL funds. The ERA was also asked to review to what extent the ESL should be available to fund a Rural Fire Service, and what effect that would have on how much people pay for emergency services.

In forming recommendations for this review, the ERA held meetings with stakeholders and received 85 submissions from interested parties from all around the State.

There is strong community support for using the ESL to fund emergency services. Very few submissions to this review argued that there should be no levy. The levy ensures that funds are available to support emergency services provided by government and volunteer organisations. The ERA recommends the State Government should continue to raise funds for emergency services through the ESL. However, it also considers that public confidence in the ESL would improve if the distribution of funds was more transparent and independent. Further, continued public support may depend on ensuring that the services funded from the ESL are clearly defined, provided in a cost-effective way, and targeted towards the greatest need.

The ESL is based on the gross rental value of a property – that is the amount the property could reasonably be expected to earn if let for a tenancy for a year. Payments also depend on where a property is located, what it is used for, and what level of emergency services is available in that area. Property owners in the metropolitan area generally pay more than those in areas serviced by bush fire brigades. The levy is collected by local councils through regular rates notices. This method for calculating and collecting the ESL appears simple and effective.

The ERA considers the ESL is equitable. Property owners with the greatest capacity to pay, pay more. Owners of similar properties, pay similar amounts of ESL. The ESL was designed to ensure that all communities receive essential emergency services regardless of cost.

The ERA considers that the ESL is an appropriate way of funding emergency services, that the way it is collected is simple and effective, and that the burden of paying the levy is fair.

However, this review has identified ways in which the accountability and transparency of the allocation of ESL expenditure could be improved.

The ERA recommends that an independent organisation advises the Minister for Emergency Services on how much landholders pay for emergency services and oversees how ESL funds are spent – including how funds are allocated to the Department of Fire and Emergency Services (DFES) and local governments. Currently DFES, the agency which receives the ESL funds, advises the Minister for Emergency Services each year on how much it needs and how that money should be spent. There is a perception among some stakeholders that ESL funds are not being spent in a way that maximises benefits to the broader community.

The ERA considers that more transparent information on how and where the ESL is spent, along with processes to ensure it is carefully targeted and spent effectively, will help to sustain community confidence in, and support for, how the ESL is raised and spent. An organisation that is independent of DFES is best placed to advise government about the amount of ESL required each year and to oversee how the ESL funds the network of career and volunteer emergency services across the State.

If the Office of Emergency Management is to be the organisation that undertakes the independent advisory and oversight role, it should be separated from DFES, continue to be funded from general government revenue and report directly to the Minister of Emergency Services.

In 2015-16, DFES collected \$323 million in ESL. Of that, DFES distributed almost \$36 million in grants to local government and volunteer marine rescue.

Many submissions to this review argue money should be spent on those activities that directly contribute to preventing and preparing for emergencies. The ERA agrees that prevention is important, and may have received less focus than the response phase of emergency management, particularly when it comes to prescribed burning and clearing. Responsibility for most aspects of prevention lies primarily with property owners and land custodians, including local and state government agencies. The ERA considers that these agencies should be more accountable in fulfilling their prevention responsibilities. However there is no strong case for using the ESL to fund landowners' prevention activities, except for those activities that landowners are unlikely to be able to do independently, such as coordination and planning.

The levy should be used to help communities act in the event of a disaster. The ESL should therefore continue to fund the front-line services of DFES and local government. It should be used to support local governments to undertake emergency management activities, in particular by funding the types of functions that Community Emergency Services Managers and other similar officers undertake. The ESL should also be used to educate the public about how to best prepare for emergencies. This will have a lasting effect and will promote self-sufficiency, particularly in high-risk communities.

The aftermath of a major emergency can affect communities for years after the event – affecting people, land and industry. Helping these communities to recover draws on the resources of government, the private sector and not-for-profit organisations. The ERA does not consider the ESL to be the best way to fund these responses. Each emergency is unique, and the cost and nature of services needed in response is unpredictable. Recovery should continue to be resourced through the agencies responsible for delivering services.

The ERA was not asked to give a view on whether the State should establish a rural fire service, or what a rural fire service should look like if one was established. The ERA was however asked to consider whether the ESL should fund any rural fire service, and what the impact on ESL rates might be.

The ERA has estimated that the cost of a single extra rural fire station with 30 paid career firefighters is about \$4.5 million a year. There are many ways a rural fire service could be configured. The costs of each possible model vary depending mainly on whether it is staffed by volunteers or career firefighters, but also the equipment required for each station and head office costs. The ERA has estimated a lower and upper bound for the potential costs – a rural fire service would cost Western Australians between \$4.2 million and \$560 million extra each year. The cost of any rural fire service established by the State Government would fall within this range.

For residential ratepayers, these amounts are the equivalent of an extra \$2.41 a year on average in ESL charges for the purely volunteer based model, and up to \$362.74 extra a year for a service staffed by career firefighters.

Recommendations

Key recommendations

1. The design of the ESL should be retained in its current form.
2. An independent organisation should:
 - a. advise the Minister for Emergency Services on ESL revenue and rates;
 - b. allocate funds to the Department of Fire and Emergency Services, and a rural fire service if established;
 - c. oversee how the Department of Fire and Emergency Services, and a rural fire service if established, allocate ESL funds to other stakeholders; and
 - d. review how ESL funds are spent.
3. The Department of Fire and Emergency Services, and a rural fire service if established, should provide a report to the independent advisory and oversight organisation explaining how they have allocated ESL funds and the rationale for this allocation.
4. The independent advisory and oversight organisation should be the body of appeal for ESL-related issues, and the Fire and Emergency Services Commissioner's appeal role should be revoked.
5. The Office of Emergency Management could undertake the independent advisory and oversight role. If it was to do so it:
 - a. must be made independent of the Department of Fire and Emergency Services and report directly to the Minister for Emergency Services;
 - b. must continue to be funded from general government revenue; and
 - c. should receive additional funds from general government revenue to fund the additional functions.
6. The Department of Treasury should undertake a review of the Department of Fire and Emergency Services' structure, resources and administration costs to determine whether services are efficiently delivered.
7. The State Government should undertake a review of governments' prevention responsibilities (including for local government), and whether they are being met.

What the ESL should fund

8. The ESL should be used to fund emergency management activities that the Department of Fire and Emergency Services and local governments provide on behalf of the community if they can do so more effectively than individual property owners. These are prevention, preparedness and response activities that:
 - a. anyone can access and which may be used simultaneously by many people without other users being disadvantaged;
 - b. everyone should have access to regardless of ability or willingness to pay, and which benefit the broader community not just the users; and/or
 - c. require government coordination.
9. The ESL should not be used to fund prevention, preparedness and response activities that primarily benefit individual property owners, including state and local governments in their capacity as property owners or managers.
10. A proportion of the Department of Fire and Emergency Services' corporate services costs should be funded by general government revenues, rather than the ESL.
11. The ESL should not fund the corporate services costs of local governments. Corporate services functions in local governments support a range of local government services, not just emergency management and local governments have alternative revenue streams that they can draw upon to fund these functions.
12. The ESL should not fund the costs of recovery. There are already appropriate mechanisms for funding recovery costs outside of the ESL. These mechanisms involve the public, private, and not-for-profit sectors.
13. The ESL should continue to fund the Volunteer Marine Rescue Service and road crash rescue services.
14. If a rural fire service is established, the ESL should be used to fund emergency management activities it provides on behalf of the community if it can do so more effectively than individual property owners.
15. A proportion of any rural fire service's corporate services costs should be funded by general government revenues, rather than the ESL.

Decision making framework

16. The Department of Fire and Emergency Services should continue to implement and comply with policies and procedures that enable the best practise management of hazards, such as the ISO 31000 standard, the Capability Framework, high level activity-based costing, post-project effectiveness reviews and the *Whole of Government Open Data Policy*.

17. The Department of Fire and Emergency Services should use the cost and incident data it gathers from implementing high level activity-based costing to determine the direct costs of providing emergency services to each of the five ESL categories.
18. The Department of Fire and Emergency Services should apply robust analytical techniques for its funding allocation decisions.
19. The assessment of applications for ESL funds by the Department of Fire and Emergency Services, and a rural fire service if established, should be guided by the objectives of achieving:
 - a. at least the minimum level of service (where services are provided); and
 - b. an allocation of funds to activities that provide the greatest net benefits.
20. The Department of Fire and Emergency Services, together with a rural fire service if one is established, should develop one funding allocation manual for frontline service delivery organisations (the Career Fire and Rescue Service and all volunteer services). This manual should:
 - a. be described sufficiently broadly so as to not be too prescriptive, in turn allowing for discretion and flexible decision making based on needs; and
 - b. be developed and reviewed regularly in consultation with stakeholders, including the Western Australian Local Government Association and Volunteer Advisory Committees.
21. The Department of Fire and Emergency Services, together with a rural fire service if one is established, should, in consultation with the Western Australian Local Government Association, develop a procedure for local governments to apply for ESL funding for prevention, preparedness and response activities that:
 - a. anyone can access and which may be used simultaneously by many people without other users being disadvantaged;
 - b. everyone should have access to regardless of ability or willingness to pay, and which benefit the broader community not just the users; and/or
 - c. require government coordination.

Stakeholder consultation and transparency

22. The independent advisory and oversight organisation should consult stakeholders when:
 - a. advising the Minister for Emergency Services on ESL revenue and rates; and
 - b. considering how ESL funds should be allocated to stakeholders.

23. The independent advisory and oversight organisation should prepare a report to the Minister for Emergency Services recommending total ESL revenue and rates. The Minister should table the report in Parliament within 28 days of receiving it.
24. The independent advisory organisation should prepare and publish an annual report on the ESL.

Collection of the ESL

25. Local governments should continue to collect the ESL on behalf of the State Government.
26. The independent advisory and oversight organisation should compensate local government for the cost of collecting ESL revenue (including the costs of recovering unpaid debts) and not invoice the local government for ESL revenue that cannot be recovered.
27. The independent advisory organisation should work with the Western Australian Local Government Association to determine how to best communicate to property owners the purpose of the ESL and that it is a state government levy. Any community awareness programs should be funded by general government revenue.

1 Introduction

1.1 Terms of reference

On 23 December 2016, the then Treasurer of Western Australia asked the Economic Regulation Authority (ERA) to prepare a report on the current arrangements for, and options to improve, the management and distribution of the Emergency Services Levy (ESL) in Western Australia.

The Treasurer referred the review to the ERA under section 38 of the *Economic Regulation Authority Act 2003*, which allows the Treasurer to direct the ERA to prepare a report on a matter relating to an industry that is not a regulated industry (that is, water, gas, electricity and rail industries).

In conducting this review, the ERA will consider the following:

- The current ESL expenditure applied to managing the emergency services (prevention of, preparedness for, response to and recovery from natural hazard emergencies).
- The proportion of ESL funding directed towards each aspect of emergency management: prevention, preparedness, response and recovery.
- The extent to which the current allocation of ESL funds towards prevention and response reflects best practice in managing the risk of bushfire and other hazards.
- The extent to which the current methodology for setting the ESL is appropriate, now and into the future.
- The current transparency and accountability arrangements for the distribution of the ESL.
- Whether it would be more appropriate for the allocation of ESL funds to be the responsibility of an agency other than the Department of Fire and Emergency Services.
- The extent to which the ESL should be available to fund administrative and/or operational costs of a Rural Fire Service.
- The extent to which the use of the ESL to fund a Rural Fire Service would impact on ESL rates.

1.2 Background to the review

The ERA was asked to conduct a review of the ESL in response to a recommendation of the *Report of the Special Inquiry into the January 2016 Waroona Fire*, prepared by Mr Euan Ferguson.¹

Stakeholder comments in the Ferguson report raised the following concerns with the administration of the ESL:²

- Stakeholders perceive that increases in the levy are used to supplement the administrative costs of the Department of Fire and Emergency Services (DFES), rather than funding frontline services.
- Insufficient funds are being directed towards mitigation³ activities, with priority being given to response, despite greater financial benefits from investing in mitigation rather than response.
- There is a lack of transparency in the way funding from the ESL is allocated and concern that the allocation is not based upon risk.⁴

The Ferguson report noted that previous inquiries into Western Australian bushfires had identified similar issues with the ESL and recommended changes to the management of the ESL.

In the 2011 *Perth Hills Bushfire Report*, Mr Mick Keelty recommended “[t]he State Government move the responsibility for the management and distribution of the Emergency Services Levy to the Department of Finance.”⁵ DFES and the Department of Finance examined this issue, but found no major benefit evident in transferring the assessment and collection of the ESL to the Department of Finance.⁶

The Ferguson report considered this recommendation of the *Perth Hills Bushfire Report* had not been implemented because the review was not sufficiently inclusive or transparent.⁷ The report considered that an independent review should encompass a broad range of stakeholders and take into account the need for a greater emphasis on bushfire prevention and mitigation.⁸

¹ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, 2016, Vol. 1.

² Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, 2016, Vol. 1, p. 55.

³ Note that the ERA has used the term ‘prevention’ synonymously with ‘mitigation’ throughout this report.

⁴ Natural disaster risk arises from the interaction of three elements: the probability of a natural hazard occurring; the exposure of people, property and the environment to the hazard; and their vulnerability to the impacts. (Source: Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 1, p. 12.)

⁵ Keelty, M. APM AO, *A Shared Responsibility: Perth Hills Bushfire Inquiry*, Perth, Government of Western Australia, 2011, p. 22.

⁶ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, 2016, Vol. 1, p. 55.

⁷ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, 2016, Vol. 1, p. 56.

⁸ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, 2016, Vol. 1, p. 261.

The report recommended the State Government create a rural fire service to enhance the capability for rural fire management and bushfire risk management at a State, regional and local level.⁹

On 23 June 2017, the State Government hosted a bushfire mitigation summit to hear stakeholders' views on bushfire management issues.¹⁰ A summary of outcomes of the bushfire mitigation summit has been released which states that the summit did not define a preferred rural fire service model, and that participants acknowledged that it is difficult to debate the merits of a rural fire service unless a preferred model is defined.¹¹

1.3 Consultation

The ERA published an issues paper on 30 January 2017. The purpose of the issues paper was to help interested parties make submissions to the review. The issues paper explained the process for the review and how the ERA would examine the issues outlined in the terms of reference.

Submissions to the issues paper closed on Friday 10 March 2017. The ERA received 40 submissions. Most of the submissions are published on the ERA's website (www.erawa.com.au). Three submissions were confidential and are not published.

The ERA had 29 meetings with 21 organisations from February to May 2017 (Appendix A). These meetings were conducted on the basis that comments made during these meetings would not be attributable to individuals or organisations.

The ERA published a draft report on 7 July 2017, and invited stakeholders to make submissions on 37 draft recommendations. Submissions in response to the draft report closed on 16 August 2017. The ERA received 43 submissions. In addition, the ERA received two submissions that had been lodged to the issues paper but were not received at the time of the issues paper due to technical issues. These submissions are available on the ERA's website.

After publishing the draft report, the ERA:

- met with four organisations to clarify points made by the parties in their submissions to the draft report; and
- requested further information from stakeholders.¹²

⁹ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, 2016, Vol. 1, p. 258.

¹⁰ Office of Emergency Management, *Bushfire Mitigation*, Perth, Government of Western Australia, <https://www.oem.wa.gov.au/Pages/BushfireMitigationSummit.aspx>, (accessed 19 June 2017).

¹¹ Office of Emergency Management, *Bushfire Mitigation Summit: Summary*, Perth, Government of Western Australia, 2017, <https://www.oem.wa.gov.au/Pages/BushfireMitigationSummit.aspx>, (accessed 30 August 2017).

¹² Department of Fire and Emergency Services (including the Office of Bushfire Risk Management); Department of Biodiversity, Conservation and Attractions; Department of Health; Department of Justice; Department of Local Government, Sport and Cultural Industries; Main Roads; Water Corporation; Western Power; Western Australian Local Government Association; City of Bunbury; City of Busselton, City of Mandurah; Shire of Capel; Shire of Dardanup; Shire of Murray.

The ERA also conducted a series of regional visits in early August. The purpose of this consultation was for the ERA to clarify for stakeholders aspects of the draft report.

The document *Emergency Services Levy Review: Submissions to the issues paper and draft report* has been released alongside this final report and is available on the ERA's website. It contains a list of stakeholders that made submissions to the ESL review and a list of stakeholders that the ERA met during the review period. A summary of submissions made to the issues paper and draft report is also provided in this document.

This final report has been prepared with the benefit of legal advice (which remains confidential and has not been disclosed in the final report) and consultation.

1.4 Structure of this final report

The remainder of this final report is set out as follows.

Chapters 2 and 3 set out factual background information that the ERA has drawn upon in conducting analysis and making recommendations. This includes:

- *Chapter 2 – Emergency management arrangements in Western Australia:* background information on agencies and organisations with responsibilities for emergency management and emergency services in Western Australia, and on the operation of the ESL.
- *Chapter 3 – The Department's revenues and costs:* an overview of DFES's revenues and expenditures, and how the ESL is currently applied across prevention, preparedness, response and recovery.

Chapters 4 to 9 set out the ERA's analysis and recommendations. This includes:

- *Chapter 4 – Best practice management of hazards:* a discussion of the extent to which the current allocation of ESL funds towards prevention and response reflects best practice in managing the risk of bushfire and other hazards.
- *Chapter 5 – What the ESL should fund:* an assessment of whether it is appropriate to fund emergency management activities, including emergency services, from a special purpose levy, a discussion of which aspects of emergency management expenditure should be funded from the ESL and a discussion of the principles for designing a special purpose levy.
- *Chapter 6 – Design of the ESL:* an assessment of issues with the design of the ESL against principles for the design of taxes and levies, and practical considerations.
- *Chapter 7 – Funding a rural fire service:* a discussion of the extent to which the ESL should be used to fund the costs of a rural fire service and an estimate of the range of potential costs of a rural fire service.
- *Chapter 8 – Governance, transparency and accountability arrangements:* a discussion of options to improve the transparency and accountability of the administration of the ESL, including whether an agency other than DFES should allocate the ESL.
- *Chapter 9 – The ERA's assessment:* a summary of the ERA's findings and recommendations.

1.5 Next steps

The ERA's role has been to investigate and form recommendations that address the terms of reference for this review. This role concludes with the presentation of this final report to the Treasurer.

The ERA appreciates the many stakeholders that have contributed to the development of this final report.

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2 Emergency management arrangements in Western Australia

2.1 Introduction

This chapter provides background information on agencies and organisations with responsibilities for emergency management and emergency services in Western Australia, and on the operation of the ESL. The chapter is set out as follows:

- An overview of agencies and organisations with responsibilities for providing emergency management and services in Western Australia.
- Information about the ESL, including why it was introduced in Western Australia, its administration, the expenditures it was intended to fund, what it is currently used for, and the parties that contribute to ESL revenue.
- A description of the method used to calculate the ESL.

2.2 Emergency management and emergency services in Western Australia

The *Emergency Management Act 2005* defines an ‘emergency’ as the occurrence or imminent occurrence of a hazard of such a magnitude that it requires a significant and coordinated response.¹³ The *Emergency Management Act 2005* defines ‘emergency management’ as the management of adverse effects of an emergency. The adverse effects are managed through prevention, preparedness, response and recovery. Organisations such as the State Emergency Management Committee, Office of Emergency Management and Hazard Management Agencies are required by legislation to provide this managerial role across 27 hazards. ‘Emergency services’ involve an organisation responding to provide protection to preserve life and property from harm resulting from an emergency.¹⁴ Organisations that provide emergency services include DFES and volunteer units such as the State Emergency Service.

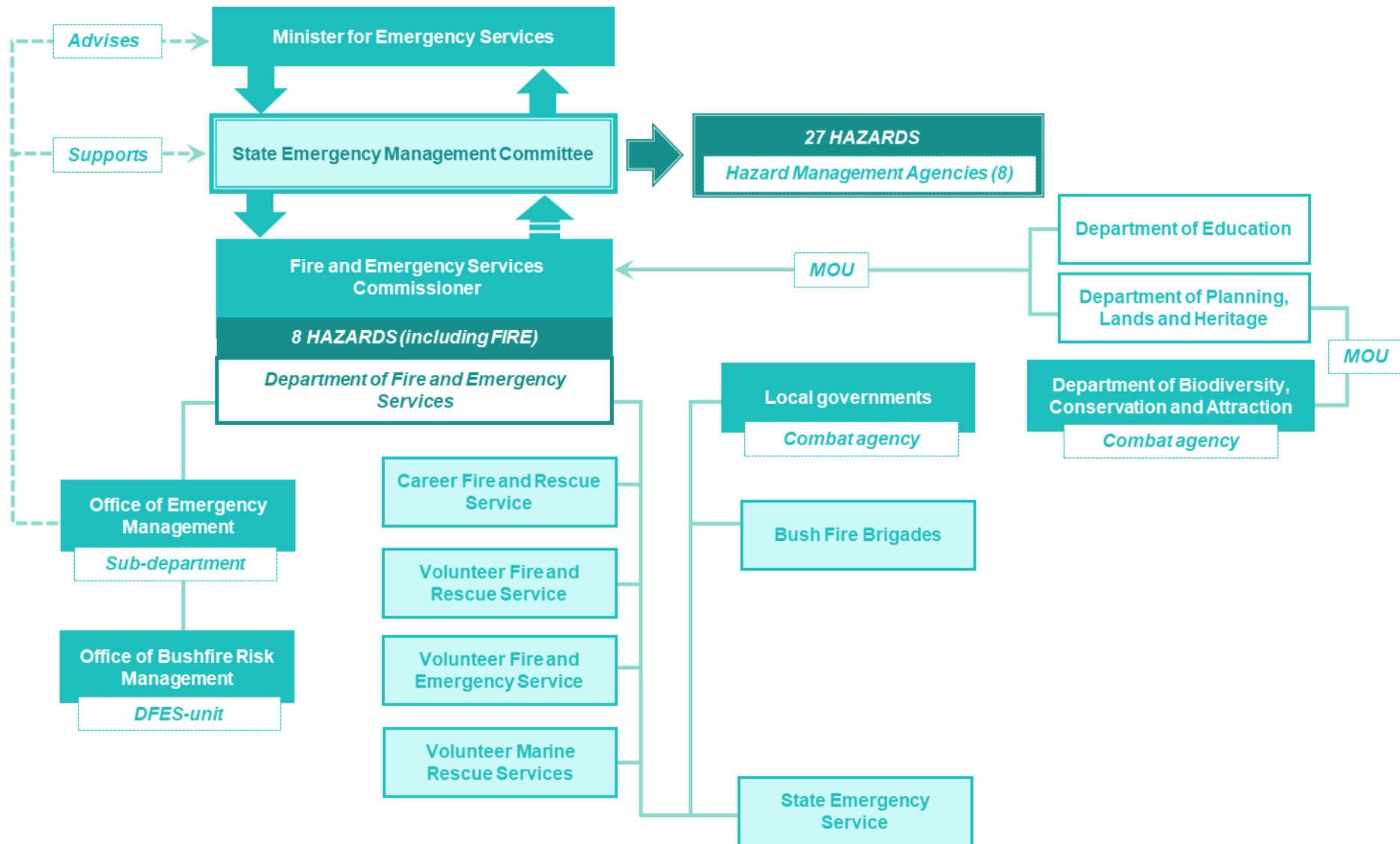
This report treats ‘emergency services’ as a subset of ‘emergency management’. Reference to ‘emergency services’ only captures response activities, whereas reference to ‘emergency management’ captures prevention, preparedness, response and recovery activities, and supporting managerial functions.¹⁵

Figure 1 provides an overview of the structure of emergency management and emergency services in Western Australia.

¹³ *Emergency Management Act 2005*, section 3.

¹⁴ State Emergency Management Committee, *State Emergency Management: Glossary*, ‘emergency service’, Perth, Government of Western Australia.

¹⁵ The Office of Emergency Management notes that while the *Emergency Management Act 2005* defines emergency management as “the management of the adverse effects of an emergency” and emergency as “the occurrence or imminent occurrence of a hazard [one of the 27 legislated hazards] which is of such a nature or magnitude that it requires a significant and coordinated response”; the majority of emergency service incidents do not require “a significant and coordinated response”.

Figure 1 Overview of emergency management and emergency services in Western Australia

Source: ERA analysis.

2.2.1 State Emergency Management Committee

The State Emergency Management Committee is the State's peak emergency planning body and reports to the Minister for Emergency Services.¹⁶ Members of the State Emergency Management Committee are appointed by the Minister.¹⁷ The Committee is responsible for developing a state wide mechanism that ensures a coordinated approach to emergency management.¹⁸ It does so through the state emergency management framework (Figure 2).

Figure 2 The emergency management framework



Source: Office of Emergency Management.

¹⁶ The State Emergency Management Committee is established under section 13 of the *Emergency Management Act 2005*.

¹⁷ The State Emergency Management Committee is comprised of a Chairman, a Deputy Chairman, an Executive Officer, a representative of local government, and other members appointed in accordance with the *Emergency Management Regulations 2006* (Regulations).

¹⁸ Office of Emergency Management, *Emergency Management*, <https://www.oem.wa.gov.au/emergency-management>, Perth, Government of Western Australia, (accessed 24 May 2017).

The state emergency management framework identifies relevant authorities or organisations, and outlines the roles and responsibilities to prevent, prepare for, respond to and recover from an emergency. The framework also provides an emergency coordination structure that is established through the *Emergency Management Act 2005* and *State Emergency Management Policy*.

The State Emergency Management Committee is supported by district emergency management committees, local emergency management committees, four sub-committees, and two reference groups to fulfil its legislative functions. In January 2017, the Committee established a new sub-committee, the State Bushfire Coordinating Committee, to:

- develop a state bushfire management policy and set long term bushfire risk management objectives; and
- identify bushfire risk management priorities and provide a mechanism to allocate bushfire mitigation grant expenditure.

The State Bushfire Coordinating Committee engages with stakeholders and advises the State Emergency Management Committee and the Fire and Emergency Services Commissioner on bushfire risk management matters.¹⁹

2.2.2 Hazard Management Agencies

The *Emergency Management Act 2005* appoints hazard management agencies (or public authorities) to provide emergency management (or an aspect of emergency management) of a hazard prescribed by the *Emergency Management Regulations 2006*.²⁰ A hazard management agency is appointed either because of its functions under any written law or because of its specialised knowledge, expertise, and resources for a particular hazard.²¹

There are eight hazard management agencies in Western Australia. They are the Commissioner of Police, Fire and Emergency Services Commissioner, Coordinator of Energy, State Health Coordinator and State Human Epidemic Controller, Marine Safety General Manager, Public Transport Authority, Arc Infrastructure,²² and Agriculture Director General.

Table 1 summarises the relationship between a hazard, the agency responsible, and the controlling agency (or agencies).²³

¹⁹ Department of Fire and Emergency Services, *Office of Bushfire Risk Management Update – State Bushfire Coordinating Committee*, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/waemergencyandriskmanagement/obrm/Documents/OBRM-Update-April-2017.pdf>, 2017, (accessed 27 May 2017).

²⁰ *Emergency Management Act 2005*, section 4 (1).

²¹ *Emergency Management Act 2005*, section 4 (3).

²² Brookfield Rail Pty Ltd changed its name to Arc Infrastructure as of 17 July 2017. Source: Arc Infrastructure, Newsroom: We are now Arc Infrastructure, Perth, 2017, <http://www.arcinfra.com/Newsroom/We-are-now-Arc-Infrastructure>, (accessed 22 September 2017).

²³ A controlling agency (or agencies) is the agency with the responsibility to control the response activities to an incident as specified in the appropriate Westplan (hazard specific plan), either through legislation other than the *Emergency Management Act 2005*, or by agreement between a Hazard Management Agency and one or more agencies. Source: Office of Emergency Management, *Submission to draft report*, 11 August 2017, p. 3.

Table 1 Hazard management arrangements

Hazard Management Agency	Hazards	Controlling agency
Commissioner of Police	Air crash, land search, maritime search, radiation escape from a nuclear powered warship, road crash, space re-entry debris and terrorist act	Western Australian Police
Fire and Emergency Services Commissioner	Cyclone, earthquake, collapsed structure or landform, fire, ²⁴ flood, hazmat spill (chemical, radiological, or other substances), storm and tsunami	Department of Fire and Emergency Services
Coordinator of Energy	Electricity, gas, and liquid fuel supply disruption	Department of Treasury (Public Utilities Office) ²⁵
State Health Coordinator and State Human Epidemic Controller	Biological substance spill, heatwave, and human epidemic	Department of Health
Marine Safety, General Manager	Marine oil pollution and marine transport emergency	Department of Transport, Marine Safety and Port Authority
Public Transport Authority Network	Rail crash (passenger)	Public Transport Authority ²⁶
Arc Infrastructure	Rail crash (freight)	Arc Infrastructure
Agriculture Director General	Animal or plant, pests or diseases	Department of Agriculture and Food WA

Source: Office of Emergency Management – Emergency Management Arrangements.

²⁴ DFES within gazetted fire districts or where a DFES brigade or unit is established; Department of Biodiversity, Conservation and Attractions on land it manages outside gazetted fire districts; and local government in local government districts outside of gazetted fire districts and Department of Biodiversity, Conservation and Attractions land.

²⁵ On 1 July 2017, the Public Utilities Office was transferred to the Department of Treasury as part of the Machinery of Government changes.

²⁶ Passenger rail crash is alternatively managed by WA Police or DFES, by agreement, following the declaration of an emergency situation or state of emergency or circumstance where the demands of the situation are deemed to exceed the capacity or capability of the Public Transport Authority.

A Hazard Management Agency has responsibilities, functions and powers for its prescribed hazard(s), under the *Emergency Management Act 2005* and the *State Emergency Management Policy*, including:

- conducting emergency management activities for prevention, preparedness, response and recovery;²⁷
- declaring, extending and revoking an emergency situation through a notice of declaration;²⁸
- appointing a hazard management officer to act as an emergency response coordinator on its behalf;²⁹ and
- preparing, maintaining, exercising and amending the Westplans.³⁰

The *State Emergency Management Policy* further outlines a Hazard Management Agency's roles and responsibilities across prevention, preparedness, response, and recovery.

Westplans are developed for each hazard by the prescribed agency. Some Westplans outline hazard risk management strategies.

2.2.3 Department of Fire and Emergency Services

DFES was established on 1 November 2012. DFES coordinates emergency management and emergency services for fire, tsunami, storm, hazardous material incidents, flood, earthquake, cyclone, and collapsed landform or structures across the State.³¹ DFES's responsibilities are set down in multiple Acts³² (which include the *Fire and Emergency Services Act 1998*, *Bush Fires Act 1954* and *Fire Brigades Act 1942*),³³ and by the *Emergency Management Act 2005* and *Emergency Management Regulations 2006*.

The Fire and Emergency Services Commissioner is the chief executive officer of DFES.³⁴ The Fire and Emergency Services Commissioner has responsibility to provide emergency management across eight hazards,³⁵ as well as a responsibility, and functions, to provide emergency services.³⁶ The Fire and Emergency Services Commissioner also has powers to assess the levy charged on State and local government land, to form and manage a

²⁷ *Emergency Management Act 2005*, section 3.

²⁸ *Emergency Management Act 2005*, Part 4, Division 1.

²⁹ *Emergency Management Act 2005*, Part 4, Division 2.

³⁰ *State Emergency Management Policy*, section 1.5.4; *Emergency Management Act 2005*, section 20.

³¹ Department of Fire and Emergency Services, *Annual Report 2015-16*, Perth, Government of Western Australia, 2016, p. 14; *Emergency Management Regulations 2006*, regulations 17.

³² *Fire and Emergency Services Act 1998*, section 3.

³³ These are referred to as the 'emergency services Acts'.

³⁴ *Fire and Emergency Services Act 1998*.

³⁵ The Fire and Emergency Services Commissioner is the Hazard Management Agent or public authority that provides emergency management for hazard risks relating to fire, tsunami, storm, hazardous material incidents, flood, earthquake, cyclone, and collapsed landform or structures. (*Emergency Management Act 2005*, section 4; *Emergency Management Regulations 2006*, regulation 17.) The *Emergency Management Act 2005* and the *Emergency Management Regulations 2006* do not differentiate between bushfires and structural fires.

³⁶ The Fire and Emergency Services Commissioner's functions are defined in section 11, 18A, 18F, and 18K of the *Fire and Emergency Services Act 1998* and section 25 in the *Fire Brigades Act 1942*.

brigade, and carry out fire prevention measures the Fire and Emergency Services Commissioner considers necessary.³⁷

The Fire and Emergency Services Commissioner:

- provides support under memoranda of understanding to state government agencies, such as the Department of Education and Department of Planning, Lands and Heritage, with responsibilities for fire management on land they manage;
- has general responsibility for the State Emergency Service, Volunteer Marine Rescue Services, and Fire and Emergency Services units;³⁸ and
- has general responsibility for all private and volunteer brigades such as the Volunteer Fire and Rescue Service and the Volunteer Fire and Emergency Services.³⁹

DFES provides emergency services through its career firefighters and an extensive network of volunteers. DFES also administers the ESL.⁴⁰ The administration and calculation of the ESL is discussed further in Section 2.3 and Section 2.4.

Appendix B shows DFES's organisational structure in detail.

2.2.3.1 Office of Emergency Management

The Office of Emergency Management provides secretariat support and advice to the State Emergency Management Committee, and advice to the Minister for Emergency Services. The Office of Emergency Management has the strategic role of developing and improving the State's emergency management arrangements through capacity building, providing advisory and support services to stakeholders, and as of 2016, performing an assurance role for policy implementation.

The Office of Emergency Management has responsibility for administering the *Emergency Management Act 2005*, including:

- developing, maintaining and reviewing the *State Emergency Management Policy* (in consultation with relevant stakeholders);⁴¹
- preparing the *Emergency Preparedness Report* — this report offers a broad view of the State's capacity and ability to deal with large-scale emergencies and is submitted yearly to the Minister for Emergency Services;⁴² and
- carrying out the State Risk Project — this project identifies a range of potential vulnerabilities that may be affected by any of the 27 hazards. It is used to formulate an understanding of the risks faced at the state, district, and local levels in order to

³⁷ *Fire and Emergency Services Act 1998*, section 36 L; *Fire Brigades Act 1942*, section 26; *Bush Fires Act 1954*, section 10 (e); respectively.

³⁸ *Fire and Emergency Services Act 1998*, section 18A, 18F and 18K.

³⁹ *Fire Brigades Act 1942*.

⁴⁰ *Fire and Emergency Services Act 1998*.

⁴¹ State Emergency Management Committee, *State Emergency Management Policy*, Perth, Government of Western Australia, 2016, p. 8.

⁴² Office of Emergency Management, *Submission to issues paper*, 9 March 2017.

formulate appropriate, cost-effective mitigation strategies that address capacity and ability gaps.⁴³

The Office assists with recovery by administering funding for the Natural Disaster Resilience Program, the All West Australians Reducing Emergencies grant, and the Western Australia Natural Disaster Relief and Recovery Arrangements.⁴⁴

It also:

- manages the finances for the National Bushfire Mitigation Program;⁴⁵ and
- provides capability building assistance and guidance to district emergency management committees, local emergency management committees, local governments and hazard management agencies.⁴⁶

The Office of Emergency Management is a sub-department of DFES. The Fire and Emergency Services Commissioner appoints and delegates responsibilities to the Office of Emergency Management's Executive Director under the *Public Sector Management Act 1994*. DFES provides the Office of Emergency Management with support services in human resources, finance, and information technology, through a service agreement.⁴⁷ The Office of Emergency Management is however not funded by the ESL – rather, it is funded through general government revenue.⁴⁸

2.2.3.2 Office of Bushfire Risk Management

In 2012, the State Government established the Office of Bushfire Risk Management as a policy response to the findings of the 2011 Keely report into the Margaret River fire. The Office of Bushfire Risk Management is an independent business unit of DFES and reports directly to the Fire and Emergency Services Commissioner.

The Office of Bushfire Risk Management oversees the level of prescribed burning undertaken and sets standards to manage bushfire related risks in the State.⁴⁹ The Office has other functions including: facilitating coordination between key stakeholders, providing expert bushfire risk management advice to stakeholders, and reporting on the State's capability to manage bushfire related risk.

⁴³ Risks are assessed through a series of workshops. The State Emergency Management Committee establishes six objectives to protect: people, economy, infrastructure, social setting, government, and environment. Source: Office of Emergency Management, *Submission to issues paper*, 9 March 2017; Office of Emergency Management, *State Risk Project*, Perth, Government of Western Australia, <https://www.oem.wa.gov.au/about-us/the-office-of-emergency-management/risk-and-capability/state-risk-project>, (accessed 29 May 2017).

⁴⁴ State Emergency Management Committee, *SEMC and Secretariat Annual Report 2015-2016*, Perth, Government of Western Australia, 2016, p. 16.

⁴⁵ State Emergency Management Committee, *SEMC and Secretariat Annual Report 2015-2016*, Perth, Government of Western Australia, 2016, p. 16.

⁴⁶ In accordance with the *State Emergency Management Policy* and the *Emergency Management Act 2005*.

⁴⁷ State Emergency Management Committee, *SEMC and Secretariat Annual Report 2015-2016*, Perth, Government of Western Australia, 2016, p. 54.

⁴⁸ It is therefore subject to the *Financial Management Act 2006*.

⁴⁹ Department of Fire and Emergency Services, *Office of Bushfire Risk Management Charter*, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/waemergencyandriskmanagement/obrm/Documents/DFES-OBRM-Charter.pdf>, (accessed 27 May 2017).

The Office of Bushfire Risk Management has the ability to approve, delay or disallow prescribed burning in high bushfire risk areas; establish and maintain standards for bushfire risk management activities; establish and maintain a bushfire prone mapping area; and request agencies, entities and organisations to report on bushfire related risk and prescribe burning.

The Office of Bushfire Risk Management also has the responsibility to develop and administer the *Map of Bush Fire Prone Areas*, which is an online map that provides an “accurate and consistent designation of bush fire prone areas in Western Australia”.⁵⁰ The map ensures future developments in bushfire-prone areas are better protected from bushfires.⁵¹

Finally, the Office of Bushfire Risk Management is responsible for developing guidelines to assist local governments prepare their Bushfire Risk Management Plans.⁵² The Bushfire Risk Management Plan program is a tenure-blind program⁵³ that provides local governments with the tools and knowledge to lead bushfire risk assessment, and prioritises treatment strategies to manage and reduce those risks.⁵⁴ DFES administers the Bushfire Risk Management Plan program and is the custodian of the Bushfire Risk Management System.⁵⁵

2.2.4 Department of Planning, Lands and Heritage

The Department of Planning, Lands and Heritage⁵⁶ administers Crown land in Western Australia, and is principally governed by the *Land Administration Act 1997*. Western Australia has a total land area of 252.9 million hectares.⁵⁷ Crown land makes up 92 per cent of the State, while freehold land that is privately owned accounts for eight per cent.⁵⁸ The Department of Planning, Lands and Heritage liaises with DFES and the Department of Biodiversity, Conservation and Attractions to implement a Bushfire Risk Management Plan on Western Australia’s Crown land.

⁵⁰ Department of Fire and Emergency Services, *Office of Bushfire Risk Management*, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/waemergencyandriskmanagement/obrm/Pages/default.aspx>, (accessed 16 June 2017).

⁵¹ Department of Fire and Emergency Services, *Map of Bush Fire Prone Areas – Frequently Asked Questions*, Perth, Government of Western Australia, 2017, <https://www.dfes.wa.gov.au/regulationandcompliance/bushfireproneareas/Pages/default.aspx>, (accessed 21 August 2017).

⁵² Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 13.

⁵³ Tenure blind means that bushfire risks are prioritised based on a risk assessment, across both public and private lands. Source: Department of Parks and Wildlife, *Management: tenure-blind approach*, Perth Government of Western Australia, <https://www.dpaw.wa.gov.au/management>, (accessed 21 August 2017).

⁵⁴ Watson, P. and Francis J., Emergency Services – Bushfire Risk Management Policy, *Hansard*, Assembly, 20 September 2016, p.6337b-6339a.

⁵⁵ The Bushfire Risk Management System is a database to assist in assessing the risk of bushfires. (Source: Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 13); State Emergency Management Committee, *Bushfire Stocktake – Green paper*, Perth, Government of Western Australia, 2016, p. 19.

⁵⁶ The Department of Lands became the Department of Planning, Lands and Heritage as at 1 July 2017.

⁵⁷ Geoscience Australia, *Area of Australia – States and Territories*, Canberra, Government of Australia, <http://www.ga.gov.au/scientific-topics/national-location-information/dimensions/area-of-australia-states-and-territories>, (accessed 28 June 2017).

⁵⁸ Department of Lands, *Annual Report 2015-2016*, Perth, Government of Western Australia, 2106, p. 6.

The Department of Planning, Lands and Heritage has a memorandum of understanding with DFES for DFES to conduct bushfire risk management on unallocated Crown land and unmanaged reserves in the metropolitan area and regional town sites. The Department of Biodiversity, Conservation and Attractions co-manages the remaining areas of unallocated Crown land and unmanaged reserves. These relationships are summarised in Figure 4, and the Department of Biodiversity, Conservation and Attractions' responsibility to manage fire-related risks on Crown land is discussed further in Section 2.2.5.

Figure 3 Figure 3 illustrates the different types of Western Australia's land tenure.

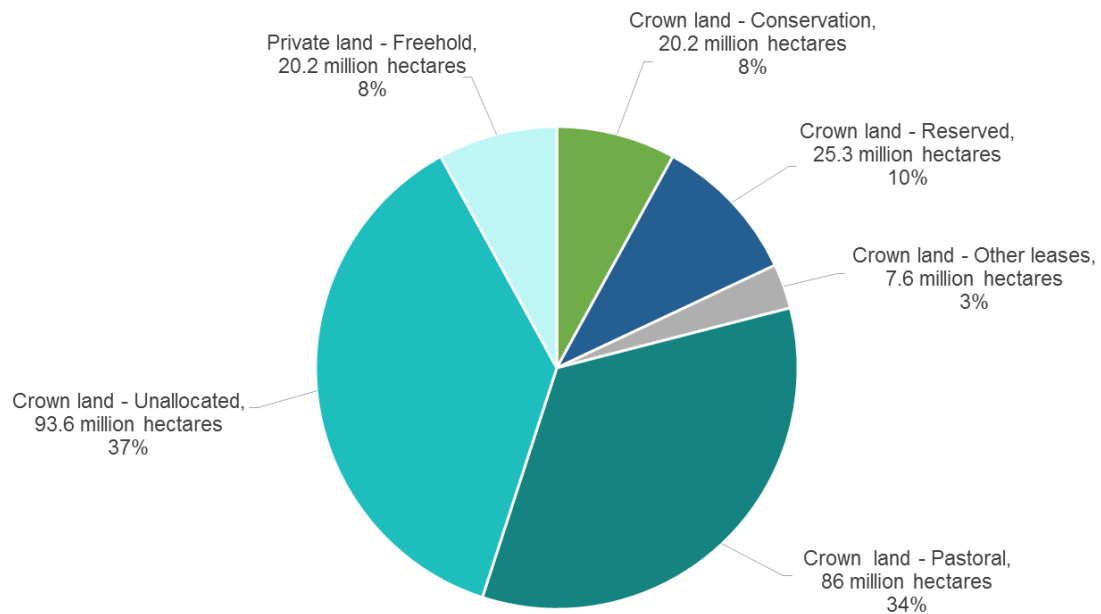
The Department of Planning, Lands and Heritage liaises with DFES and the Department of Biodiversity, Conservation and Attractions to implement a Bushfire Risk Management Plan on Western Australia's Crown land.⁵⁹

The Department of Planning, Lands and Heritage has a memorandum of understanding with DFES for DFES to conduct bushfire risk management on unallocated Crown land and unmanaged reserves in the metropolitan area and regional town sites.⁶⁰ The Department of Biodiversity, Conservation and Attractions co-manages the remaining areas of unallocated Crown land and unmanaged reserves.⁶¹ These relationships are summarised in Figure 4, and the Department of Biodiversity, Conservation and Attractions' responsibility to manage fire-related risks on Crown land is discussed further in Section 2.2.5.

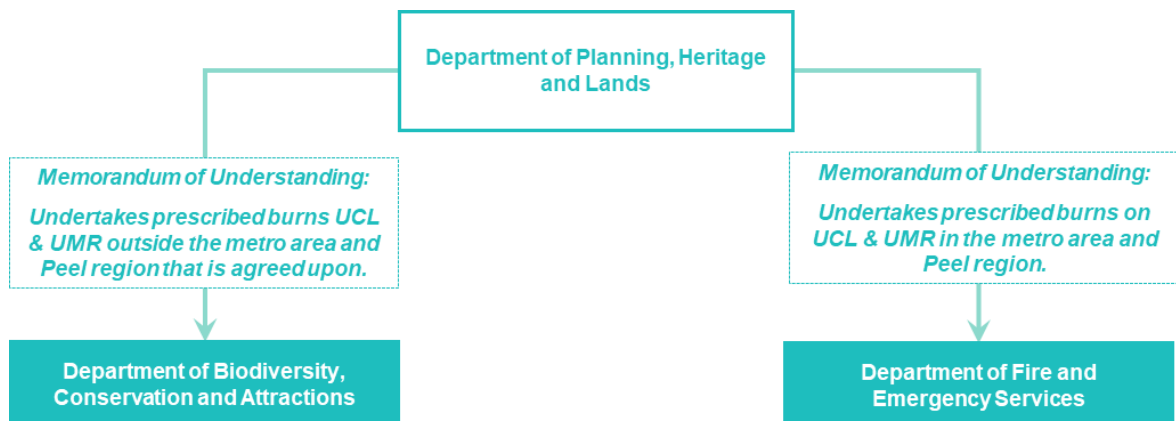
⁵⁹ Department of Lands, *Annual Report 2015-2016*, Perth, Government of Western Australia, 2016, p. 27.

⁶⁰ Department of Lands, *Annual Report 2015-2016*, Perth, Government of Western Australia, 2016, p. 53; Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 3. Unallocated Crown land is defined as "Crown land which is not subject to any interest, aside from native title interests, and which [is] not reserved or dedicated". Unmanaged reserves are "reserves which [are] not formally placed under the control of a management body". Source: Landgate, *Glossary of terms: Unallocated Land, Unmanaged Reserves and freehold land*, Perth, Government of Western Australia, <https://www0.landgate.wa.gov.au/for-individuals/property-ownership/survey-services/glossary-of-terms>, (accessed on 22 June 2017); *Land Administration Act 1997*, section 3.

⁶¹ Department of Lands, *Annual Report 2015-2016*, Perth, Government of Western Australia, 2016, p. 27; Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 3.

Figure 3 Western Australia's land tenure

Source: Department of Lands Annual Report 2015-2016.

Figure 4 Bushfire risk management on unallocated Crown land, unmanaged reserves, and state government agency-owned land

Source: Information provided by DFES and the Department of Biodiversity, Conservation and Attractions, Department of Parks and Wildlife Annual Report 2015-16, Department of Lands Annual Report 2015-2016.

Managing bushfire-related risk on pastoral land, freehold land, and other lease tenure is the responsibility of the land owner or occupier of land, under the *Bush Fires Act 1954*. The management of bushfire-related risk includes the suppression and prevention of bushfires.⁶²

⁶² *Bush Fires Act 1954*, sections 28 and 33.

2.2.5 Department of Biodiversity, Conservation and Attractions

The Department of Biodiversity, Conservation and Attractions⁶³ is the statutory body responsible for managing approximately 29 million hectares of land across Western Australia.⁶⁴ The Department provides land and environmental conservation services to the State's national parks, regional parks, marine parks and reserves.

The Department of Biodiversity, Conservation and Attractions has the responsibility to manage fire related risks on Crown land that is classified as conservation estates, reserved land, and other land tenures.⁶⁵ The Department of Biodiversity, Conservation and Attractions is also responsible for bushfire risk prevention and preparedness on some unallocated Crown land and unmanaged reserves outside the Perth metropolitan area and town sites.⁶⁶

As a land manager, the Department of Biodiversity, Conservation and Attractions has the authority to conduct fire risk management strategies to prevent, manage or control fire on land placed under its care.⁶⁷ The Department of Biodiversity, Conservation and Attractions is a prescribed agency for fire suppression.⁶⁸

Prescribed burns are conducted to protect and maintain the integrity of State assets from a bushfire-related risk.⁶⁹ The Department of Biodiversity, Conservation and Attractions uses a system for prescribed burning that aligns with the *AS/NZS ISO 31000 Risk Management – Principles and Guidelines* risk management standard (ISO 31000 standard). The Office of Bushfire Risk Management regularly audits the Department of Biodiversity, Conservation and Attractions' prescribed burnings for compliance with the agreed system and through a continuous improvement framework, makes incremental improvements.⁷⁰

The Department of Biodiversity, Conservation and Attractions also researches fire behaviour, which improves the effectiveness of the Department's prevention and

⁶³ The Department of Parks and Wildlife became a part of the Department of Biodiversity, Conservation and Attractions on 1 July 2017.

⁶⁴ Department of Parks and Wildlife, *Annual Report 2015-16*, Perth, Government of Western Australia, 2016, pp. 91-92; The department's full land tenure is established under Part 2 of the *Conservation and Land Management Act 1984*, except for lands held by the Botanic Gardens and Parks, Rottnest Island, and Zoological Parks and Authorities. Source: Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 11.

⁶⁵ *Conservation and Land Management Act 1984*, section 33 (1) (aa).

⁶⁶ Department of Parks and Wildlife, *Annual Report 2015-16*, Perth, Government of Western Australia, 2016, p. 65; *Land Administration Act 1997*, section 45.

The Department of Biodiversity, Conservation and Attractions is not responsible for fire suppression on unallocated Crown land and unmanaged reserves outside the metro area, regional centres, and town sites. Source: Communication with the Department of Biodiversity, Conservation and Attractions, 7 September 2017.

⁶⁷ *Conservation and Land Management Act 1984*, section 8A; section 8C; section 33 (1) (a) & (1) (aa).

⁶⁸ *Emergency Management Regulations 2006*, regulation 30.

⁶⁹ Department of Parks and Wildlife, *Annual Report 2015-16*, Perth, Government of Western Australia, 2016, p. 62.

⁷⁰ State Emergency Management Committee, *Bushfire Stocktake – Green paper*, Perth, Government of Western Australia, 2016, p. 27; Communication with Office of Emergency Management and the former Department of Parks and Wildlife, 12 June 2016; Department of Parks and Wildlife, *Yearbook 2015-16*, Perth, Government of Western Australia, 2016, p. 26, https://www.dpaw.wa.gov.au/images/documents/about/annual-report/2016/parks_and_wildlife_yearbook_2015-16_final_web.pdf, (accessed 29 June 2017).

preparedness.⁷¹ Fuel age data is used to prioritise when and where prescribed burning should occur, subject to other variables such as wind speed, humidity, and allowed prescribed burning days.⁷² The Department of Biodiversity, Conservation and Attractions keeps a log of fuel age on land that it manages. The Department of Biodiversity, Conservation and Attractions said in its submission to the draft report that in 2016-17, the Department conducted over 247,000 hectares of prescribed burning in three of its south west forest regions.⁷³

2.2.6 Local governments

Local governments have a role to provide emergency management and emergency services across all 27 hazards. Local governments:

- must ensure that emergency management arrangements are in place for their respective districts;⁷⁴
- can take preventative activities to promote local safety, such as conducting earthworks or other works on land for the prevention or reduction of floods;⁷⁵
- manage recovery activities, including establishing a recovery plan in local emergency management arrangements, nominating a local recovery coordinator, and establishing a local recovery coordination group to assist in coordinating recovery activities at the local level;⁷⁶ and
- provide advice and support to the community to prevent, prepare for, respond to, and recover from an emergency.⁷⁷

For fires, local governments:

- are the prescribed agency for fire suppression⁷⁸ and have legislative responsibilities for bushfire risk management;⁷⁹

⁷¹ Department of Parks and Wildlife, *Fire*, Perth, Government of Western Australia, <https://www.dpaw.wa.gov.au/management/fire>, (accessed on 22 May 2017).

⁷² Department of Parks and Wildlife, *Planning for prescribed burning: prescribed burn planning process*, Perth, Government of Western Australia, <https://www.dpaw.wa.gov.au/management/fire/prescribed-burning/54-planning-for-prescribed-burning?showall>, (accessed 8 June 2017).

⁷³ Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 3.

⁷⁴ *Emergency Management Act 2005*, section 41.

⁷⁵ *Local Government Act 1995*, Schedule 3.2, No. 2.

⁷⁶ *Emergency Management Act 2005*, section 36 (b); *State Emergency Management Policy*, section 6.3.

⁷⁷ State Emergency Management Committee, *State Emergency Management Plan*, Perth, Government of Western Australia, 2016, p. 95.

⁷⁸ *Emergency Management Act*, section 6; *Emergency Management Regulations*, regulation 31.

⁷⁹ Local governments have legislative responsibilities for bushfire risk management on all land tenures within the local government area under the *Bush Fires Act 1954*. This includes having the responsibilities for bushfire risk management (prevention and suppression) on unallocated Crown land and unmanaged reserves. (Source: Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 3; Communication with Department of Biodiversity, Conservation and Attractions, 12 September 2017.)

- can appoint bush fire control officers,⁸⁰ who have powers⁸¹ to establish, maintain, and equip one or more bushfire brigades for the purpose of controlling, extinguishing, or preventing the occurrence or spread of a bushfire;⁸²
- have powers to restrict burning times, penalise unlawful burning, and instruct owners or occupiers of land to prevent and suppress bushfires occurring on their own land;⁸³ and
- may penalise the land owner or occupier of land if they fail to comply with an issued instruction and can direct bush fire control officers to carry out the necessary prevention or suppression activities⁸⁴ – they can recover the expenses incurred from the land owner (including private individuals and State agencies).⁸⁵

Local governments are required to develop bushfire risk management plans under the *Westplan* for fire.⁸⁶ In 2015, DFES signed a memorandum of understanding with 16 local governments to support and fund the development of bushfire risk management plans.⁸⁷ Funds to implement these 16 plans come from the Natural Disaster Resilience Program and general government revenue.⁸⁸ DFES has approached an additional 22 local governments who may have the capacity to develop a Bushfire Risk Management Plan.

In the 2017-18 State Budget, the State Government announced \$3.7 million of funding to assist local governments develop or further their Bushfire Risk Management Plans. The amount will enable an additional 11 local governments to begin developing their bushfire risk management plans.⁸⁹

Local governments also conduct cyclone-related prevention activities. They have the power to remove, dismantle, or destroy dangerous vegetation or premises on land that may cause loss of life, harm, or damage to property or any part of the environment as a result of a cyclone.⁹⁰ They can also issue an instruction to a land owner or occupier of land to conduct the same prevention activity,⁹¹ issue fines if the instruction is not complied with, and recover the expenses incurred in conducting the activity.⁹²

⁸⁰ *Bush Fires Act 1954*, section 38.

⁸¹ *Bush Fires Act 1954*, section 39.

⁸² *Bush Fires Act 1954*, section 41.

⁸³ *Bush Fires Act 1954*, Part 3 and Part 4.

⁸⁴ *Bush Fires Act 1954*, section 33 (4), 28 (3).

⁸⁵ *Bush Fires Act 1954*.

⁸⁶ Department of Fire and Emergency Services, *Westplan – Fire*, Perth, Government of Western Australia, 2016, p. 53.

⁸⁷ Quirk, M. and Francis, J., Emergency Services – Office of Bushfire Risk Management – Tenure Blind Approach, Assembly, *Hansard*, 10 May 2016, p.2655b-2655b.

⁸⁸ Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, pp. 75 and 84; Quirk, M. and Kelly, D., Assembly Committees A and B Supplementary Information, *Hansard*, 26 May 2016, p.626a-628a

⁸⁹ Government of Western Australia, *Media Statement – McGowan Labor Government strengthens bushfire risk identification*, 2017, <https://www.mediastatements.wa.gov.au/Pages/McGowan/2017/09/McGowan-Labor-Government-strengthens-bushfire-risk-identification.aspx>, (accessed 8 September 2017).

⁹⁰ *Emergency Management Act 2005*, section 46.

⁹¹ *Emergency Management Act 2005*, section 47.

⁹² *Emergency Management Act 2005*, section 48.

Local governments are responsible for the management of funding for their local bush fire brigades and State Emergency Service units. Under the ESL arrangements, local governments submit an operating and capital grants application to DFES via the Local Government Grant Scheme.⁹³

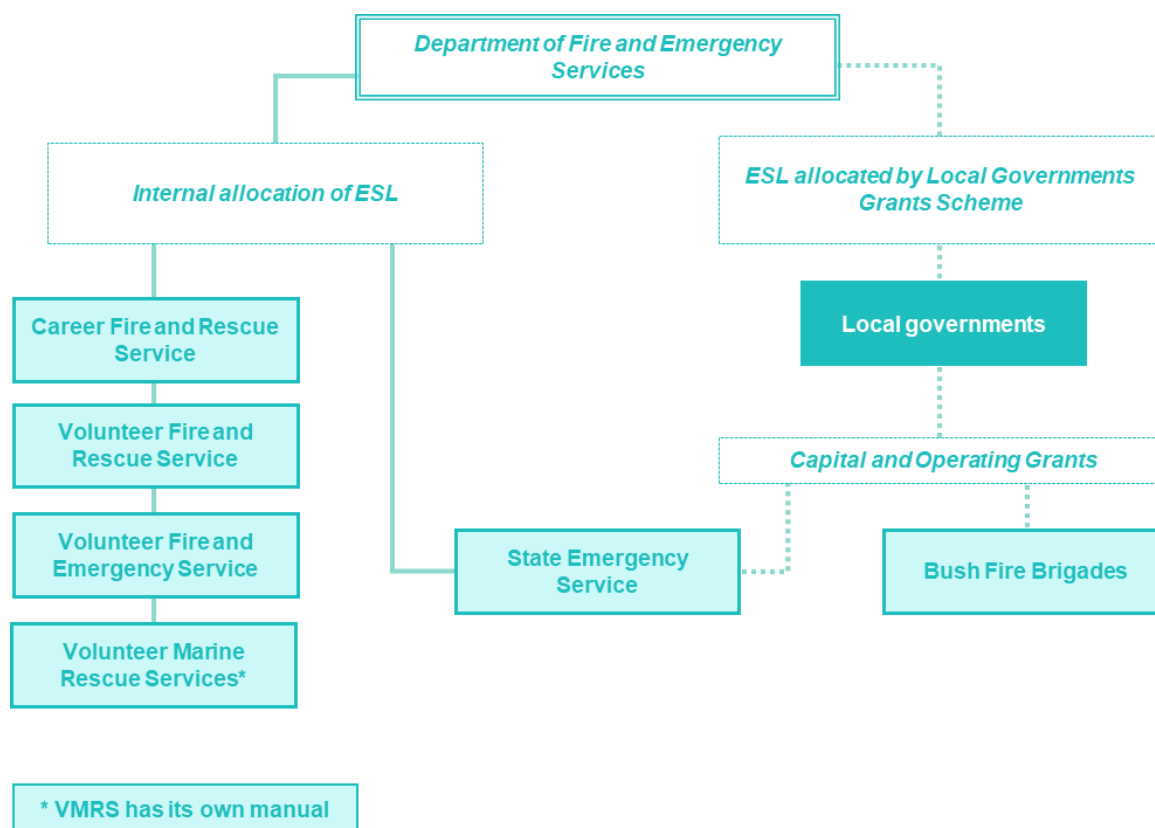
2.2.7 *Frontline service delivery*

Several organisations provide frontline services throughout Western Australia. These include:

- the Career Fire and Rescue Service;
- the Volunteer Fire and Rescue Service ;
- local government volunteer bush fire brigades;
- the Volunteer Fire and Emergency Services;
- the State Emergency Service; and
- the Volunteer Marine Rescue Services.

Figure 5 shows these organisations, along with the source of their funding.

⁹³ Department of Fire and Emergency Services, *Local Government Grant Scheme Manual for Capital and Operating Grants 2017/18*, Perth, Government of Western Australia, 2017.

Figure 5 Front-line service bodies and their source of funding

Source: DFES.

DFES career firefighters operate as the Career Fire and Rescue Service. Career firefighters are paid staff responsible for firefighting, hazardous material management, road crash rescue, urban search and rescue, disaster support, fire alarm response, building fire safety inspection, fire scene investigation, community engagement, and the provision of firefighting and fire safety education. In 2016, there are 1,123 career firefighters in Western Australia operating in the Perth metropolitan fire district, regional cities, and urban metropolitan areas.⁹⁴

The Volunteer Fire and Rescue Services consist of volunteers who provide firefighting, hazardous material management, road crash rescue, and fire safety education services. There were 93 brigades and 2,414 volunteers in 2015-16.⁹⁵ They support communities in the urban metropolitan area, country towns and rural areas.⁹⁶

⁹⁴ Department of Fire and Emergency Services, *Operational Information: Career Fire and Rescue Service*, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/aboutus/operationalinformation/Pages/fireandrescueservice.aspx>, (accessed 25 May 2017); Department of Fire and Emergency Services, *Emergency Services Levy Manual of Operating Procedures 2017/18*, Perth, Government of Western Australia, 2017, pp. 1-2.

⁹⁵ Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 158.

⁹⁶ Department of Fire and Emergency Services, *Emergency Services Levy Manual of Operating Procedures 2017/18*, Perth, Government of Western Australia, 2017, pp. 1-2.

Local government bush fire brigades consist of volunteers who provide bushfire prevention and risk management services, bushfire suppression services, and bushfire safety education to the community. There were 575 brigades in 2015-16, and 19,954 volunteers. Bush fire brigades support communities in the urban metropolitan area, country towns, and pastoral/rural areas, and are appointed by local governments through the *Bush Fires Act 1954*. Some bush fire brigades operate as Volunteer Fire and Rescue Service units.⁹⁷

The Volunteer Fire and Emergency Services consist of multi-functional volunteer units trained in natural disaster and emergency response. There were 27 units in 2015-16, and 884 volunteers. The Volunteer Fire and Emergency Services supports communities in country towns and pastoral/rural areas.⁹⁸

The State Emergency Service volunteers provide disaster support, search and rescue services, community safety education, and ground support for fire services. There were 67 State Emergency Service units in 2015-16, and 1,946 volunteers. The State Emergency Service supports communities across the Perth metropolitan fire district, regional cities, urban metropolitan areas, country towns, and pastoral/rural areas.⁹⁹

The Volunteer Marine Rescue Services consist of volunteers who assist police in searching for missing people and vessels, provide help to drifting vessels, and assist in the removal of grounded and submerged vessels.¹⁰⁰ They also assist other emergency service operations, such as recovering those trapped on the beach during fires, and assisting in suppressing jetty fires.¹⁰¹ In 2015-16, there were 36 groups and 1,559 volunteers. The Volunteer Marine Rescue Services are in 39 locations along Western Australia's 13,000 kilometre coastline.¹⁰²

⁹⁷ Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 158; Department of Fire and Emergency Services, *Operational Information: Volunteer Fire and Rescue Services*, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/aboutus/operationalinformation/Pages/default.aspx>, (accessed 29 May 2017); *Fire and Emergency Services Regulations 1998*, regulation 6.

⁹⁸ Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 158; Department of Fire and Emergency Services, *Operational Information: Volunteer Fire and Emergency Services*, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/aboutus/operationalinformation/Pages/default.aspx>, (accessed 29 May 2017); *Fire and Emergency Services Regulations 1998*, regulation 6.

⁹⁹ Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 158; Department of Fire and Emergency Services, *Operational Information: State Emergency Service*, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/aboutus/operationalinformation/Pages/default.aspx>, (accessed 29 May 2017); *Fire and Emergency Services Regulations 1998*, regulation 6.

¹⁰⁰ Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 158; Department of Fire and Emergency Services, *Operational Information: Volunteer Marine Rescue Services*, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/aboutus/operationalinformation/Pages/default.aspx>, (accessed 29 May 2017); *Fire and Emergency Services Regulations 1998*, regulation 6.

¹⁰¹ Volunteer Marine Rescue Western Australia, *Submission to draft report*, 12 July 2017, p. 1.

¹⁰² Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 158; Department of Fire and Emergency Services, *Operational Information: Volunteer Marine Rescue Services*, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/aboutus/operationalinformation/Pages/default.aspx>, (accessed 29 May 2017); *Fire and Emergency Services Regulations 1998*, regulation 6.

2.3 The Emergency Services Levy

The ESL commenced on 1 July 2003.¹⁰³ The ESL is an annual, property-based levy that is used to fund the costs of providing emergency management – primarily emergency services – in Western Australia.

2.3.1 Why the Emergency Services Levy was introduced

The ESL was established to ensure that all property owners contribute to the costs of emergency management and services, and that emergency management and services in Western Australia are appropriately funded.¹⁰⁴

Before the ESL was introduced, emergency management and services were funded from a mix of sources. These included a compulsory levy applied to insurance companies and recovered through insurance premiums, levies raised by local governments, state government contributions, grants (for example, from the Lotteries Commission), and community fundraising.¹⁰⁵

The basis of this funding system arose in the nineteenth century. Western Australia adopted the British model of imposing a compulsory charge against insurance companies to establish full-time paid fire services.¹⁰⁶ Career and volunteer fire services were initially managed and funded by insurance underwriters to protect the property interests of their policyholders, and so to minimise their financial risks. In 1898, these services were incorporated into the government managed and operated service that exists today.¹⁰⁷

Under the previous funding arrangements, funding sources varied by service and by location. For example:

- The Career Fire and Rescue Service was funded 75 per cent by the compulsory charge against insurance companies, and a 12.5 per cent contribution from each of the State Government and (collectively) local governments.
- The Volunteer Fire and Rescue Services in country towns was fully funded by the State Government.
- Local government bush fire brigades in rural communities were funded by local governments and their communities, including through community fundraising and matched grants from the State Government and the Lotteries Commission.
- The State Emergency Service and Volunteer Marine Rescue Services were funded by a combination of local community contributions through local government, or local

¹⁰³ The ESL is established by the *Emergency Services Levy Act 2002*, Part 6A of the *Fire and Emergency Services Act 1998*, and the *Fire and Emergency Services Regulations 1998*.

¹⁰⁴ Kobelke, J.C., Second Reading Speech: Fire and Emergency Services Legislation (Emergency Services Levy) Amendment Bill, *Hansard*, Assembly, 25 September 2002, p.1572b-1573a.

¹⁰⁵ Kobelke, J.C., Second Reading Speech: Fire and Emergency Services Legislation (Emergency Services Levy) Amendment Bill, *Hansard*, Assembly, 25 September 2002, p.1572b-1573a.

¹⁰⁶ Kobelke, J.C., Second Reading Speech: Fire and Emergency Services Legislation (Emergency Services Levy) Amendment Bill, *Hansard*, Assembly, 25 September 2002, p.1572b-1573a.

¹⁰⁷ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 13.

fundraising, state and Australian government funding and Lotteries Commission grants.¹⁰⁸

The contribution made by the insurance industry was financed by policyholders through a loading on their property insurance premiums (that is, on building and contents insurance). The loading was known as the Fire Service Levy and was determined by the insurance industry as the levy sufficient to raise their 75 per cent contribution was based on the premium income generated in the previous year.¹⁰⁹

The previous funding arrangements were inequitable because the level of financial contribution, in the form of insurance premiums, varied considerably among property owners. For example, although the insurance levy was compulsory, property owners could choose not to insure, to self-insure, to under-insure, or to use an off-shore, non-contributing insurer.¹¹⁰ This variability diluted the effectiveness of using insurance premiums as a proxy for level of risk. The Insurance Council of Australia conducted a survey in 1999, which estimated that:

- 9 per cent of all owner-occupied homes had no building cover;
- 21 per cent of all owner-occupied homes had no contents cover;
- 75 per cent of tenanted homes had no contents cover; and
- 31 per cent of all homes had no building or contents cover.¹¹¹

The arrangements were also inequitable because the level of service varied considerably between locations. In some cases, funding could only be spent in the location it was raised, resulting in some emergency services units being under-funded and under-resourced.¹¹² However, in times of need, community funded volunteer groups would cross boundaries to provide services in other locations.

“Not every locality has a volunteer SES [State Emergency Service] unit and therefore not every local community contributes to the SES. However, in times of emergency, SES volunteers provide a mobile response service anywhere in the State. Some communities contribute; others get off scot-free.”¹¹³

In 2003, the ESL system was introduced. Under the arrangements established in 2003, the ESL and an ongoing state government contribution were to meet 100 per cent of the agreed operating and capital costs of the career and volunteer Fire and Rescue Service, bush fire

¹⁰⁸ Kobelke, J.C., Second Reading Speech: Fire and Emergency Services Legislation (Emergency Services Levy) Amendment Bill, *Hansard*, Assembly, 25 September 2002, p.1572b-1573a.

¹⁰⁹ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 12.

¹¹⁰ Kobelke, J.C., Second Reading Speech: Fire and Emergency Services Legislation (Emergency Services Levy) Amendment Bill, *Hansard*, Assembly, 25 September 2002, p.1572b-1573a.

¹¹¹ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 15.

¹¹² Department of Fire and Emergency Services, *Emergency Services Levy Question & Answer Guide 2017/18*, Perth, Government of Western Australia, 2017, p. 1.

¹¹³ Kobelke, J.C., Second Reading Speech: Fire and Emergency Services Legislation (Emergency Services Levy) Amendment Bill, *Hansard*, Assembly, 25 September 2002, p.1572b-1573a.

brigades, Fire and Emergency Services Authority units (later known as Volunteer Fire and Emergency Services),¹¹⁴ and the State Emergency Service.¹¹⁵

Local governments were to submit annual budgets to the Fire Emergency Services Authority for the operating costs and capital costs of their bush fire brigades and State Emergency Services units, using a Local Government Grants Scheme. There were to be no other ongoing contributions required from the community to fund these services (such as contributions from local government and community fundraising).¹¹⁶ The change in funding arrangements did not affect the management and control of these services.¹¹⁷

The ESL funding arrangements were originally not intended to alter the way the Volunteer Marine Rescue Services was funded. Rather, funding from general government revenue was to continue at \$1 million a year.¹¹⁸ The ESL began to fund the Volunteer Marine Rescue Services in 2015-16.¹¹⁹

Using a property based levy to fund emergency services is consistent with the approach in most other Australian jurisdictions (Appendix C). The exceptions are Tasmania, where insurance companies contribute to funding emergency services, and the Northern Territory, where emergency services are funded from general government revenue.¹²⁰

¹¹⁴ Fire and Emergency Service Authority Units are now known as Volunteer Fire and Emergency Services, and are a multi-skilled emergency services group developed to serve communities which either elected to have a single emergency service entity or, which through lack of local resources, only had sufficient volunteers for one service (Source: Fire and Emergency Service Authority, *A replacement funding system*, Perth, Government of Western Australia, 2002, p. 15). Fire and Emergency Service Authority Units are established under section 18M of the *Fire and Emergency Services of Western Australia Act 1998*.

¹¹⁵ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 32.

¹¹⁶ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, pp8-9, p. 32; Kobelke, J.C., Second Reading Speech: Fire and Emergency Services Legislation (Emergency Services Levy) Amendment Bill, *Hansard*, Assembly, 25 September 2002, p.1572b-1573a.

¹¹⁷ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 9.

¹¹⁸ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 2.

¹¹⁹ Department of Fire and Emergency Services, *Emergency Services Levy Question & Answer Guide 2017/18*, Perth, Government of Western Australia, 2017, p. 1.

¹²⁰ Australian Capital Territory Revenue Office, *Fire and emergency services levy*, Canberra, Government of Australian Capital Territory, <http://www.revenue.act.gov.au/duties-and-taxes/other-levies-and-taxes/fire-and-emergency-services-levy>, (accessed 1 February 2017); Australasian Fire and Emergency Services Authorities Council, *Understanding Our Business Survey 2015/16*, Australasian Fire and Emergency Services Authorities Council, Melbourne, 2016, p. 7; Department of Police, Fire and Emergency Management, *Annual Report 2015-16*, Hobart, Government of Tasmania, 2016, p. 81; New South Wales Government, *Emergency Services Property Levy*, Sydney, Government of New South Wales, <http://emergencyservicespropertylevy.nsw.gov.au/>, (accessed 31 January 2017); New South Wales Treasury and the Ministry for Police and Emergency Services, *Funding our Emergency Services: Discussion Paper July 2012*, Sydney, Government of New South Wales, 2012; South Australian Fire and Emergency Services Commission, *How is the sector funded?*, Adelaide, Government of South Australia, http://www.safecom.sa.gov.au/site/about_us/how_sector_is_funded.jsp, (accessed 1 February 2017); Victorian Government, *Fire Services Property Levy: Frequently Asked Questions*, Melbourne, Government of Victoria, <http://www.firelevy.vic.gov.au/faq.html>, (accessed 31 January 2017); Victoria State Emergency Service, *News: On funding*, Melbourne, Government of Victoria, <https://www.ses.vic.gov.au/-/on-funding>, (accessed 31 January 2017).

2.3.2 Administration of the Emergency Services Levy

Part 6A of the *Fire and Emergency Services Act 1998* establishes roles for the Minister for Emergency Services (the Minister), the Fire and Emergency Services Commissioner and local governments to administer the ESL.

The Minister is responsible for deciding the total amount of ESL revenue to raise, based on advice from DFES. In doing so, DFES must consider estimated emergency services expenditure in the coming year, and the amount of funding appropriated by Parliament for the services provided under the emergency services Acts.¹²¹ The Minister may also consider any other matter deemed relevant in determining the levy.

The annual budget for DFES (including ESL revenues) is approved by Parliament through the annual State Budget process.

The amount of ESL levied on a property must be determined as a rate in the dollar of the gross rental value of the land as at 1 July each year.¹²² However, the Minister can apply different levy rates by location (known as ESL category areas), which are set depending on the level of service available in each location.¹²³ The Minister may also determine a minimum and maximum levy for properties, which vary by land use and by ESL category. For category five properties (pastoral/rural areas) and mining tenements, a fixed charge is applied (as opposed to a rate in the dollar of gross rental value). Rates for 2016-17 are provided in Section 2.4.

Most ESL funds raised are collected by local governments on behalf of DFES. Local governments are required to assess the amount of ESL payable by property owners, and serve a written notice.¹²⁴ Local governments do not have discretion over the amount raised and simply apply the rate method as advised by DFES (refer to Section 2.4). A local government will usually provide the assessment notice as part of a council rates notice.¹²⁵ All ESL funds collected by local governments are forwarded to DFES.

The ESL is also payable on properties owned by the State Government, local governments, and government corporations (with some exceptions). In these cases, DFES issues assessment notices directly. Those ESL funds are also forwarded to DFES.

Figure 6 shows the main parties involved in the collection, administration and use of the ESL.

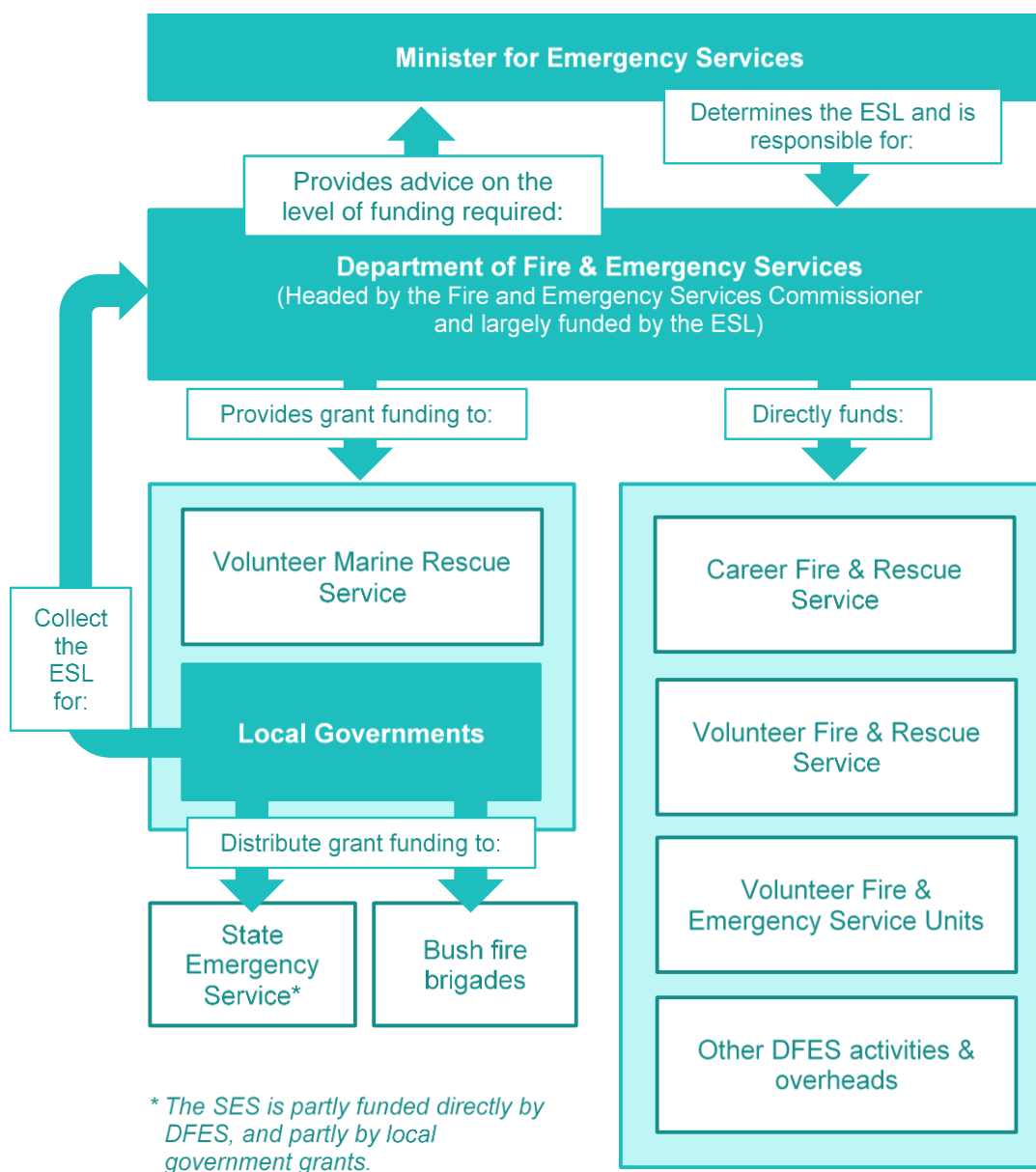
¹²¹ As set out further below, DFES receives an appropriation from the State Government to fund activities it may not legally fund from ESL revenues.

¹²² *Fire and Emergency Services Act 1998*,

¹²³ *Fire and Emergency Services Act 1998*,

¹²⁴ *Fire and Emergency Services Act 1998*.

¹²⁵ For State Government and Commonwealth property, DFES invoices the property owners directly.

Figure 6 Collection, administration and spending of the ESL

Source: DFES, ERA Analysis.

2.3.3 What the Emergency Services Levy funds

DFES receives all revenue raised by the ESL. DFES then provides grants and subsidies to other organisations. The *Fire and Emergency Services Act 1998* states that:

- any levy paid is to be credited to an operating account of DFES; and
- any amount credited to an operating account of DFES may be applied only for the purposes of the emergency services Acts.¹²⁶

¹²⁶ Being the *Fire and Emergency Services Act 1998*, the *Bush Fires Act 1954*, and the *Fire Brigades Act 1942*. *Fire and Emergency Services Act 1998*, section 38(1).

This ensures ESL funding may only be used for the functions of the Fire and Emergency Services Commissioner (as set out in the emergency services Acts), and subject to any Ministerial or state government policy determinations established in the annual DFES budget (which is approved by Parliament).

Other than limiting what the ESL can be spent on to the ‘purposes’ of the emergency services Acts, the legislation does not prescriptively set out what the ESL can and cannot fund. On the one hand, the functions of the Fire and Emergency Services Commissioner are broad and relate to “the provision and management of emergency services”,¹²⁷ including:¹²⁸

- advising the Minister on all aspects of policy in relation to emergency services;
- developing plans for, and providing advice on, the management and use of emergency services; and
- undertaking, coordinating, managing and providing practical and financial assistance to activities and projects relating to emergency services.

The Fire and Emergency Services Commissioner may do all things necessary or convenient to be done for or in connection with the performance of their functions.¹²⁹

When the ESL was introduced, it was expected that ESL funds would cover a narrower range of things, such as the cost of:¹³⁰

- the career and volunteer Fire and Rescue Service;
- local governments' volunteer bush fire brigades;
- the State Emergency Service;
- the Fire and Emergency Service Authority's new multi-service Fire and Emergency Service Authority units;
- the Fire and Emergency Service Authority's Emergency Management Services; and
- the Fire and Emergency Service Authority's community safety programs.

For local governments, the emergency services Acts set out that local government requests for ESL funding must be based on estimates of “expenditure in relation to fire and emergency services”.¹³¹

¹²⁷ *Fire and Emergency Services Act 1998*, section 11.

¹²⁸ *Fire and Emergency Services Act 1998*, section 11(2).

¹²⁹ *Fire and Emergency Services Act 1998*, section 11(12).

¹³⁰ Kobelke, J., Fire and Emergency Services Legislation (Emergency Services Levy) Amendment Bill 2002, *Hansard*, Assembly, Perth, Government of Western Australia, 25 September 2002, p. 1570b-1572a.

¹³¹ *Fire and Emergency Services Act 1998*, section 36A.

Some stakeholders, including the Association of Volunteer Bush Fire Brigades and local government, consider that the ESL was introduced for the purpose of better resourcing volunteer brigades.¹³²

In summary, the legislation is not prescriptive about what the ESL can and cannot fund, beyond requiring that it is applied only for the purposes of the emergency services Acts.

The ESL is the main source of revenue for DFES. In 2015-16, ESL revenue was \$323.3 million, or about 82 per cent of total income for DFES.¹³³ DFES also receives an appropriation from the State Government, which accounted for \$37.1 million or 9.4 per cent of DFES's revenues in 2015-16. DFES applies the appropriation from the State Government to activities it may not legally fund from ESL revenues.¹³⁴ (See Section 3.2 for a detailed overview of DFES's sources of revenue.)

DFES notes that the ESL can be used to fund:

- capital equipment purchases including firefighting appliances, vehicles, buildings, and major rescue equipment;
- operating costs including operating and maintaining vehicles and buildings, insurance, personal protective equipment and operational consumables; and
- volunteer training, fire investigations, building inspections, community safety programs, emergency management planning, and the corporate support costs of DFES.

Figure 7 shows ESL revenue and state government funding received by DFES since 2004-05.

DFES notes that the ESL can be used to fund:¹³⁵

- capital equipment purchases including firefighting appliances, vehicles, buildings, and major rescue equipment;
- operating costs including operating and maintaining vehicles and buildings, insurance, personal protective equipment and operational consumables; and
- volunteer training, fire investigations, building inspections, community safety programs, emergency management planning, and the corporate support costs of DFES.

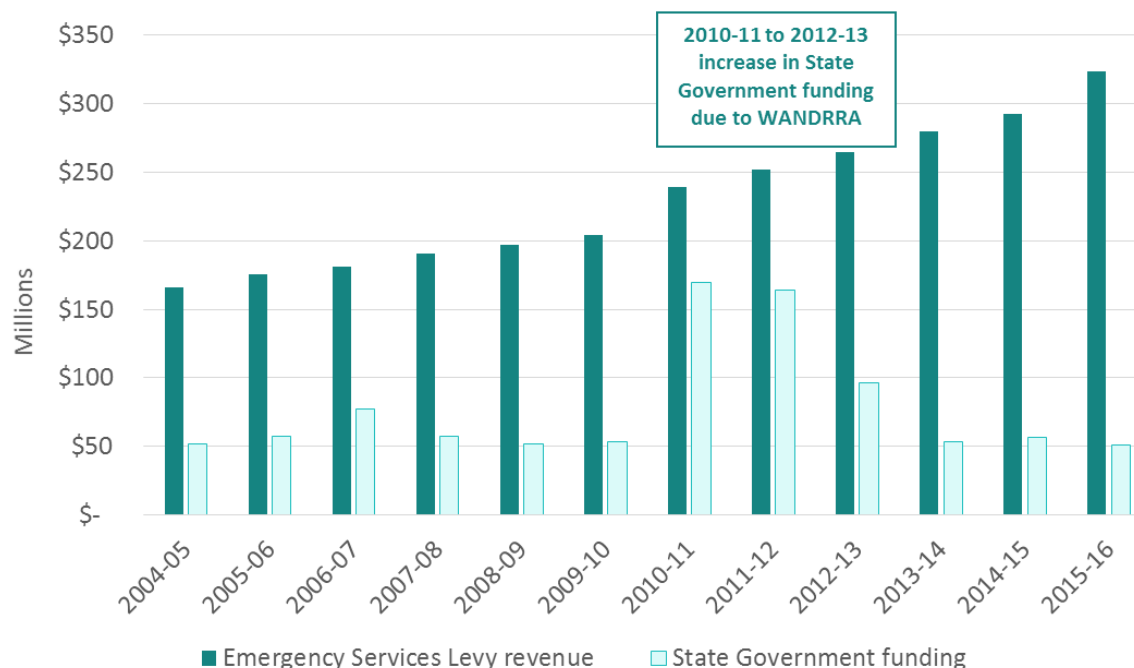
¹³² ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017

¹³³ Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 72.

'Total income' includes all income from the State Government, including service appropriations, services received free of charge, and fund from Royalties for Regions.

¹³⁴ The ERA understands that ESL revenue may not be used for unexploded ordinance, surf lifesaving, and the salaries of the Fire and Emergency Services Commissioner and the two deputy Fire and Emergency Services commissioners.

¹³⁵ Department of Fire and Emergency Services, *Emergency Services Levy Question & Answer Guide 2017/18*, Perth, Government of Western Australia, 2017, p. 1.

Figure 7 ESL revenue and state government funding 2004-05 to 2015-16 (\$ real 2015-16)

Sources: DFES annual reports; ERA analysis.¹³⁶

The ESL funds the capital and operating costs of the career and volunteer Fire and Rescue Service, volunteer bush fire brigades, the State Emergency Service, and the Volunteer Fire and Emergency Service.¹³⁷ In 2010-11, the ESL also began funding the aviation service contracted by DFES during emergencies, and in 2015-16, the ESL began funding the Volunteer Marine Rescue Services.¹³⁸

The career and volunteer Fire and Rescue Service, Volunteer Fire and Emergency Service, and Volunteer Marine Rescue Services are part of DFES. DFES allocates ESL funding to the Career Fire and Rescue Service, Volunteer Fire and Rescue Service, and Volunteer Fire and Emergency Service¹³⁹ through its internal budgeting process. Funds are allocated to Volunteer Marine Rescue Services using a grants process that is consistent with The Local Government Grants Scheme manual.¹⁴⁰

¹³⁶ The Western Australian Natural Disaster Relief and Recovery Arrangements, or WANDRRA, is invoked to 'provide financial assistance to communities whose social, financial and economic wellbeing have been significantly affected by an eligible natural disaster event'. (Source: Fire and Emergency Services Authority, *Annual Report 2011-12*, Perth, Government of Western Australia, p. 120.) It is described in more detail in Chapter 3.

¹³⁷ Department of Fire and Emergency Services, *Emergency Services Levy Question & Answer Guide 2017/18*, Perth, Government of Western Australia, 2017, p. 1.

¹³⁸ Department of Fire and Emergency Services, *Emergency Services Levy Question & Answer Guide 2017/18*, Perth, Government of Western Australia, 2017, p. 1.

¹³⁹ All Volunteer Fire and Emergency Service units are subject to a formal Memorandum of Understanding between DFES and the respective local government and the volunteers. Therefore, Volunteer Fire and Emergency Service units are directly administered and financed by DFES. Source: Department of Fire and Emergency Services, *Local Government Grants Scheme Manual for Capital and Operating Grants 2017/18*, Perth, Government of Western Australia, 2017, pp. 11-12.

¹⁴⁰ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 12.

DFES provides support to local governments through the Local Government Grant Scheme.¹⁴¹ The Local Government Grant Scheme manual states that the intended role and function of the Local Government Grant Scheme is to enable DFES to finance the approved capital and operating costs associated with providing and maintaining an effective bushfire fighting service for local governments, and costs associated with the delivery of services provided by State Emergency Service units.¹⁴²

Local governments distribute the money they get from the ESL through the Local Government Grant Scheme to bush fire brigades and State Emergency Service units.

The specific local government expenditure items that can be funded from the ESL change from year to year, as published in the Local Government Grant Scheme manual. For example, radio communication appliances for bush fire brigades and State Emergency Service units were eligible items in the 2012-13 financial year. However, the appliances are an ineligible item in 2016-17.¹⁴³ In contrast, operational training costs and other items, which were unavailable in the 2012-13, are added to the 2016-17. (The Local Government Grant Scheme Manual is further discussed in Chapter 8.)

The Western Australian Local Government Association (WALGA) reported last year that bush fire brigades and State Emergency Service units still need to fundraise, and rely on donations and local government contributions to support their operational and capital needs.¹⁴⁴ The WALGA report suggests that the ESL is not funding all of the operating and capital costs of the bush fire brigades and State Emergency Service units, contrary to the original intent of the ESL arrangements. However, according to DFES:

“...the original intent of the ESL was not to fund all costs but to effect the capital and operating costs that support the preparedness and response capability requirements of the brigades and units...Local governments retain their shared responsibility obligations to emergency management that were in place pre ESL and contribute to LGGS [Local Government Grants Scheme] Capital facility projects. The need for a local fundraising activity is the decision of the individual Brigade or Unit.”¹⁴⁵

Figures 8 and 9 show the revenue sources for bush fire brigades and the State Emergency Service since 2012-13.

¹⁴¹ Communication with Department of Fire and Emergency Services, 8 June 2017.

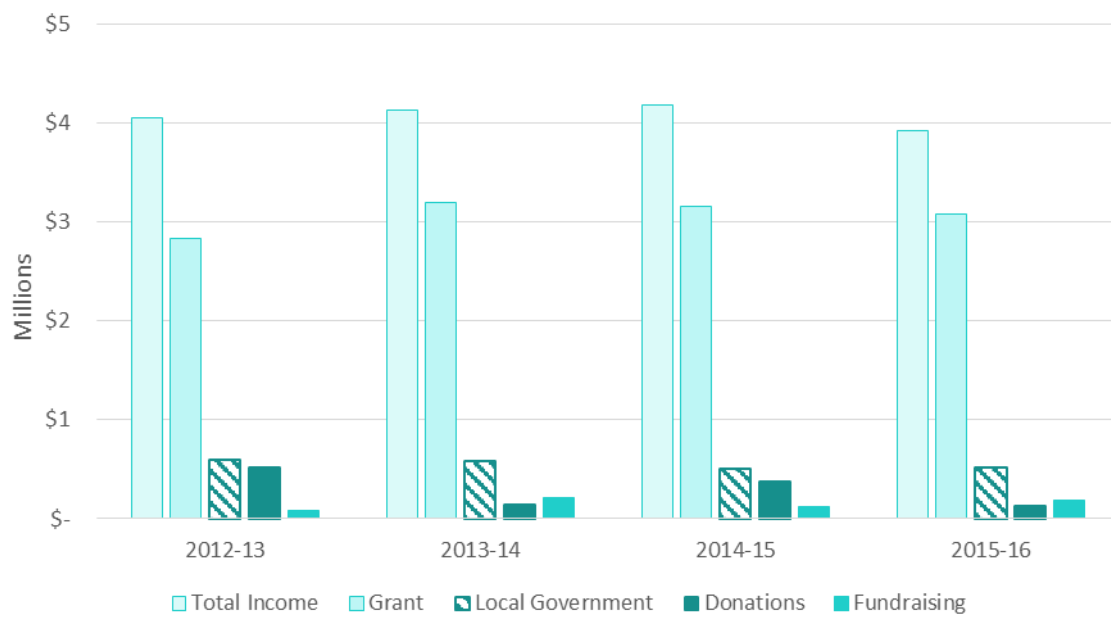
¹⁴² Department of Fire and Emergency Services, *Local Government Grants Scheme Manual for Capital and Operating Grants 2017/18*, Perth, Government of Western Australia, 2017, p. 9.

¹⁴³ Department of Fire and Emergency Services, *Local Government Grants Scheme Manual for Capital and Operating Grants 2012/13*, Perth, Government of Western Australia, 2012, pp. 62-66; Department of Fire and Emergency Services, *Local Government Grants Scheme Manual for Capital and Operating Grants 2017/18*, Perth, Government of Western Australia, 2017, pp. 72-73.

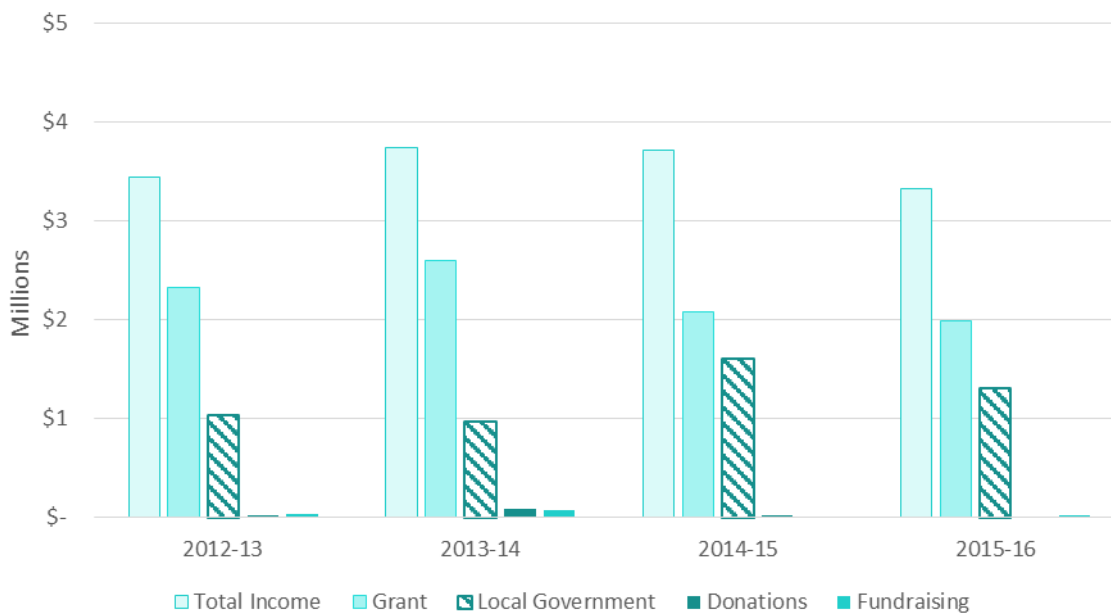
¹⁴⁴ AEC Group on behalf of WALGA, *Local Government Emergency Management Funding Review – Working Draft 06*, Perth, AEC Group Limited, 2016, p. 38.

The report provided is an advance draft copy, and only 32 out of 138 local governments contributed to the survey on which this information is based.

¹⁴⁵ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 13.

Figure 8 Bush fire brigades revenue by source (\$ real 2015-16)

Source: WALGA draft report submitted to the ERA.

Figure 9 State Emergency Service revenue by source (\$ real 2015-16)

Source: WALGA draft report submitted to the ERA.

Note: The increase in local government contribution in 2014-15 is attributed to capital expenditure provided in advance to construct a State Emergency Service facility for the Karratha State Emergency Service.¹⁴⁶

¹⁴⁶ Communication with Western Australian Local Government Association, 22 June 2017.

2.3.4 The State Government's total contribution to funding

The State Government's contribution to the revenue earned from the ESL includes ESL payments on land that it owns throughout the State.¹⁴⁷ The levy on state government land is either assessed by the Fire and Emergency Services Commissioner¹⁴⁸ or, where required, by local governments,¹⁴⁹ and in consultation with the Valuer-General.¹⁵⁰

The State Government provides an ongoing subsidy towards the cost of volunteer services, particularly in rural and remote areas of the State. When the ESL was introduced, the Minister for Police and Emergency Services stated that the State Government would continue its commitment to fund emergency services. The subsidy was estimated at \$18.5 million a year in 2001-02 terms.¹⁵¹

DFES estimates the state government contribution in 2016-17 to be approximately \$36.1 million, which is made of \$17.4 million in ESL on state government property and a further contribution of \$18.7 million.¹⁵²

The State Government has 93,492 properties that incur the ESL. Charges are levied based on the same ESL categories and property use classifications as for private landholders, and using gross rental value. The exception is for properties in Category Five, where a fixed charge is applied.¹⁵³ Figure 11 shows the State Government's total historical contribution through both ESL payments on its properties and from general government revenue.

The State Government also funds specific programs from general revenue, such as:

- the Wildfire Assistance Scheme – this scheme is used when bush fire brigades and local governments exhaust their local resourcing and funding capabilities when faced with major emergencies; and
- the Unallocated Crown Land Scheme – this scheme funds DFES's resource commitment to fire prevention activities on selected unallocated Crown land throughout Western Australia.

Figure 10 shows the State Government's ESL contribution on its properties by ESL category for the 2016-17. (ESL categories and property use classifications are explained in Section 2.4.)

¹⁴⁷ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 24; *Fire and Emergency Services Act 1998*, section 36L.

¹⁴⁸ *Fire and Emergency Services Acts 1998*, section 36L(1).

¹⁴⁹ *Fire and Emergency Services Regulations 1998*, regulation 9.

¹⁵⁰ *Fire and Emergency Services Act 1998*, section 36H; The Valuer-General is an independent statutory officer appointed under the *Valuation of Land Act 1978*.

¹⁵¹ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 24.

¹⁵² Department of Fire and Emergency Services, *Emergency Services Levy Question & Answer Guide 2017/18*, Perth, Government of Western Australia, 2017, p. 4; Communication with the Department of Fire and Emergency Services, 6 September 2017.

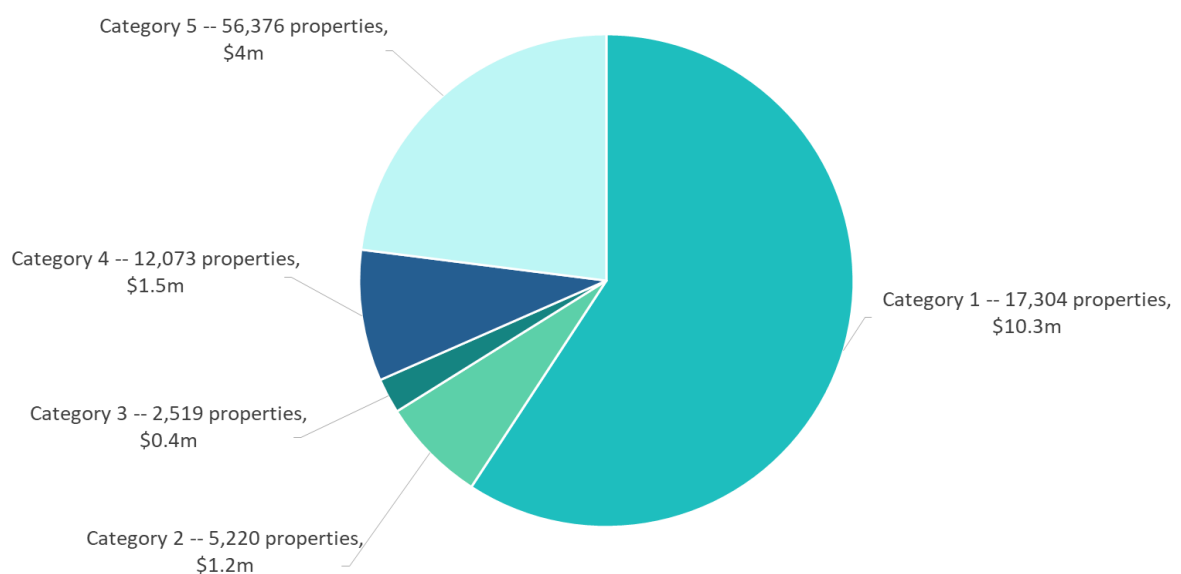
¹⁵³ These figures are based on the State Government's budget, where there is a provision for the annual estimate of the State's ESL liability for Crown owned property. Landgate advises DFES on adjustments to the initial estimate either during the mid-year budget review process or a supplementary funding process. Source: Communication with the Department of Fire and Emergency Services, 6 September 2017.

Figure 11 shows the State Government's total historical contribution through both ESL payments on its properties and from general government revenue.

The State Government also funds specific programs from general revenue, such as:

- the Wildfire Assistance Scheme – this scheme is used when bush fire brigades and local governments exhaust their local resourcing and funding capabilities when faced with major emergencies; and
- the Unallocated Crown Land Scheme – this scheme funds DFES's resource commitment to fire prevention activities on selected unallocated Crown land throughout Western Australia.

Figure 10 The State Government's ESL contribution on its properties by ESL category, 2016-17



Source: DFES data provided to the ERA.

Figure 11 ESL paid on state government properties, and general revenue contribution 2003-2004 to 2014-15 (\$ real 2015-16)



Source: DFES data provided to the ERA; Department of Treasury; ERA analysis

2.3.5 Local governments' total contribution to funding

Under the previous funding arrangement, local governments funded 12.5 per cent of the costs of the Career Fire and Rescue Service from local government rates. When the ESL was introduced, this contribution was discontinued. Local governments were to instead contribute to emergency services through ESL payments on their own property holdings.¹⁵⁴

Local governments were expected to receive net savings of approximately \$18 million each year. This comprised: \$9 million in savings from career fire districts; \$9 million in savings from bush fire brigades; \$2 million in savings from State Emergency Service units, and an offset of \$2 million from costs of collecting the ESL on local government property.¹⁵⁵

Additionally, local governments were to receive approximately \$2 million each year in fees from DFES for collecting the ESL through the local government rate billing system.¹⁵⁶ Local governments currently receive \$2.25 million to recover the cost of collecting the ESL.¹⁵⁷ However, according to WALGA's estimates, the cost of collecting the ESL is increasing, as shown in Table 2. WALGA did not provide the data supporting these estimates. DFES notes that local governments are able to submit a business case to DFES

¹⁵⁴ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 24.

¹⁵⁵ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 24.

¹⁵⁶ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 24.

¹⁵⁷ Department of Fire and Emergency Services, *Emergency Service Levy Manual of Operating Procedures 2017/18*, Perth, Government of Western Australia, 2017, p. 27.

for a fee increase if it can be established that the additional cost in collecting the ESL exceeds the fee.¹⁵⁸

Table 2 Local government ESL collection costs (\$ real 2015-16)

Year	2012-13	2013-14	2014-15	2015-16
ESL collection costs	\$3,406,329	\$3,563,828	\$3,894,670	\$3,965,372

Source: WALGA draft report submitted to the ERA.

The amount of fees paid to local governments for collecting the ESL is determined by the Minister and paid annually.¹⁵⁹ When setting fees, the Minister must consider the actual costs incurred by local governments, and consult with parties that represent the interests of local governments.

2.4 Calculating the Emergency Services Levy

The amount of ESL that must be paid on a property depends on the gross rental value¹⁶⁰ of the property, the location of the property (known as its ESL category), and the purpose for which the property is used. There are currently five ESL categories.

With the exception of ESL Category Five (which has a fixed charge), the ESL charge is calculated as a rate in the dollar of the gross rental value of the property. The rate in the dollar applied to a property varies according to the relevant ESL category. Accordingly, different rates are applied in different locations, meaning that properties that have greater access to emergency services are required to contribute more for these services. The ESL rates applied in 2017-18 to each category are set out in Table 3.

The Minister for Emergency Services has determined minimum and maximum amounts that may be applied to each property. These vary by ESL category and by land use. Minimum and maximum charges per property for 2017-18 are set out in Table 4.

DFES also calculates the average residential charge for properties in each ESL category when calculating each year's ESL rates. Table 5 shows the average residential charge for each ESL category for 2017-18.

There are few exemptions from the ESL. Under section 5 of the *Fire and Emergency Services Regulations 1998*, exempt land includes: land owned by a local government that is not improved land; land subject to a mining tenement (other than a mining lease); land that has been granted an exploration permit for petroleum; and land that is contaminated and does not receive services under the emergency services Acts.

¹⁵⁸ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 9.

¹⁵⁹ Department of Fire and Emergency Services, *Emergency Service Levy Manual of Operating Procedures 2017/18*, Perth, Government of Western Australia, 2017, p. 22.

¹⁶⁰ Gross rental value is 'the gross annual rental that the land might reasonably be expected to realise if let on a tenancy from year to year upon the condition that the landlord was liable for all rates, taxes and other charges thereon and the insurance and other outgoings necessary to maintain the value of the land'. (Source: Landgate, *Valuations for rating and taxation*, Perth, Government of Western Australia, <https://www0.landgate.wa.gov.au/for-individuals/land-values/rating-and-taxing>, (accessed on 11 January 2017).)

The *Fire and Emergency Services Act 1998* also defines the Crown as a land owner.¹⁶¹ A local government is required to pay ESL charges on Crown-owned improved property vested in that local government, except when the property is leased to a third party.¹⁶²

Table 3 ESL categories

ESL Category	Location	Type of emergency response	ESL rates for 2017-18
Category One	Perth metropolitan fire district	Network of Career Fire and Rescue Service stations and State Emergency Service units.	\$0.013259
Category Two	Regional cities	Career Fire and Rescue Service station, plus a Volunteer Fire and Rescue Service brigade and State Emergency Service units.	\$0.009944
Category Three	Urban metropolitan area	A Volunteer Fire and Rescue Service brigade and/or a bushfire brigade supported by the network of Career Fire and Rescue Service stations in the metropolitan region and State Emergency Service units.	\$0.006629
Category Four	Country towns	Volunteer Fire and Rescue Service bridges and State Emergency Service units. <i>or</i> A bushfire brigade with breathing apparatus, and State Emergency Service units.	\$0.004641
Category Five	Pastoral/rural areas	Communities supported by the state-wide State Emergency Service network and generally by a bush fire brigade.	\$75 fixed charge
Mining tenement			\$75 fixed charge

Source: *State Law Publisher*.¹⁶³

¹⁶¹ *Fire and Emergency Services Act 1998*, section 3A.

¹⁶² Department of Fire and Emergency Services, *Emergency Services Levy Manual of Operating Procedures 2016-17*, Perth, Government of Western Australia, 2015, p. 6.

¹⁶³ State Law Publisher, 'Fire and Emergency Services (Determination of Emergency Services Levy) Notice 2017', *Government Gazette No. 116 of 2017: Part 2*, Perth, Government of Western Australia, 2017.

Table 4 Minimum and maximum charges for 2017-18

ESL Category	Vacant, residential and farming		Commercial, industrial and miscellaneous	
	Minimum	Maximum	Minimum	Maximum
Category One	\$75	\$395	\$75	\$225,000
Category Two	\$75	\$296	\$75	\$168,000
Category Three	\$75	\$197	\$75	\$112,000
Category Four	\$75	\$138	\$75	\$78,000
Category Five	\$75 per rate notice			
Mining tenement	\$75 per rate notice			

Source: State Law Publisher.¹⁶⁴

Table 5 Average residential charges for each ESL category in 2017-18

ESL Category	Average residential charge
Category One	\$278
Category Two	\$166
Category Three	\$133
Category Four	\$94
Category Five	\$75 fixed charge

Source: DFES.

2.4.1 Technical calculation process

DFES uses an in-house program to calculate ESL rates each year.¹⁶⁵ The program runs on the basis that there are fixed ratios between ESL rates in each category. (That is, Category Two rates are always a certain percentage of Category One rates and so forth.)¹⁶⁶

DFES advises that there are three main considerations during the ESL rates modelling process. They are:

- the annual percentage change in the average residential charge for each ESL category;
- the minimum and maximum ESL thresholds; and

¹⁶⁴ State Law Publisher, 'Fire and Emergency Services (Determination of Emergency Services Levy) Notice 2017', *Government Gazette No. 116 of 2017: Part 2*, Perth, Government of Western Australia, 2017.

¹⁶⁵ Communications with Department of Fire and Emergency Services, 12 April 2017 and 9 June 2017.

¹⁶⁶ These ratios were set by DFES (then Fire Emergency Services Authority) when the ESL was introduced. They are 1.0 (Category One), 0.75 (Category Two), 0.5 (Category Three), 0.35 (Category Four), and a fixed charge for Category Five deemed 'fair' by DFES. The ERA understands that they are retained for consistency reasons, and that there is no particular mathematical basis for the way in which they were originally chosen.

- the ESL rates where applicable (for example if property revaluation has not occurred).¹⁶⁷

A simplified version of the annual ESL rate calculation is as follows:

1. Landgate sends valuation rolls to DFES ESL calculation staff, and these rolls are loaded into the program. The rolls are files containing the raw data for calculating the ESL – that is, the number of properties, the ESL category of each property, and the gross rental value of each property.
2. DFES financial staff send the total revenue requirement for the coming year to the DFES ESL calculation staff. (The total revenue requirement is simply the amount of money DFES needs to raise from the ESL.)
3. DFES ESL calculation staff enter the total revenue requirement into the model, as well as a preliminary ‘minimum’ and ‘maximum’ charge for each category.
4. ESL calculation staff run the program, which provides ESL rates for each category that returns a total income equal to the required revenue. In this phase, the program runs many iterations until it finds a combination where a given set of ESL rates deliver the required revenue while still maintaining the fixed ratios between ESL categories.
5. DFES ESL calculation staff monitor how many property owners hit the ‘minimum’ and ‘maximum’ limits under the ESL rates determined by the program. If too many property owners are hitting either limit, the ESL calculation staff may decide to change the limits and re-run the program until a satisfactory balance is reached.

The setting of minimum and maximum limits is a subjective process. When the ESL was introduced, the targets were no more than 20 per cent of ESL payers in each category on the minimum charge, and no more than 5 to 10 per cent on the maximum charge.¹⁶⁸ However, ESL calculation staff have advised that this is not a strict rule. ESL calculation staff aim for a fairly smooth result where most property owners pay neither the minimum nor the maximum, but an amount in-between.¹⁶⁹

¹⁶⁷ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 14.

¹⁶⁸ Communications with Department of Fire and Emergency Services, 8 June 2017.

¹⁶⁹ Communications with Department of Fire and Emergency Services, 8 June 2017.

3 Department of Fire and Emergency Services revenues and costs

3.1 Introduction

DFES receives revenue from multiple sources, including the ESL and contributions from the state and Australian governments. DFES incurs costs to provide emergency management and emergency services, including day-to-day operating costs, capital costs, and grants and subsidies paid to other parties. This chapter provides an overview of the revenues and expenditures of DFES, with a particular focus on the how the ESL is raised and applied.

This chapter addresses, to the extent possible within data constraints, the following components of the terms of reference:

- the current ESL expenditure applied to managing the emergency services (prevention of, preparedness for, response to and recovery from natural hazard emergencies); and
- the proportion of ESL funding directed towards each aspect of emergency management: prevention, preparedness, response and recovery.

The remainder of this chapter is structured as follows:

- an examination of the sources of DFES revenues, including changes in ESL rates and other revenue trends;
- an examination of the total costs of DFES, including information on cost trends, allocation of costs to operational functions, and forecast costs; and
- a discussion of ESL revenues and expenditures by regions in Western Australia.

On 1 November 2012, the Fire and Emergency Services Authority was restructured to become DFES. This report generally refers to 'DFES' when discussing the agency's costs and revenues over time, but refers to 'the Fire and Emergency Service Authority' when discussing specific costs, reports and events predating the restructure.

3.2 Revenues

3.2.1 Sources of revenue

Figure 12 shows the sources of total DFES's revenues in 2015-16. The ESL is the main source of revenue for DFES. In 2015-16, ESL revenue was \$323.3 million, or about 82 per cent of total income for DFES.¹⁷⁰

DFES also receives an appropriation from the State Government, which accounted for \$37.1 million or 9.4 per cent of DFES revenues in 2015-16. DFES applies the appropriation

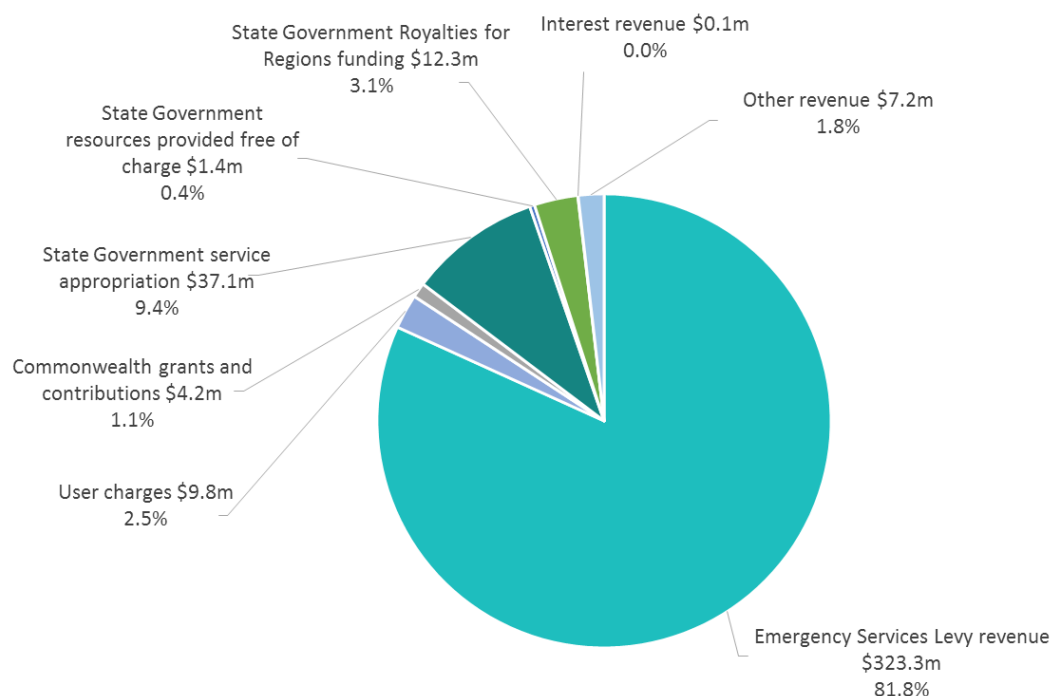
¹⁷⁰ 'Total income' includes all income from the State Government, including service appropriations, services received free of charge, and fund from Royalties for Regions. Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 72.

from the State Government to activities it may not legally fund from ESL revenues.¹⁷¹ More information on what the ESL may be used to fund is provided in Chapter 2, and Appendix D lists specific cost centres not presently funded by the ESL.

Grants from Royalties for Regions accounted for \$12.3 million or 3.1 per cent of DFES's revenues in 2015-16. The Royalties for Regions grants were used for the south west emergency rescue helicopter, crew fire protection¹⁷² and the volunteer fuel card scheme.¹⁷³

DFES also receives funding from the Australian Government, and user fees and charges (for example, fees for responding to false fire alarms).

Figure 12 DFES's sources of revenue (2015-16)



Sources: *Department of Fire and Emergency Services Annual Report 2015-16*.

¹⁷¹ The ERA understands that ESL revenue may not be used for unexploded ordinance, surf lifesaving, and the salaries of the Fire and Emergency Services Commissioner and the two deputy Fire and Emergency Services Commissioners.

¹⁷² DFES describe the crew fire protection program as a state-wide initiative focussed on ensuring the safety and welfare of emergency services personnel in the context of bushfires. The initiative comprises the retrofitting of existing firefighting appliances with burnover blankets, radiant heat shields, deluge, lagging and fire resistant panel systems and in-cabin air systems. (Source: Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 37.)

¹⁷³ Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 74.

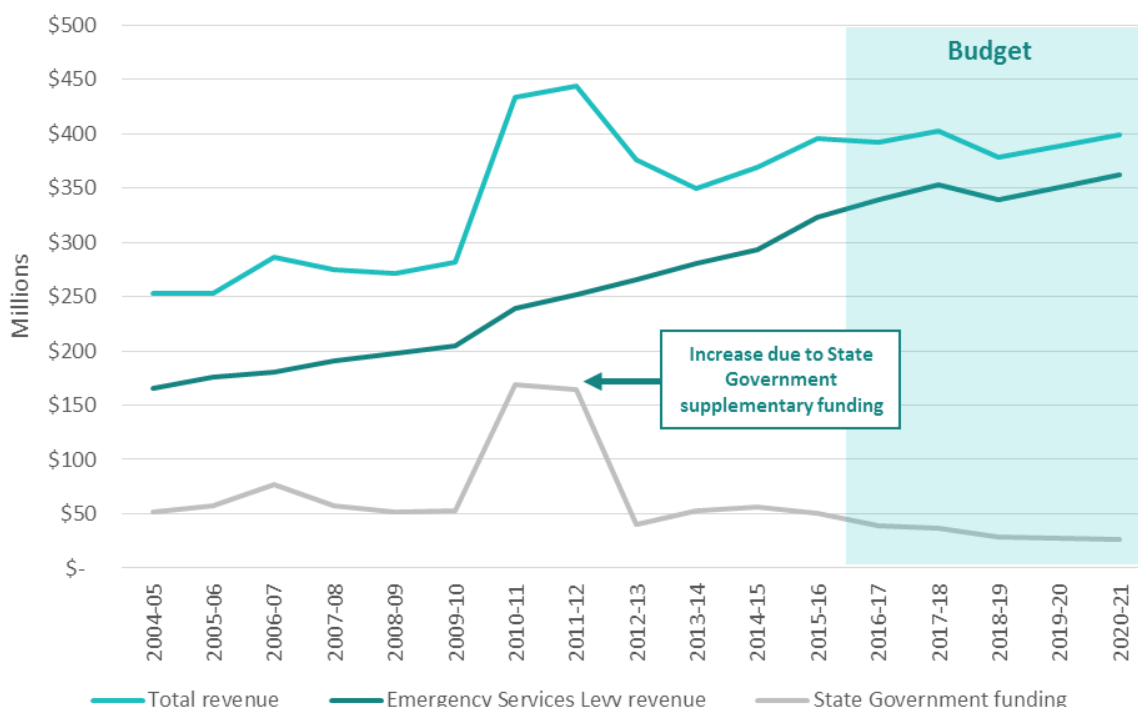
3.2.2 Historical components of Department of Fire and Emergency Services revenues

Since 2004-05, DFES's total revenue (that is, ESL revenue plus all other sources of revenue shown in Figure 12) has increased by 4.2 per cent a year in real terms.¹⁷⁴ Figure 13 shows DFES's historical and budgeted revenue by source.

ESL revenue has comprised most of DFES's revenue since the ESL was introduced. The ESL increased from 66 per cent of total revenue in 2004-05 to 82 per cent in 2015-16.¹⁷⁵

The ESL as a share of DFES's total revenue is projected to continue to increase. Data provided by DFES indicates that the ESL revenue for 2016-17 is budgeted at \$338.9 million (86 per cent of total income), rising to \$362.5 million (91 per cent of total income) by 2020-21.

Figure 13 Estimated historical and budgeted DFES revenue by source (2004-05 to 2020-2021, \$ real 2015-16)



Sources: DFES annual reports, and trial balance data and cost centre data provided to the ERA.

Since 2004-05, all sources of funding from the State Government as a share of total DFES revenues have decreased from 21 per cent of the total revenues of DFES to 13 per cent in 2015-16.

The appropriation from the State Government peaked in 2010-11 and 2011-12. Extreme weather and natural hazard events occurred in those years, which caused the Fire and

¹⁷⁴ Rates are calculated using the Compound Annual Growth Rate (CAGR) method throughout this chapter. All nominal to real conversions are based on ABS CPI data (ABS Cat No 6401.0 Dec 2016).

¹⁷⁵ 'Total income' includes all income from the State Government, including service appropriations, services received free of charge, and fund from Royalties for Regions.

Emergency Service Authority to incur significant unbudgeted expenses.¹⁷⁶ The Fire and Emergency Service Authority incurred additional costs arising from its role in administering the Western Australia Natural Disaster Relief and Recovery Arrangements, as well as unbudgeted bushfire suppression operations, and State Emergency Service response and recovery operations.¹⁷⁷ In accordance with the Fire and Emergency Service Authority's agreement with the Department of Treasury, the Fire and Emergency Service Authority used its cash resources to meet unbudgeted costs over the periods, recouping these at the end of each year through the Supplementary Funding Process.¹⁷⁸ These unbudgeted expenses were \$35.1 million in 2010-11,¹⁷⁹ and \$16 million in 2011-12¹⁸⁰ according to the Fire and Emergency Service Authority's annual reports.

The changes in the relative proportions of DFES revenues reflects both:

- strong growth in revenue collected from the ESL revenue, with ESL revenue collections increasing by 6.2 per cent a year in real terms since 2004-05; and
- a downward trend in state government appropriations to DFES, reflecting a policy decision by government that all DFES expenditures should be funded by the ESL to the extent supported by legislation.¹⁸¹

The ESL has increased more quickly than DFES's expenditure because state government contributions have declined.

¹⁷⁶ The Fire and Emergency Service Authority's annual reports for these years note a range of natural hazard events, including four cyclones, a tornado, extensive flooding and thunderstorms, and the Perth Hills and Augusta-Margaret River bushfires. (Source: Fire and Emergency Services Authority, *Annual Report 2010/11*, Perth, Government of Western Australia, 2011, p. 138; Fire and Emergency Services Authority, *Annual Report 2011/12*, Perth, Government of Western Australia, 2012, p. 120.)

¹⁷⁷ Fire and Emergency Services Authority, *Annual Report 2010/11*, Perth, Government of Western Australia, 2011, p. 28.

The Western Australia Natural Disaster Relief and Recovery Arrangements, or WANDRRA, is invoked to 'provide financial assistance to communities whose social, financial and economic wellbeing have been significantly affected by an eligible natural disaster event'. (Source: Fire and Emergency Services Authority, *Annual Report 2011/12*, Perth, Government of Western Australia, 2012, p. 120.)

¹⁷⁸ Fire and Emergency Services Authority, *Annual Report 2010/11*, Perth, Government of Western Australia, 2011, p. 28.

¹⁷⁹ Fire and Emergency Services Authority, *Annual Report 2010/11*, Perth, Government of Western Australia, 2011, p. 28.

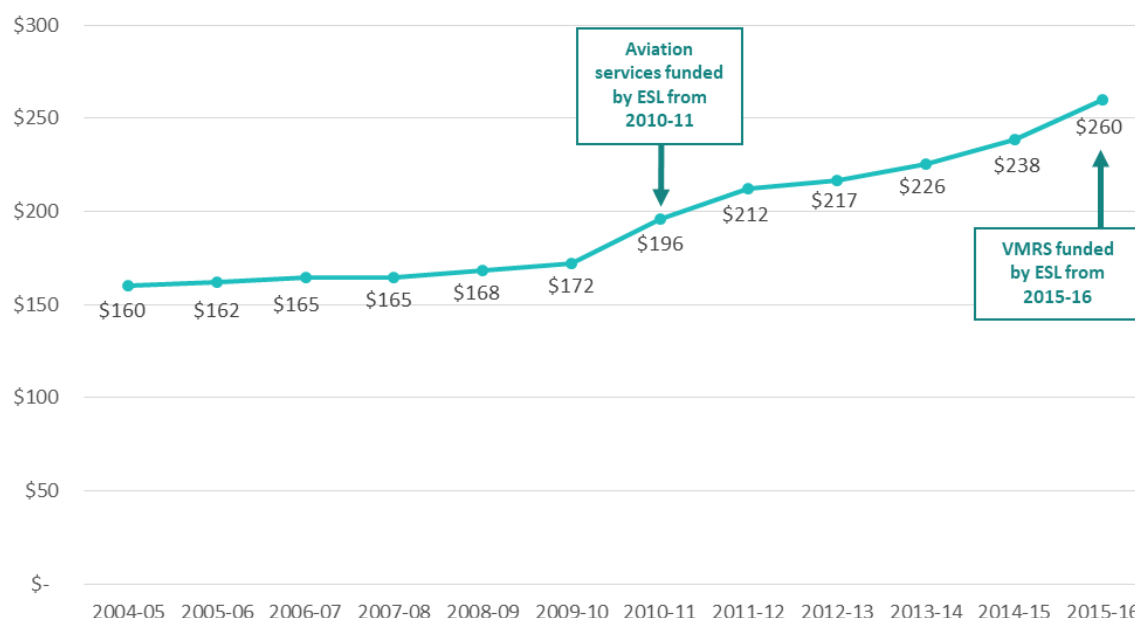
¹⁸⁰ Fire and Emergency Services Authority, *Annual Report 2011/12*, Perth, Government of Western Australia, 2012, p. 26.

¹⁸¹ Quirk, M., Motion, *Hansard*, Assembly, 9 September 2015, p. 6029b-6041a.

3.2.3 Emergency Services Levy average residential charge

The average residential charge for Category One (metropolitan) properties has increased from \$122 in 2004-05 (equal to \$160 in 2015-16 dollars) to \$260 in 2015-16. This increase over time is shown in Figure 14.

Figure 14 Average residential charge (Category One) 2004-05 to 2015-16 (\$ real 2015-16)



Sources: ERA analysis and DFES data provided to the ERA.

Additional services have been funded by the ESL since it was introduced. These services were previously funded from general government revenue. In 2010-11, the ESL began funding the aviation service contracted by DFES during emergencies, and in 2015-16, the ESL began funding the Volunteer Marine Rescue Services.¹⁸²

Table 6 and Table 7 show the average residential charge for each ESL category in real and nominal terms over the same period.

Table 6 Average residential charge, 2004-05 to 2015-16 (\$ real 2015-16)

	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Category One	\$160	\$162	\$165	\$165	\$168	\$172	\$196	\$212	\$217	\$226	\$238	\$260
Category Two	\$112	\$107	\$116	\$121	\$104	\$114	\$148	\$127	\$133	\$144	\$135	\$144
Category Three	\$74	\$76	\$84	\$83	\$82	\$84	\$94	\$101	\$101	\$104	\$113	\$120
Category Four	\$54	\$56	\$57	\$59	\$55	\$61	\$73	\$72	\$76	\$79	\$81	\$85
Category Five	\$39	\$44	\$43	\$45	\$47	\$49	\$55	\$59	\$60	\$62	\$65	\$68

Source: DFES; ERA analysis.

¹⁸² Department of Fire and Emergency Services, *Emergency Services Questions & Answer Guide 2017/18*, Perth, Government of Western Australia, 2017, p. 1.

Table 7 Average residential charge, 2004-05 to 2015-16 (\$ nominal)

	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Category One	\$122	\$128	\$133	\$139	\$144	\$152	\$179	\$196	\$205	\$220	\$236	\$260
Category Two	\$85	\$85	\$94	\$102	\$89	\$101	\$135	\$117	\$126	\$140	\$134	\$144
Category Three	\$56	\$60	\$68	\$70	\$70	\$74	\$86	\$93	\$96	\$101	\$112	\$120
Category Four	\$41	\$44	\$46	\$50	\$47	\$54	\$67	\$67	\$72	\$77	\$80	\$85
Category Five	\$30	\$35	\$35	\$38	\$40	\$43	\$50	\$55	\$57	\$60	\$64	\$68

Source: DFES.

3.2.4 Volunteer services received free of charge

DFES receives a substantial amount of services free of charge from its volunteers. In 2015, the Fire and Emergency Services Commissioner stated that:

“Emergency services volunteers are critical to protecting Western Australian (WA) communities from disaster; providing over 95% of the emergency services response personnel. WA emergency services volunteers respond to over 7,500 incidents every year and support local communities to prevent, prepare for, respond to and recover from emergencies and disasters including fire, flood, storm, cyclone, road crash, land and sea searches and other rescues.”¹⁸³

While it is clear that volunteers provide a high-value service to DFES and the community, it is difficult to put a dollar value on that service. DFES has not undertaken an analysis of the value of volunteers.¹⁸⁴ The ERA acknowledges the difficulties of accurately assessing the value of volunteer time, and that DFES also invests money in training and equipping volunteers, as well as receiving services from them.

This chapter uses a simplified calculation to estimate the value of volunteer time contributed in 2015-16, based on volunteer data provided by DFES. (Volunteers also invest a significant amount of personal time in training, which is not captured in this calculation.)

Table 8 shows the number of volunteer hours contributed by members of bush fire brigades, Volunteer Fire and Emergency Service, State Emergency Service, and Volunteer Fire and Rescue Service in 2015-16.¹⁸⁵ Table 8 also shows an estimate of the value of those hours.

In calculating the value of hours contributed by volunteers, the ERA considered multiple scenarios. Values have been calculated by multiplying an hourly wage by the number of

¹⁸³ Department of Fire and Emergency Services, *Emergency Services Volunteer Workforce Sustainability Strategy: 2015-2024*, Perth, Government of Western Australia, 2015, p. 2.

¹⁸⁴ Communication with Department of Fire and Emergency Services, 26 May 2017.

¹⁸⁵ Data provided by Department of Fire and Emergency Services, 2 March 2017. (*Item 14 – Volunteer Service Figures 28 February 2017.docx*)

volunteer hours.¹⁸⁶ The report uses the minimum adult hourly wage in Western Australia,¹⁸⁷ full-time adult average weekly earnings in Australia¹⁸⁸, and the hourly wage of a regional firefighter in DFES¹⁸⁹ to calculate the values in the respective columns.

Table 8 Estimated value of volunteer hours (2015-16)

Volunteer Unit	Volunteer Hours	Value (based on minimum wage)	Value (based on average Australian weekly earnings)	Value (based on regional firefighter hourly rate)
Bush fire brigades	113,228	\$2,025,649	\$4,291,341	\$5,268,499
Volunteer Fire and Emergency Services	9,791	\$175,161	\$371,079	\$455,575
State Emergency Service	29,318	\$524,499	\$1,111,152	\$1,364,167
Volunteer Fire and Rescue Service	53,477	\$956,704	\$2,026,778	\$2,488,285
Total	205,814	\$3,682,012	\$7,800,351	\$9,576,525

Source: DFES, Department of Commerce, Australian Bureau of Statistics, Western Australian Industrial Relations Commission, ERA analysis.

Volunteers undertake many tasks, including fighting fires, conducting searches, providing firefighters with transport, managing radio communications, and catering. The collective value of their time is unlikely to be as low as that based on the minimum wage, or as high as that based on the hourly rate of a regional firefighter.

3.3 Costs

3.3.1 Operating costs

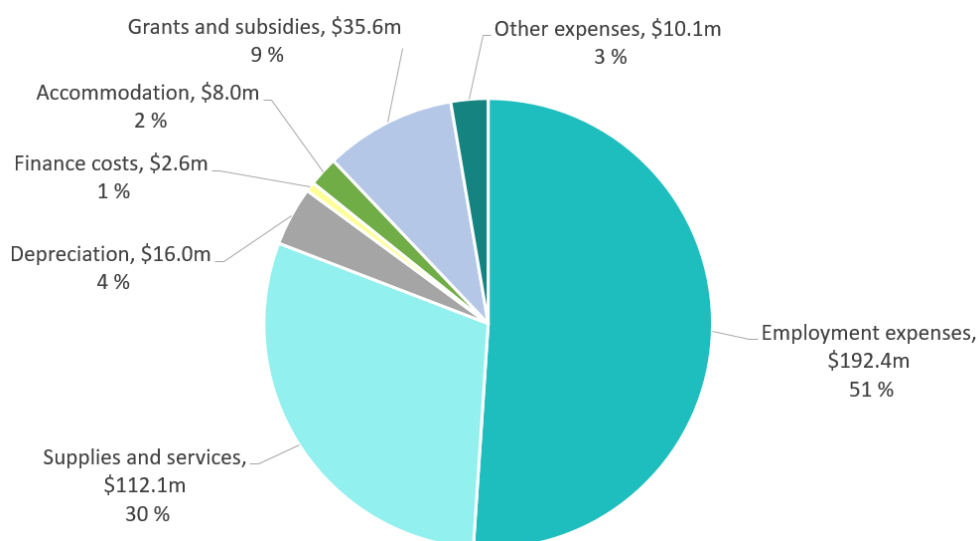
The major expense categories for DFES are employment expenses (51 per cent of total expenditures), supplies and services expenses (30 per cent), and grants and subsidies expenses (9 per cent) (Figure 15). Each of these expense categories is discussed in more detail below.

¹⁸⁶ The ERA has assumed a 40 hour working week for the estimate based on average Australian weekly earnings. All wage assumptions are based on figures from the 2015-16 financial year, except for the hourly rate of a regional firefighter which was only available for 2016-17.

¹⁸⁷ Department of Commerce, *Western Australian minimum wage rates 2004-2015*, Perth, Government of Western Australia, https://www.commerce.wa.gov.au/sites/default/files/atoms/files/previous_mce_award_free_pay_rates_2004-2015_1116.pdf, (accessed on 7 June 2017).

¹⁸⁸ Australian Bureau of Statistics, *6302.0 – Average Weekly Earnings, Australia, May 2016*, Canberra, Government of Australia, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/94F2364241C05F8CCA2580CF000D4673?opendocument>, (accessed on 29 June 2017).

¹⁸⁹ Provided by the Department of Fire and Emergency Services on 21 June 2017. DFES notes that most “[t]he majority of Career Fire and Rescue Service firefighters (especially in country areas) are at Senior Firefighter rank”.

Figure 15 DFES expenditure by category (2015-16)

Sources: ERA analysis; DFES Annual Report 2015-16.

Table 9 provides details of the types of costs allocated to each cost category.

Table 9 Types of costs included in DFES cost categories

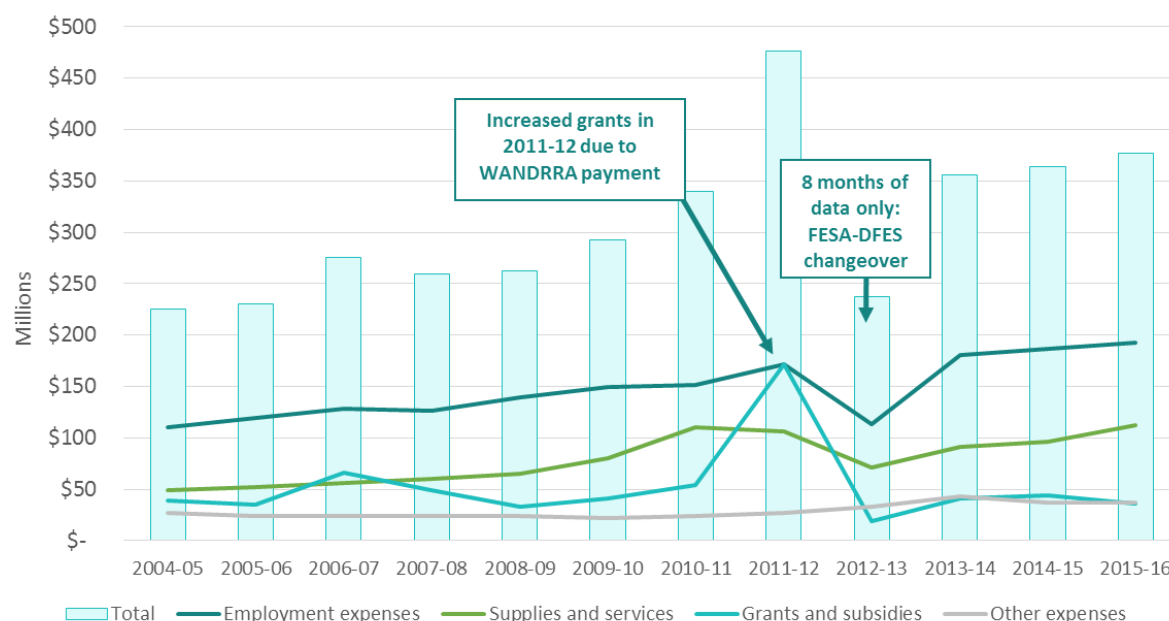
Category	Details
Employment expenses	Wages and salaries (including long service leave and annual leave), overtime payments, the cost of protective clothing provided to DFES employees, and superannuation costs.
Supplies and services	Administration, advertising and promotion, communications, consulting, contractors, electricity and water, insurance premiums and claims, leases, maintenance, and travel costs.
Grants and subsidies	The cost of grants and subsidies provided to local governments, private fire brigades, various volunteer entities, and the Volunteer Marine Rescue Services Group.
Depreciation	The depreciation of DFES buildings, vehicles, plant and equipment, and leasehold improvement, as well as the amortisation of intangible assets (e.g. DFES software).
Accommodation	Lease rentals, and related repair and maintenance costs.
Finance costs	Interest expenses and loan guarantee fees.
Other expenses	Doubtful debts expenses, asset write-offs, employment on-costs, audit fees, and any other expenses incurred as a result of ordinary activities.

Sources: DFES Annual Report 2015-16.

Figure 16 shows DFES's total expenditure over the period 2004-05 to 2015-16, along with trends in employment, supplies and services, grants and subsidies, and other expenses over the same period.

DFES's expenditures have increased by 4.8 per cent a year in real terms since 2004-05.¹⁹⁰ DFES's expenditures have increased by a similar amount to general government expenditure over the same period. Between 2004-05 and 2015-16, general government sector expenditure in Western Australia increased by 4.7 per cent a year in real terms.

Figure 16 DFES expenditure by category (2004-05 to 2015-16, \$ real 2015-16)

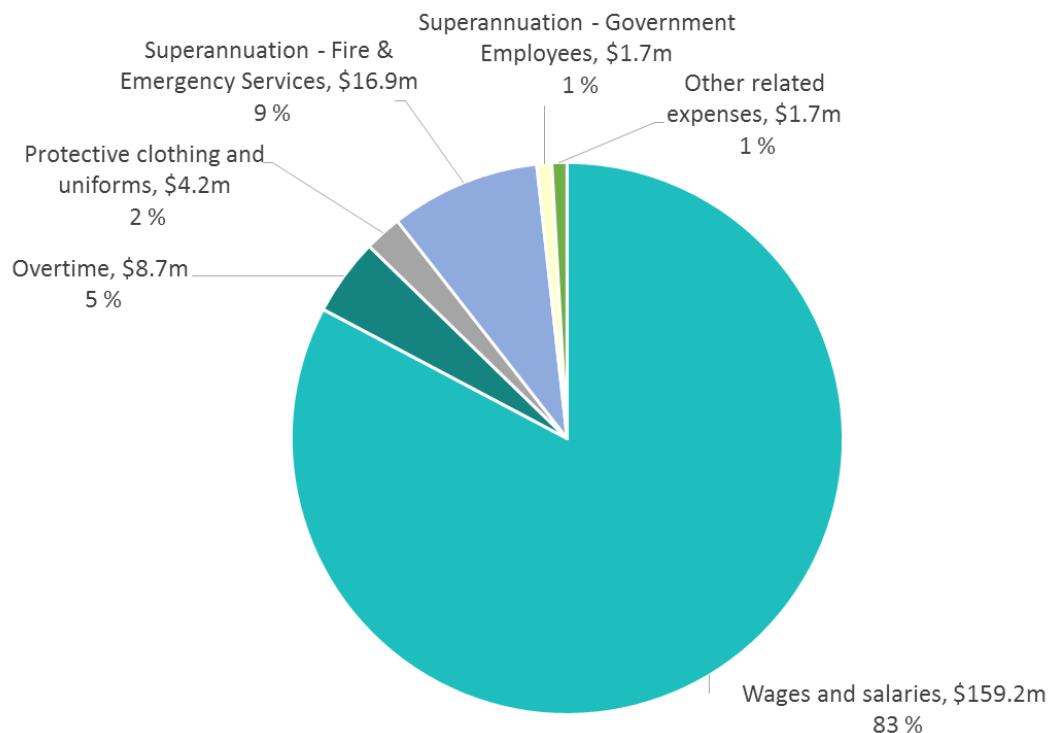


Sources: ERA analysis; DFES annual reports 2004-05 to 2015-16.

Employment costs

DFES's employment expenses cover the costs of career firefighters, employees providing planning and strategy services, and employees providing corporate services. Employment expenses accounted for 51 per cent, or \$192.4 million, of DFES's expenditures in 2015-16. Wages and salaries accounted for most of this cost (83 per cent), as shown in Figure 17.

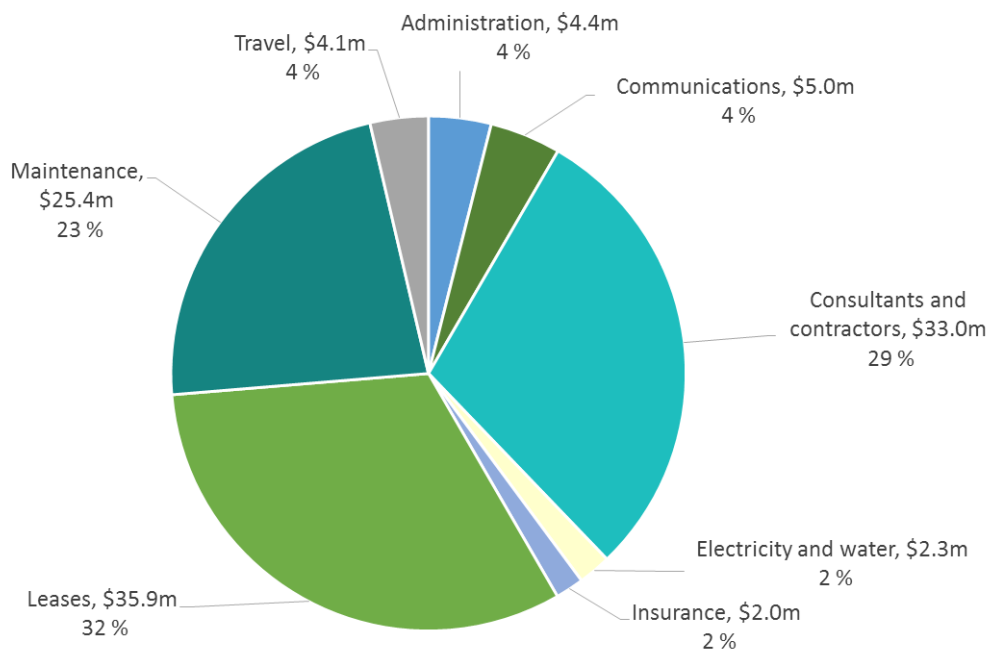
¹⁹⁰ Data from Department of Fire and Emergency Services' annual reports: 2004-05 to 2015-16.

Figure 17 DFES's employment expenditure by category (2015-16)

Sources: DFES Annual Report 2015-16 and trial balance overtime data provided by DFES.

Supplies and services costs

Supplies and services expenses accounted for 30 per cent of DFES's expenditures in 2015-16. The major components of supplies and services costs are maintenance, leases, and consultants and contractors, as shown in Figure 18.

Figure 18 DFES's supplies and services expenditure by category (2015-16)

Source: DFES Annual Report 2015-16.

Grants and subsidies

Grants and subsidies accounted for 9 per cent of DFES's expenditures in 2015-16. These grants and subsidies cover the costs of local government bush fire brigades and various volunteer entities including State Emergency Service units.¹⁹¹

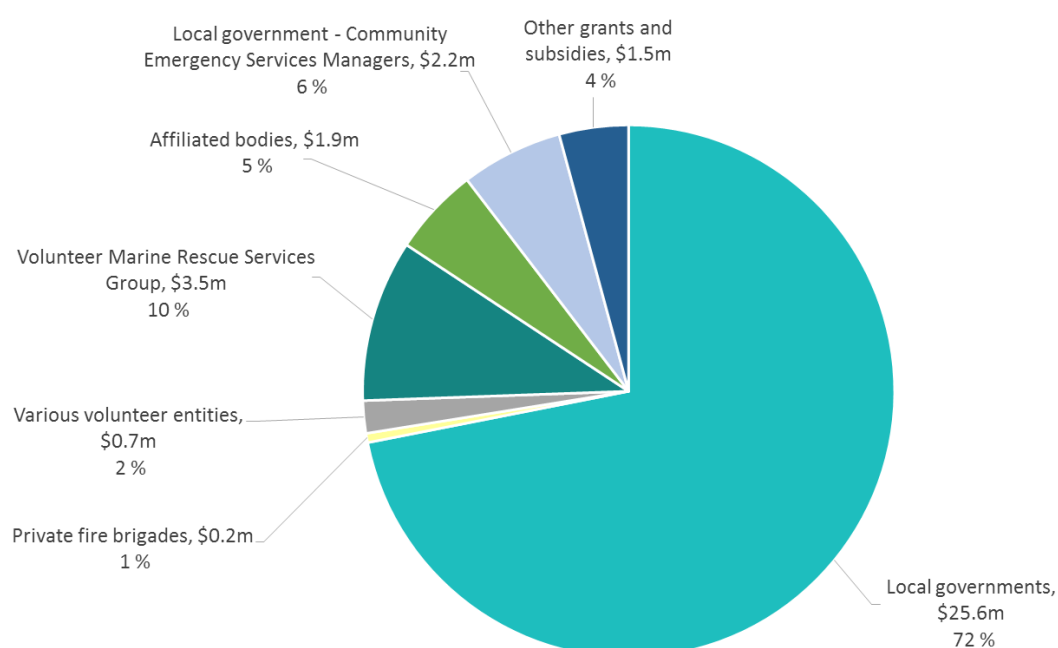
This category does not include the costs of Career Fire and Rescue Service units, Volunteer Fire and Rescue Service units, and Volunteer Fire and Emergency Services units. These units are managed by DFES, and are funded directly by DFES.¹⁹² More information on funding allocation across specific emergency services is provided in Section 3.3.3 below.

Most grant and subsidy funding, for both capital and operating costs, is paid to local governments. Payments to local governments accounted for 72 per cent of this expenditure in 2015-16.

Under section 36A of the *Fire and Emergency Services Act 1998*, local governments are required to submit an annual estimate of their expenditure "in relation to fire and emergency services". The Fire and Emergency Services Commissioner approves the estimate, and pays local governments an amount equal to the approved expenditure.

Figure 19 provides a breakdown of grants and subsidies paid by DFES in 2015-16.

Figure 19 DFES's grants and subsidies expenditure, including both operating and capital grants (2015-16)



Source: DFES Annual Report 2015-16.

Table 10 provides a more detailed breakdown of all grants and subsidies expenditure since 2004-05.

¹⁹¹ Department of Fire and Emergency Services, *Emergency Services Levy Question & Answer Guide 2017/18*, Perth, Government of Western Australia, 2017, p. 2.

¹⁹² Department of Fire and Emergency Services, *Emergency Services Levy Question & Answer Guide 2017/18*, Perth, Government of Western Australia, 2017, p. 2.

Table 10 Grants and subsidies by type, 2004-05 to 2015-16 (\$m real, 2015-16)

	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Recurrent grants												
Local governments	22.5	19.7	19.8	18.9	8.4	8.3	8.6	9.3	9.0	11.2	9.1	10.4
Private fire brigades	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2
NDRP/ WANDRRA/ AWARE programs ¹⁹³	12.7	12.6	43.2	26.4	8.0	15.9	23.7	133.8	133.1	-	-	-
Various volunteer entities	1.3	1.7	0.7	0.7	0.7	0.7	0.9	0.7	0.6	0.8	0.7	0.7
Volunteer Marine Rescue Services Group	2.2	1.4	0.7	0.7	1.1	1.1	0.8	1.1	1.1	1.4	1.3	1.3
Affiliated bodies	0.4	0.5	0.4	1.1	1.1	1.1	1.0	1.1	1.7	1.8	2.0	1.9
Local government - Community Emergency Service Managers	-	-	-	-	0.2	0.4	0.6	1.2	1.5	2.0	2.1	2.2
Other grants and subsidies	0.3	-	3.1	3.4	0.2	0.2	0.3	0.3	0.2	1.5	0.6	1.5
Capital grants												
Local governments	12.8	11.1	11.4	10.9	12.6	11.7	14.9	22.4	10.7	21.4	26.7	15.2
Volunteer Marine Rescue Services Group	1.2	0.8	1.1	1.1	0.9	1.5	2.5	1.2	0.5	0.8	1.0	2.2
Total												
Total grants and subsidies expense	53.5	48.1	80.5	63.4	33.4	41.1	53.7	171.1	158.6	40.9	43.7	35.6

Source: DFES annual reports 2005-06 to 2015-16; data provided by DFES, ERA analysis.

Note: Since the publication of the draft report, DFES has provided full-year data for 2012-13, and additional data on some recurrent and capital grants between 2004-05 and 2007-08. As a result, the ERA has updated some figures in the above table.

DFES notes that some of the programs identified in Table 10 have different lifespans or are intermittent in nature, and not all are funded by the ESL.¹⁹⁴ For example, the Natural Disaster Resilience Program, Western Australia Natural Disaster Relief and Recovery Arrangement, and All West Australians Reducing Emergency programs can make up anywhere between 24 to 84 per cent of the total grants and subsidies expense (Table 11).

¹⁹³ The Natural Disaster Resilience Program (NDRP), Western Australia Natural Disaster Relief and Recovery Arrangement (WANDRRA) fund, and All West Australian Reducing Emergency (AWARE) program.

¹⁹⁴ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 15.

Table 11 NDRP, WANDRRA, and AWARE programs as a percentage of total grants and subsidies

	2004 -05	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16
NDRP/WANDRRA/A WARE programs	12.7	12.6	43.2	26.4	8.0	15.9	23.7	133.8	133.1	0.0	0.0	0.0
Total grants and subsidies expense	53.5	48.1	80.5	63.4	33.4	41.1	53.7	171.1	158.6	40.9	43.7	35.6
%	23.7	26.2	53.6	41.7	24.0	38.8	44.2	78.2	83.9	0.0	0.0	0.0

Source: DFES annual reports 2005-06 to 2015-16; data provided by DFES, ERA analysis.

Note: Since the publication of the draft report, DFES has provided full-year data for 2012-13, and additional data on some recurrent and capital grants between 2004-05 and 2007-08. As a result, the ERA has updated some figures in the above table.

Table 12 shows the total grants and subsidies paid to local governments over the period since 2004-05, excluding these programs.

Table 12 Grants and subsidies by type, excluding NDRP, WANDRRA, and AWARE programs, 2004-05 to 2015-16 (\$m real, 2015-16)

	2004 -05	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16
Total grants and subsidies expense excluding NDRP/WANDRRA/ AWARE programs	40.8	35.5	37.3	36.9	25.4	25.1	29.9	37.4	25.5	40.9	43.7	35.6

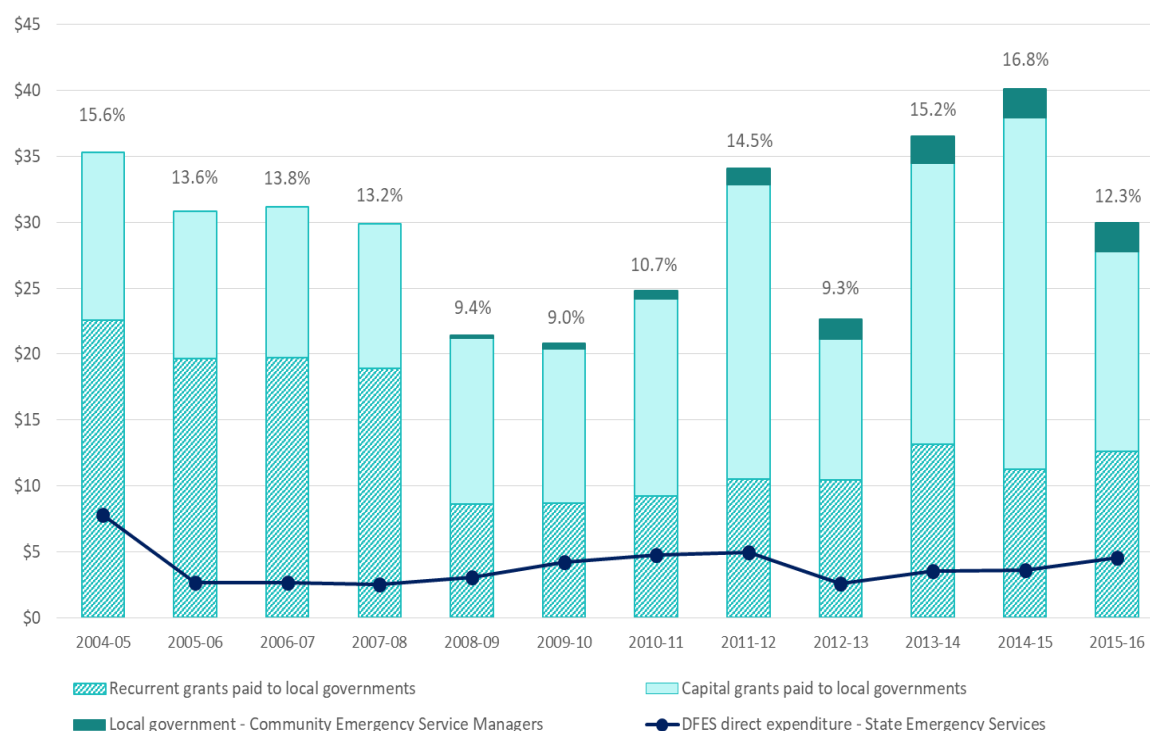
Source: DFES annual reports 2005-06 to 2015-16; data provided by DFES, ERA analysis.

Note: Since the publication of the draft report, DFES has provided full-year data for 2012-13, and additional data on some recurrent and capital grants between 2004-05 and 2007-08. As a result, the ERA has updated some figures in the above table.

Since 2004-05, grants and subsidies paid to local governments and the volunteer organisations they manage (the bush fire brigades and the State Emergency Service) have varied from year to year.

In recent years, a lower proportion of DFES's total expenditure has been on grants paid to local governments and the volunteer organisations they manage, relative to when the ESL was first introduced (Figure 20). This could in part be explained by the fact that DFES also makes contributions directly to the State Emergency Service. That is, the grants and subsidies provided to local governments for the State Emergency Service might be lower in some years, or reducing over time, because DFES provides more funds to the State Emergency Service directly. However, as shown in Figure 20, this does not appear to be the case. Years where lower grants and subsidies are paid to local governments do not coincide with years of higher DFES funding provided directly to the State Emergency Service, and there is no clear increasing or decreasing trend in the funding provided directly to the State Emergency Service by DFES.

Figure 20 Grants and subsidies paid to local governments, 2004-05 to 2015-16 (\$m real, 2015-16)



Source: DFES annual reports 2004-05 to 2015-16; data provided by DFES, ERA analysis.

Note: The percentage figure represents the total amount of grants and subsidies paid to local governments as a percentage of DFES's total expenditure.

While the amount of annual recurrent grants paid to local governments and the volunteer organisations they manage has in recent times been lower than when the ESL was introduced, the amount of capital grants has been higher. There has also been an increase in the grants and subsidies paid to local governments to support Community Emergency Service Managers.

3.3.2 Capital expenditure

DFES has data on its capital expenditure between 2004-05 and 2015-16. This is shown in Most of DFES's capital expenditure is on purchasing motor vehicles and buildings.

Table 13 below.

Most of DFES's capital expenditure is on purchasing motor vehicles and buildings.

Table 13 DFES's Capital Expenditure by Type, 2004-05 to 2015-16 (\$m real, 2015-16)

	2004 -05	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16
Land	4.6	6.0	3.5	2.0	1.0	0.9	0.1	0.2	1.0	1.7	1.7	12.6
Buildings	21.3	6.5	6.7	17.1	11.5	14.1	21.4	22.7	5.0	6.3	8.5	16.2
Plant & Equipment	4.5	2.6	4.3	7.3	4.8	6.3	-11.6	3.0	3.0	-3.3	1.6	2.0
Vehicles	16.8	15.0	10.8	11.3	10.5	7.0	13.1	16.8	12.8	12.2	7.4	8.3
Software	0.0	0.1	0.1	0.2	0.0	0.7	0.1	0.4	0.2	0.0	1.1	0.0
Leasehold Improvements	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.1	0.3	0.0	0.0	0.2
Total	47.2	30.2	25.4	37.9	27.8	29.0	24.2	43.2	22.3	16.9	20.3	39.3

Source: DFES; ERA analysis.

3.3.3 Attributing Department of Fire and Emergency Services costs to activities

The terms of reference for this review require the ERA to consider the current ESL expenditure, and proportions of expenditure, applied to prevention, preparedness, response, and recovery activities. The ERA has been unable to classify DFES expenditures into these categories because DFES does not undertake activity-based costing.

Box 1 provides an overview of activity-based costing.

Box 1 What is activity-based costing?

Activity-based costing is a costing method that identifies all the activities an organisation performs, and identifies how many resources each activity requires. In accounting, many central costs are counted as ‘overheads’ – for example, the costs of travel, administrative staff and supplies, water, and power. Activity-based costing attempts to reduce the number of costs classified as overheads. This is done by assessing how much of each overhead resource is used by each activity. Overhead costs are then allocated to the organisation’s activities, in proportion to the amount each activity uses.¹⁹⁵

An organisation that is using activity-based costing will trace how much of each ‘overhead’ cost is used by each activity to understand why the cost occurred.¹⁹⁶

This allows organisations to better understand the true costs of their activities – for example, how much it costs per hour for the State Emergency Service to respond to an incident (or particular type of incident). The calculated cost would include all DFES costs directly associated with State Emergency Service, an appropriate proportion of costs that are shared by the State Emergency Service and other services, and an appropriate proportion of head office costs.

Detailed activity-based costing can be technically challenging and requires a thorough assessment of an organisation’s activities and costs. However, even high level activity-based costing can help an organisation identify activities that are costing more or less than anticipated, assisting it to perform more efficiently and report more transparently to the public.

DFES collects detailed real-time¹⁹⁷ data on the activities of career and volunteer workers across the State (for example, attendance at a road accident, prescribed burning activities), but not its costs. This data could form the basis of activity-based costing in the future.

DFES reports on two types of activity: ‘prevention services’ and ‘emergency services’. ERA analysis of data provided by DFES indicates that ‘prevention services’ are generally prevention and preparedness activities, while ‘emergency services’ are response activities. DFES does not have a category for recovery.

Figure 21 shows a summary of DFES’s cost centre structure – that is, the way in which it categorises and records its costs. A more detailed version of this figure, along with examples of specific cost centres that fall into each category, is provided in Appendix D and Appendix C.

¹⁹⁵ Gupta, K. P., *Cost Management: Measuring, Monitoring & Motivating Performance*, Delhi, Global India Publications, 2009, p. 86.

¹⁹⁶ The Chartered Institute of Management Accountants, *Activity Based Costing: Topic Gateway Series 1*, London, CIMA, 2006, p. 5.

¹⁹⁷ That is, DFES know exactly how many staff and resources are deployed on the ground at any point in time, and have precise information about the location of each. This allows DFES to maintain a detailed, informative, and very current database of its activities and use of resources.

Figure 21 DFES's Cost Centre Structure

DFES costs	
Direct costs	
	Prevention Services
	Community Prevention
	Emergency Management Services
	Emergency Services
	Fire and Rescue Services – Career
	Fire and Rescue Service – Volunteer
	Bush Fire Services
	State Emergency Service
	Volunteer Marine Rescue Services
	Natural Disaster Relief Arrangements
	Local Government Grants (BFS and SES)
	FESA Unit Volunteers (Note: FESA Units are now named 'VFES Units')
	WA Emergency Rescue Helicopter Service
	FESA Aerial Services
Overhead costs	
	Corporate Services
	CEO Corporate
	Business Services Corporate
	Human Services Corporate

Source: DFES.

The draft report presented data on DFES expenditure on corporate services overheads, prevention services, and emergency services from 2004-05 to 2016. At the time of publication, DFES was unable to provide some data. DFES informed the ERA that the relevant files for 2004-05, 2005-06, and 2008-09 had been lost, and that DFES could not calculate the actual amount spent on each service in 2012-13, the year the Fire and Emergency Service Authority changed over to DFES.¹⁹⁸

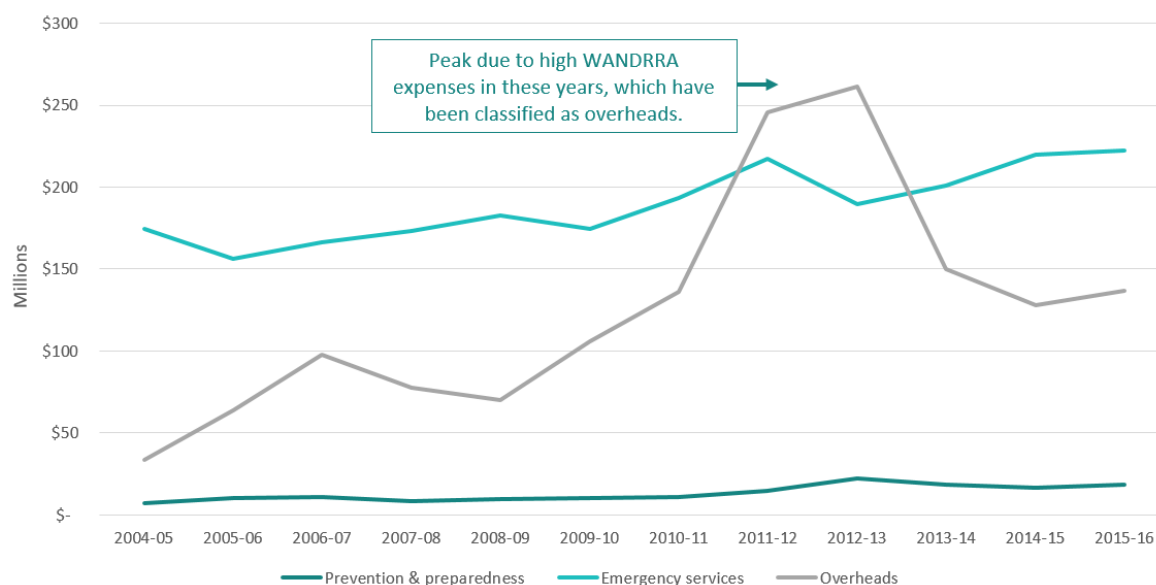
Since the publication of the draft report, DFES has provided the ERA with updated data, including data for the years that were previously reported as lost or impossible to calculate. The following tables and figures in this section are based on the updated data provided to the ERA in August 2017.

There are some differences between this updated data, and the data originally provided by DFES for the draft report. Most significantly, the earlier data classified Western Australia Natural Disaster Relief and Recovery Arrangement costs as an emergency services

¹⁹⁸ Communication with Department of Fire and Emergency Services, 12 June 2017 and 13 June 2017.

expense.¹⁹⁹ The new data provided by DFES (presented in Figure 22 and Table 14) reclassifies Western Australia Natural Disaster Relief and Recovery Arrangement costs as an overhead expense. Neither classification is more 'correct' than the other – they are simply different approaches to presenting the same data. However, the change does mean that the figures and tables below differ from those published on p. 88 of the draft report.

Figure 22 DFES's expenditure on corporate services overheads, prevention services, and emergency services (\$ real, 2015-16)



Source: DFES; indexed to 2015 16 dollars by the ERA.

Note: Since the publication of the draft report, DFES has provided full-year data for the years between 2004-05 and 2007-08, and 2012-13. As a result, the ERA has updated the figure above.

¹⁹⁹ This is consistent with the way in which DFES has historically classified the Western Australia Natural Disaster Relief and Recovery Arrangements as expenses when calculating the split between emergency services expenses and prevention services for its annual reports.

Table 14 DFES direct expenditure by business area, 2004-05 to 2015-16 (\$m real, 2015-16)

	2004 -05	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16
Emergency services	174.4	156.3	166.3	173.3	182.9	174.7	193.1	217.0	189.6	200.7	219.9	222.0
Prevention services	7.3	10.3	11.0	8.0	9.3	10.3	10.8	14.2	21.8	18.2	16.2	18.3
Overheads	33.7	63.9	97.8	77.5	70.1	105.6	136.0	245.3	261.3	150.1	127.8	136.5
Total	215.4	230.5	275.1	258.8	262.3	290.5	339.9	476.5	472.7	369.0	364.0	376.8

Source: DFES; indexed to 2015-16 dollars by the ERA.

Note: Since the publication of the ERA's draft report, DFES has provided full-year data for 2012-13, and additional data on DFES's direct expenditure by business area between 2004-05 and 2007-08. As a result, the ERA has updated some figures in the above table.

The data is presented in real terms to allow for comparison from year to year. However, it should be noted that neither the original nominal data provided by DFES, or the updated data, reconciles exactly to DFES's annual report for most years. At the time the draft report was published, DFES reported that this was probably due to minor, last minute adjustments to the annual report.²⁰⁰ The reclassification of Western Australia Natural Disaster Relief and Recovery Arrangement expenses (from emergency services to overheads) has further increased the difference between the data presented above, and that in DFES's annual reports.

Allocation of overheads

In 2015-16, overhead expenses accounted for 36 per cent of DFES's total expenditure. Emergency services accounted for a further 59 per cent, and prevention services for 5 per cent.

DFES performs a basic overhead allocation process for its annual report, using a cost allocation model to allocate overhead costs between prevention and emergency services. The model first transfers a portion of emergency services expenditure (approximately \$11.7 million in 2015-16, equivalent to four weeks' total emergency expenditure) to prevention services, recognising the roles of the Career Fire and Rescue Service, Volunteer Fire and Rescue Service, and State Emergency Service in community prevention. The model then allocates overhead costs based on the proportion of direct expenditure attributed to the categories of prevention and emergency services expenditure.

After allocating overheads, expenses for prevention services were \$48.78 million or 12.9 per cent of total expenses. Expenses on emergency services were reported as \$328.0 million, or 87.1 per cent of total expenses.²⁰¹

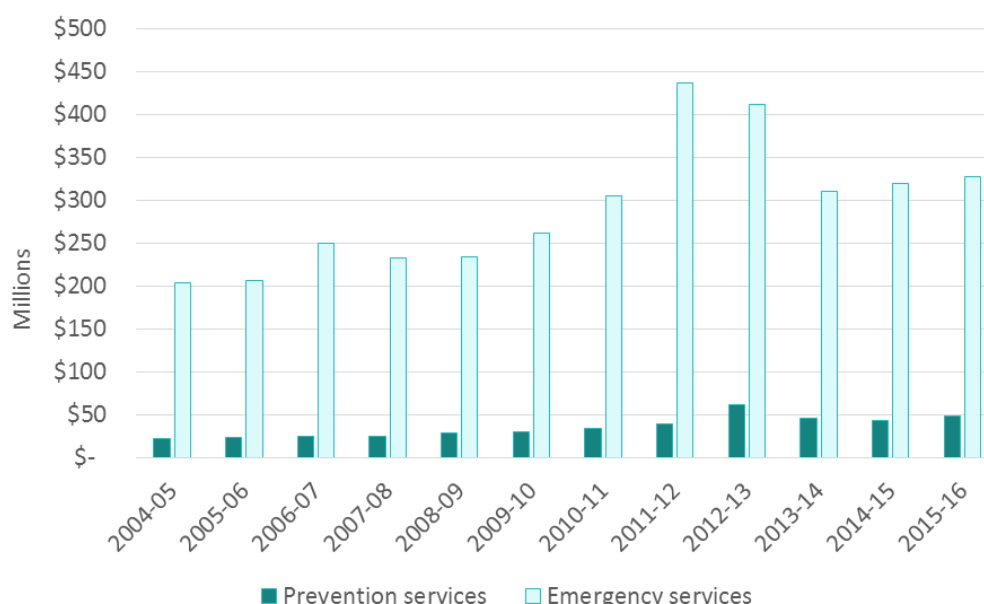
Figure 23 shows the breakdown of emergency services and prevention services expenditure in DFES's annual reports from 2004-05 through to 2015-16. This expenditure

²⁰⁰ Communication with Department of Fire and Emergency Services, 13 June 2017.

²⁰¹ Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 55.

includes allocated overheads.²⁰² Expenditure on emergency services has been substantially higher than expenditure on prevention services in all years. Prevention services expenditure accounts for a relatively small proportion of DFES's expenditures, but increased from 9.8 per cent of ESL expenditures in 2004-05 to 12.9 per cent in 2015-16.

Figure 23 Split between prevention services and emergency services expenditure published in DFES's annual reports (\$ real, 2015-16)



Source: DFES annual reports, 2013-14 to 2015-16.

The Department of Planning, Lands and Heritage has paid DFES \$450,000 a year, under a memorandum of understanding, to undertake bushfire prevention activities on unallocated Crown land and unmanaged reserves within rural towns since 2004.²⁰³ Removing this expenditure from the calculation would reduce the share of expenditure on prevention services slightly, to 12.8 per cent in 2015-16.

The Fire and Emergency Service Authority's annual reports for 2010-11 and 2011-12 state that costs in those years were higher than anticipated, due to costs arising from the Fire and Emergency Service Authority's role in administering Western Australia Natural Disaster Relief and Recovery Arrangements, unbudgeted bushfire suppression operations, and State Emergency Service response and recovery operations.²⁰⁴ In accordance with the Fire and Emergency Service Authority's agreement with the Department of Treasury, the

²⁰² DFES broadly allocates overheads as follows: every cost centre is designated as either 'prevention services', 'emergency services', or 'overheads' when it is created. At the end of the year, four weeks' of fire and emergency services expenses are transferred from 'emergency services' to 'prevention services' to recognise the prevention activities performed by these groups. Overheads are then allocated to either 'emergency services' or 'prevention services' based on the ratio between the two.

²⁰³ The Department of Planning, Lands and Heritage (formerly the Department of Lands) indicated that this arrangement existed with the Department of Planning, Lands and Heritage and its various predecessor agencies since 2004. (See also: Department of Lands, *Submission to issues paper*, 14 March 2014, p. 3.)

²⁰⁴ Fire and Emergency Services Authority, *Annual Report 2010/11*, Perth, Government of Western Australia, 2011, p. 28.

The Western Australia Natural Disaster Relief and Recovery Arrangements, or WANDRRA is invoked to 'provide financial assistance to communities whose social, financial and economic wellbeing have been significantly affected by an eligible natural disaster event'. (Source: Fire and Emergency Service Authority, *Annual Report 2011/12*, Perth, Government of Western Australia, 2012, p. 120.)

Fire and Emergency Service Authority used its cash resources to meet unbudgeted costs over the periods, and recouped these at the end of each year from the Supplementary Funding Process.²⁰⁵ These unbudgeted expenses were \$35.1 million in 2010-11,²⁰⁶ and \$16 million in 2011-12.²⁰⁷ The Fire and Emergency Service Authority's annual reports for these years identify natural hazard events, including four cyclones, a tornado, extensive flooding and thunderstorms, and the Perth Hills and Augusta-Margaret River bushfires.²⁰⁸

Prevention and preparedness (prevention services)

DFES is not the sole provider of prevention and preparedness services. Other agencies, such as the Department of Biodiversity, Conservation and Attractions, and local governments undertake a substantial amount of prevention and preparedness. More information about the role and funding of these and other relevant agencies is provided in Chapter 2 and Chapter 4.

DFES generally refers to prevention and preparedness collectively as 'Prevention Services'. It categorises prevention services as:

- *Community prevention services* (for example, contracting mitigation works for the Department of Planning, Lands and Heritage on unallocated Crown land, operating programs like At Risk Communities and the Blue Hydrant Marker Program, delivering unexploded ordnance services, undertaking fire investigation and analysis, and operating the Swan and Avon River Catchment Flood Warning system).
- *Emergency management services* (for example, jointly funding Community Emergency Service Managers to work with local governments, and operating the Office of Bushfire Risk Management).

A detailed list of all active DFES's prevention services cost centres is provided in Appendix D.

In 2015-16, \$6.3 million (or 13 per cent) of DFES's prevention services expenditure related to emergency management services, and \$42.5 million (or 87 per cent) to community prevention services.

Response (emergency services)

Emergency services costs include the costs of operating the Career Fire and Rescue Services, Volunteer Fire and Rescue Service, Volunteer Fire and Emergency Services, Volunteer Marine Rescue Services, and State Emergency Service, as well as the cost of grants provided to local governments to operate bush fire brigades. They also include the costs of the Western Australian Rescue Helicopter Service and DFES aerial services.

²⁰⁵ Fire and Emergency Services Authority, *Annual Report 2010/11*, Perth, Government of Western Australia, 2011, p. 28.

²⁰⁶ Fire and Emergency Services Authority, *Annual Report 2010/11*, Perth, Government of Western Australia, 2011, p. 28.

²⁰⁷ Fire and Emergency Services Authority, *Annual Report 2011/12*, Perth, Government of Western Australia, 2012, p. 26.

²⁰⁸ Fire and Emergency Services Authority, *Annual Report 2010/11*, Perth, Government of Western Australia, 2011, p. 138; Fire and Emergency Service Authority, *Annual Report 2011/12*, Perth, Government of Western Australia, 2012, p. 120.

Table 15 shows the components of direct DFES's expenditure on emergency services over the 2004-05 to 2015-16 period. The largest component of DFES direct expenditure on emergency services is that incurred by the Career Fire and Rescue Service.

As discussed earlier in this chapter, DFES was unable to provide some data for the draft report. The relevant files for 2004-05, 2005-06, and 2008-09 had been lost, and DFES reported that it could not calculate the actual amount spent on each service in 2012-13, the year the Fire and Emergency Service Authority changed over to DFES.²⁰⁹

Since the publication of the draft report, DFES has been able to provide the ERA with data for the missing years, but has also made some changes to the way in which the data is presented (in particular, reclassifying Western Australia Natural Disaster Relief and Recovery Arrangement costs from emergency services expenses to overheads). Consequently, the figures in Table 15 are different to those presented on p. 91 of the ERA's draft report.

Table 15 DFES direct expenditure: emergency services, 2004-05 to 2015-16 (\$m real, 2015-16) (excludes overheads)

	2004 -05	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16
Fire and Rescue Services - Career	104.6	111.4	113.8	120.8	126.8	117.4	125.4	137.4	129.9	129.4	137.9	142.8
Fire and Rescue Services - Volunteer	8.1	8.3	8.0	7.0	7.2	4.5	5.1	8.3	2.7	3.0	3.6	3.9
Local Government Grants (BFBs & SES)	27.2	19.1	22.7	22.0	23.7	22.6	26.0	34.1	21.7	33.8	36.8	25.3
Aerial Services	1.0	5.3	7.3	9.5	10.0	13.3	18.1	19.2	18.9	17.0	24.6	25.8
WA Rescue Helicopter Service	1.3	5.9	6.8	6.4	6.4	6.8	6.5	6.0	7.5	8.3	7.1	12.1
Volunteer Marine Rescue Services	3.0	2.4	2.6	3.2	3.6	4.2	4.6	4.2	3.9	4.3	4.4	5.8
State Emergency Service	7.8	2.7	2.6	2.5	3.1	4.2	4.8	5.0	2.6	3.6	3.6	4.6
Natural Disaster Relief Arrangements	14.2	-0.6	0.7	-	-	-	-	-	-	-	-	-
Other costs	7.3	1.8	1.7	1.8	2.2	1.7	2.6	2.9	2.3	1.4	1.9	1.8
Total	174.4	156.3	166.3	173.3	182.9	174.7	193.1	217.0	189.6	200.7	219.9	222.0

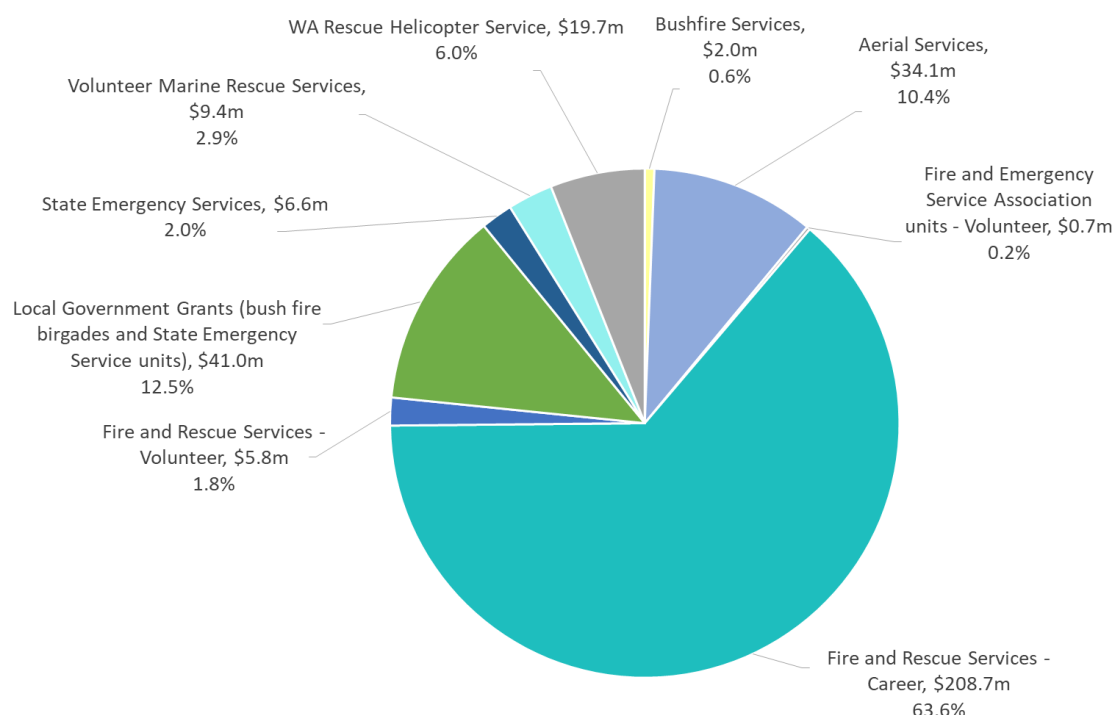
Source: DFES; indexed to 2015-16 dollars by the ERA.

Note: Since the publication of the ERA's draft report, DFES has provided full-year data for 2012-13, and additional data on direct emergency services expenditure between 2004-05 and 2007-08. As a result, the ERA has updated some figures in the above table.

²⁰⁹ Communication with Department of Fire and Emergency Services, 12 June 2017 and 13 June 2017.

The components of DFES's emergency services expenditure for 2015-16 are shown in Figure 24.

Figure 24 Allocated DFES emergency services expenditure by service (including overheads) (\$real, 2015-16)



Sources: Cost allocation data provided by DFES.

Career Fire and Rescue Service units, Volunteer Fire and Rescue Service units, and Volunteer Fire and Emergency Services units are managed by DFES, and are funded directly by DFES.²¹⁰ DFES does not perform a more detailed breakdown of expenditure for each of these services and has advised that any such breakdown would require broad assumptions to be made about the allocation of overhead costs. It is not possible to perform a more detailed analysis of the costs of each service because DFES does not undertake activity-based costing.

The State Emergency Service is mentioned twice in the above breakdown. DFES has stated that the 'State Emergency Service' costs are the direct costs incurred in supporting units. This includes, for example, unit travel, training, and refreshments, regional office expenses, vertical rescue equipment, and the costs of the Pilbara and Kimberley offices where the State Emergency Service is under DFES's direct control. In contrast, 'Local Government Grants (BFB & SES)' refers only to the operating and capital grants paid by DFES to local governments in support of the State Emergency Service units and bush fire brigades.²¹¹

²¹⁰ Department of Fire and Emergency Services, *Emergency Services Levy Question & Answer Guide 2017/18*, Perth, Government of Western Australia, 2017, p. 2.

²¹¹ Communication with Department of Fire and Emergency Services, 8 June 2017.

Recovery

DFES does not have any significant recovery-related costs. Although DFES is not responsible for undertaking natural disaster recovery activities, it had a role in administering the State's recovery capabilities, Western Australia Natural Disaster Relief and Recovery Arrangements, until April 2013.²¹² The recovery arrangement is invoked for eligible emergencies where the anticipated costs of relief and recovery activities are expected to exceed the Small Disaster Criterion, being \$240,000.²¹³ The State's Western Australia Natural Disaster Relief and Recovery Arrangement functions are currently coordinated by the Office of Emergency Management within DFES, with assistance from other agencies when necessary. The program's relief and recovery activities are jointly funded by the State and Australian Governments.²¹⁴

3.3.4 Forecast costs

The 2016-17 State Budget shows a projected increase in DFES's expenses from \$386 million in 2016-17 to \$395 million in 2019-20, and an increase in ESL revenue from \$339 million to \$359 million over the same period, if the current funding model is retained.²¹⁵ State government appropriations are budgeted to be about \$18 million each year, but Royalties for Regions funding will fall from \$14 million in 2016-17 to \$2 million in 2019-20.

DFES has also provided more detailed indicative budget data for the years 2017-18 through to 2020-21, allowing for the assessment of future costs for each DFES function (that is, frontline services, corporate services, training and organisational development, compliance and technical advisory services, and community awareness and education).²¹⁶

Figure 25 shows the average proportion of costs attributable to each function over the period. Frontline services account for just under half of the budgeted costs of DFES (47.3 per cent). Corporate services costs account for 31.9 per cent of budgeted costs over the period.

²¹² The Western Australia Natural Disaster Relief and Recovery Arrangements program was administered by the Fire and Emergency Service Authority (and subsequently DFES) until April 2013, when this responsibility was transferred to the Department of the Premier and Cabinet. On 1 December 2016, responsibility for administering the Western Australia Natural Disaster Relief and Recovery Arrangement program was transferred from the Department of the Premier and Cabinet to OEM. (Source: Communication with Office of Emergency Management, 7 April 2017.)

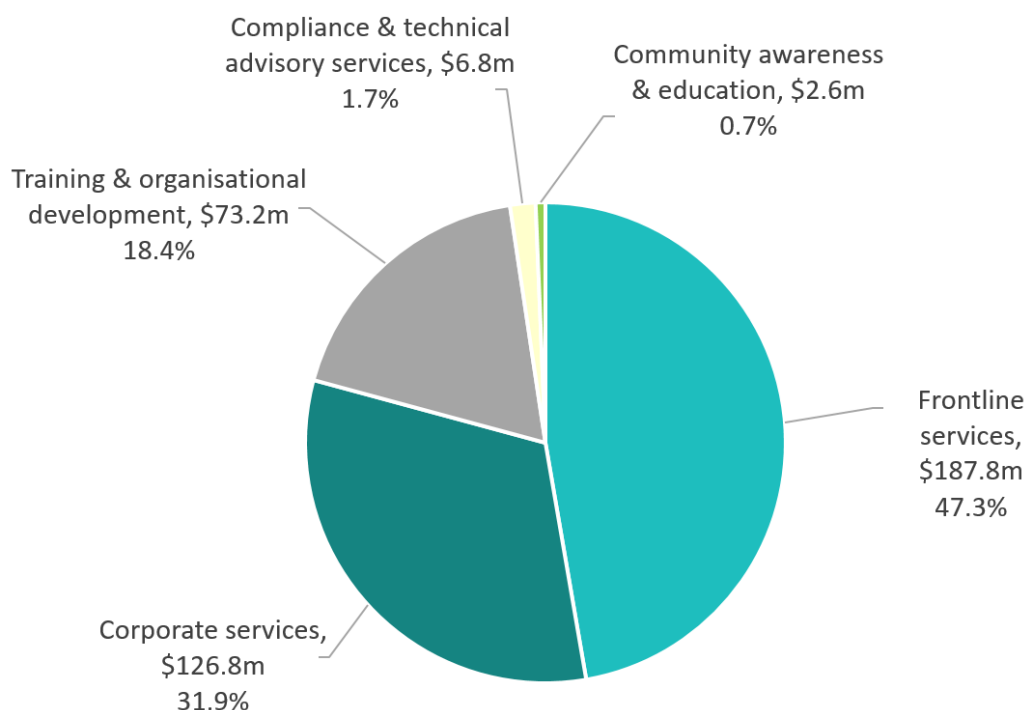
²¹³ The Small Disaster Criterion is set by the Secretary of the Commonwealth Attorney-General's Department. It is the trigger for an event to be classified as an 'eligible disaster' under the joint Australian Government-State Natural Disaster Relief and Recovery Arrangements.
Fire and Emergency Services Authority, *Annual Report 2010/11*, Perth, Government of Western Australia, 2012, p. 138.

²¹⁴ Office of Emergency Management, *Western Australia Natural Disaster Relief and Recovery Arrangements (WANDRRRA)*, Perth, Government of Western Australia, <https://www.oem.wa.gov.au/funding/wandrra>, (accessed 5 April 2017).

²¹⁵ It is unclear how much this will increase average ESL rates, since ESL rates are also a function of the number of properties on valuation rolls, and uneven changes in gross rental value will also shift the average rate in each category.

²¹⁶ Forecast costs are categorised by cost centre functions, unlike historical costs which are allocated to accounting categories.

Figure 25 Indicative budgeted average annual cost directly attributable to each function (2017-18 to 2020-21)



Source: Indicative budget data provided by DFES.

3.4 Regional distribution of costs and revenues

DFES has provided some data on the distribution of costs and revenues across its operational regions, and across ESL categories. This section presents cost and revenue data by region and by ESL categories (where available).

3.4.1 Revenue by region

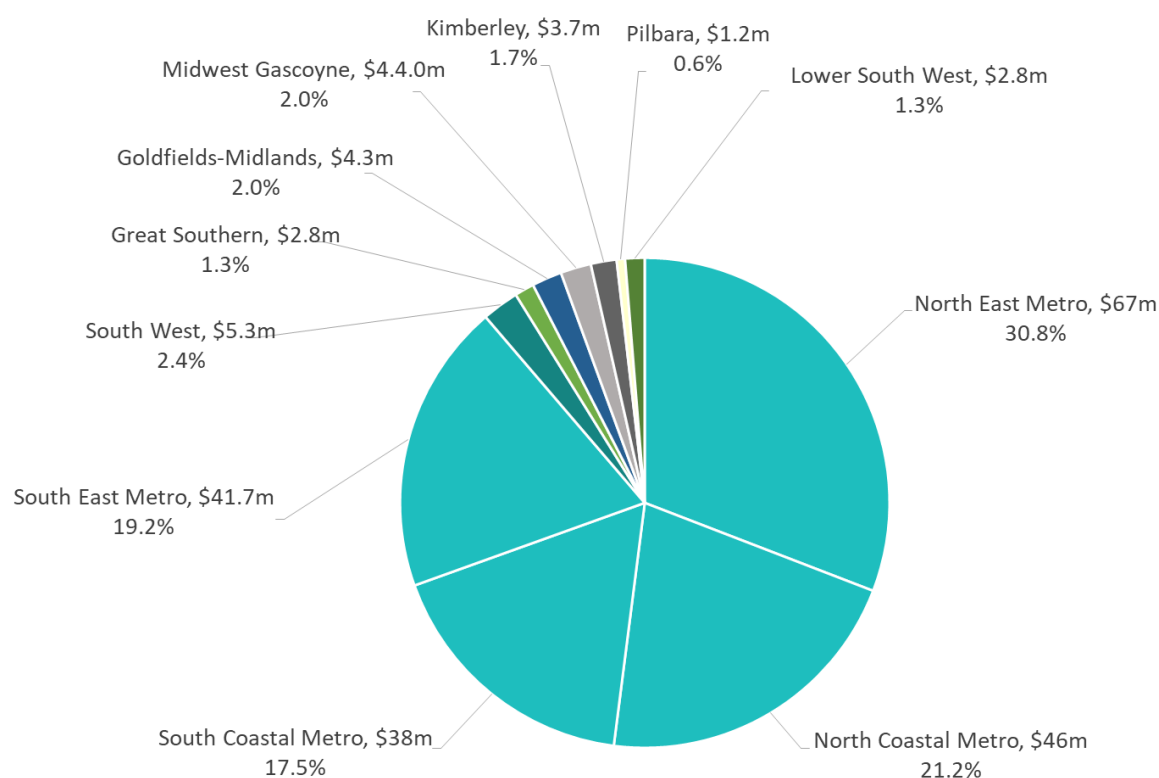
Figures provided to Parliament state that 82.3 per cent of ESL revenues were collected from metropolitan sources, and 17.7 per cent from regional sources in 2015-16.²¹⁷ In these statistics, 'metropolitan sources' refer to Perth only; a further 5 to 6 per cent of ESL revenue comes from other metropolitan areas (being Albany, Bunbury, Greater Geraldton, Kalgoorlie-Boulder, and Mandurah).²¹⁸

Figure 26 shows the calculation of the average annual revenue raised from each region over the period 2005-06 to 2015-16. The data in the chart only shows revenue raised from rates on property by local governments. It does not include, for example, ESL collected directly by DFES on state government property.

²¹⁷ Mischin, M., Question without Notice 1177 – Answer advice, *Hansard*, Council, 10 November 2016, p. 7850b.

²¹⁸ Communication with Department of Fire and Emergency Services, 27 April 2017.

Figure 26 Average annual ESL revenue raised by geographic region (2005-06 to 2015-16) (\$ real 2015-16)



Source: ESL revenue data provided by DFES.

It is likely that the proportion of revenue raised by each region will be similar in future years. DFES has stated that its revenue split by region can be affected by the Valuer-General's property revaluations and by ESL boundary amendments, but "generally remains fairly constant".²¹⁹

3.4.2 Revenue by Emergency Services Levy category

Table 16 shows ESL revenue raised by category between 2004-05 and 2015-16.

Table 16 ESL revenue raised per ESL category, 2004-05 to 2015-16 (\$m real, 2015-16)

	2004 -05	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16
Category One	\$98	\$107	\$115	\$123	\$129	\$139	\$167	\$184	\$197	\$214	\$230	\$258
Category Two	\$8	\$9	\$10	\$11	\$10	\$11	\$15	\$13	\$15	\$16	\$16	\$17
Category Three	\$3	\$3	\$3	\$3	\$4	\$4	\$5	\$4	\$4	\$5	\$6	\$6
Category Four	\$5	\$6	\$7	\$8	\$7	\$9	\$11	\$10	\$12	\$13	\$14	\$15
Category Five	\$3	\$4	\$4	\$4	\$4	\$5	\$6	\$6	\$6	\$7	\$7	\$8

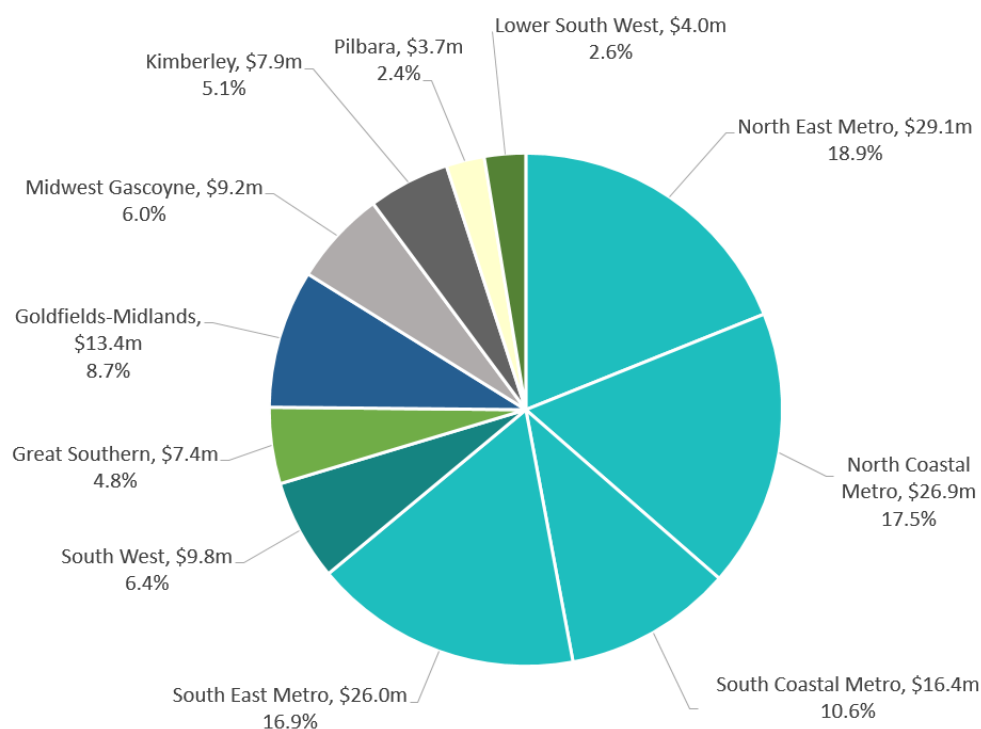
Source: ESL revenue data provided by DFES.

²¹⁹ Communication with the Department of Fire and Emergency Services, 7 April 2017.

3.4.3 Costs by region

Figure 27 shows budgeted costs attributable to each DFES region for 2016-17. These costs include all direct costs attributable to a specific region, including the Career Fire and Rescue Service, Volunteer Fire and Rescue Service, State Emergency Service, local government operating and capital grants, local government fees, and any other location-specific costs identified by the ERA. In the data provided by DFES, direct costs attributable to a region comprise about one third of DFES's total costs. These costs do not include corporate overheads and other costs that are not location-specific.

Figure 27 DFES's budgeted direct expenditure (including grants) by region for 2016-17



Source: Indicative budget data provided by DFES.

3.4.4 Costs by Emergency Services Levy category

DFES does not collect data on costs by ESL category. DFES could do this if it implemented activity-based costing and performed additional analysis.

3.5 Summary

The terms of reference for this review require the ERA to consider the current ESL expenditure, and proportions of expenditure, applied to managing emergency services (prevention of, preparedness for, response to and recovery from natural hazard emergencies).

DFES does not report against the categories of prevention, preparedness, response, and recovery. Instead, DFES classifies expenditures as 'prevention services' and 'emergency services'. Prevention services are generally prevention and preparedness expenses, while emergency services are generally response expenses. DFES does not have any significant recovery-related costs.

In 2015-16, overhead expenses accounted for 36 per cent of total DFES's expenditure. Emergency services accounted for a further 59 per cent, and prevention services for 5 per cent. After allocating overheads, expenses for prevention services were 12.9 per cent of total expenses, and expenses for emergency services were 87.1 per cent of total expenses.

DFES receives revenue from a range of sources, including the Emergency Services Levy, and contributions from the state and Australian governments. Since 2004-05, DFES's total revenues have increased by 4.2 per cent a year in real terms. Over this period, the ESL share of DFES's total revenues has increased from 66 per cent of total revenue in 2004-05 to 82 per cent in 2015-16, while appropriations from the State Government have decreased from 21 per cent in 2004-05 to 13 per cent in 2015-16.

DFES's expenditures have increased by 4.8 per cent a year in real terms since 2004-05. Over this period, grants and subsidies paid to local governments and the volunteer organisations they manage have varied from year to year. However, a lower proportion of DFES's expenditure has been on grants paid to local governments and the volunteer organisations they manage in recent times compared to when the ESL was first introduced.

4 Best practice management of hazards

Key points

- Natural hazard risk management is a collective responsibility. Many individuals, communities, government organisations, and businesses work to reduce natural hazard risks on their own properties, and to reduce the potential for harm to others.
- With limited funds, it is not possible to eliminate every risk. Effective risk management involves setting priorities, and at times selecting one project over another. When doing so, it is important to choose the activities that offer the best value.
- Prevention and preparedness are important because they can reduce future costs. The merits of prevention and preparedness spending should, however, be assessed on a case by case basis. To make an assessment, it is necessary to compare how much an activity costs, with the benefits it delivers.
- A greater focus on prevention could result in benefits to the community. However, the ESL funds only a sub-set of total emergency management activities. While acknowledging the benefits of prevention, it does not follow that all prevention should be ESL funded.
- Disaster response is a critical function of government, and governments must be resourced to meet this role. However, spending too much on response has consequences, particularly if it comes at the cost of effective prevention and preparedness.
- The ISO 31000 standard can be used to guide DFES in managing risk, and when paired with cost benefit analysis, can help inform budgeting decisions to ensure that money is spent well. The framework should only be used to address risks and activities for which DFES is responsible.
- DFES is in the process of implementing two frameworks to help decide how funds should be allocated. The Strategic Planning Framework provides the basis of the allocation of ESL funding across prevention, preparedness, response, and recovery. The Capability Framework is intended to provide DFES with an overarching framework to plan for the future and make budgeting decisions.
- While DFES complies with the Department of Treasury's budgeting process and is implementing these frameworks, DFES's current funding allocation process is not ideal. It is important to apply robust analytical techniques wherever possible and take them into account when making decisions.
- There is a perception that DFES spends too much on response at the expense of prevention. Greater clarity is needed for all stakeholders about the extent DFES has obligations to undertake direct prevention activities. Without this clarity, it is hard to determine that DFES has spent 'too little' on particular activities. Providing more transparency in the processes that allocate ESL funds would reduce the likelihood of too much being spent on response.

4.1 Introduction

The purpose of this chapter is to explain best practice management of natural hazards. It covers the principles and practices that constitute best practice hazard management, and discusses how funds should be allocated to hazard reduction activities. This information is directly relevant to DFES as a Hazard Management Agency, but is also relevant to all those involved in hazard management – be they local governments, communities, businesses, or individuals.

This chapter partially addresses the term of reference requiring the ERA to consider whether the current allocation of ESL funds towards prevention and response reflects best practice in managing the risk of bushfire and other hazards. The remainder of this chapter is structured as follows:

- an overview of the four phases of emergency management;
- a discussion of funding responsibilities for hazard management in Western Australia, beyond the ESL;
- an overview of effective risk management;
- a brief discussion of trends in demand for emergency services and other emergency management activities in Western Australia;
- a discussion of investment in natural hazard prevention and preparedness, and how the costs and benefits of prevention and preparedness should be measured;
- an overview of best practice and standards for resource allocation; and
- the ERA's assessment of and recommendations about how DFES allocates funding to various activities.

Stakeholders were broadly supportive of the draft recommendations on these issues, in particular that DFES should:

- implement activity-based costing to allow for robust analysis;²²⁰
- implement the ISO 31000 standard across its business activities;²²¹
- finalise and implement its Capability Framework;²²²

²²⁰ Rotheram, I., *Submission to draft report*, 20 July 2017, p. 1; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 3.

²²¹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 11; Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 11; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 8; Mangini, J., *Submission to draft report*, 11 August 2017, p. 5; Shire of Corrigin, *Submission to draft report*, 14 August 2017, p. 9; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 12; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 3.

²²² Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 11; Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 11; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 3.

- require cost benefit analysis to be prepared for all major funding allocation decisions,²²³ and
- require post-project cost benefit reviews to be presented to senior decision makers to enable assessment of the effectiveness of past decisions.²²⁴

Where stakeholders had particular issues with the draft recommendations, this is considered in Section 4.8.

4.2 The four phases of emergency management

Measures to prevent or reduce the effects of disasters can be undertaken before, during, or after a disaster. There are four main phases of emergency management. These are prevention, preparedness, response, and recovery.²²⁵ A range of activities occurs in each of the four phases. Some activities are specific to particular hazards, while others can be used to treat a number of different hazards.

Emergency management (and hazard management more broadly) is undertaken by many parties, not just by hazard management agencies. The private sector, not-for-profit sector, other government agencies, and private individuals all have roles across the phases of emergency management.²²⁶

Prevention is aimed at reducing the probability of a disaster occurring, or reducing the effects of a natural disaster by limiting the exposure and vulnerability of people and assets to natural disasters.²²⁷ Prevention may include conducting prescribed burns to reduce fuel loads, or building flood levees.

Preparedness aims to ensure authorities, the community, and individuals are ready to act in the event of a disaster.²²⁸ Preparedness may include community education programs, establishing natural hazard plans, and ensuring equipment is ready in the event of an emergency.

²²³ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 12; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 9; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 9; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 3.

²²⁴ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 12; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 3.

²²⁵ Council of Australian Governments, *National Strategy for Disaster Resilience*, Canberra, Government of Australia, 2011, p. 3. Some organisations and literature use the term 'disaster risk reduction' instead of 'prevention' and 'preparedness' to discuss similar concepts – for example, the United Nations uses this phrasing in its United Nations Office for Disaster Risk Reduction. (Source: United Nations Office for Disaster Risk Reduction, *What is Disaster Risk Reduction?*, United Nations, <https://www.unisdr.org/who-we-are/what-is-drr>, (accessed on 13 June 2017).)

²²⁶ Council of Australian Governments, *National Strategy for Disaster Resilience*, Canberra, Government of Australia, 2011, p. 4.

²²⁷ Australian Institute for Disaster Resilience, *Manual 1: Emergency management in Australia Concepts and principles*, Canberra, Government of Australia, 2004, p. 15.

²²⁸ Australian Institute for Disaster Resilience, *Manual 1: Emergency management in Australia Concepts and principles*, Canberra, Government of Australia, 2004, p. 15.

Prevention and preparedness can be further categorised into ‘hard’ and ‘soft’.²²⁹ Hard risk-management measures are generally construction-focused, reinforcing existing infrastructure to reduce the risk posed by natural hazards such as floods, earthquakes, and cyclones,²³⁰ or building infrastructure, such as fire and storm shelters. Soft prevention and preparedness tends to focus changing people’s behaviour and decisions²³¹ – for example, conducting education campaigns, or undertaking land-use planning.

Response involves actions that are taken immediately before, during, or after a disaster to reduce the effects on the community.²³² Response may include, for example, putting out a bushfire or a structural fire, or evacuating people from low-lying areas before a storm surge.

Recovery involves restoring a community to normal function after a natural disaster.²³³ Recovery may include cleaning up after a natural disaster, restoring services to normal working order, and providing counselling services to people affected by a disaster.

Figure 28 shows the four phases of emergency management.

Figure 28 The four phases of emergency management

Prevention	Preparedness
<p>Acting in advance to reduce the likelihood or minimise the effects of a hazard.</p> <p><i>Examples:</i></p> <ul style="list-style-type: none"> <i>Hazard reduction burns</i> <i>Maintenance of electricity assets</i> <i>Arson deterrence campaigns</i> 	<p>Working to ensure effective response and recovery when a hazard arises.</p> <p><i>Examples:</i></p> <ul style="list-style-type: none"> <i>Community safety programs and resources</i> <i>Constructing fire shelters</i> <i>Establishing warning systems</i>
Response	Recovery
<p>Acting before, during and after a hazard event to control the effects and minimise damage.</p> <p><i>Examples:</i></p> <ul style="list-style-type: none"> <i>Firefighting</i> <i>Conducting evacuations</i> 	<p>Restoring normal function to communities affected by a hazard event.</p> <p><i>Examples:</i></p> <ul style="list-style-type: none"> <i>Rebuilding and restoring services</i> <i>Cleaning up hazardous materials</i> <i>Providing counselling and financial support</i>

²²⁹ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 390; van den Honert, R.C., *Improving Decision Making about Natural Disaster Mitigation Funding in Australia—A Framework*, Resources, 2016, Vol. 5 (3), pp. 1-23.

²³⁰ van den Honert (2016) gives the example of building flood levees.

²³¹ van den Honert (2016) gives the example of running hazard awareness education campaigns.

²³² Australian Institute for Disaster Resilience, *Manual 1: Emergency management in Australia Concepts and principles*, Canberra, Government of Australia, 2004, p. 15.

²³³ Australian Institute for Disaster Resilience, *Manual 1: Emergency management in Australia Concepts and principles*, Canberra, Government of Australia, 2004, p. 15.

Generally, preparedness and prevention occur before a natural disaster, while response and recovery occur during and after a natural disaster. However, there can be overlap between phases. For example, prevention may occur during the recovery phase to improve the resilience of the community in advance of the next natural disaster. This may involve improving assets, systems, and facilities (known as betterment), rather than simply restoring them to pre-disaster standards.²³⁴ The distinctions between the four categories can be somewhat limiting and artificial, and at times, a single action may not fit neatly into one category.²³⁵

It is not clear whether purchasing response-focused capital items is preparedness or response. This is particularly evident in the case of fire management – is purchasing a fire truck preparedness, since it is purchased before the fire, or is it response, since the truck is to be used to actively control the immediate effects of a hazard or disaster? Many guides to prevention, preparation, response, and recovery are silent on this issue, since the ‘four phase’ model tends to categorise activities rather than assets.²³⁶ In practice, capital equipment contributes to preparedness,²³⁷ prevention and response.²³⁸ In some cases it also contributes to recovery.²³⁹

4.3 Funding responsibilities for hazard management

Natural hazard risk management is a collective responsibility. This principle is clearly stated in both the *National Disaster Resilience Strategy* – the Australian Government’s framework for building disaster resilience across Australia²⁴⁰ – and by Western Australia’s State Emergency Management Committee.²⁴¹ Many individuals, communities, government organisations, and businesses in Western Australia work to reduce natural hazard risks on their own properties, and to reduce the potential for harm to others.

Table 17 provides a non-exhaustive summary of funding sources for prevention, preparedness, and response in Western Australia.

²³⁴ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 373.

²³⁵ Cronstedt, M., *Prevention, preparedness, response, recovery – an outdated concept?*, Australian Journal of Emergency Management, 2002, Vol. 17 (2), p. 10.

²³⁶ For example, Australian Institute for Disaster Resilience, *Manual 1: Emergency management in Australia – Concepts and principles*, Canberra, Emergency Management Australia, 2004, p. 5; Carter, W. N., *Disaster management: a disaster manager’s handbook*, Manila, Asian Development Bank, 1992, pp. 52-55.

²³⁷ Strategic planning to understand the number and location of assets (say, fire trucks) needed is a preparedness activity.

²³⁸ Capital equipment is used to conduct prevention and response activities.

²³⁹ ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017.

²⁴⁰ Council of Australian Governments, *National Strategy for Disaster Resilience*, Canberra, Government of Australia, 2011, p. 3.

²⁴¹ State Emergency Management Committee, *2016 Emergency Preparedness Report*, Perth, Government of Western Australia, 2016, p. 2.

Table 17 Funding prevention, preparedness, and response

Funding source	Agency Responsible	Amount ²⁴²
Mitigation Activity Fund	State Bushfire Coordinating Committee	\$15 million over 2016-2020
Royalties for Regions	Department of Primary Industries and Regional Development WA	\$15 million to the Department of Planning, Lands and Heritage over 2016-2020; \$20 million to Department of Biodiversity, Conservation and Attractions over 2016-2020
Emergency Services Levy	Department of Fire and Emergency Services	approx. \$350 million per year
Natural Disaster Resilience Program	Attorney-General's Office through Office of Emergency Management	\$26.1 million per year nationally; WA to award \$2.2 million in 2017, awarded \$2.01 million in 2016 and \$2.8 million in 2015
National Emergency Management Projects	Australia-New Zealand Emergency Management Committee through Attorney-General's Office	\$3.6 million across 22 projects nationally in 2015-16; \$205,000 awarded to State Emergency Management Committee in 2015-16
National Bushfire Mitigation Program	Australian Government via Department of Fire and Emergency Services	\$15 million over 2014-2017; \$905,000 for WA over 2014-2017
All West Australians Reducing Emergencies	Office of Emergency Management	\$260,000 awarded in 2015; \$121,000 awarded in 2016

²⁴² Department of Lands, *Submission to issues paper*, 14 March 2014; State Emergency Management Committee, *State Emergency Preparedness Report 2015-16*, Perth, Government of Western Australia, pp. 9, 81-82; Attorney-General's Department, *Resilience Funding*, Canberra, Government of Australia, <https://www.ag.gov.au/EmergencyManagement/Resilience-funding/Pages/default.aspx>, (accessed 4 May 2017); State Emergency Management Committee, *Annual Report 2015-16*, Perth, Government of Western Australia, 2016, p. 84; Office of Emergency Management, *Natural Disaster Resilience Program 2016-17: Guidelines for Applicants*, Perth, Government of Western Australia, <https://www.oem.wa.gov.au/Documents/Funding/NDRP/2016-17/201617NDRPGuidelinesforApplicants.pdf>, (accessed 4 May 2017).

As detailed in Chapter 3, DFES also receives funding from Royalties for Regions, which has been used to fund the south west emergency rescue helicopter, crew fire protection²⁴³ and the volunteer fuel card scheme.²⁴⁴

Table 18 provides a non-exhaustive list of recovery funding available in Western Australia.

Table 18 Funding recovery

Funding source	Agency Responsible	Amount ²⁴⁵
WA Natural Disaster Relief and Recovery Arrangements	Australian Government through Office of Emergency Management	\$25.5 million in 2016, \$26.6 million in 2015
Lord Mayor's Distress Relief Fund	City of Perth	Varies per disaster event ²⁴⁶
Disaster Recovery Payment	Australian Department of Human Services	Varies per disaster event ²⁴⁷
Disaster Recovery Allowance	Australian Department of Human Services	Varies per disaster event ²⁴⁸
Royalties for Regions	Department of Primary Industries and Regional Development WA	\$12.3 million to Department of Fire and Emergency Services in 2015-16

Beyond these government activities and funding sources, extensive contributions are made by others to prevention, preparedness, response, and recovery. Local governments, communities, volunteers, individuals, and businesses all invest their own time and money in hazard management, sharing responsibility with the State. The financial contribution of local government is described in Chapter 2.

²⁴³ DFES describes the crew fire protection program as a state-wide initiative focussed on ensuring the safety and welfare of emergency services personnel in the context of bushfires. The initiative comprises the retrofitting of existing firefighting appliances with turnover blankets, radiant heat shields, deluge, lagging and fire resistant panel systems and in-cabin air systems. (Source: Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 37.)

²⁴⁴ Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 74.

²⁴⁵ Department of Human Services, *Annual Report: 2015-16*, Canberra, Government of Australia, 2016, pp. 92-93, <https://www.humanservices.gov.au/sites/default/files/8802-1610-annualreport2015-16.pdf>, (accessed 4 May 2017); Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 46.

²⁴⁶ The Lord Mayor's Distress Relief Fund raised \$8.1 million for the Waroona and District Fires Appeal (Source: Appeals WA, *Waroona and District Fires Appeal – Media Statement*, Perth, <http://www.appealswa.org.au/media.html>, accessed 4 May 2017).

²⁴⁷ 2015-16: \$4.2 million and \$6.8 million paid support residents affected by the South Australia Pinery bushfire and Western Australia Waroona bushfire. (Source: Department of Human Services, *2015-16 Annual Report*, Canberra, Government of Australia, 2016, p. 93.)

²⁴⁸ 2015-16: \$107,052 and \$115,966 paid to assist individuals affected by the South Australia Pinery bushfire and Western Australia Waroona bushfire. (Department of Human Services, *2015-16 Annual Report*, Canberra, Government of Australia, 2016, p. 93.)

Stakeholder responses to this review have emphasised the importance of ensuring that adequate revenue is directed towards prevention, and that prevention has not been given sufficient priority.²⁴⁹ A greater focus on prevention could result in benefits to the community – the benefits to the community of prevention are discussed in more detail in the remainder of this chapter.

However, this review focuses only on the ESL, and the ESL funds only a sub-set of total emergency management and emergency service activities in Western Australia.

While acknowledging the benefits of prevention, the ERA does not consider that it follows that all prevention activities should be funded from the ESL. The reasons for this are outlined in Chapter 5.

4.4 Effective risk management

Natural disasters can impose great costs on society. These may include loss of life, damage to private and public property, lost productivity, stress and trauma, and damage to the natural environment.²⁵⁰

It is possible to reduce the damage caused by natural disasters. Individuals, businesses and governments can undertake emergency management activities before, during, and after natural disasters to reduce risk, and hence reduce losses.²⁵¹

With limited funds, it is not possible or desirable to eliminate all risks. Individuals, businesses, and governments will incur costs if they undertake risk management.²⁵² Governments must choose between spending limited funds on risk management and other activities and projects. Similarly, individuals have competing priorities. Effective risk management involves setting priorities, and at times selecting one project at the expense of another.²⁵³ When doing so, it is important to choose the most effective activities: those that offer the best value, where the benefits outweigh the costs.²⁵⁴

Appendix F gives more detail on measuring the costs and benefits of reducing risk.

²⁴⁹ This includes, for example, the Gidgegannup Progress Association, Mr. E van Rijnswood, Mr. R Smith, Emergency Services Volunteers Association, Cascade Scaddan Fire Review, Pastoralists and Graziers Association, The Bushfire Front, Shire of Manjimup, Shire of Esperance, and Shire of Plantagenet.

²⁵⁰ Productivity Commission, *Natural Disaster Funding Arrangements: Issues Paper*, Melbourne, Government of Australia, 2014, p. 2.

²⁵¹ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 339.

²⁵² Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 343.

²⁵³ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, pp. 343 - 344.

²⁵⁴ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 344.

4.5 Demand for emergency services

Demand for emergency services in Western Australia is likely to increase. This is due to expected changes in the State's natural hazard profile,²⁵⁵ projected demographic changes,²⁵⁶ and public expectations about the level of service that emergency services organisations should provide.²⁵⁷

In its 2014-15 inquiry into natural disaster funding, the Productivity Commission noted that "projections generally indicate that the frequency and intensity of several extreme weather events are likely to increase, resulting in potentially more frequent natural disasters in the future"²⁵⁸ and that "[c]limate change may impact on future costs through changes in the frequency and intensity of some extreme weather events".²⁵⁹

The Office of Emergency Management also highlights a number of risks specific to Western Australia:

"Hotter, drier conditions due to climate change, particularly in the South West, will have important consequences for EM [emergency management]. If climatic conditions continue along the current trajectory, the northern part of Western Australia will become increasingly cooler and wetter while the South West will be hotter and drier. This will increase the likelihood of floods in the north while heightening the threat of bushfires and heatwaves in the South West."²⁶⁰

Other research has also highlighted the increasing risks posed to the State by bushfires,²⁶¹ and by storms and cyclones.²⁶² To take bushfire as an example, the State Emergency Management Committee notes that "[a]s bushfire risk level is predicted to increase, so too is the size and nature of fire response services that will be required in the future".²⁶³

Demographic changes are driving increased demand for emergency services. Increasing numbers of Australians are settling in areas that are more exposed to natural hazards, such as coastal regions and the peri-urban fringe.²⁶⁴ In its 2016 *Emergency Preparedness Report*, the State Emergency Management Committee notes that increased density in such areas not only increases the potential losses in the event of a natural disaster, but also increases

²⁵⁵ State Emergency Management Committee, *2016 Emergency Preparedness Report*, Perth, Government of Western Australia, 2016, p. 16.

²⁵⁶ State Emergency Management Committee, *2016 Emergency Preparedness Report*, Perth, Government of Western Australia, 2016, pp. 23 & 118.

²⁵⁷ State Emergency Management Committee, *2016 Emergency Preparedness Report*, Perth, Government of Western Australia, 2016, pp. 4 & 8.

²⁵⁸ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, pp. 272-3.

²⁵⁹ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 268.

²⁶⁰ Office of Emergency Management, *2016 Emergency Preparedness Report*, Perth, Government of Western Australia, 2016, p. 16.

²⁶¹ State Emergency Management Committee, *Strategic Bushfire Stocktake (Draft) Green Paper – January 2016*, Perth, Government of Western Australia, p. 17.

²⁶² Bushfire Cooperative Research Centre, *Strategic Emergency Management in Australia and New Zealand: Discussion paper on the implications of research and future challenges: June 2013*, Melbourne, Bushfire Cooperative Research Centre, 2013, p. 30.

²⁶³ State Emergency Management Committee, *Strategic Bushfire Stocktake (Draft) Green Paper – January 2016*, Perth, Government of Western Australia, p. 17.

²⁶⁴ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 1, p. 7.

demand on emergency response and support services. It also states that demand for 'proactive' activities (that is, prevention and preparedness) will probably rise accordingly.²⁶⁵

The Bushfire Cooperative Research Centre expects an increased demand for services (and consequently increased costs) over coming decades, predicting an increase in community susceptibility to natural disasters as a result of demographic change.²⁶⁶

Finally, there is some evidence that public expectations of emergency service providers in Australia are increasing, with the Bushfire Cooperative Research Centre finding that:

"The research found perceptions that community and elected representative expectations were increasingly unrealistic and that while the policy rhetoric included exhortations to enhance community resilience the reality was that resilience in some communities had actually declined. This results in greater expectations on emergency services in times of need with the anticipation of individualised or personal attention."²⁶⁷

Australia's National Strategy for Disaster Resilience also states that "[g]overnments' desire to help communities in need, and pressure to help those affected may be creating unrealistic expectations and unsustainable dependencies".²⁶⁸

4.6 Investing in prevention and preparedness

Stakeholder submissions to this review have focused heavily on the importance of investing in prevention and preparedness. There is evidence demonstrating the effectiveness of specific and well-targeted prevention and preparedness activities.

This section:

- discusses the merits of investing in prevention and preparedness;
- explains the importance of measuring the costs and benefits of investing in specific activities; and
- discusses the risks of spending too much on response at the expense of prevention and preparedness.

²⁶⁵ State Emergency Management Committee, *2016 Emergency Preparedness Report*, Perth, Government of Western Australia, 2016, p. 23.

²⁶⁶ Bushfire Cooperative Research Centre, *Strategic Emergency Management in Australia and New Zealand: Discussion paper on the implications of research and future challenges: June 2013*, Melbourne, Bushfire Cooperative Research Centre, 2013, p. 28.

²⁶⁷ Bushfire Cooperative Research Centre, *Strategic Emergency Management in Australia and New Zealand: Discussion paper on the implications of research and future challenges: June 2013*, Melbourne, Bushfire Cooperative Research Centre, 2013, pp. 5-6.

²⁶⁸ Council of Australian Governments, *National Strategy for Disaster Resilience*, Canberra, Government of Australia, 2011.

4.6.1 The merits of investing in prevention and preparedness

A natural hazard becomes a natural disaster when people are affected, causing a serious disruption to the functioning of a community or society,²⁶⁹ and can have major environmental effects. Natural disasters are costly, in terms of destruction of property, and social, environmental, and other economic costs. Consequently, it is important to invest in activities that prevent natural hazards from becoming natural disasters, or at least reduce the cost of those natural disasters that cannot be prevented. This is particularly important in the current context, where the costs of natural disasters are rising, as are the frequency and severity of natural hazard events.²⁷⁰

Several stakeholders state that prevention and preparedness can make communities less vulnerable to natural hazards, and so less in need of response services and recovery investment.²⁷¹ This makes intuitive sense, as there will be less requirement for response and recovery services if a disaster does not occur, or if it occurs but is less severe.

Effective investment in prevention and preparedness (and consequently resilience) benefits society as a whole. The Productivity Commission has pointed out that more resilient communities that invest in prevention and preparedness are likely to experience lower disaster-related costs than other communities.²⁷² These costs include damage to physical property, loss of life, trauma, and loss of productivity.²⁷³ Therefore investment in prevention and preparedness not only lowers government costs, but reduces the costs experienced by communities as a result of natural disasters.

There are many different types of prevention and preparedness activities. Some typical program areas are shown in Box 2 – these include activities that can be undertaken by governments, and those that can be undertaken by businesses and individuals. Used appropriately, each activity could save lives, property, and money. However, as explained in Section 4.6.2, prevention and preparedness do not always offer good value.

²⁶⁹ United Nations Office for Disaster Risk Reduction, *Terminology*, United Nations, <https://www.unisdr.org/we/inform/terminology>, (accessed 15 June 2017).

²⁷⁰ Productivity Commission, *Natural Disaster Funding Productivity Commission Inquiry Report*, Melbourne, Government of Australia, 2014, Vol. 2, pp. 272-3.

²⁷¹ For example, the Gidgegannup Progress Association, *Submission to issues paper*, 8 March 2017, p. 3; Pastoralists Graziers Association of WA, *Submission to issues paper*, 10 March 2017, p. 5; Shire of Esperance, *Submission to draft report*, 11 August 2017, p. 3, and Shire of Plantagenet, 4 August 2017, p. 8.

²⁷² Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 373.

²⁷³ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 2.

Box 2 Examples of prevention and preparedness program areas

Government prevention and preparedness activities	
Prevention <ul style="list-style-type: none"> - Building-use regulations and codes - Public education and information - Tax incentives / disincentives - Insurance incentives / disincentives - Zoning / land-use management - Protective infrastructure (e.g. levees) - Prescribed burning 	Preparedness <ul style="list-style-type: none"> - Emergency response plans - Warning systems - Emergency communications - Mutual aid agreements - Public education and information - Community refuge shelters
Private prevention and preparedness activities	
Prevention <ul style="list-style-type: none"> - Establishing fire breaks and clear zones - Hazard-resistant construction - Siting structures appropriately - Clearing tall grass and fallen trees 	Preparedness <ul style="list-style-type: none"> - Evacuation plans - Training programs and drills - Resource inventories - Private refuge shelters - Data backup systems - Private infrastructure (e.g. water tanks)

Source: Australian Institute for Disaster Resilience; ERA analysis.²⁷⁴

Appendix E details some of the specific prevention and preparedness activities carried out by DFES.

4.6.2 Measuring the costs and benefits of investing in prevention and preparedness

There have been a number of claims that a one-dollar investment in prevention and preparedness will generate a particular return from savings from future damage. The ERA does not consider these claims to be robust, and considers that the benefits of prevention and preparedness activities can only be measured on a case-by-case basis.

²⁷⁴ Australian Institute for Disaster Resilience, *Manual 1: Emergency management in Australia – Concepts and principles*, Canberra, Emergency Management Australia, 2004, p. 5, and ERA research.

For example, the World Bank has frequently been quoted as saying that disaster risk reduction²⁷⁵ activities save \$4 to \$7 dollars for each dollar invested. This statistic continues to be quoted, even though the World Bank itself no longer supports these figures:

“[M]any politicians and reports quote the World Bank as having calculated that DRR [disaster risk reduction] saves \$7 (sometimes \$4-7) for every \$1 invested. One variation is that the World Bank and U.S. Geological Survey showed that \$40 billion invested in DRR [disaster risk reduction] would have reduced disaster losses during the 1990s by \$280 billion. No original, verifiable citations, calculations, or methods have yet been found, so the World Bank no longer promotes these numbers.”²⁷⁶

“Additionally, myths have arisen surrounding BCRs [benefit cost ratios] for DRR [disaster risk reduction]. The most infamous is the often-quoted ratio that the World Bank is purported to have calculated that DRR [disaster risk reduction] saves \$7 (sometimes \$4–7) for every \$1 invested. The 7:1 ratio continues to be used today, often without citing a reference, for example, by top UN officials, government organizations (USAID), and NGOs (Center for American Progress; Oxfam). The World Bank no longer promotes that specific statement and recommends that the ratio not be used.”²⁷⁷

Similar claims have been made in Australia. For example, the Australian Red Cross states that “[t]he Australian Business Roundtable research found that every dollar spent on disaster risk reduction saves three to eight dollars in the costs of recovery.”²⁷⁸ However, on examining the referenced Australian Business Roundtable findings, it is evident that the three and eight dollars cited by the Australian Red Cross simply refers to the outcomes of two specific prevention projects.^{279,280}

The ERA rejects this generic approach of attributing a number of ‘dollars saved’ per ‘dollar spent’ on prevention and preparedness, and the implication that simply redirecting money to prevention and preparedness will necessarily have an economic benefit.

Prevention and preparedness are important because they can reduce future costs. However, not all prevention and preparedness activities are equally effective at reducing costs. Emergency management agencies, businesses, and individuals need to invest in the right activities, in the right locations to get the most value from prevention and preparedness spending. That is, the merits of prevention and preparedness spending should be assessed on a case-by-case basis. (However, certain types of activities have been consistently

²⁷⁵ Some organizations use the umbrella term ‘disaster risk reduction’ to refer to prevention and preparedness activities.

²⁷⁶ Kelman, I., *Background Note: Disaster Mitigation is Cost Effective*, World Development Report 2014, Oslo, Center for International Climate and Environmental Research, 2014, p. 3.

²⁷⁷ Shreve, C. M., *Does mitigation save? Reviewing cost-benefit analyses of disaster risk reduction*, International Journal of Disaster Risk Reduction, Vol.10, 2014, pp. 213-235.

²⁷⁸ Slayter, J., *Time to rethink our approach to disasters*, Australian Red Cross, 2016, <http://www.redcross.org.au/news/rethink-our-approach-to-disasters.aspx>, (accessed on 29 May 2017).

²⁷⁹ Australian Business Roundtable for Disaster Resilience and Safer Communities, *A better way to protect Australian from Natural Disasters*, Media Release, <http://australianbusinessroundtable.com.au/assets/documents/Media%20releases/Media%20Release2.pdf>, (accessed on 29 May 2017).

²⁸⁰ The Western Australian Farmers Federation made a similar point in its submission to this review, stating that the Productivity Commission had made a similarly generic claim of a saving of ‘\$11 in emergency management for every \$1 spent on mitigation’. However, the Western Australian Farmers Federation was unable to provide a citation for this statement upon request.

successful in certain types of environments – for example, prescribed burning in south-west forests.)

To make an assessment, it is necessary to compare how much an activity costs with the benefit it delivers. One widely-used tool for measuring this is called cost-benefit analysis. (Appendix F discusses this tool, its limitations, and some alternatives, in further detail.) The Productivity Commission considers that cost-benefit analysis is an appropriate way to assess the effectiveness of emergency management activities, and that “[a]n overriding advantage of using cost-benefit analysis is the transparency, and therefore accountability, it brings to decision making”.²⁸¹

Cost-benefit analysis considers all the costs and benefits of an activity over time.²⁸² An analysis may not just consider the easily-measured costs and benefits (for example, raising a dam wall, or reconstructing a house), but also more subjective costs and benefits (for example lost productivity as a result of a disaster, or the value of a life saved).

The output of a cost-benefit analysis is called the ‘benefit-cost ratio’ – it is a number that attempts to summarise the overall value for money of an investment.²⁸³ If a prevention or preparedness activity has a benefit-cost ratio of less than one, it costs more than it saves. Conversely, if an activity has a benefit-cost ratio of greater than one, it saves more than it costs, and is likely to be a good investment.²⁸⁴

After analysis, it may become evident that many different prevention and preparedness activities all have benefits that are greater than their costs. However, a government, business, or individual may only have the resources to invest in a few of those activities. In that case, they should choose to invest in those activities that have the highest benefit-cost ratio – that is, the activities that deliver the best value for money.

Some case studies are provided in the boxes below. Broadly, the case studies show that activities can have very different results, and that it is important to perform case-by-case analysis and choose carefully when prioritising prevention and preparedness activities.

Box 3 provides an overview of some cost-benefit analysis studies of bushfires in Western Australia. These studies not only highlight the value of investment in bushfire prevention and preparedness, but also the importance of choosing the most effective activities for each location.

²⁸¹ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 355.

²⁸² The timing of costs and benefits is accounted for using a variable called a ‘discount rate’ – a factor that takes into account the time value of money – that is, the concept that it is more valuable to have a dollar immediately, than it is to have that dollar at some point in the future.

²⁸³ Infrastructure Victoria, *Moving from Evaluation to Valuation: Improving project appraisals by monetizing more economic, social and environmental impacts*, Melbourne, Government of Victoria, 2016, p. 11.

²⁸⁴ Infrastructure Victoria, *Moving from Evaluation to Valuation: Improving project appraisals by monetizing more economic, social and environmental impacts*, Melbourne, Government of Victoria, 2016, p. 11.

Box 3 Cost-benefit analysis and bushfires in Western Australia

Two recent Western Australian studies demonstrate the benefits of investing in bushfire prevention and preparedness. The first focuses on the costs and benefits of prescribed burning in south-west forests. The second considers a broader range of activities in the south-west and the Perth Hills.

Study 1: Think Long Term: the Costs and Benefits of Prescribed Burning in the South-West of Western Australia²⁸⁵

Prescribed burning can substantially reduce the potential severity of bushfires.²⁸⁶ This study combined economic modelling and bushfire simulation modelling to assess the costs and benefits of prescribed burns in the south-west of Western Australia over the short term (one year) and long term (15+ years). It found that short-term investments in prescribed burning in the region generate a benefit of 0.70 to 1.50 saved for each dollar invested. (So, under some scenarios, the benefits are somewhat smaller than the costs in any given year.) However, over the long term, the benefits were much higher. It showed long-term savings of between 10 and 47 dollars every year for each dollar invested, compared to a scenario where there was no prescribed burning.

Over the long term, it becomes increasingly likely that a community will be faced with a major natural hazard event. This analysis demonstrates that prevention activities – in this case, prescribed burning – can save money by preventing natural hazards from becoming disasters.

Study 2: Economic assessment of bushfire risk in management options in Western Australia: case studies in the Perth Hills and in the south-west of Western Australia²⁸⁷

This study examined the costs and benefits of three prevention and preparedness activities, in the Perth Hills and south-west regions:

- increased fuel reduction through prescribed burning and mechanical works (on the former Department of Parks and Wildlife managed land only, on local government managed land only, and on both types of land);
- land-use planning to reduce future development in high-risk areas; and
- supporting the development of community groups to help property owners better manage fuels on their own land.

Perth Hills: Benefit-cost ratios (each year, assessed over a 10 year period)

Increasing fuel reduction (Department of Parks and Wildlife)	Increasing fuel reduction (local governments)	Increasing fuel reduction (Local governments & Department of Parks and Wildlife land)	Community Engagement	Land-use Planning
4.64	1.78	4.68	0.92	15.26

The Perth Hills analysis showed that all options except for community engagement returned benefits that exceeded the costs of the activity. Land-use planning returned a significantly higher benefit for each dollar invested than any other activity. Increasing fuel reduction on both Department of Parks and Wildlife and local government managed land had a greater benefit than doing either activity alone.

²⁸⁵ Florec, V., Pannell, D., Burton, M., Kelso, J. and Milne G., *Think Long Term: the Costs and Benefits of Prescribed Burning in the South West of Western Australia*, Bushfire and Natural Hazards Cooperative

However, results for land in the south–west region were quite different:

South–west: Benefit-cost ratios (per year, assessed over a 10 year period)

Increasing fuel reduction (Department of Parks and Wildlife)	Increasing fuel reduction (local governments)	Increasing fuel reduction (Local governments & Department of Parks and Wildlife land)	Community Engagement	Land-use Planning
2.09	0.59	1.98	0.41	0.13

Generally, activities in the south–west had a lower benefit-cost ratio than in the Swan Hills. The highest benefit activity was increasing fuel reduction on Department of Parks and Wildlife managed land, while land-use planning returned the lowest benefit for each dollar invested.

This analysis shows that some strategies are far more effective than others, and highlights how different prevention and preparedness activities may be appropriate in different areas.

Cost-benefit analysis work by Deloitte also illustrates the value of investing in prevention and preparedness, and shows how the same activities can have different benefit-cost ratios when applied in different areas and contexts. Box 4 summarises Deloitte’s findings on prevention activities for cyclone and floods in south-east Queensland, floods in New South Wales, and bushfires in Victoria.

Box 4 Deloitte Access Economics case studies

Floods and cyclones in Queensland²⁸⁸

Deloitte examined the costs and benefits of making new and existing houses more resilient to floods and cyclones in foreshore and inland south–east Queensland.

	Benefit-cost ratio for existing houses	Benefit-cost ratio for new houses
Foreshore only	0.19 to 0.75	1.24 to 3.09
Inland only	0.06 to 0.23	0.38 to 0.96
Foreshore and inland	0.07 to 0.28	0.47 to 1.17

Deloitte’s analysis assumes a cost of between \$13,000 and \$52,000 to retrofit an existing house, and a cost of between \$2,600 and \$6,500 to achieve the same increase to resilience for a new house.

Research Centre, Non-peer reviewed proceedings from the Bushfire and Natural Hazards Cooperative Research Centre & AFAC conference, Brisbane, 2016.

²⁸⁶ State Emergency Management Committee, *Strategic Bushfire Stocktake (Draft) Green Paper – January 2016*, Perth, Government of Western Australia, 2016, p. 4.

²⁸⁷ Florec, V. and Pannell, D., *Economic assessment of bushfire risk in management options in Western Australia: case studies in the Perth Hills and in the South-West of Western Australia*, University of Western Australia, report prepared for the State Emergency Management Committee Secretariat, 2016.

²⁸⁸ Deloitte Access Economics, *Building Our Nation’s Resilience to Natural Disasters*, a report for the Australian Business Roundtable for Disaster Resilience & Safer Communities, Canberra, 2013, pp. 39-40.

All options result in some benefit. However, the benefits only consistently exceed the costs of improving the resilience of new houses in foreshore areas. The net benefits are much higher for making new houses more resilient, because the costs of improving resilience are much lower. The net benefits of investing in housing resilience in foreshore areas are greater than those inland areas, because foreshore areas are more vulnerable to floods and cyclones.

This demonstrates that improving the resilience of new houses in foreshore areas is the best use of money, because the benefits are greater than the costs.

Floods in New South Wales²⁸⁹

Increasing the height of dam walls also increases resilience to floods. Deloitte assessed the costs and benefits of increasing the height of the Warragamba Dam wall by 23 metres to increase flood resilience in the flood-prone Hawkesbury-Nepean region.

Deloitte found that raising the dam wall would reduce flood costs in the region by 73 per cent. It calculated that raising the wall would cost about \$411 million over 5 years (from 2012), but would save \$3 billion in flood-related costs between 2013 and 2050. This gave a benefit-cost ratio of 8.5 dollars for each dollar invested.²⁹⁰

Bushfires in Victoria²⁹¹

Deloitte reviewed the costs and benefits of three very different bushfire prevention and preparedness activities in Melbourne's metropolitan fringe, a highly-populated area that is also at high risk of bushfires:

- **Building more resilient houses** (at an average compliance cost of \$14,931 per house): This activity reduces the risk of fire spreading from house to house via embers. Deloitte estimated a benefit-cost ratio of 1.4 dollars saved for each dollar invested, over the period from 2013 to 2050.
- **Reducing ignition sources by burying electricity wires** (at a cost of \$690 million to treat 71,000 high-risk homes): Faults in electricity transmission and distribution networks are a frequent cause of bushfires in Victoria. Deloitte estimated a benefit-cost ratio of 3.1 dollars saved for each dollar invested, over the period from 2013 to 2050.
- **Managing vegetation by clearing 5 metre areas around at-risk houses** (at a cost of \$200 a year for 71,000 high-risk homes): A 5 metre clearance around the house reduces bushfire risk by 30 per cent. This can be achieved by establishing regulations, and conducting compliance and monitoring activities. Deloitte estimated a benefit cost-ratio of 1.3 dollars saved for each dollar invested, over the period from 2013 to 2050.

This analysis shows that there may be a variety of prevention options for a given risk, all of which yield a net benefit. As with the study of floods and cyclones in Queensland, the number of approaches that can be taken will depend on the level of resourcing available. In practice, the Victorian Government would also weigh the value of these three activities against the value of other risk management activities across the State.

²⁸⁹ Deloitte Access Economics, *Building Our Nation's Resilience to Natural Disasters*, a report for the Australian Business Roundtable for Disaster Resilience & Safer Communities, Canberra, 2013, pp. 43.

²⁹⁰ Deloitte noted that this was substantially higher than the (still substantial) benefit-cost ratio of 2.2 calculated by Molino Stewart for the same project, due to the choice of discount rate used in the calculation. This difference highlights one of the challenges with this kind of analysis – it can be difficult for experts to agree on the right assumptions to use when modelling costs and benefits.

The Deloitte case studies illustrate the potential benefit of investing in prevention. However, the case studies focus mainly on ‘hard’ prevention activities. Emergency management agencies can also undertake ‘soft’ prevention and preparedness activities (for example, community information programs). The Productivity Commission has pointed out that soft measures can also be effective - and sometimes less intrusive – than hard measures, although the benefits may be harder to quantify.²⁹²

The Western Australian case study in Box 3 assessed specific community engagement activities in the Perth Hills and south-west regions, and found the costs of the activity were greater than the benefits. However, the same study showed a benefit-cost ratio of 15.26 for land-use planning in the south-west region – another soft prevention activity. This shows that, as with hard prevention, choosing the right soft prevention and preparedness activities can deliver significant savings.

The United Nations’ *Sendai Framework for Disaster Risk Reduction 2015-2030* emphasises the value of both hard and soft disaster risk reduction activities, stating that:

“Public and private investment in disaster risk prevention and reduction through structural [hard] and non-structural [soft] measures are essential to enhance the economic, social, health and cultural resilience of persons, communities, countries and their assets, as well as the environment. These can be drivers of innovation, growth and job creation. Such measures are cost-effective and instrumental to save lives, prevent and reduce losses and ensure effective recovery and rehabilitation.”²⁹³

4.6.3 Risks of spending too much on response

It is necessary to have the right level of response capacity in place to meet the needs of the community when faced with a natural disaster.

Governments and emergency management agencies have strong political incentives to invest in response capabilities. When a natural disaster occurs, they will inevitably be criticised for providing too little, but are rarely criticised for providing too much.²⁹⁴

The results of investing in response are also highly visible to the community – for example, the State’s firefighters, emergency vehicles, and water-bombing aircraft. In contrast, the results of investment in prevention and preparedness can be less visible,²⁹⁵ being money spent to reduce the probable consequences of an event that may or may not happen in the future.²⁹⁶

²⁹¹ Deloitte Access Economics, *Building Our Nation’s Resilience to Natural Disasters*, a report for the Australian Business Roundtable for Disaster Resilience & Safer Communities, Canberra, 2013, pp. 47-48.

²⁹² Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 373.

²⁹³ United Nations Office for Disaster Risk Reduction, *Sendai Framework for Disaster Risk Reduction 2015-2030*, United Nations, Geneva, Switzerland, 2015, p. 18.

²⁹⁴ Kelly, C., *A framework for improving operational effectiveness and cost efficiency in emergency planning and response*, Disaster Prevention and Management: An International Journal, Vol. 4, Issue 3, 1995, pp. 25-31.

²⁹⁵ Handmer, J., & Dovers, S., 2008, *Policy Development and Design for Fire and Emergency Management*, Australian Journal of Emergency Management, Vol. 1, No. 1, pp. 21-29; Vohries, F., *The economics of investing in disaster risk reduction*, Working paper for the United Nations Office for Disaster Risk Reduction, 2012, Geneva, Switzerland, p. 16.

²⁹⁶ Neumayer, E., Plümper, T. and Barthel, F., 2014, *The political economy of natural disaster damage*, Global Environmental Change, Issue 24, pp. 8-19.

Many submissions to this review expressed concern that DFES may be investing too much in response and too little in prevention and preparedness.

Spending too much on response at the expense of prevention and preparedness may have a number of negative effects. Long term costs may increase if less money is available for prevention and preparedness expenditures that have positive benefits. This is evidenced by many of the benefit-cost studies in Section 4.6.2, which show how a dollar invested in prevention and preparedness can save multiple dollars in the future.

Spending too much on response capacity and top-down disaster management can reduce a culture of self-reliance, replacing it with one where people simply expect highly-resourced emergency management agencies to be available to deal with every hazard. This reduces community resilience and increases vulnerability to natural disasters.²⁹⁷

Australia's National Strategy for Disaster Resilience emphasises that resilience is not merely a concern for emergency management agencies, but a shared responsibility across governments, businesses, individuals, and community organisations.²⁹⁸ The State Emergency Management Committee's *2016 Emergency Preparedness Report* notes this issue too. The report states that while Western Australians are generally committed to the principle of shared responsibility:

"[T]here remain pockets of society that believe 'it won't happen to me'...The complacency of such people creates impacts broader than just to themselves and may affect the entire community."²⁹⁹

The Pastoralists and Graziers Association also warned of the risks of eroding self-reliance in its submission, stating that "[t]he PGA [Pastoralists and Graziers Association] is deeply concerned about government interventions that do, or could potentially, undermine self-reliance."³⁰⁰

In summary, disaster response is a critical function of government, and particularly of emergency management agencies such as DFES. It is essential that governments are resourced to meet this response role. However, spending too much on response can have consequences, particularly if it comes at the cost of effective prevention and preparedness. This does not mean that DFES and the State Government should be responsible for *all* prevention and preparedness. Disaster resilience is a shared responsibility, and prevention and preparedness can, and should, be funded from a range of sources, with property owners taking responsibility for risks on their land.

²⁹⁷ Clements, B. W. and Casani, J., *Disasters and Public Health: Planning and Response*, Butterworth-Heinemann, 2016, pp. 62-63.

²⁹⁸ Council of Australian Governments, *National Strategy for Disaster Resilience*, Canberra, Government of Australia, 2011, p. 2.

²⁹⁹ State Emergency Management Committee, *2016 Emergency Preparedness Report*, Perth, Government of Western Australia, 2016, p. 8.

³⁰⁰ Pastoralists and Graziers Association of WA, *Submission to issues paper*, 10 March 2017, p. 3.

4.7 Best practices and standards for funding allocation

The ISO 31000 standard is the main framework that describes best practices for risk management and resource allocation (refer to Box 5 below). The ISO 31000 standard aims, among other things to, help organisations, “effectively allocate and use resources for risk treatment”.³⁰¹ The standard is relevant to the allocation of ESL funding, and is endorsed by the State Emergency Management Committee.³⁰²

Box 5 What is the ISO 31000 standard?

The ISO standards have been developed by the International Organisation for Standardization, an independent, non-governmental and international organisation. The International Organisation for Standardization aims to develop “world-class specifications for products, services and systems, to ensure quality, safety and efficiency”.³⁰³

The ISO 31000 standard provides principles, a framework, and a process for managing risk.³⁰⁴

In practice, this means that the standard helps users develop ways to deal with the effect of uncertainty on objectives. This includes helping users design and implement a broad framework to manage risks facing the organisation, to consistently monitor and review the framework, and to continually improve it.³⁰⁵

It also gives direction on how to communicate and consult more effectively with stakeholders, assess the context in which the risk occurs, perform a risk assessment (that is risk identification, analysis, and evaluation), and design treatments for the risk (that is, identifying and selecting risk management options, and preparing and implementing treatment plans).³⁰⁶

Finally, it gives direction on how to monitor risk and review risks and risk management on an ongoing basis, as well as properly recording the risk management process for future users.³⁰⁷

It is a comprehensive standard that provides an overview of risk, and the actions and decisions organisations need to manage risk. This standard is particularly relevant for organisations like DFES, who face risk as a part of their everyday business.

Figure 29 shows how the ISO 31000 standard relates the principles of effective risk management, with a framework for risk management and risk management processes.

³⁰¹ International Organization for Standardization, *ISO 31000:2009 Risk management – principles and guidelines*, <https://www.iso.org/obp/ui/#iso:std:iso:31000:ed-1:v1:en>, (accessed 30 May 2017).

³⁰² State Emergency Management Committee, *2012 Emergency Preparedness Report*, Perth, Government of Western Australia, 2012, p. 7.

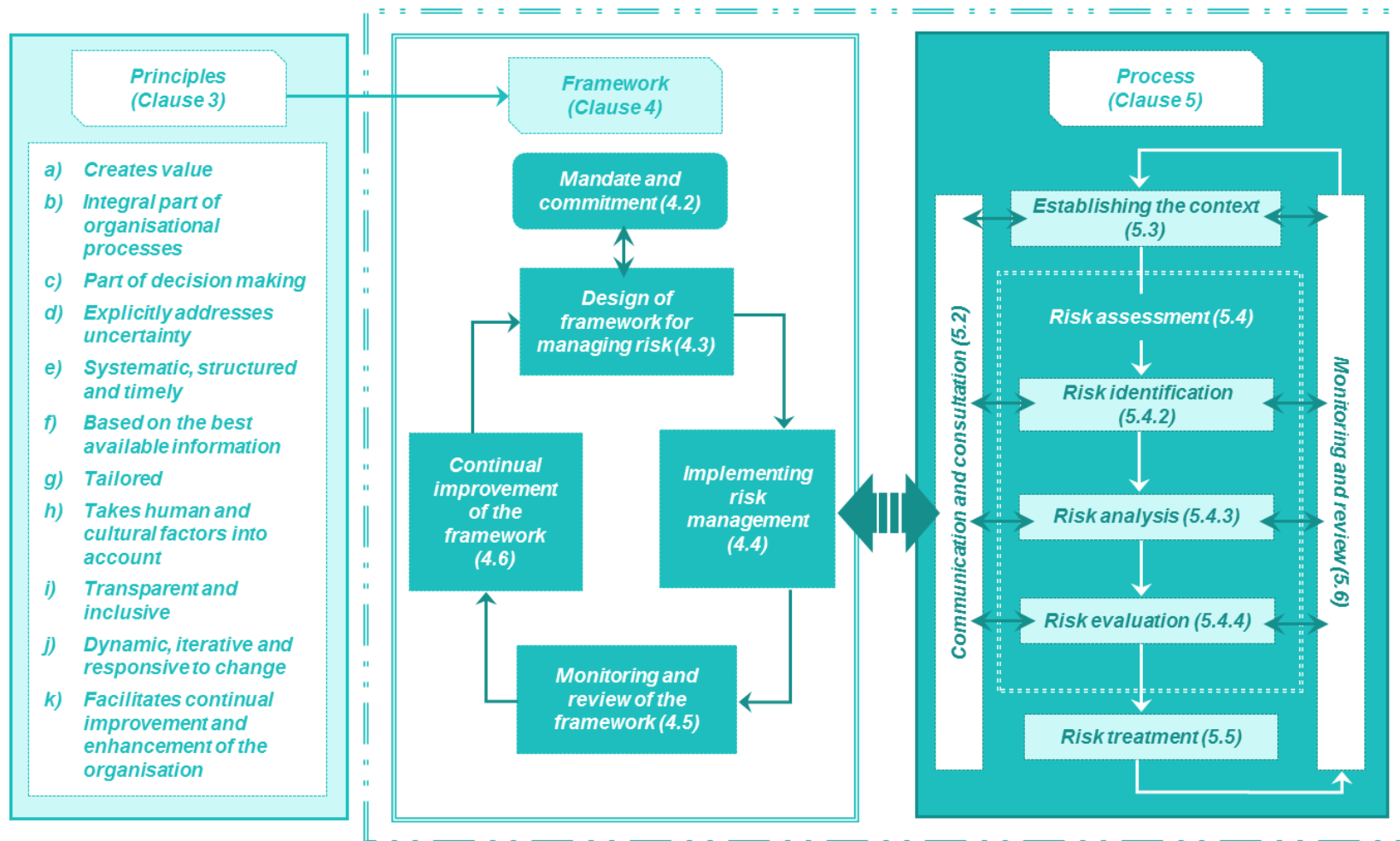
³⁰³ International Organization for Standardization, <https://www.iso.org/about-us.html>, (accessed 13 June 2017).

³⁰⁴ International Organization for Standardization, *ISO 31000 – Risk management*, <https://www.iso.org/iso-31000-risk-management.html>, (accessed 13 June 2017).

³⁰⁵ International Organization for Standardization, *ISO 31000 – Risk management*, <https://www.iso.org/iso-31000-risk-management.html>, (accessed 13 June 2017).

³⁰⁶ International Organization for Standardization, *ISO 31000 – Risk management*, <https://www.iso.org/iso-31000-risk-management.html>, (accessed 13 June 2017).

³⁰⁷ International Organization for Standardization, *ISO 31000 – Risk management*, <https://www.iso.org/iso-31000-risk-management.html>, (accessed 13 June 2017).

Figure 29 Relationship between the risk management principles, framework, and process

Source: International Organisation for Standardisation: ISO 31000.

The 'framework' and 'process' boxes do not refer specifically to funding allocation. However, they do raise issues for best practice allocation of emergency management resources in Western Australia. The most relevant issues raised in the figure are:

- *The feedback loop shown in the 'framework' box:* Good risk management (be it for natural hazards or other risks) requires ongoing monitoring, review, and improvement. This type of continuous evaluation allows an agency to adjust the allocation of resources in response to changing conditions, and also in response to lessons from past experience.
- *The identification, analysis, evaluation, and treatment process shown in the 'process' box:* An agency needs to go through each of these stages to make effective resource allocation decisions. These stages should be informed by communication and consultation, and by monitoring and review. Any lessons learned from the risk treatment phase are fed back through the monitoring and review process to inform and improve decision making in the future.

The ISO 31000 standard provides a framework that can guide DFES in managing risk, and when paired with cost-benefit analysis, can help inform budgeting decisions to ensure that money is spent well. However, the framework should always be applied in context – that is, it should only be used to address risks and activities for which DFES is responsible. For example, the ESL should mainly be used to fund prevention activities that benefit the community in general, rather than specific property owners (discussed in Chapter 5). These are largely management and coordination activities. This means that DFES would only apply the framework to risks and prevention activities that fall within this scope.

DFES's submission to the draft report states that it has an established Risk Management Framework that is aligned to the ISO 31000 standard, and that it intends to expand application of the ISO 31000 standard across all business decisions including business plans and budget allocations.³⁰⁸ It notes that continuous improvement of risk management across the organisation is ongoing.³⁰⁹

4.7.1 Overview of Department of Fire and Emergency Services budgeting process

DFES follows the same procedures as other government agencies for the annual budget allocation process.³¹⁰ Each year, the Department of Treasury assesses Western Australia's financial position and any policy direction from the State Government. This information is used to set parameters for the upcoming year's budget process – this essentially tells agencies how much money they have for the coming year. However, the budget process is flexible, in that agencies have the opportunity to:

- request adjustments to the forward estimates (that is, how much money is available for future years);
- seek funding to support new initiatives or respond to cost pressures; and

³⁰⁸ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 11.

³⁰⁹ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 11.

³¹⁰ Material provided by Department of Fire and Emergency Services, *DFES's Budget Process Overview*, 2 June 2017.

- formalise any state government policy decisions that affect agency business.³¹¹

Each year, agencies (including DFES) prepare their annual budget submissions covering these areas. With the exception of seeking funding to support new initiatives, annual budget submissions do not generally deal with specific projects undertaken by the agency.

Within DFES, the Corporate Leadership Team is responsible for making the decisions that inform DFES's annual budget submission. The Corporate Leadership Team is the key decision-making body in DFES, and its role includes endorsing the annual budget and monitoring financial performance.³¹² DFES states that when it develops the annual budget submission, DFES has stated the Corporate Leadership Team takes into account the internal and external factors shown in Box 6.

In its submission to the draft report, DFES notes that the current arrangement, involving the Department of Treasury informing Government of recommendations on DFES's budget and ESL spending:³¹³

- is the most appropriate, efficient and equitable budget determination and allocation process; and
- ensures that the Fire and Emergency Services Commissioner is afforded the same level of responsibility and accountability as other Accountable Authorities for the financial management of the functions and services under their control as prescribed in the *Financial Management Act 2006*.

DFES notes that the financial responsibilities of the Fire and Emergency Services Commissioner should not be viewed in isolation of responsibilities for emergency services under the emergency services Acts.³¹⁴

³¹¹ Description provided by Department of Fire and Emergency Services, 2 June 2017.

³¹² Department of Fire and Emergency Services, *DFES Governance Framework – Version 3 (Issue Date: 20 October 2016)*, Perth, Government of Western Australia, 2016, p. 9.

³¹³ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, pp. 4-5.

³¹⁴ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, pp. 4-5.

Box 6 Factors considered when developing the DFES annual budget submission³¹⁵**External factors**

- Forward estimates for the upcoming financial year;
- Government / Ministerial direction; and
- The Department of Treasury budget parameters.

Internal factors

- Issues, risks, and cost pressures raised from within DFES that require funding support. In addition to the Corporate Leadership Team, there are a number of formal committees that help DFES identify issues, risks, and cost pressures.
- These committees include the Audit and Risk Committee, Program Management Committee, Local Government Grants Committee, Volunteer Marine Rescue Capital Grants Committee, Strategic Asset Management Plan Committee, Strategic Communications Committee, Volunteer Advisory Committees, Equity and Diversity Committee, and Health and Safety Governance Committee.

4.7.2 Department of Fire and Emergency Services funding allocation frameworks

DFES is in the process of formalising two high-level frameworks to help decide how funds should best be allocated. These are the Strategic Planning Framework and the Capability Framework.³¹⁶ These inform the DFES budgeting process discussed in Section 4.8 and how funds are allocated.³¹⁷ Figure 30 shows DFES's funding allocation and budgeting structure.

Figure 30 DFES funding allocation and budgeting structure

³¹⁵ Department of Fire and Emergency Services, *DFES Governance Framework – Version 3 (Issue Date: 20 October 2016)*, Perth, Government of Western Australia, 2016, p. 9.

³¹⁶ Material provided by Department of Fire and Emergency Services, *DFES's Budget Process Overview*, 2 June 2017.

³¹⁷ The information in this section was provided by Department of Fire and Emergency Services to the Economic Regulation Authority.

The Strategic Planning Framework (summarised in Box 7) provides the basis of the allocation of ESL funding across prevention, preparedness, response, and recovery.

DFES has stated that, in making this allocation, it develops a risk matrix that outlines the type of hazards that may affect Western Australia, and the potential effect of each of those hazards. DFES gives less weight to the probability of any given hazard occurring, than to the potential effect of that hazard, on the basis that it will still have to respond, whether a likely event or an unlikely event occurs. Hence, in allocating funding to projects, it prioritises those that provide capacity to respond to a range of hazards, rather than actions and expenditure that target single hazards.³¹⁸

Box 7 DFES Strategic Planning Framework

The Strategic Planning Framework underpins the *DFES 2016-2028 Strategic Plan*. The *DFES 2016-2028 Strategic Plan* outlines the agency's priorities over the next 12 years.

The Strategic Planning Framework sets six high level priorities and uses these to set specific organisational targets by 2020, 2024, and 2028. DFES uses these long term targets to develop its Annual Business Plan and Program of Works. The Annual Business Plan and Program of Works detail the specific actions and projects DFES plans to undertake during the year.

The six priorities defined in the *DFES 2016-2028 Strategic Plan* are:

1. protection and preservation of life;
2. community warnings and information;
3. protection of critical infrastructure and community assets;
4. protection of residential property;
5. protection of assets supporting individual livelihood and community financial stability; and
6. protection of environmental and heritage values.

Source: DFES.

The Capability Framework (summarised in Box 8) was finalised and published in September 2015, and is intended to provide DFES with an overarching framework to plan for the future and make budgeting decisions. It is designed to help DFES gather the information necessary to determine funding needs. In its submission to the draft report, DFES states that “considerable progress” has been made with the Capability Framework, with:

“...work commencing as a priority on the development of a high level implementation plan. This will establish the foundations for moving forward with capability planning and improved transparency around funding decisions.”³¹⁹

DFES is still working to finalise implementation of the Capability Framework.

³¹⁸ Communication with Department of Fire and Emergency Services, 22 May 2017.

³¹⁹ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, pp. 2-3.

Box 8 DFES Capability Framework

The Capability Framework involves the following steps:

1. Establishing the DFES organisational context ('What we do, and why we do it?').
2. Capability modelling. This comprises two steps:
 - a. Modelling individual capabilities ('What we should do?'); and
 - b. Developing the Service Delivery Model ('How we would like to operate').
3. Strategic planning ('What we plan to do'), leading to the development of the DFES Strategic Budget. This planning covers five sub-plans:
 - a. Strategic People Plan;
 - b. Strategic Asset Management Plan;
 - c. Strategic Information and Communication Technologies Plan;
 - d. Strategic Knowledge Plan; and
 - e. Strategic Accountability and Governance Plan.
4. Risk evaluation and prioritisation of capabilities, leading to the development of the DFES Business Plan ('What we will do') which informs necessary modifications to DFES service delivery.

Source: DFES.

DFES states that implementation of the Capability Framework will:³²⁰

- clarify roles and responsibilities assigned to DFES under legislation;
- prioritise funding and resourcing based on risk assessment;
- support equitable resourcing decision making based on capability required versus who administers the personnel providing the service; and
- improve transparency in financial reporting, specifically funding allocation, by aligning projects to community outcomes, performance measures and service activity.

4.8 Economic Regulation Authority assessment

The ERA examined DFES's ESL funding allocation process by discussing it with DFES staff and examining internal DFES planning documents and strategies. The ERA was also informed by consultation with other stakeholders.

Improvements could be made to the processes used by DFES to allocate funds. Recommendations for improving the processes are set out in the rest of this chapter.

³²⁰ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 11.

4.8.1 General findings on the funding allocation process

DFES informs the ERA that funding allocation priorities are decided by the Corporate Leadership Team in monthly meetings and planning days. During these meetings, members of the Corporate Leadership Team put forward ideas for funding. Ideas are selected to be implemented after discussion and debate. The Corporate Leadership Team is informed by the Strategic Planning Framework and the Capability Framework during these sessions,³²¹ and a project proposal must be developed for each funding idea.³²²

Robust debate by agency leadership has an important role in planning and funding allocation processes. However, the approach described by DFES appears quite informal, and the internal documents provided make no mention of cost-benefit analysis or other analytical techniques.

In response to the draft report, DFES notes that:

- it uses formal evaluation techniques for significant investment projects, as required by Cabinet and the Department of Treasury;
- the Program Evaluation Unit within the Department of Treasury has published an Evaluation Guide that is available to all agencies to provide consistency across evaluations, improve the cost-effectiveness of programs and promote accountability; and
- DFES is currently developing an evaluation framework that will “allow these benefits to be extrapolated from initiatives of all sizes within the department”.³²³

While it is likely that DFES applies evaluation techniques in some circumstances, it is unclear:

- how the Corporate Leadership Team decides which project proposals to fund, including the type of technical analysis it uses (cost-benefit analysis or otherwise);
- whether detailed technical analysis of funding allocation options (cost-benefit analysis or otherwise) is undertaken as a matter of course, and if so, at what stage of the idea-development or funding allocation process; and
- whether DFES undertakes post-implementation analysis of specific projects (cost-benefit analysis or otherwise) as a matter of course, and whether any such analysis is fed back into the Corporate Leadership Team’s future funding allocation processes.

³²¹ Communication with Department of Fire and Emergency Services, 22 May 2017.

³²² Material provided by Department of Fire and Emergency Services, *DFES’s Budget Process Overview*, 2 June 2017.

³²³ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 10.

4.8.2 Consideration of risk when making decisions

During consultation the ERA was informed that, in general, agencies tend to lack evidence when deciding how to allocate resources to manage risk.³²⁴

Several stakeholders perceive that DFES does not adequately consider risk when making decisions. Stakeholders who raised this issue included the Office of Emergency Management³²⁵ and WAFarmers.³²⁶ In its submission to the issues paper, the Office of Emergency Management commented that ESL expense management “should have closer alignment with recognised risk management processes”, stating that:

“It follows that expenses would be directed towards the most productive treatments and controls and thus range over the full spectrum of treatments from prevention (or mitigation) and preparedness, to response and recovery. The difficulty will be identifying the varying risk burden faced across the state and developing a suitable distribution mechanism.”³²⁷

The Office of Emergency Management suggested a specific approach to do this, as outlined in Box 9.

Box 9 Office of Emergency Management’s proposal to improve allocation of DFES expenditure in line with risk

“Ideally, each local government area would have a fully developed emergency management risk plan – to a state-wide standard – complete with costed treatments. This plan would form the basis of a local government business case for ongoing funding support. Base, or foundational funding support to each local government, simply based on population, land use or land value (or a combination of these) would always be the start point, with an emergency management risk plan forming the basis for additional funding. OEM [Office of Emergency Management] recognises that this is somewhat idealistic and would take years to reach maturity.

It is therefore suggested a staged approach would be required, perhaps commencing by more explicitly permitting prevention/mitigation expenditure in the first instance. Given DFES’s state-wide remit, there would be a need for base level funding to ensure service viability, though district and local district distribution could be prioritised based on more rigorous risk-based methodology. In addition, there will also always be a need to coordinate functions and services state-wide (such as aviation, training, logistics, incident expertise, major incident coordination etc.)[.] An interim first step could be to base distribution on land use/value and population index, with an assured level of base funding for service viability.”³²⁸

The process proposed by the Office of Emergency Management is just one of a range of options. However, it illustrates that there are other approaches to risk-based funding allocation that DFES could consider.

³²⁴ The Department of Biodiversity, Conservation and Attractions is an exception. The Department adopted the ISO 31000 standard and brought all of its activities into alignment with the standard by 2012-13.

³²⁵ Office of Emergency Management, *Submission to issues paper*, 9 March 2017, p. 3

³²⁶ Western Australian Farmers Federation Inc. (WAFarmers), *Submission to issues paper*, 10 March 2017, p. 3

³²⁷ Office of Emergency Management, *Submission to issues paper*, 9 March 2017, p. 3.

³²⁸ Office of Emergency Management, *Submission to issues paper*, 9 March 2017, p. 3.

It is important that stakeholders – including the State Government and indeed all Western Australians – can have confidence that DFES considers and manages risk appropriately. The best way to provide this confidence is to introduce strong and visible processes and good governance. A number of stakeholders do not feel there is sufficient evidence to demonstrate DFES’s effectiveness in this area.

To address this, the draft report recommended that DFES should implement the ISO 31000 standard across its business, with a particular focus on implementing the feedback and learning processes described in the ISO 31000 framework.³²⁹ The ERA also recommended that DFES finalise and implement the Capability Framework as a priority. Submissions to the draft report general support these recommendations.

Some progress appears to have been made by DFES in this area. In its submission to the draft report, DFES notes that it is intending to apply the ISO 31000 standard across all business decisions, including business plans and budget allocations.³³⁰ It states that the Capability Framework was finalised and published in September 2015, and that it is working to implement the framework.³³¹

Specific concerns raised by stakeholders are now addressed.

4.8.2.1 *Implementing ISO 31000 standards*

Some stakeholders argue that the ISO 31000 standards should only be implemented if they do not create new operational and financial inefficiencies (for example, by increasing DFES staff numbers and costs without improving outcomes, or having an adverse impact on volunteer time due to increased compliance requirements).³³² One stakeholder states that any requirement for prescribed burning processes to comply with ISO 31000 standards is flawed, because it would increase bureaucracy and be impractical.³³³

Implementing the ISO 31000 standard should lead to a more efficient allocation of existing resources – and in turn better outcomes from those resources – not a need to increase resources. Further, the framework should only be used to address risks and activities for which DFES is responsible. The framework is not intended to apply to volunteers’ activities, nor the activity of undertaking prescribed burning. The framework would, however, be applied in developing Bushfire Risk Management Plans, because this would ensure that resources are directed to the areas of highest risk.

³²⁹ DFES has not yet implemented the ISO 31000 standard across its entire organisation. However, the Office of Bushfire Risk Management is working with the Department of Biodiversity, Conservation and Attractions (formerly the Department of Parks and Wildlife), DFES, and local government to progress compliance with the ISO 31000 standard for bushfire risk management. *Source:* Department of Fire and Emergency Services, *Office of Bushfire Risk Management*, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/waemergencyandriskmanagement/obrm/Pages/default.aspx>, (accessed 16 June 2016).

³³⁰ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 11.

³³¹ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 11.

³³² Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 8; Smith, R., *Submission to draft report*, 7 August 2017, p. 7; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 6.

³³³ Smith, R., *Submission to draft report*, 7 August 2017, p. 7.

4.8.2.2 *The Capability Framework*

Some stakeholders argue that an independent organisation should have a role in the development, review, finalisation and implementation of the Capability Framework, because it is currently perceived to only benefit DFES and the United Firefighters Union.³³⁴

DFES notes that the Capability Framework has already been finalised and is now being implemented,³³⁵ suggesting that it is too late for an independent organisation to play a role in developing, reviewing and finalising the Capability Framework. However, in Chapter 8, this report recommends that an organisation such as the Department of Treasury review DFES's structure and resources, to determine whether it is operating efficiently, including how it allocates and spends ESL revenue. This review would provide an opportunity for an independent organisation to review the Capability Framework and DFES's implementation of the framework.

Given these considerations, this report recommends that the ISO 31000 standard and the Capability Framework continue to be implemented by DFES.

4.8.3 *Use of quantitative evidence to support decision making*

DFES has not demonstrated a clear link between its funding allocation frameworks, the decision-making processes of the Corporate Leadership Team, and any use of quantitative evidence (including for post-project evaluation). DFES's Strategic Planning Framework and Capability Framework provide strategic direction, but DFES did not provide more detailed information about how the relative costs and benefits of various alternatives are measured.

DFES notes that it uses formal evaluation techniques for significant investment projects, as required by Cabinet and the Department of Treasury, and that it is currently developing an evaluation framework.³³⁶ However, DFES does not provide information about what these techniques are, or how they are applied.

Stakeholders broadly support the draft report's recommendation that a robust quantitative analysis should be undertaken in both the decision-making and post-project review phases. While technical assessments may not provide a definitive result, and must be balanced with other concerns, they provide important information for decision-makers.

Specific issues raised by stakeholders are now addressed.

4.8.3.1 *Cost-benefit analysis and other analytical techniques*

DFES notes that cost-benefit analysis may not be the most appropriate technique to evaluate the provision of state government services — it suggests alternatives such as

³³⁴ Association of Volunteer Bushfire Brigades, *Submission to draft report*, 15 August 2017, p. 11; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 8; Smith, R., *Submission to draft report*, 11 August 2017, p. 7.

³³⁵ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 11.

³³⁶ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 10.

cost-effectiveness analysis,³³⁷ risk-benefit analysis,³³⁸ economic impact analysis,³³⁹ fiscal impact analysis,³⁴⁰ and social return on investment analysis.³⁴¹

An overview of some alternative quantitative methods is included in Appendix F. All quantitative methods have limitations.³⁴² Alternative methods can serve as useful complements, and in some cases alternatives, to cost-benefit analysis.

For example, risk-benefit analysis – as a specific type of cost-benefit analysis – would allow for the risk of costs and benefits occurring to be taken into account. It could therefore be seen as enhancing the output of traditional cost-benefit analysis (as opposed to substituting for it). Measuring environmental, psychological and social costs and benefits can be particularly difficult. However, social return on investment analysis, and augmenting cost-benefit analysis with other forms of community-based studies, can set the economic numbers in the more comprehensive context that planners actually operate in.

Where the value of the outcomes of activities cannot be established (and cost-benefit analysis therefore cannot be undertaken), cost effectiveness analysis could be a viable alternative.

On the other hand, economic impact analysis is not an appropriate analytical technique for deciding how to allocate resources among different activities. This is because it does not take into account the resources consumed in undertaking the different activities, only their different economic effects.

³³⁷ Cost effectiveness analysis is an alternative to cost-benefit analysis. It compares the relative costs to the outcomes of two or more courses of action. It is most useful where it is not possible to monetize benefits, and is commonly used in health care because it is difficult to put a *value* on outcomes – but the outcomes can be counted and compared (e.g. ‘number of lives saved’). *Source*: Better Evaluation, *Cost Effectiveness Analysis*, <http://www.betterevaluation.org/en/evaluation-options/CostEffectivenessAnalysis>, (accessed 25 August 2017).

³³⁸ Risk benefit analysis is a specific form of cost-benefit analysis. It applies estimates for the level of risk associated with potential outcomes, both positive and negative. These risk estimates are then included in calculations of costs and benefits. It therefore not only considers costs and benefits, but also the risk associated with the occurrence of such costs and benefits. It is widely used in health and medical analyses, as well as in business to calculate the risk associated with certain activities to inform insurance premiums or other risk based decisions. *Source*: CBA Builder, *Risk benefit analysis*, <http://www.cbabuilder.co.uk/CBA6.html>, (accessed 25 August 2017).

³³⁹ Economic impact analysis demonstrates the economic contribution that an organization, industry or investment makes to a region or country. Computable general equilibrium modelling is used to undertake economic impact analysis. *Source*: Oxford Economics, *Economic Impact Analysis*, <http://www.oxfordeconomics.com/economic-impact/economic-impact-analysis>, (accessed 25 August 2017).

³⁴⁰ Fiscal impact studies quantify the impact of a new law or a new or existing business, institution or event on revenue or expenditures of a government municipality. They allow government officials to effectively evaluate or plan for a new development or project that affects tax revenue, service fees, or the cost of providing services. *Source*: Anderson Economic Group, *Public Policy and Economic Analysis*, <http://www.andersoneconomicgroup.com/expertise/publicpolicyandeconomicanalysis.aspx>, (accessed 25 August 2017).

³⁴¹ Social return on investment analysis is specific form of cost-benefit analysis that entails stakeholder-driven evaluation blended with cost-benefit analysis, tailored to a social purpose. It is a relatively new and developing form of cost-benefit analysis. *Source*: Social Ventures Australia Consulting, *Social Return on Investment: Lessons learned in Australia*, 2012, <http://socialventures.com.au/assets/SROI-Lessons-learned-in-Australia.pdf>, (accessed 25 August 2017); Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 10.

³⁴² Criticisms of using traditional cost-benefit analysis as the sole evaluative tool for a prospective project include that: there are difficulties in estimating non market value; there is no clear indication of who benefits and who pays (distributional impacts); and there are limitations in comparing across hazards, as each disaster has different consequences and uncertainty.

It is also not clear that fiscal impact analysis would be the most appropriate technique for allocating funds to emergency management activities on the basis of risk. Nonetheless, it could be used to assess the fiscal impacts of an activity after the decision to allocate funds had been made.

There are certain circumstances where cost-benefit analysis may not be the most appropriate technique to assess funding decisions. However, it is still important to apply robust analytical techniques wherever possible and take them into account when making decisions. The analytical technique applied should be considered on a case by case basis, depending on the activities being compared, and the appropriateness of the technique.

4.8.3.2 Expanding the scope and independence of cost-benefit analysis

Other stakeholders argue that there needs to be a high degree of independence in the development, and transparency over the outcomes, of pre- and post-project cost-benefit analyses.³⁴³ Some suggest cost-benefit analysis should also be applied to the funding allocation decisions of local governments.³⁴⁴

The recommendations in Chapter 8 are aimed at increasing the degree of oversight and transparency of DFES's funding allocation decisions. It would be unusual to mandate, for a particular government department, that the analysis performed in deciding how to allocate funds must be undertaken by an independent party, and be made public. Members of the public are, however, able to request this type of information under the *Freedom of Information Act 1982*.

Local governments should also be using robust analytical techniques to decide how to allocate funds. This need not mean that cost-benefit analysis is applied to all of their funding allocation decisions. There is a trade-off between the administrative costs of preparing cost-benefit analysis and the benefits of more efficient and effective resource allocation. Given the difference in the scale of annual expenditure undertaken by individual local governments compared to DFES,³⁴⁵ requiring them to undertake cost-benefit analysis would be an unreasonable administrative burden. Nonetheless, local governments should still be considering the costs and benefits of their funding allocation decisions, using techniques that are appropriate for the circumstances.

³⁴³ For example: Association of Volunteer Bushfire Brigades, *Submission to draft report*, 15 August 2017, p. 12; and Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 3.

³⁴⁴ Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 9.

³⁴⁵ The total of all local governments' Emergency Management operating expenditure was estimated at \$29.4 million in 2016-17. This compares to DFES annual operating expenditure of around \$377 million. (Source: AEC Group on behalf of WALGA, *Local Government Emergency Management Funding Review – Working Draft 06*, Perth, AEC Group Limited, 2016; Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2017.)

4.8.3.3 Activity-based costing

While most stakeholders support DFES implementing activity-based costing, DFES notes:

- it currently complies with the Department of Treasury's cost reporting guidelines; and
- "significant resourcing" may be required to "deliver on reporting outcomes that meet multiple stakeholder and compliance needs" — this is because there are "complexities involved in separating costs in a multi-hazard and multi-dimensional, regional service delivery model".³⁴⁶

DFES collects real-time data³⁴⁷ on the activities of career and volunteer workers across the State. This data could form the basis of activity-based costing.

A detailed activity-based costing system is expensive, complex to establish and maintain, and require a better understanding of processes and cost behaviour than traditional costing methods.³⁴⁸ Perhaps reflecting these costs, the rate of implementation of activity-based costing (worldwide and in Australia) has tended to be quite low.³⁴⁹

The Department of Treasury notes that:³⁵⁰

"...materiality of costs and relevance of information to decision making should be considered before embarking on an ABC [activity-based costing] exercise. Typically, ABC [activity-based costing] is not practical in an organisation with a lack of diverse services and/or a relatively low proportion of indirect costs."

On the first of these points, the ERA has identified throughout this report a number of areas of decision making where activity-based costing would produce relevant information:

- Identifying the proportion of expenditure applied to prevention, preparedness, response and recovery.
- Determining the annual direct costs of providing emergency management activities and emergency services to each of the five ESL categories of land.
- Breaking down the expenditure of the Career Fire and Rescue Service, Volunteer Fire and Rescue Service, and Volunteer Fire and Emergency Service units.

³⁴⁶ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 10.

³⁴⁷ That is, DFES know exactly how many staff and resources are deployed on the ground at any point in time, and have precise information about the location of each. This allows DFES to maintain a detailed, informative, and very current database of its activities and use of resources.

³⁴⁸ Department of Treasury, *Costing and Pricing Government Services: Guidelines for use by agencies in Western Australian Public Sector*, Perth, Government of Western Australia, 2015, p. 20.

³⁴⁹ Byrne, S., Stower, E. and Torry, P., *Activity Based Costing Implementation Success in Australia*, Conference Paper, Australian & New Zealand Academy of Management: *Managing Our Intellectual and Social Capital*, 4-7 December 2007, p. 2, https://eprints.usq.edu.au/3719/1/Byrne_Stower_Torry.pdf, (accessed 28 August 2017).

³⁵⁰ WA Department of Treasury, *Costing and Pricing Government Services: Guidelines for use by agencies in Western Australian Public Sector*, 2015, p. 20.

- Identifying the proportion of Career Fire and Rescue Service, Volunteer Fire and Emergency Service and State Emergency Service time and resources spent on road crash rescue.

The ERA also considers that DFES provides diverse services, and that at 36 per cent of total DFES expenditure in 2015-16, the proportion of its indirect costs is not low.

These provide arguments in favour of implementing activity-based costing.

Given the costs and complexity of implementing detailed activity-based costing, this report recommends that only high level activity-based costing be implemented. The activity-based costing should identify the expenditure applied to prevention, preparedness, response and recovery; the annual direct costs of providing emergency management activities to each of the five ESL categories; the expenditure of the Career Fire and Rescue Service, Volunteer Fire and Rescue Service, and Volunteer Fire and Emergency Service units; and the proportion of Career Fire and Rescue Service, Volunteer Fire and Emergency Service and State Emergency Service time and resources spent on road crash rescue.

4.8.4 *Spending in response and prevention*

Some stakeholders perceive that DFES's decisions have a bias towards response rather than prevention, since DFES is a response-focused organisation. This perception is evident in the many submissions that criticised DFES's lack of investment in prevention.

This perception has arisen, in part, because of a lack of clarity around what DFES and other state government organisations' prevention obligations are, as well as DFES's position that prevention is the responsibility of property owners. This issue is discussed in Chapter 5. Without clarity about different organisations' prevention obligations, it is hard to determine whether DFES has spent 'too much' or 'too little' on prevention.

The recommendations made in Chapter 8 will allow for more transparent and accountable decision-making about the allocation of ESL funds to prevention, preparedness and response. If the recommendations in Chapter 8 are adopted, this may reduce any possible over spending on response, since an independent body would oversee funding allocations.

The views that stakeholders provided in response to the draft report on these issues are set out in Chapters 5 and 8.

4.9 Recommendations

- The Department of Fire and Emergency Services should continue to implement and comply with policies and procedures that enable the best practise management of hazards, such as the ISO 31000 standard, the Capability Framework, high level activity-based costing, post-project effectiveness reviews and the *Whole of Government Open Data Policy*.
- The Department of Fire and Emergency Services should apply robust analytical techniques for its funding allocation decisions.

5 What the Emergency Services Levy should fund

Key points

- Special purpose levies that are closely aligned to the provision of a specific service can have advantages. The ESL is an appropriate means of funding a clearly defined set of emergency management activities.
- However, the ESL should not fund all emergency management activities. It is important to provide incentives for property owners (including state and local governments) to fund most emergency management activities on their own land.
- The ESL should be used to fund prevention, preparedness and response activities that:
 - have 'public good' characteristics – that is, which anyone can access and which may be used simultaneously by many people without other users being disadvantaged;
 - have 'merit good' characteristics – that is, which everyone should have access to regardless of ability or willingness to pay, and which benefit the broader community not just the users; and/or
 - require government coordination.
- The Volunteer Marine Rescue Service and road crash rescue have these characteristics. It is therefore legitimate to continue to fund them using the ESL.
- While prevention may not have been given sufficient priority, this is a separate issue to whether the ESL should fund prevention on individual property owners' land. Other mechanisms should be used to increase the focus on prevention.
- The ESL should not be used to fund prevention, preparedness and response activities that primarily benefit individual property owners, including state and local governments in their capacity as property owners or managers.
- The ESL should not be used to fund recovery. There are already appropriate mechanisms for funding recovery costs outside of the ESL. These mechanisms involve the public, private, and not-for-profit sectors.
- There is a risk that using the ESL to fund an increasing proportion of DFES's corporate services costs will decrease the level of external scrutiny of this expenditure, and reduce stakeholders' support for the ESL. Allowing the ESL to fund local governments' corporate services costs could reduce the incentive for local governments to make efficient decisions about how they allocate funds from non-ESL sources.
- Implementing the ERA's recommendations about what the ESL should fund would require some changes to current funding processes, particularly for local governments. These issues are addressed in Chapter 8.

5.1 Introduction

This chapter describes the framework the ERA has used to consider how emergency management, including the provision of emergency services, should be funded, and discusses how this framework should be applied in practice.

This chapter is structured as follows:

- an assessment of whether it is appropriate to fund emergency management from a special purpose levy (such as the ESL) rather than general government revenue;
- a discussion of principles for determining which aspects of emergency management expenditure should be funded from the ESL; and
- a discussion of how these principles should be applied in practice – that is, the ERA’s recommendations about what the ESL should fund.

Each section includes a discussion of the issues stakeholders raised in submissions to the issues paper and the draft report. In general, stakeholders support the ERA’s draft recommendations that the ESL should be used to fund:

- prevention and preparedness activities that have community-wide benefits, or involve coordination of prevention across land tenures;³⁵¹ and
- the full costs of the Community Emergency Services Managers.³⁵²

While stakeholders support these recommendations, many call for the ESL to fund an even broader range of activities, in particular prescribed burning and local government emergency management.³⁵³

Some stakeholders do not support the ERA’s draft recommendation that the ESL should be used to fund the administration costs of DFES; or argue that if it does, it should also fund the administration costs of local governments.³⁵⁴

³⁵¹ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 8; Mangini, J., *Submission to the Emergency Services Levy Review – draft report*, 11 August 2017, p. 3; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 6; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 3; The Bushfire Front, *Submission to draft report*, 15 August 2017, p. 1; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 6.

³⁵² Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 7; City of Swan, *Submission to draft report*, 27 July 2017, p. 1; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, pp. 6-7; The Bushfire Front, *Submission to draft report*, 15 August 2017, p. 1.

³⁵³ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 5; Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 4; City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1; Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, pp. 1-2; Mangini, J., *Submission to draft report*, 11 August 2017, p. 4; Shire of Corrigin, *Submission to draft report*, 10 August 2017, pp. 3-4; Shire of Esperance, *Submission to draft report*, 11 August 2017, p. 1; Shire of Nannup, *Submission to draft report*, 10 August 2017, p. 2; Shire of Woodanilling, *Submission to draft report*, 8 August, p. 1; The Bushfire Front, *Submission to draft report*, 15 August 2017, p. 1; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 8.

³⁵⁴ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 7; Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 6; City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1; Dewhurst, G., *Submission to draft report*, 11 August 2017,

5.2 Funding emergency management through a special levy

Most government services are funded through general government revenue. However, emergency management in Western Australia (and some other Australian states) is funded through a property-based special purpose levy.³⁵⁵

5.2.1 Why have property-based levies been introduced?

In the past, some states funded emergency services (and in some cases broader emergency management activities) through insurance-based levies. However, more recently, most states have moved to a property-based levy.

This includes the following jurisdictions:

- New South Wales — while emergency services are currently funded by contributions from the Treasurer, local councils, and insurance companies (from a levy), legislation is in place to move to a property-based levy.³⁵⁶
- Victoria — emergency services are primarily funded from a Fire and Emergency Services Levy, which is calculated based on the capital improved value of each property, and varies by type of land use.³⁵⁷
- Queensland — emergency services are funded from an Emergency Management Levy. The levy for each property is calculated based on the level of service provided in each area and the type of use of each property.³⁵⁸
- South Australia — emergency services are funded by an Emergency Services Levy, which is levied on land, vehicles and vessels, and placed in a Community Emergency Services Fund. The levy rates on land are calculated based on land use, the region of the state where the property is located, and on the capital value of the property.³⁵⁹
- The Australian Capital Territory — emergency services are in part funded by a Fire and emergency Services Levy, which is a fixed charge on residential and rural

p. 6; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 6; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 4; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 3; Smith, R., *Submission to draft report*, 7 August 2017, p. 6.

³⁵⁵ The ESL is what is referred to as a 'hypothecated revenue'. The hypothecation of a tax is the dedication or earmarking of revenue raised from a specific tax for a particular service. (Source: Keable-Elliott, I., *Hypothecated taxation and the NHS*, London, Centre Forum, 2014, p. 11.)

³⁵⁶ New South Wales Government, *Emergency Services Property Levy*, Sydney, New South Wales Government, <http://emergencyservicespropertylevy.nsw.gov.au/>, (accessed 31 January 2017).

³⁵⁷ Victorian Government, *Fire Services Property Levy: Frequently Asked Questions*, Melbourne, Government of Victoria, <http://www.firelevy.vic.gov.au/faq.html>, (accessed 31 January 2017).

³⁵⁸ Australasian Fire and Emergency Services Authorities Council, *Understanding Our Business Survey 2015/16*, Australasian Fire and Emergency Services Authorities Council, Melbourne, 2016, p. 7.

³⁵⁹ South Australian Fire and Emergency Services Commission, *How is the sector funded?*, Adelaide, Government of South Australia, http://www.safecom.sa.gov.au/site/about_us/how_sector_is_funded.jsp, (accessed 1 February 2017).

properties. Commercial properties pay an amount equal to the average unimproved value of the land multiplied by a marginal rate.³⁶⁰

Tasmania still partly funds emergency services from contributions paid by insurance companies (about 25 per cent of total funding). However, it also draws funds from a levy on motor vehicles (about 10 per cent of total funding), contributions from local governments (about 50 per cent of total funding) and contributions from the State Government (about 15 per cent of total funding).³⁶¹

In introducing property-based levies, state governments did not make clear economic or social arguments for funding emergency management (including emergency services) from special purpose levies rather than general government revenue.³⁶² The merits of property-based levies were generally compared only to the insurance-based levies that they were replacing. (Refer to Appendix G for a more detailed discussion of the reasons given by states for introducing property-based levies to fund emergency management.)

Property-based levies are a more appropriate means of funding emergency management than insurance-based levies. Property-based levies are fairer because all property owners contribute to the costs of emergency management, not just those that insure their property.³⁶³ Property-based levies also impose fewer costs on the economy than insurance-based levies because they cause fewer unintended changes to behaviour. For example, insurance-based levies discourage people from taking out insurance, which is a means of managing risk.³⁶⁴ Property-based levies may also allow the government greater flexibility to apply different charges according to the risk of an area or according to the capacity of a property owner to pay.

5.2.2 Special purpose levies compared to general revenues

Public policy experts generally consider that it is better to fund government services from general government revenue than special purpose levies.³⁶⁵ Special purpose levies may create problems that can be avoided by using general government revenue.

In particular, special purpose levies may result in funding levels that are too high or too low for the services they fund.³⁶⁶ In practice, this is not an issue for the ESL, because rates are set to collect the revenue required (see Section 2.4.1).

³⁶⁰ ACT Revenue Office, *Fire and emergency services levy*, Canberra, ACT Government, <http://www.revenue.act.gov.au/duties-and-taxes/other-levies-and-taxes/fire-and-emergency-services-levy>, (accessed 1 February 2017).

³⁶¹ Australasian Fire and Emergency Services Authorities Council, *Understanding Our Business Survey 2015/16*, Australasian Fire and Emergency Services Authorities Council, Melbourne, 2016, p. 7.

³⁶² Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002; New South Wales Treasury and the Ministry for Police and Emergency Services, *Funding our emergency services: discussion paper*, Sydney, Government of New South Wales, 2012; Victorian Department of Treasury and Finance, *Victorian Fire Services Property Levy: options paper*, Melbourne, Government of Victoria, 2011.

³⁶³ New South Wales Treasury and the Ministry for Police and Emergency Services, *Funding our emergency services: discussion paper*, Sydney, Government of New South Wales, 2012, p. 4.

³⁶⁴ New South Wales Treasury and the Ministry for Police and Emergency Services, *Funding our emergency services: discussion paper*, Sydney, Government of New South Wales, 2012, p. 3.

³⁶⁵ McCleary, W., *The earmarking of government revenue: a review of some World Bank experience*, The World Bank Research Observer, Vol. 6(1), 1991, pp.81-104.

³⁶⁶ Keable-Elliott, I., *Hypothecated taxation and the NHS*, London, CentreForum, 2014, p. 15.

Special purpose levies may also interfere with the design of the broader tax system.³⁶⁷

Funding specific services through special purpose levies may also reduce the level of scrutiny of expenditures on those services by governments and treasury departments. This is because services that are funded through general government revenue must compete for funding with all other services, enforcing a higher level of scrutiny. Services with their own funding source have a reduced need to compete with other services for funding.

Special purpose levies that are not closely aligned to a specific purpose (or group of services) have few benefits.³⁶⁸ However, funding services from special purpose levies that are closely aligned to a specific service (or group of services) can have some advantages.

For example, special purpose levies may help property owners understand how much they are paying for a particular service. This may facilitate debate about how much people are willing to pay for a service.³⁶⁹

Special purpose levies may also be useful for generating approval for revenue-raising measures, particularly for services that have strong public support.³⁷⁰ Undertaking emergency management, in particular providing emergency services, appears to have a high level of public support, as evidenced by the willingness of communities to fundraise to provide these activities and to act as volunteers.

Special purpose levies may also help to make governments more accountable to the public about how they are spending revenue, and help ensure funds are spent how the public wants.³⁷¹ Alignment of government and public interests is an important consideration for the ESL.

An ESL (or equivalent) is the main source of revenue for emergency services in most other Australian jurisdictions. For example, New South Wales legislation requires 73.7 per cent of emergency services costs to be funded from its Fire and Emergency Services Levy.³⁷² In Queensland, its Emergency Management Levy funds 87.5 per cent of its fire and emergency services.³⁷³ In South Australia, its Emergency Services Levy funds 95 per cent of its fire services and 98 per cent of the State Emergency Services.³⁷⁴ In Victoria, the Fire

³⁶⁷ Keable-Elliott, I., *Hypothecated taxation and the NHS*, London, CentreForum, 2014, p. 17.

³⁶⁸ Special purpose levies that are closely aligned to specific services are 'strongly' hypothecated. Hypothecation is strong when the revenues from the special purpose levy are only used to fund a particular programme or service, and there is no other source of funding for that programme. Hypothecation is 'weak' when it does not meet either or both of these conditions. (Source: Keable-Elliott, I., *Hypothecated taxation and the NHS*, London, CentreForum, 2014, p. 11.)

³⁶⁹ Keable-Elliott, I., *Hypothecated taxation and the NHS*, London, CentreForum, 2014, p. 13.

³⁷⁰ Keable-Elliott, I., *Hypothecated taxation and the NHS*, London, CentreForum, 2014, p. 14.

³⁷¹ Keable-Elliott, I., *Hypothecated taxation and the NHS*, London, CentreForum, 2014, p. 13.

³⁷² This was scheduled to take effect from 1 July 2017, however, has been deferred. Source: Communication with the New South Wales Department of Treasury, 19 September 2017.

³⁷³ Australasian Fire and Emergency Services Authorities Council, *Understanding Our Business Survey 2015/16*, Australasian Fire and Emergency Services Authorities Council, Melbourne, 2016, p. 7.

³⁷⁴ South Australian Fire and Emergency Services Commission, *How is the sector funded?*, Adelaide, Government of South Australia, http://www.safecom.sa.gov.au/site/about_us/how_sector_is_funded.jsp, (accessed 1 February 2017).

and Emergency Services Levy funds 87.5 per cent of the cost of the Metropolitan Fire Brigade and 77.5 per cent of the cost of the Country Fire Authority.³⁷⁵

Only the Northern Territory funds emergency services entirely from general government revenue.³⁷⁶

5.2.3 Stakeholder views

Very few stakeholders oppose using a special purpose levy to fund emergency management.

In a submission to the issues paper, Mr Ron De Gruchy from the Western Australian Self Funded Retirees questioned whether it is appropriate to fund emergency management from a special purpose levy.

“There should not be any Levy at all - THIS IS THE MAIN ISSUE. The use of a Levy to fund a State Government Department is totally wrong. It is tantamount to imposing a Levy to fund the Police Department, the Education Department, the WA Fisheries Department, the Health Department, the Attorney-General’s Department, the Department of Sport & Recreation etc. etc. etc.”³⁷⁷

Cascade Scaddan Fire Review states that provision of emergency management is no different to provision of other services including education and health.³⁷⁸ Another anonymous stakeholder states:

“It [the ESL] seems a crazy way of funding a government service. I agree with the opinion in the draft review of Ron DeGruchy regarding the anomaly of funding these costs as a levy rather than from general state government coffers.”³⁷⁹

In contrast, Mr Glenn Dewhurst said, “[t]he ESL must be retained as there is no other realistic option”.³⁸⁰ The Pastoralists and Graziers Association states:

“...there needs to be some level of community-based funding for community level activities above and beyond those conducted by individual land owners or land managers. However...there is a clear need for a framework of planning, budgeting, expenditure and reporting so that ‘demand’ for ESL funding is not relentlessly increasing.”³⁸¹

Most stakeholders do not specifically comment on whether emergency management should be funded by a special purpose levy.

³⁷⁵ Victorian Government, *Fire Services Property Levy: Frequently Asked Questions*, Melbourne, Government of Victoria, <http://www.firelevy.vic.gov.au/faq.html>, (accessed 31 January 2017).

³⁷⁶ New South Wales Treasury and the Ministry for Police and Emergency Services, *Funding our Emergency Services: Discussion Paper July 2012*, New South Wales Government, Sydney, 2012.

³⁷⁷ WA Self-Funded Retirees Inc., *Submission to issues paper*, 3 April 2017, p. 1.

³⁷⁸ Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 7.

³⁷⁹ Anonymous, *Submission to draft report*, 9 August 2017, p. 1.

³⁸⁰ Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 2.

³⁸¹ Pastoralists and Graziers Association of Western Australia, *Submission to draft report*, 16 August 2017, p. 3.

In submissions to the issues paper, other agencies, such as the Western Australian Police³⁸² and the Department for Child Protection and Family Support,³⁸³ called for the ESL to be used to fund the emergency management expenditures of other agencies as well as DFES.

Extending the ESL to fund the emergency management expenditures of other agencies may undermine public support for the ESL. Community support for the ESL will be best maintained when the revenue is used for clearly-defined and specific purposes.³⁸⁴ Using the ESL to fund a broader range of government expenditures may erode public trust in the use of the ESL. Further, the emergency management activities of other agencies are currently already funded through general government revenue. This ensures that these expenditures receive a high level of scrutiny and compete for funding against other government priorities, which as noted above, has merits.

Calls to fund the emergency management expenditures of other agencies from the ESL should therefore be resisted. This expenditure should continue to be funded from general government revenue.

5.2.4 Summary

The ESL has been an appropriate means of funding a clearly defined set of emergency management activities. Through the ESL, the government has more flexibility to make decisions about how different property owners should contribute funding for these activities (for example, based on capacity to pay).³⁸⁵ The ESL has also been a stable and reliable source of funding for services that the community considers necessary.³⁸⁶

5.3 Funding different emergency management activities

The following section identifies principles to determine the types of emergency management activities the ESL should fund, and applies those principles to make recommendations about specific activities.

In response to the ERA's draft recommendations, stakeholders are broadly of the view that:

- the ESL should fund prevention, preparedness and response activities;³⁸⁷

³⁸² Western Australian Police, *Submission to issues paper*, 28 February 2017, p. 2.

³⁸³ Department for Child Protection and Family Support, *Submission to issues paper*, 10 March 2017, p. 2.

³⁸⁴ Keable-Elliott, I., *Hypothecated taxation and the NHS*, London, CentreForum, 2014, p. 11.

³⁸⁵ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 2.

³⁸⁶ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 17.

³⁸⁷ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 5; Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 4; City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1; Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, pp. 1-2; Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 8; Mangini, J., *Submission to draft report*, 11 August 2017, pp. 3-4; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 6; Shire of Corrigin, *Submission to draft report*, 10 August 2017, pp. 3-4; Shire of Esperance, *Submission to draft report*, 11 August 2017, p. 1; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 3; Shire of Nannup, *Submission to draft report*, 10 August 2017, p. 2; Shire of Woodanilling, *Submission to draft report*, 8 August,

- the ESL should not fund DFES's administration costs³⁸⁸ — but if it does, it should also fund local governments' emergency management administration costs³⁸⁹ and/or there should be greater scrutiny of DFES's expenditure;³⁹⁰
- the Community Emergency Services Manager program,³⁹¹ along with local government positions that are similar to the Community Emergency Services Manager role,³⁹² should be funded by the ESL; and
- the Volunteer Marine Rescue Service should be funded by the ESL (or at least not by a charge on vessel registrations).³⁹³

One stakeholder considers that the ESL should fund recovery,³⁹⁴ whereas others instead call for other sources of funding to be more readily available for recovery.³⁹⁵

p. 1; The Bushfire Front, *Submission to draft report*, 15 August 2017, p. 1; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, pp. 6-8.

³⁸⁸ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 7; Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 8; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 4; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 5.; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 3; Smith, R., *Submission to draft report*, 7 August 2017, p. 6; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 7.

³⁸⁹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 7; City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 7.

³⁹⁰ Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 6; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 5; Rotheram, I., *Submission to draft report*, 20 July 2017, p. 1; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 4; United Firefighters Union of Australia West Australian branch, *Submission to draft report*, 11 August 2017, p. 2; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 7.

³⁹¹ Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 9; City of Swan, *Submission to draft report*, 27 July 2017, p.1; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 4; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 6; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 4; Shire of Nannup, *Submission to draft report*, 10 August 2017, p. 2; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 4; Shire of Woodanilling, *Submission to draft report*, 8 August 2017, p. 1; The Bushfire Front, *Submission to draft report*, 15 August 2017, p. 1; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 2; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 7.

³⁹² Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, pp. 7-8; City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1; Smith, R., *Submission to draft report*, 7 August 2017, p. 6; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 7.

³⁹³ Howlett, I., *Submission to draft report*, 8 July 2017, p. 1; Klaka, K., *Submission to draft report*, 11 July 2017, pp. 1-2; Lyon, J., *Submission to draft report*, 8 July 2017, p. 1; Macbeth, J., *Submission to draft report*, 19 July 2017, pp. 1-2; MacPherson, S., *Submission to draft report*, 8 July 2017, p. 1; Poole, D., *Submission to draft report*, 11 August 2017, pp. 1-2; Thomas, M., *Submission to draft report*, 19 July 2017, p. 1; Walker, M., *Submission to draft report*, 13 July 2017, p. 1; Wright, E., *Submission to draft report*, 9 July 2017, p. 1.

³⁹⁴ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 6.

³⁹⁵ City of Swan, *Submission to draft report*, 27 July 2017, p. 1; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 3; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 7.

5.3.1 Principles for identifying activities the Emergency Services Levy should fund

This section sets out some principles to identify the types of activities that should be paid for by property owners³⁹⁶ and those that should be funded by the ESL.

Applying an economic framework, goods and services can be categorised as private goods, public goods and merit goods.

A private good is bought and owned by an individual, business or government. Its use by one person precludes use by another.³⁹⁷ In the context of emergency management, a private good may include rain water tanks or fire breaks on private property.

A public good is a good or service that anyone can access³⁹⁸ and which may be used simultaneously by many people without other users being disadvantaged.³⁹⁹ Such services may need to be provided by the government, because the private sector may underprovide them if businesses cannot recover the cost of providing them from the people who benefit from them. Some emergency management activities are public goods, including for example community safety campaigns and emergency management plans.

Merit goods are less clearly defined and more subjective than public goods, but tend to have one or both of the following characteristics:⁴⁰⁰

- The goods are so important that governments and the community consider that everyone should have access to them regardless of ability or willingness to pay (for example, health and education).
- The community benefits when these goods are consumed, not just the person directly consuming the service (for example, vaccination protects individuals from disease, but also provides 'herd immunity' for the broader public).⁴⁰¹

In the context of emergency management, response may be considered a merit good. Activities with merit good characteristics could be undertaken by private entities. However, people may not be willing to pay for them and some people may not be able to afford to pay for them.⁴⁰² Government provision, funded by a levy, helps ensure that everyone receives at least the minimum level of service, and that the service is affordable to all. Fire and emergency services are regarded as essential in wealthy societies – everybody should have

³⁹⁶ This includes private individuals and entities, as well as the State government and local governments in their capacity as property owners.

³⁹⁷ Musgrave, R. A., *A Multiple Theory of Budget Determination*, FinanzArchiv / Public Finance Analysis, Vol. 17, No. 3, 1956, pp. 333–343.

³⁹⁸ Irrespective of whether they choose to access the service or not.

³⁹⁹ Public goods are non-excludable and non-rival. Non-excludable means that it is not possible to prevent individuals from using a service. Non-rival means that one person's use of a service does not diminish the availability of that service for use by other people. An example of a public good is national defense. (Source: Katz, M. and Rosen, R., *Microeconomics (2nd Edition)*, Irwin, Illinois, 1994, pp. 630-631 and 634.)

⁴⁰⁰ Pulsipher, A. G., *The Properties and Relevancy of Merit Goods*, Finanzarchiv – Public Financial Analysis, New Series, Vol. 30, No. 2, 1971, pp. 266-286.

⁴⁰¹ Gordis, L., *Epidemiology (Fifth Edition)*, Amsterdam, Elsevier, 2013, pp. 26-27.

⁴⁰² Pulsipher, A. G., *The Properties and Relevancy of Merit Goods*, Finanzarchiv – Public Financial Analysis, New Series, Vol. 30, No. 2, 1971, pp. 266-286.

access to these services. People benefit when their neighbour's property is protected, not just when their own property is protected.⁴⁰³

Broadly speaking, the ESL should be used to fund public and merit goods.

The ESL should not, however, be used to fund private goods. The Productivity Commission says property owners should have primary responsibility for managing risks to their own property.

“Households, business and governments are generally best placed to manage natural disaster risks to their own assets – asset owners typically have a clear incentive to identify and implement the risk management options that most closely align with their risk appetite.”⁴⁰⁴

It follows that property owners (including the State and local governments) should pay for emergency management on their own land, rather than it being funded from the ESL. For example property owners should be responsible for cleaning up in advance of storms and cyclones, pruning trees to ensure that they do not come in contact with power lines, establishing and maintaining fire-breaks, and conducting prescribed burns.

However, property owners may not spend enough on these types of prevention and preparedness activities, since the benefits are long-term, uncertain, and shared with other property owners. There may be a case for government to use ESL funds to coordinate these activities across different land tenures in a specific area.

In conclusion, the ESL should be used to fund emergency management activities that:

- have ‘public good’ characteristics – that is, which anyone can access and which may be used simultaneously by many people without other users being disadvantaged; (for example, emergency management planning and community safety campaigns);
- have ‘merit good’ characteristics – that is, which everyone should have access to regardless of ability or willingness to pay, and which benefit the broader community not just the users (for example, response); and/or
- require government coordination (for example, coordinating emergency management activities across different land tenures in a specific area).

At a high level, this means the ESL should be used to fund those emergency management activities that DFES and local governments provide on behalf of the community if they can do so more effectively than individual property owners.

The ESL should not be used to fund emergency management activities that primarily benefit individual property owners (including State and local governments in their capacity as property owners or managers).

As an example, this would mean that tenure-blind bushfire risk management planning should be funded by the ESL, but not the direct prevention activity itself (for example, a prescribed burn, or an individual government organisation developing its treatment plan).

⁴⁰³ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 17.

⁴⁰⁴ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 1, p. 13.

Most stakeholders do not comment on these principles, other than the Department of Biodiversity, Conservation and Attractions, which states:

“The argument in the draft report that the ESL should only cover public (and merit) good and not private goods is acknowledged, and DBCA [the Department of Biodiversity, Conservation and Attractions] strongly supports the ‘shared responsibility’ concept that holds landowners/managers responsible for mitigation on their land”.⁴⁰⁵

How these principles should be applied in practice across the four phases of emergency management (prevention, preparedness, response and recovery) is discussed in the following sections.

5.3.2 Prevention

As set out in Chapter 4, it is important to invest in activities that *prevent* natural hazards from becoming natural disasters, or at least reduce the cost of those natural disasters that cannot be prevented. A key finding of this review is that there is a perception among stakeholders that prevention has not been given sufficient priority, particularly when it comes to bushfires. This is, however, a separate issue to the question of whether the ESL should fund prevention. This section sets out:

- stakeholders’ views about the lack of focus on prevention and the ERA’s views about options to address these concerns; and
- stakeholders’ views, and the ERA’s recommendations, about whether the ESL should fund prevention.

5.3.2.1 Concerns about a lack of focus on prevention

Stakeholders have argued that prevention has not been given sufficient priority, and that additional expenditure on prevention could result in benefits to the community. For example, in its submission to the issues paper the Gidgegannup Progress Association stated:

“Prevention should be given an equal if not greater resourcing than the other factors of emergency management activities....In the long term, increased funding on prevention should be reflected on reduced costs associated with Response and Recovery.”⁴⁰⁶

In its submission to the issues paper, the Shire of Harvey noted that state government agencies that own property (including Main Roads WA, Railway Reserves, Water Corporation, and the Department of Planning, Lands and Heritage) are reluctant to fund mitigation.⁴⁰⁷ The Shire of Harvey also considered that there needs to be a strategy for fire mitigation works on Australian Government property such as defence reserves and airports.⁴⁰⁸

⁴⁰⁵ Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 1.

⁴⁰⁶ Gidgegannup Progress Association (Inc.), *Submission to issues paper*, 27 February 2017, p. 3.

⁴⁰⁷ Shire of Harvey, *Submission to issues paper*, 24 February 2017, p. 2.

⁴⁰⁸ Shire of Harvey, *Submission to issues paper*, 24 February 2017, p. 2; The Australian Government manages Commonwealth lands, such as defence establishments and Commonwealth national parks, and is responsible for weed management on this land. (Source: Department of the Environment and Energy, *Policies and Programmes*, <http://www.environment.gov.au/biodiversity/invasive/weeds/government/policies.html>, (accessed on 19

In its submission to the draft report, the Department of Biodiversity, Conservation and Attractions reiterates that there are risks from spending too much on response, and that effective investment in prevention and preparedness benefits society.⁴⁰⁹

Recent reviews at the national level suggest that governments and property owners may have a tendency to not allocate sufficient funds to prevention.⁴¹⁰

In their responses to the draft report, stakeholders argue that – in particular – state government organisations are not undertaking sufficient bushfire prevention activities, especially given government land has high bushfire risk due to high fuel loads.⁴¹¹ The United Firefighters Unions states:

“A little known fact about the Waroona Yarloop fires is that the State Government School remained relatively unscathed in those fire and it had been mitigated as a result of a Memorandum of Understanding between the Department of Education and DFES. Unfortunately, the Ferguson Review of the Waroona Yarloop fires failed to address those land holders and agencies responsible for the failure to prepare and to mitigate the vast land holding impacted by those catastrophic fires.”⁴¹²

Recent reviews have found that several significant bushfires have started on state government land, including the 2016 Waroona fire,⁴¹³ and the 2015 Esperance fire.⁴¹⁴

As set out in Box 10, the ERA has also found that – while there is not a consistent approach across key land-owning state government organisations⁴¹⁵ to mitigating bushfire risk, including undertaking prescribed burning – it is possible that there is a tendency not to prioritise these activities.

June 2017).) The Commonwealth has an integrated regime to protect the environment at leased federal airports. Airport operators are required to implement their Airport Environment Strategy. The Department of Infrastructure and Regional Development oversees this through Airport Environment Officers. (Source: Department of Infrastructure and Regional Development, *Airport Planning & Regulation*, Canberra, Government of Australia, <https://infrastructure.gov.au/aviation/airport/planning/>, (accessed on 19 June 2017).)

⁴⁰⁹ Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 2.

⁴¹⁰ The Productivity Commission found that government investment in mitigation is insignificant compared to post-disaster expenditure, stating that: “[f]or example, Australian Government mitigation expenditure was only 3 per cent of what it spent post-disaster in recent years. Mitigation expenditure by state governments is likely to be higher, but information on this expenditure is not comprehensive. Overall, the clear impression is one of insufficient investment in mitigation.” (Source: Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol.1, p. 9.)

Deloitte Access Economics found that the ratio of government expenditure on post disaster to pre disaster is \$10 to \$1. (Source: Deloitte Access Economics, Australian Business Roundtable for Disaster Resilience and Safer Communities, *Building our nation's resilience to natural disasters*, 2013, p. 8.)

⁴¹¹ Shire of Woodanilling, *Submission to draft report*, 8 August 2017, p. 1; Smith, R., *Submission to draft report*, 7 August 2017, p. 4.

⁴¹² United Firefighters Union of Australia West Australian Branch, *Submission to draft report*, 11 August 2017, p. 2.

⁴¹³ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, Vol. 1, p. 63.

⁴¹⁴ Nous Group on behalf of the Department of Fire and Emergency Services, *Major Incident Review of the Esperance district fires*, Perth, Government of Western Australia, 2016, p. 6, <https://www.dfes.wa.gov.au/publications/MajorIncidentReports/DFES-MIR-Esperance-District-Fires-Final-Report-March-2016.pdf>, (accessed 31 August 2017).

⁴¹⁵ For the purpose of this report, ‘government organisations’ include government agencies, Government Trading enterprises and local governments.

Why don't property owners prioritise prevention?

Governments (both state and local) and property owners may have a tendency to not prioritise prevention for several reasons.

First, the benefits of prevention are shared.⁴¹⁶ Property owners may under-invest in prevention, because they only consider their own benefits when determining expenditure on prevention. There are additional public benefits (externalities) of prevention, for example the risk of a fire spreading to a neighbouring property decreases.

Second, governments and property owners may focus on short-term benefits and costs when making expenditure decisions. As noted by the Productivity Commission, “some costs of mitigation are generally upfront and certain, unlike the benefits which can be long-term, uncertain and only realised if a disaster occurs.”⁴¹⁷

Third, prevention may be considered a low priority for state government organisations whose core business is not emergency or land management. These organisations may prioritise resources for their core activities, or not have sufficient knowledge in emergency management. As set out in Box 10, the ERA has found that:

- responsibility for bushfire prevention in state government organisations tends to be delegated, including to individual facilities; and
- there is a lack of central coordination to ensure that bushfire prevention activities are undertaken.

Fourth, and related to the above two points, government organisations may not have sufficient funds to undertake prevention.

In its submission to the issues paper, the former Department of Lands stated that it has been unable to attract adequate funding from general government for mitigation of fire risk on unmanaged reserves and unallocated Crown land. It stated that it received \$450,000 a year (unindexed over the past decade) for fire mitigation, while the former Department of Parks and Wildlife received \$360,000 a year.⁴¹⁸ It said that a fully costed fire preparedness and prevention program on unallocated Crown land and unmanaged reserves would cost \$5.56 million a year over a ten year period.⁴¹⁹

⁴¹⁶ Economists sometimes describe shared benefits as ‘positive externalities’. An externality arises when the activity of one entity directly affects the welfare of another entity in a way that is not transmitted by market prices. Source: Rosen, H. S., *Public Finance*, Irwin McGraw-Hill, United States, 1995, p. 91.

⁴¹⁷ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 382.

⁴¹⁸ Together, these departments have significant land management responsibilities, as described in Chapter 2.

⁴¹⁹ Department of Lands, *Submission to issues paper*, 14 March 2014, p. 3.

Box 10 Bushfire prevention on state government land

The following memorandums of understanding are in place for prescribed burning:

- For DFES to undertake prescribed burning for the Department of Planning, Heritage and Lands.⁴²⁰
- For the Department of Biodiversity, Conservation and Attractions to undertake prescribed burning for the Department of Planning, Heritage and Lands and the Water Corporation.⁴²¹

DFES also has a memorandum of understanding with the Department of Education for DFES to provide 'advice on mitigation works'. It is the responsibility of the Department of Education to undertake the mitigation works.⁴²²

Stakeholders have identified other state government organisations that own or manage many and/or large landholdings which have high fuels loads.⁴²³ These organisations include:

- Main Roads;
- the Department of Health;
- the Department of Justice (formally the Department of Corrective Services);
- Water Corporation; and
- Western Power

The ERA contacted these organisations, and found the following:

- Some of these organisations do not see prescribed burning as their responsibility or core business.
- Some of these organisations view prescribed burning as the responsibility of other organisations, including local governments and the Department of Biodiversity, Conservation and Attractions.
- The organisations that acknowledge they have some responsibility for prescribed burning have decentralised this responsibility to individual facilities.

The Office of Bushfire Risk Management undertakes an annual audit of bushfire mitigation activities. For the 2016-17 audit, the Office of Bushfire Risk Management requested information from 17 organisations (excluding local governments⁴²⁴), including three government trading enterprises and one company. 10 organisations state they have undertaken prescribed burning and 15 state they have undertaken mechanical and/or chemical treatments. The Fire and Emergency Services Commissioner is due to report the findings of the audit to the State Emergency Management Committee on 5 December 2017.⁴²⁵

⁴²⁰ Communication with the Department of Fire and Emergency Services, 29 August 2017.

⁴²¹ The Department of Biodiversity, Conservation and Attractions also undertakes prescribed burning for NRM Rangelands, Rio Tinto and the Department of Defence. *Source:* Communication with the Department of Biodiversity, Conservation and Attractions, 30 August 2017.

⁴²² Communication with the Department of Fire and Emergency Services, 29 August 2017.

⁴²³ ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017.

The Department of Biodiversity, Conservation and Attractions has received Royalties for Regions funding to undertake prescribed burns. However, a grant from Royalties for Regions may not be a long-term and sustainable source of funding:

“Prescribed burning throughout the State was boosted this year with the introduction of the Department’s *Enhanced Prescribed Burning Program*, established in response to the O’Sullivan bushfire near Northcliffe in January 2015. Additional funding of \$20 million over four years through Royalties for Regions was allocated to the program. In 2015–16, Parks and Wildlife [now the Department of Biodiversity, Conservation and Attractions] achieved 154,149ha of prescribed burning in the south-west forest regions, including about 5147ha that were burnt for pine plantation protection. This was the greatest area of prescribed burning achieved by the Department in this area since 2009–10.”⁴²⁶

In its submission to the draft report, the Department of Biodiversity, Conservation and Attractions states that it is concerned that progress on tenure-blind mitigation may stall without viable and ongoing support.⁴²⁷

Fifth, in some cases the obligations on property owners to undertake bushfire prevention activities on their own land is unclear or non-binding. For example:

- It is not clear that there is currently a mechanism to ensure state government organisations undertake sufficient prevention — while DFES states that: “[t]he *Bush Fires Act 1954* has specific provisions casting primary obligation for fire prevention upon owners and occupiers of land”,⁴²⁸ the ERA understands that the *Bush Fires Act 1954* does not require state government agencies and government trading enterprises to undertake prevention activities. WALGA notes that state government organisations are not required to comply with annual bushfire mitigation notices issued by local governments.⁴²⁹
- While the Office of Bushfire Risk Management is responsible for undertaking tenure-blind planning, implementation of the plans is the responsibility of individual organisations (for example, local governments), and there is no mechanism to enforce implementation of the plans. The Office of Bushfire Risk Management advises that local governments are not currently required to publish their Bushfire Risk Management Plans or treatment strategies.

Finally, some prevention activities may be unpopular with some people. For example, some people have negative views about prescribed burns because the smoke may be a health hazard,⁴³⁰ or cause commercial (such as to grape crops⁴³¹) or environmental damage.

⁴²⁴ 52 of the 136 mainland local governments provided a response by the due date. Source: Communication with the Office of Bushfire Risk Management, 4 and 18 September 2017.

⁴²⁵ Communication with the Office of Bushfire Risk Management, 4, 7 and 18 of September, 2017.

⁴²⁶ Department of Parks and Wildlife, *Annual report 2015-16*, Perth, Government of Western Australia, 2017, p. 11.

⁴²⁷ Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 2.

⁴²⁸ Department of Fire and Emergency Services, *Submission to issues paper*, 10 March 2017, p. 2.

⁴²⁹ Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 7.

⁴³⁰ ABC News, *Asthma sufferers struggle to breathe while bushfire prevention burns cover Perth in smoke*, 8 June 2017, <http://www.abc.net.au/news/2017-06-08/smoky-days-hit-perth-asthma-sufferers/8598216>, (accessed 8 June 2017).

⁴³¹ ABC News, *Margaret River wine growers worried their grapes will be tainted by prescribed burning*, 22 March 2017, <http://www.abc.net.au/news/2017-03-22/margaret-river-wine-growers-concerned-over-prescribed-burn/8378216>, (accessed 8 June 2017).

However, many people support prescribed burning because it reduces the likelihood and intensity of fires.⁴³²

The main factors explaining why government organisations have a tendency not to prioritise prevention, for bushfires in particular, appear to be that they are not clear on what their responsibilities are, they do not view prevention as part of their core business, and they do not have sufficient funding. Clarifying the responsibilities of government organisations to undertake prevention, increasing transparency about prevention that is actually undertaken, and ensuring these organisations have sufficient funding for prevention could address these issues.

It is outside the terms of reference to make recommendations about how to ensure government organisations' prevention responsibilities are met. However, prevention has important benefits that affect the need for ESL funded services, and where the funds should be spent. It is possible that prevention is not being prioritised by government organisations. The ERA therefore recommends that the State Government undertake a review of governments' prevention responsibilities (including for local government), and whether they are being met.

5.3.2.2 *Should the Emergency Services Levy fund prevention?*

In submissions to the issues paper, most stakeholders supported the ESL funding prevention in some way.⁴³³ For example, the Office of Emergency Management stated that expenditure related to prevention (mitigation) should be permitted under the ESL, but should not replace a property owner's responsibility for managing their risk.⁴³⁴

The ERA sought clarification from the Office of Emergency Management on the types of expenditures that it considered should be funded from the ESL.⁴³⁵ The Office of Emergency Management suggested that the State Government "can and should support planning and coordination concerning bushfire risk across land tenures – the principle being that synergies arise out of collaboration across similar risks".⁴³⁶

The Office of Emergency Management considered that DFES, as the Hazard Management Agency for fire, has a role "assisting communities of land owners and those at risk from bushfires across that land in identifying, assessing and treating bushfire risks".⁴³⁷ The Office of Emergency Management further noted that DFES firefighting resources (which are funded from the ESL) "are ideally suited – and benefit from – utilisation in servicing this need where there is broad public good. It maximises the utility of existing, specialised (and limited) resources".⁴³⁸

⁴³² Bell, T. and Oliveras, I., *Perceptions of Prescribed Burning in a Local Forest Community in Victoria, Australia*, Environmental Management, 2006, Vol. 38, pp. 867-878 (p. 876).

⁴³³ These stakeholders include, for example, the Gidgegannup Progress Association, Mr. van Rijnsoud, the Emergency Services Volunteers Association, Cascade Scaddan Fire Review, Mr. Mangini, Pastoralists and Graziers Association, and the Bushfire Front.

⁴³⁴ Office of Emergency Management, *Submission to issues paper*, 9 March 2017, p. 4.

⁴³⁵ Communication with Office of Emergency Management, 14 June 2016.

⁴³⁶ Communication with Office of Emergency Management, 14 June 2016.

⁴³⁷ Communication with Office of Emergency Management, 14 June 2016.

⁴³⁸ Communication with Office of Emergency Management, 14 June 2016.

The Office of Emergency Management stated:

“By way of example, the DFES Bushfire Risk Management Plan process is a recognised methodology for planning and executing risk management strategies that protect more than one land holder. It makes sense to use ESL funded resources and people to coordinate and assist across communities. Risk treatment is more than response alone. It is more cost effective to use resources (in this case expertise and trucks etc) to plan and execute prescribed burning. It’s a more productive cooperative effort that shares responsibility, though does not remove the land owners own end-of-line responsibility to manage his/her own risk.”⁴³⁹

Other stakeholders commented that property owners should remain responsible for funding prevention. DFES stated that land managers (such as the Department of Biodiversity, Conservation and Attractions) should remain responsible for funding direct land management responsibilities related to emergency risk (for example, bushfire).⁴⁴⁰

The draft report recommended that the ESL should fund prevention undertaken by DFES, bush fire brigades and State Emergency Service units that have community-wide benefits or involve coordination of prevention across land tenures.

Some submissions to the draft report support the ERA’s recommendation that the ESL should fund prevention undertaken by DFES, bush fire brigades and State Emergency Service units that have community-wide benefits or involve coordination of prevention across land tenures.^{441,442}

WALGA, however, questions how the ERA’s recommendation would be implemented — stating that the Local Government Grants Scheme Manual would need to be reviewed to reflect the recommendation.⁴⁴³

The City of Gosnells states that the ESL should also be used to fund prescribed burns, and chemical and mechanical clearing.⁴⁴⁴ Cascade Scaddan Fire Review is of the view that the Department of Biodiversity, Conservation and Attractions should receive ESL funds for prevention because it is responsible for prevention on 90 per cent of land in the State, but only receives \$360,000 a year from consolidate revenue for prevention.⁴⁴⁵

The Department of Biodiversity, Conservation and Attractions says that while land owners and land managers are responsible for mitigation on their land, it:

“...believes it is appropriate to consider the ESL being available to support prevention activities in a manner that supplements rather than supplants individual landowner/manager responsibility. Rather than be a disincentive to individual responsibility, DBCA [Department of Biodiversity, Conservation and Attractions] notes the success of other Government support of subsidy mechanisms as incentives to

⁴³⁹ Communication with Office of Emergency Management, 14 June 2016.

⁴⁴⁰ Department of Fire and Emergency Services, *Submission to issues paper*, 10 March 2017, p. 1; Office of Emergency Management, *Submission to issues paper*, 9 March 2017, p. 4.

⁴⁴¹ Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 5.

⁴⁴² Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 2.

⁴⁴³ The Western Australian Local Government Association also made this point in relation to preparedness. Source: Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, pp. 5-6.

⁴⁴⁴ City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1.

⁴⁴⁵ Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, pp. 4-5.

individual taking action that would otherwise be beyond their financial or other resources.”⁴⁴⁶

Other stakeholders call for ESL funds to be available to a broader range of organisations for prevention than recommended by the ERA, including the Department of Biodiversity, Conservation and Attractions and local governments.^{447,448} The Association of Volunteer Bush Fire Brigades is of the view that all stakeholders should be able to submit applications for ESL funds, and that funds should be allocated on a priority basis.⁴⁴⁹

Economic Regulation Authority assessment

Prevention is important, but this does not necessarily mean that all aspects of prevention should be funded from the ESL. This section distinguishes between:

- the direct aspects of prevention – for example, cleaning up in advance of storms and cyclones, pruning trees to ensure that they do not come in contact with power lines, establishing and maintaining fire-breaks, and conducting prescribed burns; and
- aspects of prevention that are ancillary to these direct aspects (for example, prevention planning).

It is important that all property owners (including State and local governments) remain responsible for undertaking the direct aspects of prevention on their own land. The incentives for property owners to fund these activities, and their responsibilities and obligations to themselves and their neighbours, would be reduced if they were subsidised by the State Government.

Many stakeholders are concerned that these aspects of prevention are currently not prioritised. However, this is a separate issue to whether the ESL should fund prevention on individual property owners' land. As set out in Section 5.3.2.1, to address stakeholders' concerns, the ERA recommends that the State Government should undertake a review of governments' prevention responsibilities (including for local government), and whether they are being met.

In line with the principles set out in Section 5.3.1, the ESL could legitimately be used to fund the costs of some of the ancillary aspects of prevention. Specifically, this would be those aspects of prevention that DFES and local governments provide on behalf of the community if they can do so more effectively than individual property owners. This includes, for example, prevention planning (such as undertaking risk assessments), developing plans for conducting prevention, and developing and maintaining tenure-blind databases.

The ERA therefore agrees with the Office of Emergency Management that contributing to the costs of the Bushfire Risk Management Plan program would be an appropriate use of the ESL.⁴⁵⁰ The Bushfire Risk Management Plan program is a state-wide, tenure-blind

⁴⁴⁶ Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 2.

⁴⁴⁷ Shire of Esperance, *Submission to draft report*, 11 August 2017, p. 3.

⁴⁴⁸ Shire of Corrigin, *Submission to draft report*, 10 August 2017, p.3.

⁴⁴⁹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 1.

⁴⁵⁰ Bushfire Risk Management Plans are also currently partly funded by the National Disaster Resilience Program, and partly from general government revenue. (Source: Communication with Office of Emergency Management, 19 June 2017; Department of Fire and Emergency Services, *Bushfire Mitigation Grant – Guidelines for Applicants 2016-2017*, Perth, Government of Western Australia,

program that assists local governments in assessing bushfire related risks to the community and its assets, and helps prioritise treatment strategies to address those risks.⁴⁵¹

The ESL could fund the direct aspects of prevention activities undertaken by DFES, local governments, bush fire brigades and State Emergency Service units on government owned or managed property. Prevention contributes towards public safety (which is an outcome that everyone should have access to) and the benefits from prevention conducted across the landscape are shared. The Office of Emergency Management makes the case that the Fire and Emergency Services Commissioner, as the public authority for fire, could have an important role to ensure that on-the-ground prevention is undertaken in a coordinated way across land tenures, perhaps using DFES staff and equipment to undertake these activities.

However, there is ambiguity about the extent to which DFES has responsibilities for prevention and whether such activities may be funded by the ESL (see Box 11).

If the ESL was to be used to fund direct prevention, consideration would need to be given to recovering these costs directly from beneficiaries, where they can be identified. The Productivity Commission considers that user pays charging should be the preferred choice for recovering the costs of prevention.⁴⁵² The Productivity Commission recommends that prevention should only be funded from government revenue if these expenditures cannot be recovered from beneficiaries.⁴⁵³ There are already provisions under some legislation which allow this to occur. For example, section 33 of the *Bush Fires Act 1954* allows local governments to direct private property owners to undertake prevention activities. If private property owners do not comply, local governments may undertake these activities and recover the costs from the owner. Having said this, WALGA argues that state government organisations are not required to comply with annual bushfire mitigation notices issued by local governments.⁴⁵⁴

In summary, primary responsibility for funding the direct aspects of prevention should remain with property owners. The ESL should not be used to fund direct prevention activities. The ESL should be used to fund those aspects of prevention that DFES and local governments provide on behalf of the community it they can do so more effectively than individual property owners.

<https://www.dfes.wa.gov.au/waemergencyandriskmanagement/bushfiremitigationgrants/Pages/default.aspx>, (accessed on 16 June 2017).)

⁴⁵¹ Department of Fire and Emergency Services, *Office of Bushfire Risk Management: Bushfire Risk Management Guideline Launch*, Perth, Government of Western Australia, 2015, <https://www.dfes.wa.gov.au/waemergencyandriskmanagement/obrm/Documents/OBRM-Bushfire-Risk-Management-Plan-Guidelines-Launch-Dec-2015.pdf>, (accessed 19 June 2017).

⁴⁵² Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 404.

⁴⁵³ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 404.

⁴⁵⁴ Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 7.

Box 11 Can the ESL fund prevention?

As set out in Chapter 2, the emergency services Acts are not prescriptive about what emergency management activities the ESL can fund. As a result, stakeholders have different views on what the ESL can legally fund.

Cascade Scaddan Fire Review considers “it is within scope of the legislation that created and governs the ESL for ESL funds to be spent on mitigation activities”.⁴⁵⁵

In contrast, the former emergency services minister, Mr Joe Francis, told Parliament that being able to “use the ESL to fund mitigation.... would require an amendment” to legislation.⁴⁵⁶

The Office of Emergency Management states:

“One of the identified weakness of the current system is the policy restraint currently place on expenditure of the funds raised by the levy..... ESL expenditure is largely contributed to response activities and expenses associated with response preparedness..... It makes sense, in our view, that ESL expense should have closer alignment with recognised risk management processes. It follows that expenses would be directed towards the most productive treatments and controls and thus range over the full spectrum of treatments from prevention (or mitigation) and preparedness, to response and recovery.”⁴⁵⁷

DFES notes:

“If the ESL is considered to be the primary funding source for enhanced capability for the State then consideration will need to be given to legislative changes.”⁴⁵⁸

Other stakeholders call for clarity on what the ESL can fund. For example, the former Department of Lands stated that it would be “useful to remove any doubt” as to whether the ESL may legally be applied to prevention, given “conflicting views”.⁴⁵⁹

The draft report recommended that any new emergency services legislation should clarify DFES’s and local governments’ prevention obligations, and whether these can be funded by the ESL. Many submissions to the draft report, including DFES,⁴⁶⁰ support this recommendation, although some provide qualifications. The Association of Volunteer Bush Fire Brigades does not support the recommendation. It is concerned that any changes to the legislation could result in an “overly prescriptive, unworkable set of rules that ultimately do not provide a good return on investment for the community”.⁴⁶¹

⁴⁵⁵ Cascade Scaddan Fire Review, *Submission to issues paper*, 10 March 2017, p. 1.

⁴⁵⁶ Francis, J.M., Emergency Services Levy – Motion, *Hansard*, Assembly, 16 September 2015, p. 9.

⁴⁵⁷ Office of Emergency Management, *Submission to issues paper*, 13 March 2017, p.3.

⁴⁵⁸ Department of Fire and Emergency Services, *Submission to issues paper*, 10 March 2017, p. 2.

⁴⁵⁹ Department of Lands, *Submission to issues paper*, 14 March 2014, p. 5.

⁴⁶⁰ Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 9; Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 8; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 6; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 5; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 10; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 9.

⁴⁶¹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 16 August 2017, p. 9.

In practice, this means that:

- The ESL should continue to fund all of the prevention activities that DFES currently undertakes and which are funded by the ESL, *except for* the direct prevention activities DFES undertakes on behalf of other organisations (for example, prescribed burns for other government departments through Memorandums of Understanding).
- Local governments (and their volunteer brigades) should be able to access ESL funds for some ancillary prevention activities, such as bushfire risk management planning, but *not* for undertaking direct prevention activities (for example, prescribed burns) on land they own or manage.

The ERA's recommendations about how local government should be able to access ESL funds for these activities are set out in Chapter 8.

5.3.3 Preparedness

In their submissions to the issues paper, some stakeholders considered preparedness should be given higher priority. The Shire of Manjimup stated that preparedness should receive a high level of importance and be funded appropriately.⁴⁶² The Pastoralist and Graziers Association said that effective prevention and response depends on preparation (preparedness), so adequate funding needs to be directed to fit-for-purpose equipment and training.⁴⁶³

The State Emergency Service Volunteers Association stated that DFES does very little to engage the community (in terms of preparation) unless there is an imminent threat, particularly when compared to the Fire and Emergency Service Authority's past work.

"In the pre-ESL role of FESA [Fire and Emergency Service Authority] there was a lot of work done in preparation of the communities to a number of natural disasters[.] This preparation included school based programs, school talks by SES [State Emergency Services] Volunteers and attendance at [Local Emergency Management Committee] meetings by SES Volunteers and the SES District Manager for the area. It was these relationships that prepared the community for natural disasters such as cyclones, storms and floods. Since the formation of DFES in 2012 these programs and preparation of the communities appears to have decreased and in many instances, has endangered the community and increased the cost to the state during a disaster or possible disaster."⁴⁶⁴

In its submission to the draft report, DFES clarified that:

"[T]he DFES school based program is still in place and has been improved with the linkages to the school curriculum"; and

"DFES encourages State Emergency Services Units to Appoint a Public Information Officer who coordinates unit community engagement activities".⁴⁶⁵

⁴⁶² Shire of Manjimup, *Submission to issues paper*, 10 March 2017, p. 1.

⁴⁶³ Pastoralists and Graziers Association, *Submission to issues paper*, 10 March 2017, p. 4.

⁴⁶⁴ State Emergency Service Volunteers Association, *Submission to issues paper*, 13 March 2017, p. 6.

⁴⁶⁵ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 14.

The draft report recommended that the ESL should be used to fund the preparedness activities of DFES, the bush fire brigades and State Emergency Service units that have community-wide benefits.

In their responses to the draft report, stakeholders generally support this recommendation,⁴⁶⁶ however, some suggest amendments.⁴⁶⁷

For example, the Shire of Corrigin suggests the recommendation should be amended to include preparedness activities undertaken by local government, including community safety programs. The Shire suggests that a grants programs (separate to the Local Government Grants Scheme) could fund these activities.⁴⁶⁸

WALGA supports the ERA's draft recommendation, but only if the Local Government Grants Scheme manual is amended to reflect the additional eligible items. WALGA also states that further clarity is required about the organisations responsible for preparedness.⁴⁶⁹

Consistent with the approach applied by the ERA for prevention, the ESL should be used to fund preparedness activities that DFES and local governments provide on behalf of the community if they can do so more effectively than individual property owners. This would include, for example, developing emergency response plans, and providing public education and information. The ESL should not fund preparedness activities that are the responsibility of individual property owners.

In practice, this means that:

- The ESL should continue to fund all of the preparedness activities that DFES currently undertakes.
- Local governments (and their volunteer brigades) should be able to access ESL funds for some preparedness activities, such as public education and community safety programs.

The ERA agrees with the Shire of Corrigin and WALGA that there is currently no mechanism for providing access to ESL funds for these purposes. The ERA's recommendations about local government access to ESL funds are set out in Chapter 8.

The ESL should not be used to fund investments in infrastructure, such as flood levees and community refuge shelters. Special purpose levies such as the ESL are better suited to funding expenditures that are relatively stable and predictable from year to year. Expenditure on this type of infrastructure tends to be lumpy over time. Funding it from the ESL could therefore lead to ESL rates that are less stable from year to year.

⁴⁶⁶ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 8; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 6; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 3; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 3; The Bushfire Front, *Submission to draft report*, 15 August 2017, p. 1.

⁴⁶⁷ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 6; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 6; Mangini, J., *Submission to draft report*, 11 August 2017, p. 4; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 3; United Firefighters Union of Australia West Australian Branch, *Submission to draft report*, 11 August 2017, p. 2; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 6.

⁴⁶⁸ Shire of Corrigin, *Submission to draft report*, 14 August 2017, p. 3.

⁴⁶⁹ Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, pp. 4-5.

5.3.4 Response

In their submissions to the issues paper, stakeholders highlighted the importance of sufficient funding being provided for response. DFES stated that it is essential that funding is allocated to ensure a “ready state” of response capability.⁴⁷⁰ The Shire of Augusta Margaret River stated that a reduction in response funding could endanger the community and increase the costs of disaster.⁴⁷¹ The Gidgegannup Progress Association⁴⁷² and the Shire of Manjimup⁴⁷³ said that all response activities need to be funded by the ESL. The Gidgegannup Progress Association commented that direct recovery of response costs from affected property owners is not appropriate. The United Firefighters Union stated that there should not be any reduction in funding available for response.⁴⁷⁴

However, some stakeholders were of the view that there should be less focus on response and that more funds should be allocated to prevention (see Section 5.3.2). WALGA stated that, based on survey results, there is a perception of over-spending on response at the expense of all other activities, in both regional and metropolitan areas.⁴⁷⁵ The Shire of Murray noted that the Local Government Grant Scheme Manual appears to be response-focussed and does not provide funding for prevention, preparedness, or recovery. The Shire also stated that, despite the manual being response-focussed, there are significant response items for which local governments are ineligible (for example, traffic management and machinery hire at DFES managed incidents).⁴⁷⁶

All submissions to the draft report that comment on response support the draft recommendation that the ESL should fund the response expenditures of DFES and local governments.⁴⁷⁷

The community expects that response services will be made available during times of need. The ESL should be used to fund the response expenditures of DFES and local government volunteer brigades. This would include, for example, response to structural fires, conducting evacuations for floods and cyclones, and traffic management during an emergency. The ESL should *not* be used to fund expenditure on response by individual property owners in managing risks on their own property (for example, private firefighting equipment).

In practice, the ERA’s recommendation means that:

- The ESL should continue to fund DFES’s response activities.
- Local governments (and their volunteer brigades) should continue to be able to access ESL funds for response, such as equipment for volunteer brigades.

⁴⁷⁰ Department of Fire and Emergency Services, *Submission to issues paper*, 10 March 2017, p. 2.

⁴⁷¹ Shire of Augusta Margaret River, *Submission to issues paper*, 9 March 2017, p. 2.

⁴⁷² Gidgegannup Progress Association, *Submission to issues paper*, 27 February 2017, p. 5.

⁴⁷³ Shire of Manjimup, *Submission to issues paper*, 10 March 2017, p. 1.

⁴⁷⁴ United Firefighters Union of Australia West Australian Branch, *Submission to issues paper*, 17 March 2017, p. 2.

⁴⁷⁵ Western Australian Local Governments Association, *Submission to issues paper*, 13 March 2017, p. 19.

⁴⁷⁶ Shire of Murray, *Submission to issues paper*, 24 February 2017, p. 3.

⁴⁷⁷ Shire of Esperance, *Submission to draft report*, 11 August 2017, p. 2; United Firefighters Union of Australia West Australian Branch, *Submission to draft report*, 11 August 2017, p. 1.

The ERA's recommendations about how local government should be able to access ESL funds for response are set out in Chapter 8.

5.3.5 Recovery

Most stakeholders support the draft report's recommendation that the ESL should not fund recovery.⁴⁷⁸ There are already appropriate mechanisms for funding recovery costs outside of ESL funding. These arrangements involve the public, private, and not-for-profit sectors.

Stakeholders oppose the ESL funding recovery for a range of reasons.

DFES noted in its submission to the issues paper that recovery services are already provided through other avenues, including state and Australian government agencies. It stated that the non-linear and unpredictable nature of recovery costs and their potential inclusion in the ESL funding model would challenge the ESL's equity and sustainability principles.⁴⁷⁹ DFES indicated that funding recovery from the ESL would challenge equity principles because decisions would need to be made about whether to recoup recovery costs just from the affected area or from the broader community. Funding recovery from the ESL would challenge sustainability principles because the costs of recovery are highly variable and unpredictable from year to year, whereas levies should remain stable over time.⁴⁸⁰

Mr Eddie van Rijnswood stated that recovery has always been excluded from ESL funding. Recovery has been handled well by welfare organisations and local government, in conjunction with the national disaster relief funding arrangements.⁴⁸¹ Similarly, the Emergency Services Volunteers Association says in its submission that recovery should be covered under disaster relief funding, rather than from the ESL.⁴⁸²

The Pastoralists and Graziers Association expressed concern that funding of recovery through the ESL may reduce incentives for people to engage in prevention and preparedness (which would reduce the need for recovery expenditure), and from taking out insurance.⁴⁸³

The Shire of Augusta Margaret River stated that local governments, with assistance from the State Government, should continue to be responsible for recovery in the event of an incident.⁴⁸⁴ The Shire of Manjimup said in its submission that the recovery costs of high-impact incidents should be funded from State and/or Australian Government revenue,⁴⁸⁵ and the Shire of Mundaring notes that funding could also be used to establish a reserve fund that local governments could access following a significant incident.⁴⁸⁶

⁴⁷⁸ The Bushfire Front Inc., *Submission to draft report*, 15 August 2017, p. 1; Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 8; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 5; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 2.

⁴⁷⁹ Department of Fire and Emergency Services, *Submission to issues paper*, 10 March 2017, p. 2.

⁴⁸⁰ Communication with Department of Fire and Emergency Services, 29 June 2017.

⁴⁸¹ van Rijnswood, E., *Submission to issues paper*, 8 March 2017, p. 1.

⁴⁸² Emergency Services Volunteers Association Inc., *Submission to issues paper*, 10 March 2017, p. 3.

⁴⁸³ Pastoralists and Graziers Association of WA, *Submission to issues paper*, 10 March 2017, p. 5.

⁴⁸⁴ Shire of Augusta Margaret River, *Submission to issues paper*, 9 March 2017, p. 1.

⁴⁸⁵ Shire of Manjimup, *Submission to issues paper*, 10 March 2017, p. 1.

⁴⁸⁶ Shire of Mundaring, *Submission to issues paper*, 3 March 2017, p. 1.

Only a few stakeholders, including the Bushfire Front,⁴⁸⁷ considered the ESL should fund recovery. The Association of Volunteer Bush Fire Brigades said that the ESL should be available for all activities that reduce the risk or effect of bushfire or other hazard, including being available for recovery activities. It states that:

“recovery is a seriously neglected phase of almost every emergency”, “[p]oorly managed recovery operations can devastate the physical and emotional health of communities”, and that poor recovery “create[s] greater risk and liability for the State going forward”.⁴⁸⁸

The Australian Red Cross had a similar view, stating that funding programs should provide for recovery activities that address the psychosocial impacts of disasters (not just physical loss), and provide for sustained resilience building and recovery.⁴⁸⁹

The primary mechanism for funding recovery is the Western Australia Natural Disaster Relief and Recovery Arrangements.⁴⁹⁰ These arrangements are used to provide assistance to communities to recover from eligible natural disaster events (including bushfires, earthquakes, floods, storms, cyclones, storm surges, landslides, tsunamis, meteorite strikes, and tornados).

The Western Australia Natural Disaster Relief and Recovery Arrangements are invoked for eligible emergencies where the anticipated costs of relief and recovery activities are expected to exceed \$240,000.⁴⁹¹ Relief is available to individuals and families, small businesses, primary producers, local governments, and state government agencies.⁴⁹²

The Western Australia Natural Disaster Relief and Recovery Arrangements do not cover compensation for losses suffered, assistance where adequate insurance could have been obtained, nor assistance for losses incurred as a result of a drought, frost, heatwave, epidemic, or event where human activity is a significant contributing factor.⁴⁹³

The Productivity Commission notes that funding arrangements need to clearly define roles and responsibilities (and how these relate to private and public risks), and have strong, transparent, and credible commitment mechanisms so that governments avoid *ad hoc* policy responses, myopic policy settings, and disincentives for private risk management.⁴⁹⁴ Extending ESL funding to recovery expenditures could undermine existing arrangements,

⁴⁸⁷ The Bushfire Front Inc, *Submission to draft report*, 8 August 2017, p. 1.

⁴⁸⁸ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 7.

⁴⁸⁹ Australian Red Cross, *Submission to issues paper*, 10 March 2017, p. 2.

⁴⁹⁰ In its submission to the draft report, the Office of Emergency Management clarified that “the State covers the cost of disaster events from consolidated funds. The Commonwealth NDRRA [Natural Disaster Relief and Recovery Arrangement] funding is arranged based on the premise that the State’s resources have been exhausted and its supports extraordinary costs. The Commonwealth pays 50% of eligible individual and community costs and contributes to the total costs of disasters once threshold have been met”. Source: Office of Emergency Management, *Submission to draft report*, 11 August 2017, p. 4.

⁴⁹¹ Office of Emergency Management, *Western Australia Natural Disaster Relief and Recovery Arrangements*, Perth, Government of Western Australia, <https://www.oem.wa.gov.au/funding/wandrra>, (accessed 29 May 2017).

⁴⁹² Office of Emergency Management, *Western Australia Natural Disaster Relief and Recovery Arrangements*, Perth, Government of Western Australia, <https://www.oem.wa.gov.au/funding/wandrra>, (accessed 29 May 2017).

⁴⁹³ Office of Emergency Management, *Western Australia Natural Disaster Relief and Recovery Arrangements*, Perth, Government of Western Australia, <https://www.oem.wa.gov.au/funding/wandrra>, (accessed 29 May 2017).

⁴⁹⁴ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 1, p. 13.

create confusion, and cause unintended consequences, including weakening incentives for asset owners to treat their own risks appropriately.

The ESL is not an appropriate mechanism to fund recovery costs. Recovery expenditures vary greatly from year to year, depending on the number and scale of disasters, and the extent they affect communities. Special purpose levies such as the ESL are better suited to funding expenditures that are relatively stable and predictable from year to year.

Expenditures on recovery are important, but the ESL should not be used to fund the costs of recovery. This is because comprehensive arrangements already exist for funding recovery, and extending ESL funding to recovery could undermine existing arrangements.

In their submissions to the draft report, some stakeholders state that while they support the ESL not funding recovery, improvements should be made to the alternative funding sources. For example, the City of Swan⁴⁹⁵ states there needs to be clear pathways to gain access to state and federal government funding in a timely manner. The Shire of Plantagenet states that the Western Australia Natural Disaster Relief and Recovery Arrangements process needs to be streamlined.⁴⁹⁶

Stakeholders' views on these issues are noted. However, it is outside the terms of reference of this review to comment on other funding sources.

5.4 Using the Emergency Services Levy to fund other expenditures

5.4.1 Should the ESL fund expenditure on administration?

The ESL is currently used to fund the administration costs of DFES, but not local governments (other than Community Emergency Services Manager positions). This is consistent with the approach taken in some other jurisdictions around Australia, in that their emergency services levies are used to fund administration functions for emergency services.⁴⁹⁷

There are valid arguments for and against the ESL being used to fund administration costs. The draft report weighed up these considerations, and recommended that:

- the ESL should be used to fund the administration costs of DFES, both to meet the expectation of service principle and for simplicity; and
- the ESL should be used to fund the cost of local governments' Community Emergency Services Managers, but not other administration costs of local governments.

⁴⁹⁵ City of Swan, *Submission to draft report*, 27 July 2017, p. 1.

⁴⁹⁶ Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 3.

⁴⁹⁷ Communication with the New South Wales Department of Treasury (19 September 2017), Queensland Department of Treasury (15 September 2017), and South Australian Fire and Emergency Services Commission (15 September 2017).

The majority of stakeholders do not support the draft recommendation that the ESL should fund DFES's administration costs. The reasons for this are broadly the same as those expressed by stakeholders in consultation leading up to the draft report – namely, that:

- DFES's administration expenditure is becoming increasingly inefficient, while at the same time less funding is being allocated to non-DFES frontline services;⁴⁹⁸ and
- the purpose of the ESL is to fund frontline services, not administration.⁴⁹⁹

Stakeholders have mixed views about whether the ESL should fund local government emergency management administration, including Community Emergency Services Managers.⁵⁰⁰

5.4.1.1 *Should the ESL fund the Department of Fire and Emergency Services' expenditure on administration?*

Promoting efficiency in administration expenditure

Several stakeholders argue that DFES's administration expenditure is growing and inefficient, and that it should therefore not be funded by the ESL.

The United Firefighters Union and the Pastoralists and Graziers Association call for greater scrutiny over administration expenditure, only supporting the ESL funding DFES's administration costs if there is increased oversight by an external organisation such as the Department of Treasury.⁵⁰¹ Similarly, in its submission to the issues paper, the City of Swan recommended that the structure and size of DFES be reviewed to determine future emergency management needs.⁵⁰²

⁴⁹⁸ Anonymous, *Submission to issues paper*, 18 February 2017, p. 1; Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 25 February 2017, p. 3; Cascade Scaddan Fire Review, *Submission to issues paper*, 10 March 2017, p. 3; Mangini, J., *Submission to issues paper*, 10 March 2017, p. 9; Shire of Plantagenet Chief Bushfire Officer, *Submission to issues paper*, 21 February 2017, p. 1; Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, p. 21.

⁴⁹⁹ Anonymous, *Submission to issues paper*, 18 February 2017, p. 1; Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 7; Shire of Harvey, *Submission to issues paper*, 24 February 2017, p. 1; The Western Australian Farmers Federation Inc. (WAFarmers), *Submission to issues paper*, 10 March 2017, p. 3; Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August, p. 1; Smith, R., *Submission to draft report*, 7 August 2017, p. 5; Shire of Plantagenet, Chief Bushfire Control Officer, *Submission to issues paper*, 13 February 2017, p. 1.

⁵⁰⁰ For example, the following stakeholders support the ESL funding Community Emergency Services Managers: City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1; City of Swan, *Submission to draft report*, 27 July 2017, p. 1; Shire of Nannup, *Submission to draft report*, 10 August 2017, p. 2; Shire of Woodanilling, *Submission to draft report*, 8 August 2017, p. 1.

The following stakeholders do not support the ESL funding local government administration - Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 9; City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 4.

⁵⁰¹ Pastoralists and Graziers Association of Western Australia, *Submission to draft report*, 16 August 2017, p. 5; United Firefighters Union of Australia West Australian Branch, *Submission to draft report*, 11 August 2017, p. 2.

⁵⁰² City of Swan, *Submission to issues paper*, 10 March 2017, p. 2.

Cascade Scaddan Fire Review is of the view the ESL should not fund DFES's administration, given administration costs account for approximately one third of ESL revenue, and the State Government has reduced its contribution to the ESL.⁵⁰³

Some stakeholders consider that funding administration from general government revenues would enhance the efficiency of administration expenditure. An anonymous submission to the issues paper recommended public employees be paid from the general government revenue, rather than ESL revenue.⁵⁰⁴ In his submission to the issues paper, Mr Kevin Forbes (Chief Bushfire Control Officer, Shire of Plantagenet)⁵⁰⁵ considered that funding DFES's administration costs through general government revenue would be consistent with how other government departments are funded. In their submissions to the draft report, Mr Ralph Smith and the Association of Volunteer Bush Fire Brigades share this view.⁵⁰⁶

The Shire of Manjimup considers that:

“Given the concerns that costs associated with administration of the ESL reduces the amount of funding that would otherwise be available for Prevention, Mitigation, Response actions, the Shire wishes to submit that **“State Government Employees, other than Career Fire Stations, should be funded from General Revenue and not ESL funds”**.”⁵⁰⁷

Many stakeholders raised concerns about the efficiency of DFES's administration expenditure and its allocation of funds to other purposes. As noted in Section 3.3.3, since the ESL was introduced DFES's expenditure on corporate overheads has been increasing at a faster rate than its expenditure on prevention services and emergency services.

Funding DFES's administration costs through general government revenues rather than the ESL may lead to increased scrutiny of these costs. This is because services that are funded through general government revenues must compete for funding with all other services. When the ESL was introduced,⁵⁰⁸ general government revenue contributed to 21 per cent of the total revenues of DFES. This had decreased to 13 per cent by 2015-16.⁵⁰⁹ This means that DFES is competing with other services for funding for an increasingly smaller proportion of its revenue. This could in turn have implications for the level of scrutiny over DFES's expenditure on administration.

Other mechanisms can also be used within the ESL framework to promote the efficiency of DFES's administration (and other) expenditures. Chapters 4 and 8 provide recommendations about how to promote more efficient expenditure – by requiring more structured and robustly analysed decisions about the allocation of funds, and by providing greater oversight of those decisions.

In addition, the proportion of DFES's revenue that comes from the ESL (86 per cent) is not particularly high when compared to other jurisdictions. As noted in Section 5.2.2, emergency services levies fund anywhere from about 75 per cent to 98 per cent of emergency services

⁵⁰³ Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 8.

⁵⁰⁴ Anonymous, *Submission to issues paper*, 18 February 2017, p. 1.

⁵⁰⁵ Shire of Plantagenet, Chief Bushfire Control Officer, *Submission to issues paper*, 13 February 2017, p. 1.

⁵⁰⁶ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August, p. 1; Smith, R., *Submission to draft report*, 7 August 2017, p. 5.

⁵⁰⁷ Shire of Manjimup, *Submission to draft report*, 10 August 2017 p. 4; Shire of Manjimup, *Submission to issues paper*, 10 March 2017, p. 1.

⁵⁰⁸ The earliest year DFES has data on the ESL is 2004-05.

⁵⁰⁹ Refer to Section 3.2.2.

costs, with a range of alternative funding sources used to recover the remaining costs depending on the jurisdiction.

Inconsistency with stakeholder expectations

A key argument against funding DFES's administration costs from the ESL is that doing so does not align with stakeholder expectations.

In their submissions to the draft report some stakeholders express the view that funding DFES's administration costs from the ESL is inconsistent with its purpose – that purpose being to fund front-line services.

Cascade Scaddan Fire Review states that it was intended that the ESL would fund frontline services and mitigation works, not administration costs.⁵¹⁰ The Association of Volunteer Bush Fire Brigades states that:

“[t]here is a strong community expectation that hypothecated taxes such as the ESL be used exclusively for front-line services.”⁵¹¹

Stakeholders expressed similar views in their submissions to the issues paper – for example, WAFarmers and the Shire of Harvey both stated that the ESL was established to fund frontline services, not administration costs.⁵¹² An anonymous submission noted that when the ESL was introduced, it was promoted on the basis that it would enable volunteer organisations to obtain new equipment and buildings.⁵¹³ The stakeholder further noted that “51% [of the ESL] is disappearing into the public service” and questioned whether it is fair that only property owners pay the salaries and superannuation of DFES staff.⁵¹⁴

While in Western Australia some stakeholders consider that funding DFES's administration costs from the ESL is inconsistent with its purpose, other Australian jurisdictions do not exclude administration or corporate services costs from being funded from their emergency services levies.⁵¹⁵

The expectation of service principle

There are also arguments in favour of funding DFES's administration from the ESL.

DFES incurs administration costs to support the emergency management activities it undertakes, including providing frontline services – if these costs were not incurred, the frontline services would not be provided. Funding these costs from the ESL is therefore consistent with the expectation of service principle, upon which the ESL was based.

⁵¹⁰ Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 7.

⁵¹¹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August, p. 1.

⁵¹² Shire of Harvey, *Submission to issues paper*, 24 February 2017, p. 1; The Western Australian Farmers Federation Inc. (WAFarmers), *Submission to issues paper*, 10 March 2017, p. 3.

⁵¹³ Anonymous, *Submission to issues paper*, 18 February 2017, p. 1.

⁵¹⁴ Anonymous, *Submission to issues paper*, 18 February 2017, p. 1.

⁵¹⁵ The ERA contacted three jurisdictions to ask whether they fund administration or corporate services costs from the ESL. Communication with the New South Wales Department of Treasury (19 September 2017), Queensland Department of Treasury (15 September 2017), and South Australian Fire and Emergency Services Commission (15 September 2017).

The expectation of service principle indicates that, if society expects to benefit from emergency management, then society needs to pay for the cost of emergency management.

A component of the cost of emergency management is in having the standby capacity to respond when a disaster occurs. Society needs to contribute to the costs of ensuring this standby capacity exists, and not just the additional cost of responding (such as call-out costs).⁵¹⁶

Differentiating between ‘corporate services’ and ‘administration’

As noted in Section 5.3, the ESL should fund prevention, preparedness and response activities that:

- anyone can access and which may be used simultaneously by many people without other users being disadvantaged;
- everyone should have access to regardless of ability or willingness to pay, and which benefit the broader community not just the users; and/or
- require government coordination.

Some activities that fall into these categories could arguably be described as administration. It might be complex to distinguish these activities from more general administration, or ‘corporate services’ type functions (such as human resources, finance and IT).

In some cases, the same resources might support both types of function. For example, DFES’s head office accommodates resources involved in undertaking the above types of activities, as well as corporate services staff. Individual staff might undertake both the above types of activities and more general corporate services functions. For example, DFES notes that staff who perform administrative work during non-emergency periods are uniformed officers, who take on an active emergency management role when emergencies take place.⁵¹⁷ DFES notes that the administrative work undertaken includes implementing recommendations from the Ferguson report, developing and implementing changes to doctrine and training, developing partnerships with key stakeholders, and contributing to national projects.⁵¹⁸

DFES allocates its forecast costs by the cost centre functions of ‘corporate services’, ‘frontline services’, ‘training and organizational development’, ‘compliance and technical advisory services’, and ‘community awareness and education’. The ‘corporate services’ function includes CEO Corporate, Business Services Corporate and Human Services Corporate. (Appendix D includes examples of the types of costs that fall into each of these sub-categories.) Corporate services are forecast to account for, on average, 31 per cent of DFES’s total annual costs over the period 2017-18 to 2021-21 (see Chapter 3, Figure 25).

⁵¹⁶ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, pp. 17-18.

⁵¹⁷ Communication with Department of Fire and Emergency Services, 16 March 2017.

The Department of Fire and Emergency Services also notes that many non-uniformed officers take on active roles during emergencies through the State Duty Roster. (Source: Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 15.)

⁵¹⁸ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 15.

DFES allocates its historical costs in two ways.

One way is according to the categories of ‘overheads’ (CEO Corporate, Business Services Corporate and Human Services Corporate), ‘Emergency Services’ and ‘Prevention Services’. (Appendix D includes examples of the types of costs that fall into each of these sub-categories.)

The other way is according to the categories of ‘supplies and services’ (administration, advertising, communications, consulting, contractors, electricity and water, insurance premiums and claims, leases, maintenance, and travel costs), ‘employment expenses’, ‘depreciation’, ‘finance costs’, ‘accommodation’ and ‘grants and subsidies’.

This demonstrates that DFES may be able to distinguish the costs of its corporate services functions from the administration costs that relate to prevention, preparedness and response activities that DFES provides because it can do so more effectively than individual property owners.

The ESL currently makes up about 86 per cent of DFES’s total revenue, and it is budgeted to make up 91 per cent of total revenue by 2020-21. If the proportion of DFES’s revenues made up by the ESL continues to increase, this means that the ESL would be funding an increasing amount of DFES’s corporate services costs – given that corporate services are forecast to account for, on average, 31 per cent of DFES’s total annual costs over the period.

Economic Regulation Authority’s assessment

Other than limiting what the ESL can be spent on to the purposes of the emergency services Acts, the legislation does not prescribe what the ESL can and cannot fund. The functions of the Fire and Emergency Services Commissioner are broad and “relate to” the provision and management of emergency services.⁵¹⁹ However, there appears to be an expectation from some stakeholders that the ESL should only fund frontline services, with administration being funded from general government revenue.

The ESL should be used to fund activities that DFES provides on behalf of the community if it can provide them more effectively than individual property owners. Some of these activities could arguably be described as administration, for example, emergency management planning and coordinating emergency management activities across different land tenures. These activities – even if they are administrative in nature – should be funded by the ESL.

In arguing that the ESL should not fund DFES’s administration costs, stakeholders do not define what they mean by ‘administration’. Given the ERA’s recommendation that the ESL should fund some types of administrative functions, the ERA has limited its considerations to whether the ESL should fund DFES’s ‘corporate services’ functions.

The ERA finds that there are arguments for and against the ESL funding DFES’s corporate service functions.

There are other mechanisms can be used within the ESL framework to promote the efficiency of DFES’s corporate services (and other) expenditures. In addition, funding

⁵¹⁹ *Fire and Emergency Services Act 1998*, section 11.

corporate services functions from emergency services levies is not uncommon in other jurisdictions around Australia.

However, stakeholder responses clearly indicate that there is a risk that confidence in the ESL will decline if the ESL continues to fund an increasing proportion of DFES's corporate services costs. In addition, it means that DFES will be competing with other services for funding for an increasingly smaller proportion of its revenue. This in turn has implications for the level of scrutiny over DFES's expenditure on corporate services functions.

Given these issues, this report recommends a proportion of DFES's corporate services costs should be funded by general government revenues, rather than the ESL.

5.4.1.2 *What local government expenditure should the ESL fund?*

Local governments have a role to provide emergency management (including emergency services) across all 27 prescribed hazards. The ESL is currently used to contribute to some of the preparedness and response activities of local government, such as maintaining and equipping bush fire brigades and State Emergency Service units, as well as for Community Emergency Services Managers.

The draft report discussed whether it is appropriate to fund emergency management undertaken by local governments through state government revenue, and whether this creates disincentives for local governments to fund these activities. The draft report concluded that:

- Local government costs incurred to provide bush fire brigades and State Emergency Service units should be funded from ESL revenue, because this would ensure the ESL is closely aligned with the provision of specific services and that communities receive at least the minimum level of emergency services.
- The ESL should fund Community Emergency Services Managers, but not other local government administration costs. This was because, first, Community Emergency Services Managers contribute to the management and support of front-line services including those provided by bush fire brigades and State Emergency Service units, and second, the cost of Community Emergency Services Managers can be readily identified and isolated from the broader emergency management administration expenditures by local governments.

While stakeholders generally support the ESL funding local government costs incurred to provide bush fire brigades and State Emergency Service units, they have mixed views about whether it should fund local government emergency management administration (including Community Emergency Services Managers).

Should the ESL fund any of local governments' emergency management activities?

In the lead up to the draft report, stakeholders expressed different opinions about whether local government services should be funded by the ESL.

The Chair of the State Emergency Management Committee, Mr Frank Edwards, considered an examination should be made of what risks local governments and other agencies own and should therefore be expected to fund as part of normal business.⁵²⁰

⁵²⁰ Edwards, F., *Submission to issues paper*, 9 March 2017, p. 2.

Some local governments stated that the ESL should fund a greater range, or higher proportion, of local government expenditures. The City of Geraldton noted that it is struggling to cover the cost of emergency services and expects that all of its costs should be covered by the ESL.⁵²¹ The City of Canning considered that ESL funding should be used to fund local government initiatives on prevention or preparedness to ensure ratepayers are not levied twice.⁵²² The City of Swan stated that its total expenditure is higher than the contribution from DFES, leaving a gap of around \$500,000 that the City meets through municipal funds.⁵²³ The Shire of Manjimup identified a range of preparedness and response costs incurred by local governments that it considers should be funded from the ESL.⁵²⁴

The City of Swan stated that there is an equity issue, because the ESL funds some specific costs for DFES, but not for local governments. For example, the City of Swan is required to pay half the costs of the Community Emergency Services Manager position through municipal funds, while the DFES share is paid by ESL revenue.⁵²⁵ Similarly, the Shire of Mundaring noted that the ESL only covers the half the cost of the Community Emergency Services Manager position paid for by DFES, and not the half paid for by local government. The Shire of Mundaring submitted that the ESL should fund the full cost of the Community Emergency Services Manager.⁵²⁶

WALGA stated that a major challenge for local governments is that many of the emergency management activities they undertake are not eligible for ESL funding through DFES's Local Government Grants Scheme.⁵²⁷ WALGA considered that the budget and payment processes in the Local Government Grants Scheme reflect historical linkages between local governments, brigades, units and DFES, rather than contemporary emergency management arrangements or legislative responsibilities.⁵²⁸

"By way of example, Local Governments are required to administer SES [State Emergency Services] capital and operating grants even though they have no legislative responsibility for SES. Additional burden for Local Governments which effectively act as an intermediary and carry the expenses associated with SES facilities. Site costs associated with SES facilities are not eligible under the LGGS [Local Government Grants Scheme] and Local Governments are expected to fund this through their own sources even though they are a DFES responsibility.

The intended role and function of the LGGS is to enable DFES to finance the approved capital and operating costs associated with the provision and maintenance of an effective bush firefighting and state emergency service for Local Governments.

In a contemporary emergency management context, Local Governments require sustainable funding for a range of responsibilities that are bestowed upon them. A comprehensive review would assess the expansion of the ESL to include access to funding for items not currently deemed eligible and that fall into the prevention and preparedness aspects of emergency management."⁵²⁹

Funding local governments' costs of providing bush fire brigades and State Emergency Service units from ESL revenue ensures all Western Australian communities receive at

⁵²¹ City of Greater Geraldton, *Submission to issues paper*, 20 March 2017, p. 1.

⁵²² City of Canning, *Submission to issues paper*, 10 March 2017, p. 3.

⁵²³ City of Swan, *Submission to issues paper*, 10 March 2017, p. 2.

⁵²⁴ Shire of Manjimup, *Submission to issues paper*, 10 March 2017, p. 2.

⁵²⁵ Shire of Manjimup, *Submission to issues paper*, 10 March 2017, p. 2.

⁵²⁶ Shire of Mundaring, *Submission to issues paper*, 3 March 2017, p. 2.

⁵²⁷ Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, p. 20.

⁵²⁸ Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, p. 20.

⁵²⁹ Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, p. 20.

least the minimum level of emergency services. The ESL should therefore continue to be used to fund local governments' direct costs of providing bush fire brigades and State Emergency Service units, as it is currently through the Local Government Grants Scheme.

Local governments' other revenue sources

Local governments also have alternative revenue streams that they can draw upon to fund their responsibilities, including local government rates and Commonwealth Financial Assistance Grants. Some local governments have a smaller rates base than others, and therefore a smaller amount of revenue to draw upon for funding not just emergency management, but all local government services.

To compensate for these 'disabilities',⁵³⁰ Australian government financial assistance grants provide local governments with additional funding.⁵³¹ These grants are allocated through a local government grants commission process to ensure that each local government in the State is able to function at a standard not lower than the average standard of other local governments.⁵³² This process recognises that some local governments will incur higher emergency management costs than an average local government,⁵³³ although does not quarantine funds for a particular purpose.⁵³⁴

The Department of Local Government, Sport and Cultural Industries has advised:

"The WA Local Government Grants Commission [] includes a cost adjuster within its methodology for calculating local government General Purpose Financial Assistance Grants. This cost adjuster acknowledges that some local governments have above average costs in relation to managing and fighting bush fires."⁵³⁵

The grants process does not specifically acknowledge if there is a large amount of state government land within a local government boundary, however, the Department of Local Government, Sport and Cultural Industries has advised:

"The revenue capacity is calculated deriving an average revenue that could be raised by a local government, using a combination of rateable properties and the rateable value of the properties in a given local government."⁵³⁶

⁵³⁰ Department of Local Government, Sport and Cultural Industries, *Local Government Financial Assistance Grants*, Perth, Government of Western Australia, <https://www.dlgc.wa.gov.au/GrantsFunding/Pages/LG-General-Purpose-Grants.aspx>, (accessed 29 August 2017).

⁵³¹ Department of Local Government and Communities, *Local Government Financial Assistance Grants*, Perth, Government of Western Australia, 2017, <https://www.dlgc.wa.gov.au/GrantsFunding/Pages/LG-General-Purpose-Grants.aspx>, (accessed 7 June 2017).

⁵³² Department of Local Government and Communities, *Local Government Financial Assistance Grants*, Perth, Government of Western Australia, 2017, <https://www.dlgc.wa.gov.au/GrantsFunding/Pages/LG-General-Purpose-Grants.aspx>, (accessed on 7 June 2017).

⁵³³ The Terrain Disability recognises that some local governments incur greater costs in bushfire prevention and control due to topographic conditions. The Cyclone Disability recognises local governments that incur pre-cyclone clean-up costs, planning costs and increased insurance costs. (Source: Western Australian Local Government Grants Commission, *Methodology for the distribution of Commonwealth Financial Assistance Grants to local governments in Western Australia*, Perth, Government of Western Australia, 2015.)

⁵³⁴ Department of Local Government and Communities, *Local Government Financial Assistance Grants*, Perth, Government of Western Australia, 2017, <https://www.dlgc.wa.gov.au/GrantsFunding/Pages/LG-General-Purpose-Grants.aspx>, (accessed 7 June 2017); Communication with the Department of Local Government, Sport and Cultural Industries, 30 August 2017; *Local Government (Financial Assistance) Act 1995* (Cth).

⁵³⁵ Communication with the Department of Local Government, Sport and Cultural Industries, 30 August 2017.

⁵³⁶ Communication with the Department of Local Government, Sport and Cultural Industries, 30 August 2017.

The Grants Commission also adjusts average per property expenditure where it:

“...determines that a local government has above average costs in a certain area such as pre-cyclone preparation (cyclone cost adjustor), bush fire management/control (terrain cost adjustor) or maintaining greenspace in hot climates (climate cost adjustor). The idea is to bring local governments in line to provide them with the ability to provide the average level of service.”⁵³⁷

The draft report noted that ERA has not been able to form a conclusion on whether the Financial Assistance Grants are sufficiently compensating local governments that face higher emergency management costs. Submissions to the draft report did not provide any further evidence about whether the grants process is sufficiently compensating local governments that have higher emergency management costs. However, if Financial Assistance Grants are not sufficiently compensating local governments for disabilities, this is an issue that should be resolved through that process.

Should the ESL fund local governments’ emergency management administration costs?

Special purpose levies mainly have benefits when used to fund clearly defined and specific services. In practice, this means that they should be used only to fund particular emergency management activities.⁵³⁸ Failure to meet these conditions will undermine transparency, accountability, and trust because revenues may not be used for their intended purpose.⁵³⁹

This raises the question of whether the ESL should fund local governments’ administration of emergency management activities, including Community Emergency Services Managers.

The draft report recommended that the ESL should fund Community Emergency Services Managers, but not other local government administration costs. This was because first, the Community Emergency Services Managers contribute to the management and support of front-line services, and second, the cost can be readily identified and isolated from broader emergency management administration expenditures by local governments.

In general, stakeholder submissions to the draft report express strong support for the Community Emergency Services Manager program, and support the ESL funding Community Emergency Services Managers.⁵⁴⁰

However, some stakeholders do not support the draft report’s recommendation that the ESL should not fund local government emergency management administration costs more broadly.⁵⁴¹ They argue that the recommendation is inconsistent with the draft report

⁵³⁷ Communication with the Department of Local Government, Sport and Cultural Industries, 30 August 2017.

⁵³⁸ Keable-Elliott, I., *Hypothecated taxation and the NHS*, London, CentreForum, 2014, p. 11.

⁵³⁹ Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, p. 21.

⁵⁴⁰ City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1; City of Swan, *Submission to draft report*, 27 July 2017, p. 1; Shire of Nannup, *Submission to draft report*, 10 August 2017, p. 2; Shire of Woodanilling, *Submission to draft report*, 8 August 2017, p. 1.

⁵⁴¹ Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 9; City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 4.

recommending that the ESL should fund both Community Emergency Services Managers and DFES administration.⁵⁴²

Distinguishing between different types of local government administrative functions

As set out in Section 5.3.1, this report recommends that the ESL be used to fund prevention, preparedness and response activities that:

- anyone can access and which may be used simultaneously by many people without other users being disadvantaged;
- everyone should have access to regardless of ability or willingness to pay, and which benefit the broader community not just the users; and/or
- require government coordination.

At a high level, this means the ESL should be used to fund the prevention, preparedness and response activities that local governments provide on behalf of the community if they can do so more effectively than individual property owners.

As noted above for DFES's administration costs, some activities that fall into these categories could arguably be described as administration.

It might be complex to distinguish these activities from local governments' more general administration functions (such as human resources, finance and IT). This is one reason why the draft report recommended that only the costs of Community Emergency Services Managers should be funded by the ESL.

However, local governments raise concerns that, because not all local governments have a Community Emergency Services Manager, some local governments would have access to less ESL funds for administrative functions than others.

DFES's decisions about Community Emergency Services Managers

Local governments call for the Community Emergency Services Manager program to be delivered more equitably, both in terms of the approval of positions and the allocation of funding.⁵⁴³ The City of Gosnells notes that DFES does not provide a Community Emergency Services Manager for all local governments that apply for one, and that it is unclear how DFES makes this decision.⁵⁴⁴

There are 139 local governments in Western Australia,⁵⁴⁵ whereas DFES has advised that there are only 32 Community Emergency Services Managers.⁵⁴⁶ The local governments with a Community Emergency Services Manager are listed in Appendix H. Of the 32 Community Emergency Services Manager positions, 27 are local government

⁵⁴² Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 9; City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1.

⁵⁴³ ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017

⁵⁴⁴ City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1.

⁵⁴⁵ Western Australian Electoral Commission, *Local Government Enrolment*, Perth, Government of Western Australia, <https://www.elections.wa.gov.au/enrol/local-government-enrolment>, (accessed 29 August 2017).

⁵⁴⁶ Communication with the Department of Fire and Emergency Services, 30 August 2017.

employees and 5 are DFES employees.⁵⁴⁷ Some Community Emergency Services Managers service multiple local governments.

Local governments that have a Community Emergency Services Manager receive ESL funds for between 50 and 70 per cent of the cost (Table 19).⁵⁴⁸

Table 19 ESL funding for Community Emergency Services Manager positions

Local government rates assessment (\$)	DFES contribution	Local government contribution	ESL Category
0-3 million	70%	30%	Four and five
3-10 million	60%	40%	Four and five
10 million upwards	50%	50%	Three, four and five.

Source: Communication with the Department of Fire and Emergency Services, 20 September 2017.

The ERA sought information from DFES on how it considers local governments' applications for a Community Emergency Services Manager and how it allocates its funding for Community Emergency Services Managers. DFES advises:

"Following a review of the program in 2015 and when the number of LGs [local governments] requesting a CESM [Community Emergency Services Manager] exceeded available funding, the priority of allocation was based on an assessment of risk. Since 2015 position offers to LGs has been based on risk. If a LG is not interested in a CESM position, then an offer is made on the next highest risk LG."⁵⁴⁹

"DFES does consider the risk in all LGs. Should an opportunity to place a CESM arise, LGs are approached based on risk to determine their interest in the CESM position. This is what occurred in Collie and Harvey this year. LGs have the right to decline the CESM placement offer, in these circumstances the offer is made to next highest risk LG until the offer is accepted. This ensures CESMs are placed according to risk."⁵⁵⁰

"A risk assessment involves many things including rainfall, population, climatic conditions etc. Generally areas of higher rainfall and population have greater risk."⁵⁵¹

Stakeholders' concerns about how DFES decides whether to approve local governments' applications for Community Emergency Services Managers are consistent with broader concerns about how DFES allocates funds to non-DFES organisations.

Administrative functions and roles

There is also a question about whether – for local governments that do not have a Community Emergency Services Manager – the functions that would otherwise be undertaken by a Community Emergency Services Manager should be ESL funded.

⁵⁴⁷ DFES has advised that they consider DFES managed Community Services Managers for local governments in Category Three. Further detail is in Appendix H.

⁵⁴⁸ Communication with the Department of Fire and Emergency Services, 20 September 2017.

⁵⁴⁹ Communication with the Department of Fire and Emergency Services, 30 August 2017.

⁵⁵⁰ Communication with the Department of Fire and Emergency Services, 20 September 2017.

⁵⁵¹ Communication with the Department of Fire and Emergency Services, 20 September 2017.

The City of Gosnells notes that some local governments have officers that have similar responsibilities to a Community Emergency Services Manager, but they do not receive ESL funding to support these officers.⁵⁵² Local governments also comment that DFES exercises a high degree of control over Community Emergency Services Managers,⁵⁵³ and expects to exercise the same level of control over non-Community Emergency Services Manager officers that perform similar functions – despite not agreeing to enter into a funding arrangement.⁵⁵⁴

DFES does not support the Community Emergency Services Manager program being extended because in its view it is “counter to the ‘shared responsibility’ principle which underpins the current cost sharing arrangements between DFES and local government”.⁵⁵⁵ However, when the ERA sought information from DFES about how it decides how many Community Emergency Services Managers there should be, DFES advised:

“The number of CESM [Community Emergency Services Manager] positions is dependent on demand and available funding. During the internal budget allocation, the current number of CESMs are budgeted – a mixture of local government grants (for CESMs employed by Local Governments [LGs]) and salaries (for those CESMs employed by DFES). If demand changes, then those changes are incorporated through the internal budget allocation process, which may require the redirection of resources from elsewhere in DFES, if deemed a priority”.⁵⁵⁶

Local governments⁵⁵⁷ have provided the job descriptions of Community Emergency Services Managers and other emergency management positions. This information shows that some non-Community Emergency Services Manager positions undertake the functions of a Community Emergency Services Manager.

For example, the Shire of Capel’s Manager Emergency and Ranger Services’ functions include:

“During emergencies represent Council on Incident Management Teams and act as Councils first point of contact.....

Facilitate the mitigation of fire and other hazards impact on the community by coordinating a range of strategies in partnership with stakeholders including the community, emergency volunteers, DFES, DPAW [Department of Parks and Wildlife, now the Department of Biodiversity, Conservation and Attractions] and other relevant agencies, including but not limited to:

- Coordinate control burn program in liaison with the Chief Bush Fire Control Officer,
- Coordinate bushfire management/mitigation programs related to unallocated crown land and reserves,

⁵⁵² City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1.

⁵⁵³ City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 6.

⁵⁵⁴ City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1.

⁵⁵⁵ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 8.

⁵⁵⁶ Communication with the Department of Fire and Emergency Services, 20 September 2017.

⁵⁵⁷ The local government sample was selected with advice from WALGA, received 14 September 2017. The local governments contacted are the City of Bunbury, City of Busselton, City of Mandurah, Shire of Capel, Shire of Dardanup, and Shire of Murray.

- Ensure compliance following annual Bush Fire and Hazard Reduction inspections by Rangers.”⁵⁵⁸

DFES has advised that Community Emergency Services Managers are responsible for “coordinating and administering the local government’s responsibilities in bushfire prevention and preparation” and “supporting the development of the [Bushfire Risk Management] plan”.⁵⁵⁹ Community Emergency Services Managers also undertake administrative functions, including “administration of Local Government Bush Fire Brigades (BFBs); administration of LGGs [Local Government Grants Scheme] capital and operating budget and training coordination”.⁵⁶⁰

At regional consultation sessions,⁵⁶¹ several Community Emergency Services Managers explained their responsibilities as including providing support for front-line services as well as administrative functions, such as processing grants for bush fire brigades and State Emergency Service units, consistent with the above.

Some of the functions of the above officers are also arguably prevention, preparedness and response activities that local governments provide on behalf of the community if they can do so more effectively than individual property owners.

Economic Regulation Authority assessment

The ERA has amended its draft recommendation about the aspects of local governments’ emergency management administration that the ESL should fund.

Local governments should have the opportunity to apply for ESL funding to cover the costs of the prevention, preparedness and response activities that they provide on behalf of the community if they can do so more effectively than individual property owners. These functions could be undertaken by Community Emergency Services Managers, or other officers that perform the same functions as Community Emergency Services Managers but do not have that title.

Chapter 8 recommends that the process by which local governments make, and DFES decides on, such funding applications should be developed by DFES and WALGA. Chapter 8 also recommends that DFES should provide funding to proposals that provide the greatest net benefits — for example, DFES should assess funding applications using a resource to risk approach.

This is consistent with the approach advocated by the Association of Volunteer Bush Fire Brigades in its submission to the draft report,⁵⁶² and that DFES takes when deciding about the allocation of Community Emergency Services Managers. However, the ERA would expect a more robust approach to be taken than what appears to be the case currently for Community Emergency Services Managers, based on the information DFES has provided.

Chapter 8 also recommends that an appeals process be established. This would provide a mechanism for local governments to dispute DFES’s decisions about applications for funding.

⁵⁵⁸ Communication with the Shire of Capel, 15 September 2017

⁵⁵⁹ Communication with the Department of Fire and Emergency Services, 20 September 2017.

⁵⁶⁰ Communication with the Department of Fire and Emergency Services, 20 September 2017.

⁵⁶¹ ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017.

⁵⁶² Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 1.

The ESL should not, however, be used to fund local governments' corporate services functions. The argument against the ESL funding these functions is clearer in the case of local governments relative to DFES. In particular, corporate services functions in local governments support a range of local government services, not just emergency management. Local governments have alternative revenue streams that they can draw upon to fund these functions. Allowing the ESL to fund them could reduce the incentive for local governments to make efficient decisions about how they allocate funds from non-ESL sources.

5.4.2 Marine and road crash rescue services

The ESL is a property-based levy that is used to fund services that are both property-based and not property-based. This includes the Volunteer Marine Rescue Service, and DFES's road crash rescue services. The Volunteer Marine Rescue Service and road crash rescue units primarily provide services in the response phase of emergency management, though the Volunteer Marine Rescue Service also undertakes prevention and preparedness activities. The Volunteer Marine Rescue Service's primary tasks are to:

- conduct marine and rescue search activities;
- provide support to stricken marine vessels;
- track the location of recreational vessels; and
- promote marine safety through education.⁵⁶³

Road crash rescue are provided by the Career Volunteer Fire and Rescue Services, Volunteer Fire and Rescue Services, Volunteer Fire and Emergency Services, and the State Emergency Service.⁵⁶⁴

In submissions to the issues paper, some stakeholders objected to the ESL being used to fund these services. For instance, an anonymous submission commented that:

"[I]t is apparently suitable for land-owners to pay through their rates, for a service which is highly-unlikely to be needed by the vast majority of WA citizens. Would it not be appropriate to extract a levy from every registered ocean-going vessel, to at least partly fund the VMRS, rather than expect land-owners to pay?"⁵⁶⁵

The Shire of Murray made the point that:

"Funding models for Volunteer Marine Rescue Service (VMRS) and Road Crash Rescue by Career and Volunteer Fire and Rescue Services (FRS) needs to be reviewed to determine the most appropriate way operational costs associated with these services are raised. A service model based on user pays needs to be developed (i.e. vehicle/boat registration licence levies)."⁵⁶⁶

⁵⁶³ Communication with Department of Fire and Emergency Services, 3 August 2017.

⁵⁶⁴ Department of Fire and Emergency Services, *Safety Information: Road Crash Rescue*, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/safetyinformation/searchandrescue/Pages/roadcrashrescue.aspx>, (accessed 4 September 2017).

⁵⁶⁵ Anonymous, *Submission to issues paper*, 18 February 2017, p. 1.

⁵⁶⁶ Shire of Murray, *Submission to issues paper*, 24 February 2017, p. 5.

When the ESL was established, simplicity in its design was an important principle. Administering one levy (that is, the ESL on property) is simpler than administering multiple levies (for example, property, vehicles, and vessels). This simplicity comes at the cost of equity. (Chapter 6 assesses the ESL against the principles of good levy design – equity, efficiency, simplicity and effectiveness.)

5.4.2.1 Vessels

The draft report recommended that the Volunteer Marine Rescue Services be funded by a separate levy on boat registrations. This recommendation was based on the following arguments:

- It is not appropriate to recover the costs of the Volunteer Marine Rescue Services from property owners via the ESL, because only a small subset of property owners is also boat owners. Unlike road rescue and other emergency services, the Volunteer Marine Rescue Services is relied on by a relatively small segment of the community.
- A levy on vessels would allow boat owners to pay the direct costs of the Volunteer Marine Rescue Services. In principle, this would be more equitable.
- The direct costs of the Volunteer Marine Rescue Services are relatively clearly defined (\$5.8 million in 2015-16, for instance⁵⁶⁷).

Many submissions do not support the draft report's recommendations, based on the following arguments:

- The Volunteer Marine Rescue Services should not be charged for on a user pays basis.⁵⁶⁸ Charging on a user pays basis is inconsistent with the basis of the ESL – the ESL funds services that some property owners are more likely to use than others.⁵⁶⁹ Only one stakeholder, Mr John Lyon, suggests the Volunteer Marine Rescue Services should be a user pays service.⁵⁷⁰
- The user pays principle is not consistently applied to major crash rescue.⁵⁷¹
- There are many users of the Volunteer Marine Rescue Services that are not in licenced vessels, including users of canoes, surf skis and dinghies,⁵⁷² as well as rock fishers and swimmers.⁵⁷³ The Volunteer Marine Rescue Services also supports non-marine based emergency services, including rescuing people trapped on a beach or jetty, and body recovery which may not have occurred near or in the water.⁵⁷⁴

⁵⁶⁷ Data provided by Department of Fire and Emergency Services, 8 February 2017. (*Item 6 Output Cost Allocation for BCM 201516.xlsx*)

⁵⁶⁸ For example: Klaka, K., *Submission to draft report*, 17 July 2017, p. 1.

⁵⁶⁹ MacPherson, S., *Submission to draft report*, 8 July 2017, 1.

⁵⁷⁰ Lyons, J., *Submission to draft report*, 8 July 2017, p. 1.

⁵⁷¹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 10.

⁵⁷² Howlett, I., *Submission to draft report*, 8 July 2017, p. 1.

⁵⁷³ Klaka, K., *Submission to draft report*, 17 July 2017, p. 1; Howlett, I., *Submission to draft report*, 8 July 2017, p. 1.

⁵⁷⁴ Volunteer Marine Rescue Services Western Australia, *Submission to draft report*, 12 July 2017, p. 1.

- Boat owners already contribute to the cost of marine based emergency services in other ways – with private effort as part of ‘the law of the sea’,⁵⁷⁵ through donations,⁵⁷⁶ and incurring the costs of complying with regulations associated with boat ownership (e.g. licensing and registration).⁵⁷⁷
- The cost of administering the levy would be large in proportion to the relatively low amount of revenue it would raise.⁵⁷⁸

DFES has provided Volunteer Marine Rescue Services incident data (Table 20). It shows the volunteer hours for incident response from 2014-15. The 2014-15 and 2015-16 datasets are incomplete as the Cockburn Volunteer Marine Rescue Services unit only began collecting data in December 2015 and the Whitfords Volunteer Marine Rescue Services unit in July 2016. The Fremantle Volunteer Marine Rescue Services unit began collecting data in July 2013, however, the data DFES provided is from 2014-15.⁵⁷⁹

The data shows that although the Volunteer Marine Rescue Services primarily responds to vessel-related incidents, including recovery or tow of vessels, volunteers also undertake duties that are not vessel related, including body recovery. The data does not show the proportion of vessel related incidents that involve non-registered vessels.

Table 20 Volunteer Marine Rescue Services incident response (volunteer hours), 2014-15 to 2016-17

Incident type	2014-15		2015-16		2016-17	
	Hours	Percent of total hours	Hours	Percent of total hours	Hours	Percent of total hours
Overdue vessels	100	1%	1,160	7%	755	3%
Body search	1,410	8%	1,450	9%	1,500	7%
Distress calls	1,090	6%	1,710	11%	1,990	9%
Standby to other incidents	6,880	40%	3,650	23%	3,445	16%
Recovery/tow of vessels	8,020	46%	9,370	58%	14,870	68%
Total volunteer hours	17,400	100%	16,180	100%	21,805	100%

Source: Communication with DFES, 11 August 2017

Having considered this evidence and arguments provided in submissions, this report removes the recommendation that a separate levy should be established to fund the

⁵⁷⁵ Wright, E., *Submission to draft report*, 9 July 2017, p. 1.

⁵⁷⁶ Klaka, K., *Submission to draft report*, 17 July 2017, p. 1

⁵⁷⁷ Gorham, G., *Submission to draft report*, 10 July 2017, p. 1; Turner, M., *Submission to draft report*, 9 July 2017, p. 1.

⁵⁷⁸ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 7.

⁵⁷⁹ Communication with the Department of Fire and Emergency Services, 11 August 2017.

Volunteer Marine Rescue Services. The Volunteer Marine Rescue Services should continue to be funded by the ESL.

5.4.2.2 Vehicles

The majority of submissions support the draft report's recommendation that the ESL should continue to fund road crash rescue. Only the Shire of Plantagenet is of the view that road crash rescue should be funded from a levy on drivers' licences (in order to be consistent with the draft recommendation that the Volunteer Marine Rescue Service should be funded by a charge on boat registrations).⁵⁸⁰ Road crash rescue could be funded:

- from the ESL;
- from a levy on vehicles; or
- through an alternative source, such as the Road Trauma Trust Account.

The most persuasive argument for continuing to fund road crash rescue service from the ESL is a practical one. A variety of DFES units provide road crash rescue services, including the Career Fire and Rescue Service, Volunteer Fire and Emergency Service, and State Emergency Service. DFES does not currently identify the proportion of Career Fire and Rescue Service, Volunteer Fire and Emergency Service, and State Emergency Service time and resources spent on road crash rescue, since DFES does not currently use activity-based costing. This means that it is currently difficult to separate road crash rescue costs from DFES's other costs, and so it is simplest to fund road crash rescue services through the ESL.

Funding road crash rescue services from a levy on vehicles has merit, and allows vehicle owners to pay the direct cost of DFES's road crash rescue services. However, as discussed above, DFES does not currently have the capacity to identify the direct costs of providing road crash rescue services, which means that it is not possible to calculate the amount that such a levy would need to raise. If DFES implements activity-based costing, as recommended in Chapter 4, this problem may be resolved.

An alternative to a levy on vehicles could be to fund road crash rescue services from another source, such as the Road Trauma Trust Account, which receives revenue from speed and red light camera fines in Western Australia. These funds may only be used for road safety activities.⁵⁸¹ However, this option is currently limited by the same problem facing a levy on vehicles, in that DFES cannot identify the direct cost of providing road crash rescue services. This means it is currently impossible to know how much money should be redirected from the Road Trauma Trust Account to DFES to fund road crash rescue services.

Having considered these three options, this report finds that DFES should continue to fund road crash rescue through the ESL, at least until activity-based costing is established. Once DFES has the ability to identify the direct costs of road crash rescue services, the State Government may wish to consider alternatives such as a levy on vehicles, or use of funds from the Road Trauma Trust account. However, it is both simple and reasonable to fund road crash rescue from the ESL.

⁵⁸⁰ Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 5.

⁵⁸¹ Office of Auditor General, *Managing the Road Trauma Trust Account – Report 15 – November 2012*, Perth, Government of Western Australia, 2012, p. 6.

5.5 Recommendations

- The State Government should undertake a review of governments' prevention responsibilities (including for local government), and whether they are being met.
- The ESL should be used to fund emergency management activities that the Department of Fire and Emergency Services and local governments provide on behalf of the community if they can do so more effectively than individual property owners. These are prevention, preparedness and response activities that:
 - a. anyone can access and which may be used simultaneously by many people without other users being disadvantaged;
 - b. everyone should have access to regardless of ability or willingness to pay, and which benefit the broader community not just the users; and/or
 - c. require government coordination.
- The ESL should not be used to fund prevention, preparedness and response activities that primarily benefit individual property owners, including state and local governments in their capacity as property owners or managers.
- The ESL should not fund the costs of recovery. There are already appropriate mechanisms for funding recovery costs outside of the ESL. These mechanisms involve the public, private, and not-for-profit sectors.
- A proportion of the Department of Fire and Emergency Services' corporate services costs should be funded by general government revenues, rather than the ESL.
- The ESL should not fund the corporate services costs of local governments. Corporate services functions in local governments support a range of local government services, not just emergency management and local governments have alternative revenue streams that they can draw upon to fund these functions.
- The ESL should continue to fund the Volunteer Marine Rescue Service and road crash rescue services.

6 Design of the Emergency Services Levy

Key points

- There are four principles of good levy design: equity, efficiency, simplicity and effectiveness. These principles inevitably compete with each other — the objective of good levy design is to ensure an appropriate balance between the principles.
- Equity is a primary consideration in the design of the ESL. There have, however, necessarily been trade-offs between equity and the other principles of good levy design for some aspects of the ESL.
- The ESL is efficient, in that it does not result in unintended distortions to behaviour, because it is applied to a relatively immobile and broad base.
- The ESL is relatively simple in its administration and design. Concerns that the rates set by DFES are not sufficiently transparent or easy to understand reflect the fact that DFES's budget-setting process is not visible to stakeholders.
- The ESL is highly effective because it is calculated based on DFES's budgeted revenue requirement for the coming year. If DFES's budget does not grow unreasonably, levy-payers are likely to accept corresponding increases in the levy.
- The ESL was designed on the basis that the allocation of ESL funds to regions should not be dictated by local capacity to raise revenue – instead, expenditure needs should dictate the allocation of funds. In markets for some goods and services, this could affect behaviour, because people pay more or less than the cost of providing them with the goods or services. However, the ERA has found that the ESL is unlikely to change people's behaviour. Increasing the extent to which metropolitan property owners fund rural and regional services is therefore less concerning from an efficiency perspective.
- Setting the ESL to reflect risk would mean that ESL rates would be based on the probability of, exposure to, and vulnerability to natural hazards, instead of being based on service availability. The State Government decided to charge by service availability when establishing the ESL — adopting risk-based rates would be a significant departure from this policy, as well as complex and potentially expensive to implement.
- While it only partially reflects service availability and capacity to pay, gross rental value remains the most practical option for determining the amount of ESL levied on a property for Categories One to Four.
- It is not practical to remove the current grouping that is applied in determining the amount of ESL levied on a property. While this means that some property owners in Category Five are likely to be paying less than property owners in Categories One to Four, alternative approaches to levying the ESL in Category Five are too administratively complex to implement.
- DFES has a formal classification objection process which should be used in the first instance for dealing with perceived misclassifications of properties as commercial/miscellaneous instead of hobby farming.

6.1 Introduction

The terms of reference for this review require the ERA to assess the extent to which the method for setting the ESL is appropriate now and into the future.

In considering the method for setting the ESL, the ERA has taken into account principles for the design of taxes and levies – being equity, efficiency, simplicity, and effectiveness. The ERA has also considered the following specific issues with the way the ESL is set:

- the recovery of revenue from metropolitan and regional areas;
- whether the ESL should be set to reflect risk or according to availability of service;
- whether gross rental value is an appropriate base for the levy;
- whether properties should be ‘grouped’ for the purpose of calculating the ESL; and
- apparent inconsistencies in the treatment of vineyards.

In considering these issues, principles of good levy design will inevitably overlap and compete with each other. Some degree of equity may be sacrificed to improve simplicity, or simplicity may give way to effectiveness. The objective of good levy design is to ensure an appropriate balance across the principles.

Stakeholders support most of the ERA’s draft recommendations on these issues, in particular that:

- the basic structure of the ESL system should be retained;⁵⁸²
- DFES should use its cost and incident data to determine the direct costs of providing emergency services to each of the five ESL categories,⁵⁸³ and
- Gross rental value should be retained as the basis for calculating ESL rates, except for Category Five properties and mining tenements.⁵⁸⁴

⁵⁸² Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 6; Shire of Corrigin, *Submission to draft report*, 14 August 2017, p. 3; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 1; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 3.

⁵⁸³ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 11; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 8; Mangini, J., *Submission to draft report*, 11 August 2017, p. 5; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 8; Shire of Corrigin, *Submission to draft report*, 14 August 2017, p. 9; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 6; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 11; and Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 3.

⁵⁸⁴ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 6; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 3; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 3.

However, some stakeholders did not support the ERA's draft recommendations about:⁵⁸⁵

- discontinuing the grouping of properties for the purpose of calculating the ESL; and
- Landgate conducting another review of land classifications in the Swan Valley to ensure that vineyards are classified appropriately.

6.2 Principles of good tax and levy design

Taxes and levies are important sources of revenue for governments.⁵⁸⁶ They help to fund the goods and services governments provide their citizens. However, all taxes and levies impose costs on the economy. These costs can be reduced by ensuring that taxes and levies are well-designed.

Many of the principles that apply to good tax design may be applied to the design of a levy. This section draws on the principles of good tax design to identify four principles of good levy design: equity, efficiency, simplicity, and effectiveness. Each principle is described below, with a discussion of how the ESL performs against each principle.

Submissions to the draft report did not raise any concerns with the ERA's assessment of the ESL against these four principles. WALGA states that it supports the ERA's assessment of the structure of the ESL against taxation principles.⁵⁸⁷

The design of the ESL is similar to the design of the emergency services levies in other jurisdictions around Australia. For example, levies tend to vary by type of land and/or property use, and level of service provided and/or geographic location.⁵⁸⁸

⁵⁸⁵ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, pp. 6-7; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 5; Valuer-General (Landgate), *Submission to draft report*, 10 August 2017, p. 1; Western Australian Local Governments Association, *Submission to draft report*, 11 August 2017, pp. 10-11; and Western Australian Volunteer Fire and Emergency Services Association, *Submission to draft report*, 11 August 2017, p. 3.

⁵⁸⁶ The ERA considers the ESL to be a charge for service, rather than a tax. A charge for service does not need to be set on a cost-recovery basis. (Source: Marney, T., Under Treasurer, *Letter to the Chairman of the Joint Standing Committee on Delegated legislation*, 19 April 2012.)

⁵⁸⁷ Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 1.

⁵⁸⁸ Victorian Government, *Fire Services Property Levy: Frequently Asked Questions*, Melbourne, Government of Victoria, <http://www.firelevy.vic.gov.au/faq.html>, (accessed 31 January 2017); Australasian Fire and Emergency Services Authorities Council, *Understanding Our Business Survey 2015/16*, Australasian Fire and Emergency Services Authorities Council, Melbourne, 2016, p. 7; South Australian Fire and Emergency Services Commission, *How is the sector funded?*, Adelaide, Government of South Australia, http://www.safecom.sa.gov.au/site/about_us/how_sector_is_funded.jsp, (accessed 1 February 2017); Australian Capital Territory Revenue Office, *Fire and emergency services levy*, Canberra, Government of Australian Capital Territory, <http://www.revenue.act.gov.au/duties-and-taxes/other-levies-and-taxes/fire-and-emergency-services-levy>, (accessed 1 February 2017).

6.2.1 Equity

In taxation, 'equity' refers to fairness in the distribution of the tax burden. A levy is equitable if the total amount recovered is raised in a fair manner across the community.

There are a number of considerations in the equitable design of a levy. Three common considerations are user pays equity, horizontal equity, and vertical equity.

- The user pays form of equity suggests that those who benefit from the services funded by the levy should pay for the cost of the benefits they receive.⁵⁸⁹
- Horizontal equity is where people in similar situations pay a similar amount.
- Vertical equity is where those with a greater ability to pay contribute more than those with a lesser ability to pay.⁵⁹⁰ This is also referred to as progressivity.

In practice, these different forms of equity frequently conflict with each other, meaning that achieving one form of equity may compromise another. Governments make decisions about how to achieve an appropriate balance between different forms of equity.

Equity is important because it reflects the fundamental values of a community. Levies that are perceived as inequitable or unfair may not be sustainable, since they may be rejected by the community.⁵⁹¹

However, equity is also a difficult principle to assess because it can be subjective. Different members of society will have different views on how equity should be achieved. Governments have an important role in balancing the competing forms of equity, taking into account community interests and expectations.

Most concerns raised by stakeholders about the method for raising the ESL relate to the principle of equity.

6.2.1.1 Is the Emergency Services Levy equitable?

The principle of equity was a primary consideration in the design of the ESL (see Appendix I). However, the ESL does not perfectly fulfil any of the forms of equity.

The ESL was not designed to meet the user pays form of equity. A policy decision was made to not directly recover the costs of services from individuals or geographic areas. Instead, the then government decided to apply a community rating principle, which shares costs amongst the community to ensure that these services are affordable for all.⁵⁹²

The ESL was designed to partially achieve vertical equity, by using gross rental value in ESL calculations as a proxy for wealth, or capacity to pay. However, some stakeholders

⁵⁸⁹ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 404.

⁵⁹⁰ The Treasury, *Re:think – Tax discussion paper*, Canberra, Government of Australia, 2015, p. 29.

⁵⁹¹ The Treasury, *Re:think – Tax discussion paper*, Canberra, Government of Australia, 2015, p. 29; Alley, C and Bentley, D., *A remodelling of Adam Smith's tax design principles*, Australian Tax Forum, Vol. 20, No. 1, pp. 624-679 (p. 622).

⁵⁹² Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 17.

said gross rental value does not perfectly reflect capacity to pay.⁵⁹³ This is discussed in Section 6.3.3.

The ESL category system seeks to ensure that property owners with access to similar levels of service pay the same rate, consistent with horizontal equity. However, some features of the ESL (such as grouping provisions) interfere with this form of equity (see Section 6.3.4).

Stakeholders have expressed concern about the equity of the ESL, for a range of different reasons reflecting their circumstances and preferences. These include whether the ESL should be charged according to risk or service availability, whether revenue raised from particular categories should reflect expenditure needs and service availability in those categories, and how properties should be grouped for the purpose of the ESL. These concerns are discussed throughout this chapter. However, in many of these cases there have necessarily been trade-offs: first, between the different types of equity; and second, between equity and the other principles of good levy design.

6.2.2 Efficiency

In general, an efficient levy is one that minimises *unintended* changes in levy-payers' behaviour (including incentives to work, save, invest or consume), while still raising the amount of revenue required.⁵⁹⁴ Unintended changes in behaviour impose a cost on levy payers and the broader economy, because levy payers make decisions they would not ordinarily make to reduce the amount of levy they pay. For example, a property owner may decide not to make improvements to their property, which they would otherwise benefit from, just to reduce their levy burden.

However, some taxes and levies are deliberately designed to change behaviour.⁵⁹⁵ For example, a levy on tobacco may be efficient, because it is designed to reduce consumption, thereby addressing a public health problem.

The ESL is not designed to influence behaviour. Property owners cannot influence the ESL amount they pay by reducing the risk of their property being affected by a disaster (for example, by clearing trees around buildings).

Levies are most efficient when they are applied to bases that are immobile rather than mobile. This is because people can avoid paying levies on mobile bases (such as insurance premiums) by conducting transactions in other jurisdictions. It is more difficult to avoid paying levies on immobile bases (such as land and property).⁵⁹⁶

Levies are also more efficient when they are applied to a broad base instead of a narrow base.⁵⁹⁷ A levy rate is applied to a base (for example, income or property value) to determine how much a levy payer owes. More levy payers have to contribute to a levy when it is applied to a broad base, so the rate needed to raise a given amount of revenue is lower

⁵⁹³ WA Self-Funded Retirees Inc., *Submission to issues paper*, 27 March 2017, p. 2.

⁵⁹⁴ Note that many sources use the word 'neutrality' rather than 'efficiency' to refer to this concept.

Alley, C & Bentley, D, *A remodelling of Adam Smith's tax design principles*, Australian Tax Forum, Vol. 20, No. 1, pp. 679-624 (p. 615).

⁵⁹⁵ The Treasury, *Re:think – Tax discussion paper*, Canberra, Government of Australia, 2015, p. 165.

⁵⁹⁶ Daley, J. and Coates, B., *Property taxes*, Grattan Institute, Melbourne, 2015, p. 11.

⁵⁹⁷ Economic Regulation Authority, *Inquiry into Microeconomic Reform in Western Australia: Final Report*, Perth, Government of Western Australia, 2014, p. 12.

compared to if it applied to a narrow base because the amount each person must pay is lower. There is less incentive for people to change their behaviour to avoid paying the levy.

6.2.2.1 *Is the Emergency Services Levy efficient?*

The ESL is efficient, because it is applied to a relatively immobile and broad base.

The ESL is applied to the gross rental value of property. Property is a highly immobile base. Property taxes include the value of capital improvements, such as buildings. Existing capital improvements to land generally cannot be moved. A property tax could result in fewer improvements being made to land, the cost is likely to be small given that the ESL is applied at a low rate.⁵⁹⁸

The ESL is also applied to a broad base and was designed to have few exemptions. The ESL applies to most types of property and property owners. These include:

- vacant land owners;
- not for profit organisations and other organisations exempt from state government taxes, fees and charges;
- public financial and non-financial corporations;
- local governments; and
- state government agencies.⁵⁹⁹

Vacant land owned by local governments and mining tenements that are used only for exploration or prospecting purposes are exempt from the ESL.⁶⁰⁰

The ESL is more efficient than the insurance-based levy that it replaced. While the insurance-based levy might to some extent have theoretically reflected risk, it resulted in unintended distortions because property owners could choose to insure off-shore to avoid paying the levy. Property owners could also avoid paying the levy by self-insuring or under-insuring.⁶⁰¹

While efficient levies should not result in unintended distortions, they may be used to intentionally change the behaviour of those who pay them. Consideration could be given to using the ESL to encourage behavioural change through risk-based pricing. Risk-based pricing is discussed in Section 6.3.2.

⁵⁹⁸ Daley, J. and Coates, B., *Property taxes*, Melbourne, Grattan Institute, 2015, p. 11.

⁵⁹⁹ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 2.

⁶⁰⁰ Department of Fire and Emergency Services, *Emergency Services Levy Question and Answer Guide 2014/15*, Perth, Government of Western Australia, 2014, p. 3.

⁶⁰¹ Kobelke, J.C., Second Reading Speech: Fire and Emergency Services Legislation (Emergency Services Levy) Amendment Bill, *Hansard*, Assembly, 25 September 2002, p.1572b-1573a.

6.2.3 Simplicity

Levies should be as simple as possible. There are several aspects to simplicity, including:

- ease of calculation and collection, with the overall costs of collecting the levy being as low as possible, including:⁶⁰²
 - the compliance costs incurred by those who pay the levy (for example, the time taken to fill out forms or remit payment); and
 - the government's administrative costs of managing the levy (for example, the cost of sending out notices, and of computer systems needed to manage levy collection);
- transparency and accountability, being the extent that the levy-collection system is visible, and easy to understand;⁶⁰³ and
- certainty, where the timing and manner of collection, and amount to be collected, are clear.⁶⁰⁴

Simple levies are convenient to pay, and straightforward to administer. This is important because it maximises the net amount of money raised by a levy, by minimising the work needed to collect that levy.

Simplicity, transparency, and certainty are also important because people are more likely to be compliant with levies that are easy to understand.⁶⁰⁵ Non-compliance may be accidental (where people are confused about their obligations), or deliberate (where people seek to exploit technical 'loopholes' in the system). Increased compliance reduces the amount of revenue that would otherwise be lost due to non-payment.

6.2.3.1 Is the Emergency Services Levy simple?

The ESL is a relatively simply levy, both in its administration and design.

With few exceptions, it is charged and collected using an existing system (that is, council rates), and relies on a robust existing dataset (being gross rental value data from Landgate). Relying on these pre-existing systems and data minimises administrative costs to the Government. Costs to levy-payers are also minimised, since the levy is collected alongside rates they would already have to pay to local government.

The design of the levy itself is also relatively straightforward. There are five categories of ESL rate, each of which reflects the level of service available in the area. The total minimum or maximum charge payable by a property owner is determined based on property use, of

⁶⁰² OECD, *Addressing the Tax Challenges of the Digital Economy – Action 1: 2015 Final Report*, Paris, OECD Publishing, 2015, p. 20.

⁶⁰³ Alley, C and Bentley, D., *A remodelling of Adam Smith's tax design principles*, Australian Tax Forum, Vol. 20, No. 1, pp. 580-624 (p.617).

⁶⁰⁴ Alley, C and Bentley, D., *A remodelling of Adam Smith's tax design principles*, Australian Tax Forum, Vol. 20, No. 1, pp. 580-624 (p.622).

⁶⁰⁵ Alley, C and Bentley, D., *A remodelling of Adam Smith's tax design principles*, Australian Tax Forum, Vol. 20, No. 1, pp. 580-624 (p.612).

which there are only two types – residential and commercial.⁶⁰⁶ Applying a single rate to all properties would be simpler, but may raise equity concerns.

Finally, the ESL is a single levy – this means that DFES (and levy-payers) do not incur the additional expenses of collecting multiple levies on, say, land, motor vehicles, and vessels.

Stakeholders have indicated that the rationale for the rates set by DFES (and their upward trajectory) is not sufficiently transparent, or easy to understand. This problem arises in part from the process by which the ESL is set - DFES determines required revenue for the year, then runs a model to determine the ESL rates that will raise the required amount of revenue. This process is explained in greater detail in Section 2.4.1. Increases in the ESL may appear arbitrary or difficult to understand because the budget-setting process is not visible to stakeholders. The transparency of DFES's budgeting procedure is discussed in Chapter 8.

6.2.4 Effectiveness

An effective levy is one that will continue to raise the revenue needed, both now and into the future. There are several aspects to effectiveness, including:

- sufficiency, where the total revenue raised by the levy is equal to the amount required;⁶⁰⁷
- sustainability, where there is reasonable certainty that the levy will continue to raise the amount required;⁶⁰⁸ and
- flexibility, where the design of the levy allows government to respond to new developments and changing revenue needs.⁶⁰⁹

Effectiveness is important, because if a levy cannot raise revenue as required, it will have failed in its core purpose, and will need to be redesigned or replaced.⁶¹⁰

In general, a levy that has a broad, non-volatile base will be more sustainable. As discussed above, 'broadness' of the base refers to the reach of the levy – that is, how many people, properties, or transactions it applies to. 'Volatility' refers to how sensitive the amount raised is to changing circumstances. For instance, a levy on property sales may be highly volatile, because property sales vary considerably with the economy. In contrast, a levy on land would be far less volatile, because the number of blocks of land is relatively stable and predictable. A levy with a broad, non-volatile base gives governments and policy-makers more certainty that sufficient revenue will be raised.

⁶⁰⁶ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 4.

⁶⁰⁷ OECD, *Addressing the Tax Challenges of the Digital Economy – Action 1: 2015 Final Report*, Paris, OECD Publishing, 2015, p. 20.

⁶⁰⁸ OECD, *Addressing the Tax Challenges of the Digital Economy – Action 1: 2015 Final Report*, Paris, OECD Publishing, 2015, p. 21.

⁶⁰⁹ OECD, *Addressing the Tax Challenges of the Digital Economy – Action 1: 2015 Final Report*, Paris, OECD Publishing, 2015, p. 21.

⁶¹⁰ Alley, C and Bentley, D., *A remodelling of Adam Smith's tax design principles*, Australian Tax Forum, Vol. 20, No. 1, pp. 580-624 (pp.618-619).

6.2.4.1 *Is the Emergency Services Levy effective?*

The ESL is highly effective, at least in the short term, because it is calculated based on DFES's budgeted revenue requirement for the coming year. As explained in more detail in Section 2.4.1, DFES uses required revenue as a starting point, then runs a simple model to determine how high ESL rates need to be to meet that target. As a result, the ESL will always raise the right amount of money in any given year.

The sustainability of this process depends largely on DFES's budgeting and expenditure decisions. If the budget (and hence the required revenue) does not grow unreasonably, then levy-payers are likely to accept any corresponding increase in the levy.

However, as shown in Section 3.2.2, ESL revenue has grown by 6.2 per cent a year in real terms since the levy was introduced. In their submission to the issues paper, one stakeholder raised concern about this rate of growth.⁶¹¹

On the other hand, in its submission to the draft report, WALGA states that it is concerned that the total revenue collected by the ESL may not be sufficient to fund emergency management activities. It calls for additional investigation into the level of revenue required.⁶¹² WALGA states that:

“To achieve the benefits of a hypothecated tax, it is important that the ESL is set at a level that funds all emergency management activities as outlined in the [ESL review] report's introduction.”⁶¹³

The ERA's recommendations about what the ESL should fund are included in Chapter 5.

The flexibility of the ESL and its ability to adapt to deliver revenue for changing circumstances is also a consideration of this report. Chapter 7 contains a discussion of whether the ESL should be used to fund a rural fire service.

6.3 Specific design issues

6.3.1 *Should capacity to raise ESL funds dictate the allocation of funds?*

A key principle applied when the ESL was established is that service delivery and expenditure needs should dictate the allocation of funds and not the local capacity to raise revenue.⁶¹⁴ There is no requirement to ensure the same amount is spent in a geographic location as is raised.⁶¹⁵

The effect of this is that people in some ESL categories might pay more than the cost of what they receive, while those in other categories pay less. DFES⁶¹⁶ and other stakeholders

⁶¹¹ Chair of Bushfire Control Office, Shire of Plantagenet, *Submission to issues paper*, 13 February 2017, p. 1.

⁶¹² Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 1.

⁶¹³ Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 5.

⁶¹⁴ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, 2002, Perth, Government of Western Australia, p. 23.

⁶¹⁵ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, 2002, Perth, Government of Western Australia, p. 23.

⁶¹⁶ Communication with Department of Fire and Emergency Services, 17 January 2017.

have told the ERA that Category One property owners pay more than the direct costs of the services they receive, while property owners in Categories Four and Five pay less.⁶¹⁷ The extent to which property owners in Category Two, Category Three and other categories (e.g. mining tenements) pay more or less than the direct cost of the services they receive is unclear because of a lack of data.

There appears to be little objection in the community to the principle that service delivery and expenditure needs should dictate the allocation of ESL funds and not the local capacity to raise revenue. Stakeholders do not raise concerns about the extent to which different categories currently pay more or less than the cost of providing services in each category. This suggests there may be significant goodwill in the community that underpins a willingness to pay, not only to protect one's own assets, but to benefit other communities and environmental assets across the State.

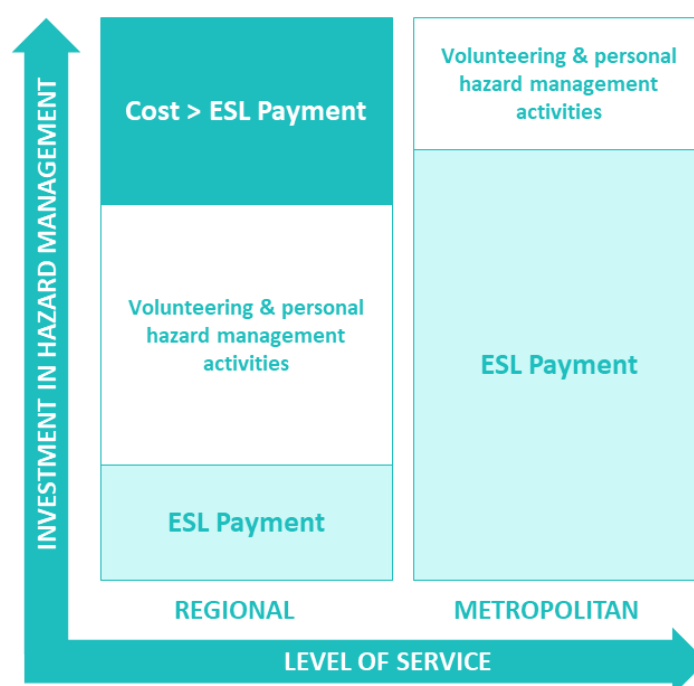
Further, volunteer participation and voluntary prevention and preparedness activities can to some extent offset any shortfall between the revenue earned in a particular category and the cost of providing services. For example, rural property owners are more likely to invest in firefighting resources and to be members of local volunteer brigades.⁶¹⁸ The value of volunteer contributions is discussed in more detail in Chapter 3, which estimates that the value of time contributed by bush fire brigade volunteers was over \$4 million in 2015-16, based on the average Australian weekly wage.

This concept is shown in Figure 31. People living in regional areas pay lower ESL rates, but tend to spend more time both volunteering in the community, and reducing risk on their own properties.⁶¹⁹ In contrast, metropolitan property owners pay higher ESL rates, but tend to spend less time volunteering, or preparing to defend their own properties. Additionally, metropolitan property owners have access to a higher level of service.

⁶¹⁷ The way DFES currently sets ESL rates contributes to this. The differences between Category One, Two, Three, Four, and Five rates are set as fixed ratios, and bear no relationship to the relative cost of providing services in each category.

⁶¹⁸ For example: Williams, D., *Submission to draft report*, 7 July 2017, p. 1; Pastoralists and Graziers Association of Western Australia (Inc), *Submission to draft report*, 16 August 2017, p. 4.

⁶¹⁹ For example: Williams, D., *Submission to draft report*, 7 July 2017, p. 1; Pastoralists and Graziers Association of Western Australia (Inc), *Submission to draft report*, 16 August 2017, p. 4.

Figure 31 Metropolitan and regional investment in hazard management

Note: Diagram is for illustrative purposes only. It does not reflect actual values or percentages, and does not illustrate the full spectrum of services received and provided by property owners in each of the five ESL categories.

In response to the draft report, some stakeholders note concern that the burden on metropolitan property owners could increase if the ESL is increasingly used to fund services in regional areas.⁶²⁰

Some stakeholders note that the burden on metropolitan property owners will increase if the ESL funds a rural fire service.⁶²¹ DFES states:

“If a separate RFS [rural fire service] is to be established and funded through the ESL, then DFES cautions against simply extending the current funding model which, in effect would source the majority of the additional funding responsibility from metropolitan property owners to subsidise rural property owners. This approach could be perceived to be contradictory to the current principles of the existing ESL funding model.”⁶²²

The United Firefighters Union states that if the ESL is used to fund a rural fire service, ESL rates in regional areas would need to increase, because “[r]esources cannot regularly be drained from the Metropolitan area to deal with emergencies and incidents”.⁶²³

⁶²⁰ Pastoralists and Graziers Association of Western Australia (Inc), *Submission to draft report*, 16 August 2017, p. 4; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 1; Smith, R., *Submission to draft report*, 7 August 2017, p. 4; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 1.

⁶²¹ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 9; Shire of Corrigin, *Submission to draft report*, 14 August 2017, p. 13; Smith, R., *Submission to draft report*, 11 August 2017, p. 4; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 8; United Firefighters Union of Australia West Australian Branch, *Submission to draft report*, 11 August 2017, p. 4; and Western Australian Volunteer Fire and Rescue Service Association, *Submission to draft report*, 11 August 2017, p. 1.

⁶²² Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 9.

⁶²³ United Firefighters Union of Australia WA, *Submission to draft report*, 11 August 2017, p. 4.

Using the ESL to fund a rural fire service would be likely to increase the extent to which ESL funds collected in metropolitan areas fund services provided in rural and regional areas. The ERA has analysed how the cost of establishing a rural fire service would affect rates in each ESL category in Chapter 7.

However, in the case of the ESL, there is no persuasive argument for the allocation of funds to be dictated by local capacity to raise revenue. In some markets, if people pay more or less than the cost of providing them with goods and services, this can lead to over or under consumption of the good or service. However, the ERA has found that the ESL is unlikely to be material enough to affect people's behaviour. For example, the ESL is unlikely to change people's decisions about where to live and/or expand their business. Increasing the extent to which metropolitan property owners fund rural and regional services, due to the ESL funding a rural fire service, is therefore less concerning from an efficiency perspective.

It is, however, concerning that it is currently not possible to quantify the extent to which property owners in different categories pay more or less than the cost of providing them with services. It is important for both DFES and the State Government to understand this clearly. This will enable better decision making, and allow the State Government to make a conscious and informed policy decision as to the acceptable extent to which some property owners pay more or less than the cost of providing them with services.

The current circumstance has arisen because DFES does not collect and analyse data in a way that shows whether property owners in each category pay more or less than the cost of providing them with services, and to what extent. However, DFES collects extensive, highly-detailed incident data, and it would be possible for DFES to perform the analysis necessary to understand the costs of service in each ESL category.

DFES could use its cost and incident data to determine the annual direct costs of emergency management for each of the five ESL categories. Doing so would allow DFES to measure, for each category, the difference between ESL revenue earned and expenditure, and to identify changes over time. It would also greatly enhance DFES's ability to provide analysis about hazards and spending patterns to the State Government.

This would require DFES to undertake activity-based costing — the ERA's recommendations about activity-based costing, and its response to DFES's submission to the draft report about activity-based costing, are set out in Chapter 4.

The ERA also recommends that DFES should publish information about the difference between ESL revenue earned and expenditure for each category, in order to provide greater transparency.

6.3.2 *Reflection of risk in Emergency Services Levy pricing*

Some stakeholders consider that the ESL should be set to reflect risk, rather than the availability of service. This would mean that ESL rates would be based on the probability, exposure, and vulnerability of either properties or regions to hazards, rather than being based on the level of service available.

The State Government made an explicit decision to charge by service availability rather than risk when establishing the principles on which the ESL is based.⁶²⁴ (Appendix I provides further information on the principles that informed the original design of the ESL.) Consequently, DFES currently sets the ESL to reflect the level of service available in each

⁶²⁴ Communication with Department of Fire and Emergency Services, 12 April 2017.

ESL category (as detailed in Chapter 2). This is consistent with the community rating principle, which aims to ensure that everyone receiving the same level of service pays the same rate irrespective of their level of risk. A move towards risk-based rates would be a significant departure from this policy.

However, several stakeholders have expressed an interest in moving from a service-based charge to risk-based rates, where the amount of ESL paid reflects how 'at risk' each area or property is. In its submission to the issues paper, the Emergency Services Volunteers Association suggested that the method for setting the ESL could be improved by assessing risk in an area, fully costing all the requirements for addressing that risk, and allocating the area to an ESL category based on that assessment.⁶²⁵

The Emergency Services Volunteers Association also raised the possibility of a less major change than a move to a full risk-based approach, being the introduction of a sixth ESL category for bushfire prone areas, stating that: "A bushfire prone area in the Urban Metropolitan area is a higher risk than a regional city or country town with good bushfire management strategies in place."⁶²⁶ The City of Canning made a similar proposal, suggesting that new 'inner metro', 'rural', and 'urban fringe' sub-categories could be introduced to better reflect risk.⁶²⁷

Other stakeholders have pointed out that a risk-based levy on individual properties would not be administratively feasible. For example, in its submission to the issues paper, the Gidgegannup Progress Association stated that:

"Individual assessment of relative risks posed to or by individual properties would be administratively very difficult or impossible to carry out and translate to financial terms."⁶²⁸

Some stakeholders also raised specific concerns with the 'level of service' concept in general, pointing out that two properties in the same ESL category may not receive the same level of service. For instance, in consultations leading up to the draft report, many stakeholders verbally raised concerns that Category Three, Four, and Five services vary significantly from location to location, because these categories rely wholly, or in part, on the services of bush fire brigades. The quality of service provided by bush fire brigades can apparently vary significantly, depending on the capabilities of the local government in charge, as well as the nature of the geographic area covered by each bush fire brigade. The Grape Growers Association has previously stated that, even within Category One, service levels can be inconsistent due to technical constraints:

"We strongly support the review of ESL boundaries based on DFES ability rather than time from the closest fire station. It is essential that ESL categories represent the service that DFES will supply. The Swan Valley is almost all ESL Category 1 but this service cannot be provided at this level. The response time for a DFES appliance has been used to set the category but on arrival the units require hydrant support at 200 metre intervals which is not available in most of the Swan Valley."⁶²⁹

The City of Swan made similar comments. It noted that residents within its boundaries are rated as either Category One or Category Three, but that while ratepayers in Category One

⁶²⁵ Emergency Services Volunteers Association Inc., *Submission to issues paper*, 10 March 2017, p. 4.

⁶²⁶ Emergency Services Volunteers Association Inc., *Submission to issues paper*, 10 March 2017, p. 4.

⁶²⁷ City of Canning, *Submission to issues paper*, 10 March 2017, p. 3.

⁶²⁸ Gidgegannup Progress Association (Inc.), *Submission to issues paper*, 27 February 2017, p. 7.

⁶²⁹ Grape Growers Association of W.A. (Inc.), *Submission to issues paper*, 8 March 2017, p. 2.

pay a higher levy than those in Category Three, the response to fires is variable.⁶³⁰ It noted that despite an increase in charges, the community believes there has been no obvious improvement in the service provided.⁶³¹

The ERA asked DFES whether it would be feasible to depart from the community rating principle and design a system where rates better reflect risk. DFES's view was that the current approach is a pragmatic choice, and that it would be too difficult to introduce a workable and equitable risk-based approach.⁶³² DFES also raised a further concern about risk-based pricing in its 2014 review of the emergency services Acts, stating "an increase in the ESL in certain [higher risk] areas may result in an expectation of a higher service in those areas, which would not necessarily be practical".⁶³³

Given the interest from stakeholders in the possibility of establishing a more risk-reflective system, the ERA has considered the following principles:

- *User pays*: If the ESL were better aligned with risk, property owners would pay for the services they need and so the risks they impose on the system. However, this is a complex issue. For example, owners of expensive properties have more assets at risk. However, they are not necessarily more vulnerable, or more exposed to natural hazards. In practice, 'user pays' for risk is a difficult issue, because it combines subjective concepts such as 'who is the most at risk', 'where is the risk highest', and 'who is most vulnerable to risk'.
- *Universality of service*: Some communities may simply be unable to pay a risk-based charge. For example, remote communities in the Kimberley have limited resources but are exposed to cyclones and floods. The equity principle indicates that they should receive a minimum service level regardless of capacity to pay.

Charging by risk challenges the principle of simplicity. Charging according to the service available is relatively straightforward. It is more complex to assess the vulnerability and exposure to, and probability of, a natural hazard affecting each property or each region, and to set charges accordingly. This may be an expensive, contentious, and technically difficult process.

On the matter of variability of service within ESL categories, the ERA accepts that there are inconsistencies in actual service levels within each category. However, this is not a strong argument for moving to a risk-based rather than service level-based ESL. With only a small number of categories covering the whole State, it is to be expected that there will be some variation. The challenges for DFES here are (1) setting ESL category boundaries appropriately – a task that is performed and reviewed on a regular basis, and (2) working effectively with local governments to promote a consistent level of service across the State.

It could be technically possible for the ESL to better reflect risk, if the State Government decided to move away from the founding concept that the ESL is a payment to ensure at least the minimum level of service. However, on a practical level, pricing the ESL at a level that reflects risk would be highly complex. This is because properties need to be classified and grouped in some way according to risk.

⁶³⁰ City of Swan, *Submission to issues paper*, 10 March 2017, p. 3.

⁶³¹ City of Swan, *Submission to issues paper*, 10 March 2017, p. 3.

⁶³² Communication with Department of Fire and Emergency Services, 17 January 2017.

⁶³³ Department of Fire and Emergency Services, *Concept Paper: Review of the Emergency Services Acts*, Perth, Government of Australia, 2014, pp. 13-14.

This could be done in one of two ways:

- *Risk rating individual properties:* Individual properties could be rated as Category One, Two, Three, etc., depending on their individual risk characteristics, and charged matching ESL rate.
- *Risk rating geographical areas:* Specific areas of the State could be given a risk rating based on the probability of a natural hazard occurring, the area's vulnerability, and its exposure, and charged a matching ESL rate. This would not be significantly different to the existing system, except that risk would be taken into account when setting ESL category boundaries. Additional categories may be required to better reflect the different levels of risk facing various parts of the State. This would allow the direct cost of providing services to these areas to be more accurately assessed and recovered from property owners.

The first option – the risk rating of individual properties – has efficiency and equity benefits, in that it encourages less risky land use (through property modification and land management), and ensures that owners who make lower-risk choices pay a lower rate.

However, this option would be administratively expensive, complex, and essentially unworkable. It would involve widespread, subjective, and expensive data-collection to be undertaken on an ongoing basis. Additionally, it would be likely to create a major administrative burden, since individual property owners would have an incentive to dispute their property's risk rating.

The only jurisdiction in Australian that adopts such a system is Queensland. The *Queensland Fire and Emergency Services Regulation 2011* currently differentiates between 168 types of property divided into 16 leviable groups. Property owners pay a fixed amount based on their property's group and location. The large number of groups and detailed property information allows risk to be taken into account.⁶³⁴

The second option – risk rating geographical areas – may be possible, and would be consistent with the fact that DFES already uses a geographical area system (being ESL categories) to set ESL rates. By way of example, the emergency services levy charge in South Australia takes into account the region of the state in which the property is located.⁶³⁵ Having said this, it is not clear whether the delineation of geographic areas is on the basis of risk or another dimension, for example, cost of service.⁶³⁶

Theoretically, the ESL could be based on a state-wide risk review conducted by the Office of Emergency Management, informed by data from across government.

Three key pieces of information would be required to move to a geographical risk-based rating system:

- the amount of direct ESL expenditure by location (that is, by ESL category area);

⁶³⁴ Communication with Department of Fire and Emergency Services, 17 January 2017.

⁶³⁵ South Australian Fire and Emergency Services Commission, How is the sector funded?, Adelaide, Government of South Australia. http://www.safecom.sa.gov.au/site/about_us/how_sector_is_funded.jsp, (accessed 1 February 2017).

⁶³⁶ South Australian Fire and Emergency Services Commission, How is the sector funded?, Adelaide, Government of South Australia. http://www.safecom.sa.gov.au/site/about_us/how_sector_is_funded.jsp, (accessed 1 February 2017).

- the probability of natural hazard risk across the State, and the vulnerability and exposure of each region; and
- how ESL category boundaries might best be set to reflect that risk.

DFES is in a position to determine the first of these via activity-based costing (although it has not done so to date), and the other two are matters for an expert review, ideally by the Office of Emergency Management. This would result in a 'patchwork' of different risk-rated regions across the State, where residents in each region paid a rate based on that region's risk rating.

Such a move to geographical risk-based payment might be feasible, but would be an extremely large, complex, and potentially expensive undertaking. Introducing a risk-based levy would also move towards charging each rate payer for the direct costs they impose on the system. The ERA is not recommending that the State Government move toward raising revenue from rate payers that aligns with service delivery and expenditure needs.

Based on these considerations, and on current data limitations, this report does not recommend a move to a risk-based ESL at present. However, given the interest from stakeholders, the State Government may choose to reconsider this policy if better data becomes available.

Stakeholders did not raise concerns with this position in their responses to the draft report.

6.3.3 Gross rental value

Gross rental value is defined under the *Valuation of Land Act 1978* as:

"[T]he gross annual rental that the land might reasonably be expected to realise if let on a tenancy from year to year upon condition that the landlord was liable for all rates, taxes and other charges thereon and the insurance and other outgoings necessary to maintain the value of the land."

That is, gross rental value represents the amount the property could reasonably be expected to earn if let for a tenancy for a year. It is determined by the Valuer-General, and is also used for determining council rates on urban land, calculating water charges, and charges for sewerage and drainage services.⁶³⁷

The amount of ESL levied on a property in Categories One to Four is determined as a rate in the dollar of the gross rental value of the land as at 1 July. The Valuer-General provides gross rental value valuations to DFES to determine the ESL charges for properties located across Categories One to Four.⁶³⁸ For Category Five properties (pastoral/rural areas) and

⁶³⁷ Landgate, *Valuation Roll Extracts*, Perth, Government of Western Australia, Perth, Government of Western Australia, <https://www0.landgate.wa.gov.au/for-individuals/land-values/ValuationRollExtracts>, (accessed 1 May 2017).

Where a reasonably expected rental value cannot be determined for a property, the Valuer-General sets its gross rental value as a percentage of the property's value (being value of the land itself plus the estimated replacement cost of any improvements to the land).

⁶³⁸ Under section 36G of the *Fire and Emergency Services Act 1998*, the Minister is able to determine a different rate payable on land based on which ESL category area the land is located in and what the land is used for.

mining tenements, a fixed charge is applied, as opposed to a rate in the dollar of gross rental value.⁶³⁹

6.3.3.1 Economic Regulation Authority's assessment

In consultation leading up to the draft report, some stakeholders suggested that gross rental value may not be the most appropriate base for calculating ESL rates. This was on the grounds that it does not reflect risk, need for service, or capacity to pay. In its submission to the issues paper, the City of Canning stated that:

"The current system is based on Gross Rental Values (GRV) in bands, on principal of perceived capacity to pay. The GRV bears no resemblance to need for service."⁶⁴⁰

In its submission to the issues paper WA Self-Funded Retirees Inc. stated that:

"[T]here are a number of elderly homeowners who have lived in their house for 30 - 40 years, do not enjoy a high Income, but the GRV on their property has risen to high levels purely due to the location."⁶⁴¹

The Chair of the State Emergency Management Committee⁶⁴² and the Office of Emergency Management⁶⁴³ both questioned whether capital improved value may be a better base than gross rental value.

Some stakeholders suggested replacing gross rental value with fixed levies charged by tables or bands. For example, the City of Canning suggested this may be a more equitable approach.⁶⁴⁴

WA Self-Funded Retirees Inc. proposed a number of solutions, including a levy charged through federal income tax, or a flat levy for each household.⁶⁴⁵ The ERA has not addressed the idea of using a levy charged through federal income tax in detail, since federal legislation is outside the terms of reference of this review. No other State or Territory administers a state-based levy through the Australian Government, and such a system would probably encounter significant legislative and procedural barriers.

The choice of an appropriate base for the ESL is largely an equity issue. Using gross rental value raises the following issues:

- *User pays:* Gross rental value only partially reflects both risk and need for service. For instance, as discussed above, low gross rental value properties in the north-west may be more highly exposed to cyclones and floods than high Gross rental value properties in the metropolitan area. However, this is not a clear cut issue. For example, people with high Gross rental value properties have higher-value assets at risk.

⁶³⁹ Landgate, *Land valuations*, Perth, Government of Western Australia, 2017, <https://www0.landgate.wa.gov.au/property-reports/land-values>, (accessed 8 September 2017).

⁶⁴⁰ City of Canning, *Submission to issues paper*, 10 March 2017, p. 2.

⁶⁴¹ WA Self-Funded Retirees Inc., *Submission to issues paper*, 27 March 2017, p. 2.

⁶⁴² Edwards, F., *Submission to issues paper*, 9 March 2017, p. 3.

⁶⁴³ Office of Emergency Management, *Submission to issues paper*, 9 March 2017, p. 4.

⁶⁴⁴ City of Canning, *Submission to issues paper*, 10 March 2017, p. 3.

⁶⁴⁵ WA Self-Funded Retirees Inc., *Submission to issues paper*, 27 March 2017, p. 2.

- *Progressivity*: Gross rental value only partially reflects capacity to pay. For example, elderly property owners who have lived in their house for many decades can reside in a high gross rental value property, but have little capacity to pay. This issue is addressed to some extent with pensioner and senior concessions. For example, Seniors Card holders receive a 25 per cent discount, and Pensioner Concessions Card holders receive a 50 per cent discount.⁶⁴⁶

Some farm property owners have a gross rental value set above the lease that could realistically be achieved from their property. The Grape Growers Association raised this concern in its submission to an earlier review:

“Many farmers have a GRV set at 5% of unimproved value and this presents values that cannot be achieved as leases. One example is a farmer with 8ha who has a GRV of \$110,000 and pays an ESL of around \$2,000. The GRV cannot be achieved as a lease with most vineyard leases being at no return but maintenance and repair in exchange for the crop. The 5% of unimproved land that has been applied to some is set by the Valuer General and appeals have failed. This is another example whereby the Valuers Act again does not recognise the Swan Valley Planning Act. Discussions and correspondence with that department has also produced no change. The only method possible to achieve a reasonable ESL rate is for DFES to strike a new rate category to overcome this anomaly.”⁶⁴⁷

This is a broader technical issue with the way the Valuer-General sets gross rental value for properties for which they cannot determine a reasonable rent. This process involves estimating a property’s capital improved value⁶⁴⁸ and multiplying it by either three per cent for residential properties, or by five per cent for other properties. It is not an issue with the method for setting the ESL itself, and falls outside the terms of reference of this review.

Using gross rental value is not a major efficiency issue. ESL rates are not likely to be a significant factor when it comes to choosing where to live, whether to improve land, or where to run a business.

A major advantage of gross rental value is that it is integrated with local governments systems used to calculate and charge rates since rates are also charged based on gross rental value. This means that it is relatively simple to administer.

The draft report considered three other options for the purpose of calculating ESL rates. These are unimproved value, capital improved value, and the use of fixed charges. Unimproved value is the value of the land only, whereas capital improved value is the value of the land, buildings, and any other improvements made to the property – that is, the value that could be expected to be raised if the property were sold.

The merits of each base are assessed below. In assessing each base, the ERA makes comments on whether each system reflects assets at risk. As noted above, however, the relationship between the ESL and risk is contentious in itself, given that the ESL was

⁶⁴⁶ Department of Fire and Emergency Services, *Emergency Services Levy Concessions – Pensioners and Seniors*, Perth, Government of Western Australia, http://www.dfes.wa.gov.au/emergencyserviceslevy/ESL%20Docs/ESL_Pensioner_Senior_Concessions.pdf, (accessed 21 June 2017).

⁶⁴⁷ Grape Growers Association of W.A. (Inc.), *Submission to issues paper*, 8 March 2017, p. 2.

⁶⁴⁸ Capital improved value is either the market value of the land, or the unimproved value of the land plus depreciated cost of improvements.

originally intended to be a payment for service. The comments on appropriate bases for the ESL should be read with this in mind.

1. *Unimproved land value*: This data is available on rolls maintained by Landgate.

Arguably, unimproved value is more efficient than gross rental value because it does not penalise property owners for making improvements to land. However, as discussed above, the ESL is unlikely to be material enough to change people's decision-making in this way. Further, unimproved value does not reflect assets at risk or capacity to pay.

Unimproved value is arguably less equitable than other bases, since it does not take capacity to pay into account, on the basis that people with buildings and other property improvements will generally have a greater capacity to pay. Additionally, it ignores the fact that property owners with buildings and other property improvements also have more assets at risk.

In other jurisdictions around the country, unimproved land value is used to calculate the fire and emergency services levy only in the Australian Capital Territory, and only for commercial properties.⁶⁴⁹

2. *Capital improved value*: Capital improved value incorporates buildings and other property improvements into the base used to calculate the ESL. It may be more equitable, more reflective of risk, and better reflect capacity to pay than gross rental value.⁶⁵⁰

The Valuer-General can calculate the capital improved value of land for specific purposes.⁶⁵¹ However, the Office of the Valuer-General has stated that general capital improved value rolls are not maintained, as this is not required under the *Valuation of Land Act 1978*. (The Act only requires the Valuer-General to determine unimproved value and gross rental value.)⁶⁵²

Consequently, it is not possible to use capital improved value to determine the ESL, since the data is unavailable.

In other jurisdictions around the country, capital improved value is used in calculating the emergency services levies in Victoria and South Australia.⁶⁵³

⁶⁴⁹ Australian Capital Territory Revenue Office, *Fire and emergency services levy*, Canberra, Government of Australian Capital Territory, <http://www.revenue.act.gov.au/duties-and-taxes/other-levies-and-taxes/fire-and-emergency-services-levy>, (accessed 1 February 2017).

⁶⁵⁰ Henry, K., Harmer, J., Piggott, J., Ridout, H., & Smith, G., *Australia's future tax system*, Canberra, Commonwealth Treasury, 2009, p. 258.

⁶⁵¹ For example, when it is necessary to determine an assessed value for land for which gross rental value cannot reasonably be calculated. Land owners' assistance may be sought in this case, to provide the Valuer-General with asset registers and other information about capital improvements to the land.

⁶⁵² Communication with the Office of the Valuer-General, 22 May 2017.

⁶⁵³ Victorian Government, *Fire Services Property Levy: Frequently Asked Questions*, Melbourne Government of Victoria, <http://www.firelevy.vic.gov.au/faq.html>, (accessed 31 January 2017); Victoria State Emergency Service, *News: On funding, Government of Victoria*, <https://www.ses.vic.gov.au/-/on-funding>, (accessed 31 January 2017); South Australian Fire and Emergency Services Commission, *How is the sector funded?*, Government of South Australia, http://www.safecom.sa.gov.au/site/about_us/how_sector_is_funded.jsp, (accessed 1 February 2017).

3. *Fixed charges*: A simple tiered system is not likely to address capacity to pay, or risk.

A fixed charge is used in the Australian Capital Territory, for residential and rural property owners.⁶⁵⁴

A variant of a fixed system is used in Queensland, where properties are classified into levy groups, and property owners pay a fixed amount based on their property's group and location. This system relies on an extremely detailed property database to equitably allocate properties into groups. The *Queensland Fire and Emergency Services Regulation 2011* currently differentiates between 168 types of property divided into 16 leviable groups. The property types detailed in the legislation are as specific as 'Oil or fuel depot, including refinery (licensed capacity of 25,000,001–50,000,000L)', 'Drive-in shopping centre (area devoted to buildings, roadways, parking and landscaping of 40,001–60,000m²)', and 'Office, shop or commercial premises, other than drive-in shopping centre (21–29 levels)'.⁶⁵⁵

Western Australia does not have a pre-existing property database of the kind used in Queensland, and it would be unjustifiably costly to develop one simply for the purpose of collecting the ESL.⁶⁵⁶ Additionally, as discussed above, the ERA does not recommend a move to a risk-based system.

Overall, unimproved value is an inferior option to gross rental value, and lack of data makes the other two options unworkable. Gross rental value remains the most practical option. Consequently, the draft report did not recommend any change to the current system.

Most stakeholders consider that gross rental value remains an appropriate base to determine ESL rates for Categories One to Four.⁶⁵⁷

However, the WA Self Funded Retirees and the Superannuated Commonwealth Officers Association Western Australia state that, while many retirees have properties with high gross rental value due to increased house prices, they do not have a high capacity to pay.⁶⁵⁸ These stakeholders argue that only some retirees receive a 50 per cent discount on the ESL, and that there is no guarantee that this concession will continue.⁶⁵⁹

The State Government provides concessions to help people in need meet the cost of household bills and other essential services.⁶⁶⁰ For the ESL, a concession is available either

⁶⁵⁴ Australian Capital Territory Revenue Office, *Fire and emergency services levy*, Canberra, Government of Australian Capital Territory, <http://www.revenue.act.gov.au/duties-and-taxes/other-levies-and-taxes/fire-and-emergency-services-levy>, (accessed 1 February 2017).

⁶⁵⁵ Communication with Department of Fire and Emergency Services, 17 January 2017.

⁶⁵⁶ Communication with Department of Fire and Emergency Services, 17 January 2017.

⁶⁵⁷ In submissions to the draft report, DFES, Dewhurst, G., Shire of Plantagenet, WALGA, and Western Australian Volunteer Fire and Rescue Services Association consider that gross rental value is only appropriate to assess the levy for Categories One to Four.

⁶⁵⁸ de Gruchy, R., *Submission to draft report*, 9 August 2017, pp. 1-2; Superannuated Commonwealth Officers Association Western Australia, *Submission to draft report*, 20 September 2017, p. 3.

⁶⁵⁹ de Gruchy, R., *Submission to draft report*, 9 August 2017, pp. 1-2.

⁶⁶⁰ ConcessionsWA, *About*, Perth, Government of Western Australia, <http://www.concessions.wa.gov.au/Pages/default.aspx>, (accessed 30 August 2017).

as a rebate on, or the deferment of, the charge.⁶⁶¹ Pensioners or seniors who own and occupy residential property as their ordinary place of residence and have a Pensioner Concession Card or State Concession Card, a WA Seniors Card and/or a Commonwealth Seniors Health Card may be entitled to rebates.⁶⁶² This framework should ensure that retirees that do not have a high capacity to pay the ESL are compensated appropriately.

The State Government recently made announcements about a review of and reforms to the concessions framework, aimed at ensuring the framework supports those in most need.⁶⁶³ It is out of the terms of reference of this review to comment on the current framework for ESL concessions, however, the ERA notes that the Government has recognised the importance of supporting those most in need.⁶⁶⁴

6.3.4 Grouping of properties

Adjoining properties with the same owner may be grouped for council and ESL rates purposes, if all properties are used for the same purpose. This 'grouped' determination is made by the Valuer-General under the *Valuation of Land Act 1978*, valuation policies, and legal precedents.⁶⁶⁵ Owners with grouped or adjoining lots make a single ESL payment.

Property owners with non-adjoining lots have to pay the ESL on each property. This can add up to more than what they would pay if their lots were grouped, because there is a minimum ESL charge on each lot.⁶⁶⁶

In submissions to the issues paper, stakeholders took two views on grouping of properties. The Association of Volunteer Bush Fire Brigades proposed:

"[A r]eview of corporate group ratings [is] needed to ensure the system is not being used to avoid full corporate contributions by grouping land holdings together for ESL liability."⁶⁶⁷

⁶⁶¹ ConcessionsWA, *Emergency Services Levy Rebate*, Perth, Government of Western Australia, <http://www.concessions.wa.gov.au/Concessions/Pages/Emergency-Services-Levy-rebate.aspx>, (accessed 30 August 2017).

⁶⁶² ConcessionsWA, *Emergency Services Levy Rebate*, Perth, Government of Western Australia, <http://www.concessions.wa.gov.au/Concessions/Pages/Emergency-Services-Levy-rebate.aspx>, (accessed 30 August 2017).

⁶⁶³ The Hon. Ben Wyatt, *Tariffs, fees and charges to assist in budget repair*, Perth, Government of Western Australia, 2017, <https://www.mediastatements.wa.gov.au/Pages/McGowan/2017/06/Tariffs-fees-and-charges-to-assist-in-budget-repair.aspx>, (accessed 30 August 2017).

⁶⁶⁴ The Hon. Ben Wyatt, *Tariffs, fees and charges to assist in budget repair*, Perth, Government of Western Australia, 2017, <https://www.mediastatements.wa.gov.au/Pages/McGowan/2017/06/Tariffs-fees-and-charges-to-assist-in-budget-repair.aspx>, (accessed 30 August 2017).

⁶⁶⁵ Valuer-General (Landgate), *Submission to draft report*, 10 August 2017, p. 1; Landgate, *Valuation policy No. 4.104 & 4.310*, Perth, Government of Western Australia, 2016, <https://www0.landgate.wa.gov.au/for-individuals/land-values/valuer-generals-role/valuation-services-policies>, (accessed 11 September 2017).

Owners may object to the Valuer-General's valuation set under section 32 of the *Valuation of Land Act 1978*.

⁶⁶⁶ In attempting to understand the extent of this issue, ERA has asked DFES for any internal analysis that it has undertaken on the implications of grouping of properties, particularly in the Swan Valley. DFES has informed the ERA that it has not done any analysis of this issue.

⁶⁶⁷ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 13 March 2017, p. 7.

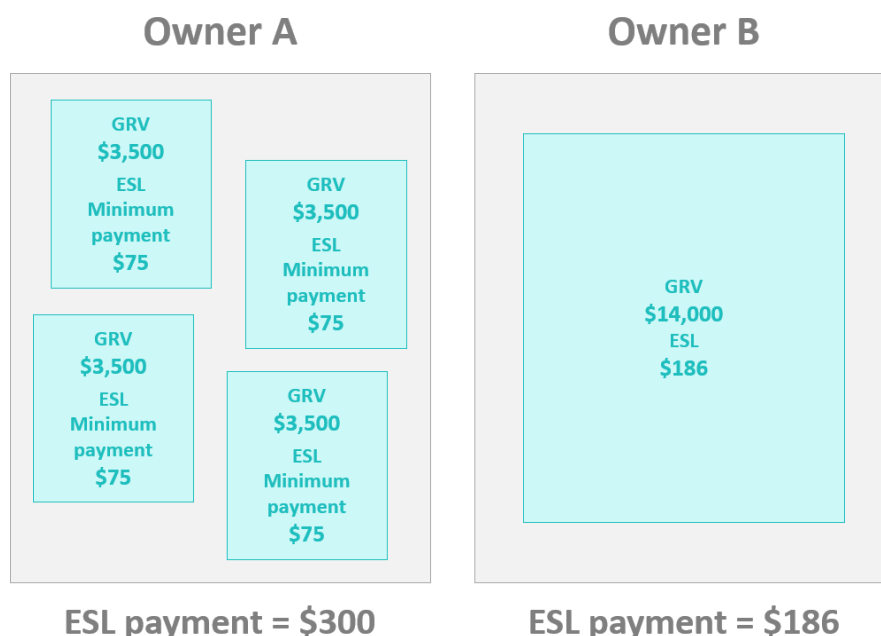
The Grape Growers Association supported the grouping of properties, and considered that grouping should also be available for non-adjoining properties:

“The use of grouped ratings is common in the Swan Valley and is appropriate in an area where lot sizes are small and most farms consist of several lots and a grouped ESL is appropriate. However, the inequity here is that many farmers have multiple lots that are not adjoining and pay an ESL on every lot resulting in a much higher ESL cost. These farmers must also be given the opportunity to pay a single ESL fee.”⁶⁶⁸

Grouping raises a question of equity, since people who are receiving essentially the same services are not paying the same amount. Presently, property owners with adjoining lots effectively receive a discount.

Figure 32 provides a simplified illustration of the issue for two owners in Category One. Owner A and Owner B both own four properties of the same size and value.⁶⁶⁹ Owner A’s four properties are in different locations, so she pays the minimum rate of \$75 on each block. Owner B’s blocks are joined, and assessed as a group. This results in Owner A paying a total of \$300 in ESL rates, while Owner B only pays a total of \$186.

Figure 32 Comparison of treatment for grouped and ungrouped land (Category One)



The draft report recommended that the simplest and most equitable solution to ensure that all property owners pay the ESL on each block of land they own would be to abolish grouping on all types of property. The ERA noted that:

- Grouping of properties is not likely to be a major efficiency issue because the ESL is unlikely to affect people’s decisions about where to live and how to expand their business.

⁶⁶⁸ Grape Growers Association of W.A. (Inc.), *Submission to issues paper*, 8 March 2017, p. 2.

⁶⁶⁹ In this example, the ERA has assumed that Landgate’s grouped gross rental value of the four adjoining blocks will be exactly equal to the sum of the values of the individual blocks (that is, $3,500 \times 4 = 14,000$). This is a simplification to illustrate the issue – in practice, the grouped gross rental value may not be exactly the same as the sum of the individual gross rental values.

- For some types of hazard (for instance, fire), it could be argued that grouped properties should be charged less than ungrouped properties because they create economies of scale. However, this may be the case only in particular circumstances, and for particular types of hazard.
- It is inequitable for some property owners to pay less through the grouping of properties for ESL purposes.

Stakeholders put forward mixed responses to the draft recommendation on discontinuing grouping.

Some stakeholders, such as the Association of Volunteer Bush Fire Brigades, Mr. Glenn Dewhurst, Mr. John Mangini, the Pastoralists and Graziers Association, the Shire of Manjimup, and the Western Australian Volunteer Fire and Rescue Services Association, support the recommendation.⁶⁷⁰

WALGA states that:

“...in principle, this recommendation is the simplest way to reduce inequity in the system. The removal of grouping provisions for Category 1 to 4 properties is unlikely to cause any significant distortions given that the majority of properties are located in the metropolitan area and are not contiguous.”⁶⁷¹

However, WALGA makes the following points:

- There would be short term costs as Landgate would be required to amend the property rolls provided to DFES to ensure that no properties are grouped for the purpose of the ESL.⁶⁷²
- The recommendation seems in conflict with the Valuer-General’s ‘Unimproved Values – Rural valuation policy 4.310’, where grouping is a legal precedent for setting land rates.⁶⁷³
- Given the ESL is currently calculated as a flat rate in Category Five, the removal of grouping would result in a significant increase in the cost of the ESL for individual landholders. It may also create further inequity in situations where properties of similar size and value pay a vastly different ESL, due to the number of individual titles on the land. There are many single farming entities that comprise properties in different ownerships. The removal of grouping would result in substantial increases to ESL rates for these landowners.⁶⁷⁴

WALGA puts forward a suggestion provided by the Shire of Williams in support of grouping properties. The suggestion is that grouping be continued, but that the current fixed charge

⁶⁷⁰ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 9; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 7; Mangini, J., *Submission to draft report*, 11 August 2017, p. 5; Pastoralists and Graziers Association of WA, *Submission to draft report*, 16 August 2017, p. 8; Shire of Manjimup, *Submission to draft report*, 11 August 2017, p. 5; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 3.

⁶⁷¹ Western Australian Local Governments Association, *Submission to draft report*, 11 August 2017, p. 10.

⁶⁷² Western Australian Local Governments Association, *Submission to draft report*, 11 August 2017, p. 10.

⁶⁷³ Western Australian Local Governments Association, *Submission to draft report*, 11 August 2017, pp. 10-11.

⁶⁷⁴ Western Australian Local Governments Association, *Submission to draft report*, 11 August 2017, p. 10.

be replaced by a system where the amount of ESL payable depends on the level of valuation of the property (whether it is gross rental value or unimproved value), as is the case for Categories One to Four.⁶⁷⁵

The Valuer-General, DFES and the Shire of Plantagenet consider that discontinuing the grouping of properties is contrary to legal precedent, would be complex, impractical and costly for DFES, Landgate and local governments to implement, and would cause further inequities for ESL rate payers.⁶⁷⁶

The Valuer-General makes the following points:

- There are more than 12,000 GRV grouped assessments in Western Australia, where the grouped assessment is determined by the Valuer-General to reflect the provisions of the *Valuation of Land Act 1998*, legal precedent and valuation policy.
- In many cases, it is not practicable to determine a gross rental value for each individual lot as a grouped assessment can include buildings that straddle boundaries, a house on one lot which only has access from a driveway over another lot, or farm houses, sheds and other outbuildings that are located across various lots.
- Ungrouping properties will lead to unnecessary complication and potential confusion as gross rental value is used by DFES, local governments and Water Corporation.⁶⁷⁷

The Valuer-General further states:

“The VLA [*Valuation of Land Act 1978*] provides that in valuing land, the Valuer-General is not subject to direction from any person.”

“Any change in the group value process including the abolition of group valuations would be a decision for the Valuer-General.”

“[S]plitting these assessments would be contrary to legal precedent and Valuer-General’s policy.”⁶⁷⁸

DFES states that:

“...If the ESL was required to be separately assessed for each lot included in a group valuation, it would lead to unnecessary complication and potential confusion to property owners if the underlying property valuation methodology differed for ESL and Council rates.”⁶⁷⁹

⁶⁷⁵ Western Australian Local Governments Association, *Submission to draft report*, 11 August 2017, p. 10.

⁶⁷⁶ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 7; Valuer-General (Landgate), *Submission to draft report*, 10 August 2017, p. 1; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 9; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 3.

⁶⁷⁷ Valuer-General (Landgate), *Submission to draft report*, 10 August 2017, p. 1.

⁶⁷⁸ Valuer-General (Landgate), *Submission to draft report*, 10 August 2017, p. 1.

⁶⁷⁹ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 6.

The Shire of Plantagenet states:

“...in rural areas, farming entities may be operated over several contiguous lots and this [] change in application of the ESL will create an increased financial burden on our agricultural industry.”⁶⁸⁰

On the basis of the submissions received, the ERA has decided to remove the draft recommendation about discontinuing grouping of properties.

The ERA has considered the alternative approach put forward by the Shire of Williams in WALGA’s submission – namely, that grouping be continued, but that the current fixed charge in Category Five be replaced by a system where the amount of ESL payable depends on the valuation of the property. Therefore, the ESL rate calculation in Category Five becomes consistent with the ESL rate calculation for Categories One to Four. The ERA has considered the prospect of using unimproved value rather than gross rental value in Category Five, given the nature of most properties in Category Five.

WALGA makes the following comment about this approach:

“This issue could be addressed by moving to Unimproved Value as the basis for calculating the ESL for Category 5 properties...Under this scenario, the grouping provisions would become redundant, to the extent that the rate is based on the total UV of the land, rather than the individual number of titles held.”⁶⁸¹

Other stakeholders also propose applying unimproved value to properties in Category Five and mining tenements.⁶⁸²

The ERA consulted with Landgate on whether applying Unimproved Value to properties in Category Five is a feasible option.⁶⁸³

Landgate has advised that though it is feasible to implement in principle, in that Landgate has unimproved value data on land across Western Australia, it is also impractical to implement in practice.

In particular, there is currently a subset of properties in Category Five that are charged council rates based on gross rental value for local government rates purposes and a fixed charge for ESL purposes. (Figure 33 illustrates how the ESL and council rates are charged within a local government boundary.) If there was a shift to unimproved value for Category Five, it is not clear that local governments’ systems would be able to accommodate applying one set of land values for rates purposes and another for ESL purposes. There would potentially be upfront and higher ongoing administrative costs for councils if they do not have systems that can accommodate two sets of land values for a single property. There would also be higher costs for Landgate in providing local governments with the additional land value data.

Landgate also notes that that the unimproved value for some properties is very high – these properties would therefore face a substantial increase in their ESL payable.

⁶⁸⁰ Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 5.

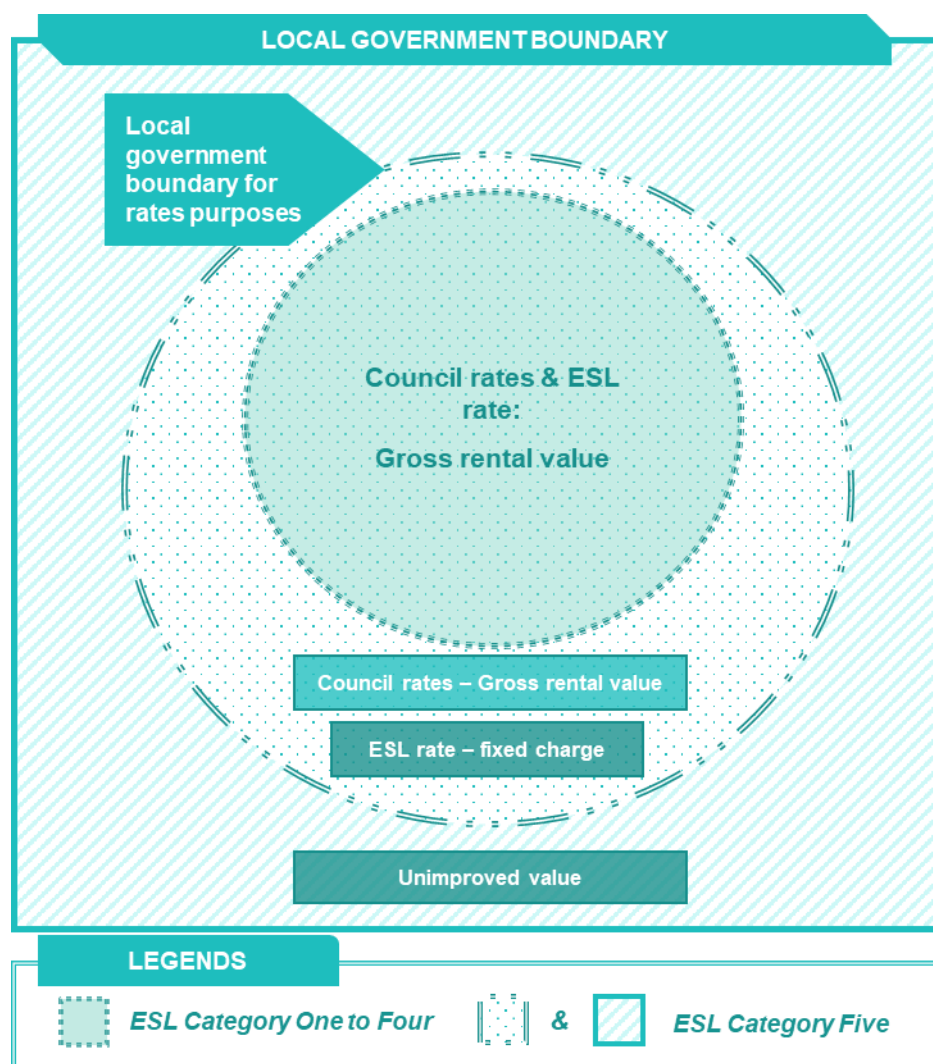
⁶⁸¹ Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, pp. 10-11.

⁶⁸² Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 6; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 1; Western Australian Local Governments Association, *Submission to draft report*, 11 August 2017, pp. 3-4; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 3.

⁶⁸³ Communication with Landgate, 28 August 2017.

Unimproved value therefore should not be used to assess ESL charges for Category Five properties. It is important that the overall costs of collecting a levy are as low as possible, including the government's administrative costs of managing the levy.

Figure 33 Rates and charges within a local government boundary



6.3.5 Treatment of vineyards

In consultation prior to the draft report, some stakeholders questioned whether vineyards are classified appropriately and consistently for the purposes of calculating the ESL.

There are two main property-use classifications each of which has a different maximum payment.⁶⁸⁴ Vacant land, hobby farming, and residential property owners in ESL Category

⁶⁸⁴ Department of Fire and Emergency Services, *Categories, Rates and Boundaries*, Perth, Government of Western Australia, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/emergency-services/levy/pages/categories-rates-boundaries.aspx>, (accessed 19 June 2017).

One will pay up to a maximum of \$395 in 2017-18. Commercial, industrial and miscellaneous property owners will pay up to a maximum of \$225,000 in 2017-18.⁶⁸⁵

Some vineyard properties are classified as commercial or miscellaneous and others as hobby farming. Those classified as commercial or miscellaneous will pay the higher maximum rate.

Given the large disparity between the maximum amounts payable, it is important that properties are classified appropriately. This is illustrated in Table 21, which compares the hypothetical ESL payable for a variety of ESL Category One properties in different circumstances.

For property owners A and C, it makes no difference whether they are classified as hobby farming or commercial properties, since each will pay \$331 in ESL rates. Property B has a gross rental value of \$100,000, but because it is classified as hobby farming, it meets the cap for its classification and the owner will only pay \$395. However, property D – a property of the same gross rental value as property B, but classified as commercial – must pay \$1,326. This is because the cap for commercial properties is \$225,000.

Table 21 Comparison of ESL payable for Category One land with different classification

	ESL property use	GRV	ESL payable
Property A	Farming (Hobby)	\$25,000	\$331
Property B	Farming (Hobby)	\$100,000	\$395 (max)
Property C	Commercial	\$25,000	\$331
Property D	Commercial	\$100,000	\$1,326

Source: DFES; WA Government Gazette; ERA analysis.

In its submission to the issues paper, the Grape Growers Association was concerned that the commercial classification is being used to raise additional ESL revenue:

“The ESL rate set for “Residential, Farming and Vacant Land” is set at a reasonable cost yet Swan Valley Farmers are currently rated as commercial. This falls under the category “Commercial, Industrial and Miscellaneous”. The question posed here is “when is a farmer not a farmer”? We believe that the aim here is to maximise revenue...”⁶⁸⁶

The Grape Growers Association was also concerned that rating vineyards as commercial does not reflect risk:

“Many farmers are rated as commercial and this is unrelated to either the cost of the DFES service provided or the associated risk. The grape growers are the least likely participants in the Swan Valley to need DFES services. Vineyards do not burn!”⁶⁸⁷

⁶⁸⁵ State Law Publisher, ‘Fire and Emergency Services (Determination of Emergency Services Levy) Notice 2017’, *Government Gazette No. 116 of 2017: Part 2*, Perth, Government of Western Australia, 2017.

⁶⁸⁶ Grape Growers Association of W.A. (Inc.), *Submission to issues paper*, 8 March 2017, p. 2.

⁶⁸⁷ Grape Growers Association of W.A. (Inc.), *Submission to issues paper*, 8 March 2017, p. 2.

The following principles are considered when assessing the classification of vineyards:

1. *User pays*: If vineyard owners are inconsistently treated as either a commercial farm or hobby farm, they will pay very different maximum charges.

However, large commercial vineyards may have additional assets at risk – for example, galleries, and restaurants. It is appropriate for such vineyards to pay full commercial rates.

2. *Progressivity*: Owners of very large commercial vineyards have a greater capacity to pay.

(The issue of setting ESL rates based on risk, as opposed to level of service, is addressed in Section 6.3.2 — the ERA is not recommending a shift towards risk based charging at this time.)

The principle of simplicity is also relevant when considering ESL rates for vineyards. Currently, these properties are categorised using data provided by the Valuer-General. This is a straightforward method that uses a pre-existing system. The same data is used for other purposes, such as calculating rates and wastewater charges. There is no merit in DFES creating its own classification system, simply to resolve the issue of vineyards. Such a task would be prohibitively expensive and complex, and difficult to justify when the Valuer-General already maintains detailed land classification data. DFES is not a land valuation agency, and is not in a position to classify land and monitor compliance with classifications.

There has already been an attempt to solve the issue of how vineyards should be classified. In 2013, Landgate (the agency of the Valuer-General) undertook a review of land use classifications in the Swan Valley that resulted in the reclassification of about 50 per cent of the land classified as 'Vineyard residence' or 'Vineyard properties'. These properties, previously rated as 'Commercial' or 'Miscellaneous', were reclassified as hobby farming properties. As hobby farms, these properties are now subject to the lower maximum charge.⁶⁸⁸ As of 2016-17, only 27 of 273 vineyards in the Swan Valley are classified as commercial or miscellaneous.⁶⁸⁹

Parliamentary debate in 2014⁶⁹⁰ and the submissions to the issues paper nonetheless indicate that the issue may not have been wholly resolved.

In the draft report the ERA recommended that given the amount of time that has passed since Landgate's last review, Landgate should revisit the classification of vineyards in the Swan Valley to decide whether any adjustments are necessary.

In response to this draft recommendation, the Shire of Corrigin states that the issue of when a farming property becomes a commercial property is not limited to the Swan Valley.⁶⁹¹

⁶⁸⁸ Francis, J. M., Emergency Services Levy - Administration – Grievance, *Hansard*, Assembly, 14 August 2014, p. 5310b-5312a.

⁶⁸⁹ Data provided by Department of Fire and Emergency Services, 23 May 2017 (*Att A – Vineyards in the Swan Valley Region May 2017.xlsx*).

⁶⁹⁰ Alban, F. A. and Francis, J. M., Emergency Services Levy – Administration – Grievance, *Hansard*, Assembly, 14 August 2014, p. 5310b-5312a.

⁶⁹¹ Shire of Corrigin, *Submission to draft report*, 14 August 2017, p. 8.

The Valuer-General states that the 2013 review undertaken by Landgate has “substantially enhanced the fairness and accuracy of these classifications.”⁶⁹² It notes that:

- it does not propose to undertake any further reviews of the classifications; and
- any queries on the classifications should be referred to DFES, where a formal classification objection process is available when queries are not resolved at the initial stage.⁶⁹³

DFES states that the classification of vineyards in the Swan Valley is a matter for Landgate and the Valuer-General. DFES states that it received recent advice that all vineyards in the Swan Valley with a commercial property use classification are commercially operating businesses, hence they are subject to the maximum ESL charge.⁶⁹⁴

The Grape Growers Association did not provide a submission to the draft report.

The ERA has considered these submissions and the fact that there is already a process in place for parties to object to the classification of their property. This process is outlined on DFES’s website, and ultimately allows parties to appeal to the Minister.⁶⁹⁵ On this basis, the ERA considers that Landgate should not be required to revisit the classification of vineyards in the Swan Valley at this time.

The draft report found that the DFES ‘Categories, Rates and Boundaries’ web page⁶⁹⁶ provides very little information on what the different ‘ESL Property Use’ classifications mean. The draft report suggested that the DFES ‘Categories, Rates and Boundaries’ web page should link users to further information on each property use classification, along with illustrative examples, and an explanation where the wording on the website varies from that in the Government Gazette. In its submission to the draft report, DFES responds positively to this suggestion, noting it will take the appropriate action.⁶⁹⁷

⁶⁹² Valuer-General (Landgate), *Submission to draft report*, 10 August 2017, p.1.

⁶⁹³ Valuer-General (Landgate), *Submission to draft report*, 10 August 2017, p.1.

⁶⁹⁴ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 6.

⁶⁹⁵ Department of Fire and Emergency Services, *ESL Administration: ESL Property Use Queries and Objections*, Perth, Government of Western Australia, https://www.dfes.wa.gov.au/emergencyserviceslevy/ESLAdministration/ESL_Property_Use_Queries_and_Objections.pdf, (accessed 1 September 2017);

Department of Fire and Emergency Services, *Emergency Services Levy Manual of Operating Procedures 2017/18*, Perth, Government of Western Australia, 2017, p. 18.

⁶⁹⁶ Department of Fire and Emergency Services, *Categories, Rates and Boundaries*, Perth, Government of Western Australia, <https://www.dfes.wa.gov.au/emergencyserviceslevy/pages/categoriesratesboundaries.aspx>, (accessed 19 June 2017).

⁶⁹⁷ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 15.

6.4 Recommendations

- The design of the ESL should be retained in its current form.
- The Department of Fire and Emergency Services should use the cost and incident data it gathers from implementing high level activity-based costing to determine the direct costs of providing emergency services to each of the five ESL categories.

7 Funding a rural fire service

Key points

- The principles establishing the types of emergency management activities that should be funded by the ESL, as set out in Chapter 5, apply equally to any rural fire service that the State Government chooses to establish.
- The State Government has not announced a preferred rural fire service model. It is beyond the terms of reference of this review to examine the merits of a rural fire service or form a view on the best model. This report does not take a position on whether the State Government should establish a rural fire service, or consider the merits of each model that the ERA has costed.
- Many factors will affect the cost of a rural fire service, including whether: it has a coordination role only, or also has operational responsibilities; operational functions are undertaken by volunteers or paid career fire fighters; the geographic area covered is limited or broad; it shares resources with other organisations; and it is established as an independent organisation, separate from DFES.
- This report includes two models of a rural fire service – one low cost and one high cost – to indicate the range of possible costs. Any variations of these two models should fall within the cost range. The main difference between the two models is that model one uses a single team that coordinates existing resources, whereas model two is a professionalised service that duplicates some of DFES's functions and requires significant investment in additional resources.
- The ERA estimates that a rural fire service will cost between \$4.2 million and \$560 million per year. The ERA estimates that the additional cost for a rural fire station staffed by 30 paid career firefighters is about \$4.5 million each year.
- The cost of a rural fire service is primarily driven by the cost of firefighters. Model one is relatively inexpensive because it coordinates existing resources and volunteers. Model two has a significantly higher cost because it has an additional 3,600 paid firefighters.
- Assuming that the contribution to total ESL revenue from each ESL category stays the same as it is currently, ESL rates would need to increase by about 1.2 per cent to fund model one and about 166 per cent to fund model two.
- This report does not advocate any particular approach for recovering the costs of a rural fire service across ESL categories. Increasing the extent metropolitan property owners fund rural and regional services (due to the ESL funding a rural fire service) does not raise concerns from an economic efficiency perspective. However, the willingness of metropolitan property owners to fund the costs of a rural fire service may have limits, particularly if it is perceived to operate inefficiently.

7.1 Introduction

The terms of reference for this review require the ERA to consider the extent to which the ESL should be available to fund the administrative and/or operational costs of a rural fire service, and effect on ESL rates of using the ESL to fund a rural fire service.

The Ferguson report on the 2016 Waroona bushfire recommended the State Government establish a rural fire service to address perceived issues in rural fire management.⁶⁹⁸ These issues included insufficient capacity and unsuitable governance to deliver rural fire services. The report also found the Career Fire and Rescue Service and volunteer brigades used different fire management and leadership approaches, leading to coordination and operational difficulties, and disconnected communities from decision making.⁶⁹⁹

On 23 June 2017, the State Government hosted a bushfire mitigation summit and called for public submissions to examine bushfire management, including the effectiveness of prescribed burning and other mitigation strategies, resourcing, and the responsibilities of local governments and property owners.⁷⁰⁰

The summit did not define a preferred rural fire service model, and participants acknowledged that it is difficult to debate the merits of a rural fire service when a preferred model has not been defined. The summary document notes that options reflected by stakeholders can be categorised as:⁷⁰¹

- a rural fire service operating within DFES;
- a rural fire service operating within DFES with total autonomy, including budget autonomy; and
- a dedicated rural fire service established in a cost-effective way which operates independently of a career fire service.

Options to transfer the management of all bushfire brigades under one umbrella – DFES or other – are also to be explored.⁷⁰²

⁶⁹⁸ This report defines 'rural fire management' as planning and undertaking activities to prevent, prepare for, and respond to fires in rural areas. It may also include incident recovery. State Government agencies and stakeholders that have responsibilities for rural fire management include DFES, the Office of Bushfire Risk Management, local governments, volunteer brigades, and the Department of Biodiversity, Conservation and Attractions.

⁶⁹⁹ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, Vol. 1, p. 256.

⁷⁰⁰ Office of Emergency Management, *Bushfire Mitigation Summit: Summary*, Perth, Government of Western Australia, 2017, <https://www.oem.wa.gov.au/Pages/BushfireMitigationSummit.aspx>, (accessed on 30 August 2017).

⁷⁰¹ Office of Emergency Management, *Bushfire Mitigation Summit: Summary*, Perth, Government of Western Australia, 2017, <https://www.oem.wa.gov.au/Pages/BushfireMitigationSummit.aspx>, (accessed on 30 August 2017).

⁷⁰² Office of Emergency Management, *Bushfire Mitigation Summit: Summary*, Perth, Government of Western Australia, 2017, <https://www.oem.wa.gov.au/Pages/BushfireMitigationSummit.aspx>, (accessed on 30 August 2017).

The cost of a rural fire service will vary depending on its model, including its role, level of resourcing, and governance arrangements. The State Government has not announced a preferred rural fire service model. Some submissions to the draft report have called for the State Government to announce its preferred rural fire service model to allow stakeholders to make an informed decision based on clear evidence.⁷⁰³

Other stakeholders have told the ERA that it should develop and cost the rural fire service model that will best address deficiencies in rural fire management and will be the most cost-effective. It is beyond the terms of reference of this review to examine the merits of a rural fire service or form a view on the best model of a rural fire service. This report does not take a position on whether the State Government should establish a rural fire service, and does not consider the merits of each model that has been costed as part of this review.

This chapter is structured as follows:

- a discussion of whether the ESL should be used to fund a rural fire service;
- a discussion of factors that will affect the cost of a rural fire service;
- a description of the models of rural fire service that have been costed;
- estimates of the cost of a rural fire service; and
- a discussion of the effect of funding a rural fire service through the ESL on ESL rates.

In general, stakeholders support using the ESL to fund the efficient costs of a rural fire service,⁷⁰⁴ though some stakeholders consider that the ESL should not fund its administration costs.⁷⁰⁵ However, stakeholders have called for the ERA to undertake a “more sophisticated treatment” of the cost of middle ground options for a rural fire service model.⁷⁰⁶

⁷⁰³ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 1; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 2.

⁷⁰⁴ Western Australian Local Government Association *Submission to draft report*, 11 August 2017, p. 9; and Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, pp. 3-4.

⁷⁰⁵ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 8; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 7; Shire of Manjimup, *Submission to draft report*, 11 August 2017, p. 4; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 4; Smith, R., *Submission to draft report*, 7 August 2017, p.6; and Pastoralists and Graziers Association of Western Australia, *Submission to draft report*, 16 August 2017, p. 7.

⁷⁰⁶ Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 2; Shire of Corrigin, *Submission to draft report*, 14 August 2017, p. 13.

7.2 Should the Emergency Services Levy fund a rural fire service?

The ERA has been asked to consider the extent to which the ESL should be available to fund administrative and/or operational costs of a rural fire service.

Using a levy to fund some of the operational costs of a rural fire service is consistent with what takes place in some other jurisdictions. For example, the Fire Services Property Levy in Victoria funds 77.5 per cent of the costs of a rural fire service. There are similar funding arrangements in South Australia and Queensland, where a levy funds 98 per cent and 73.5 per cent of the cost of these states' rural fire service respectively.

Most stakeholders that commented on whether the ESL should, at least in part, fund a rural fire service, stated that they support this proposal. The remaining stakeholders that commented did not provide a definitive position, and only one submission did not support the ESL funding a rural fire service.

Two submissions to the draft report consider that there should not be a separate rural fire service. DFES argues that in place of a separate rural fire service, more resources should be allocated to rural areas to prevent and prepare for fire and emergencies.⁷⁰⁷ The United Firefighters Union proposes building a small number of additional professional fire stations in regional locations, such as Esperance, Karratha, and Broome, and spending more on training, equipping, and supporting volunteers.⁷⁰⁸

The submissions that support the ESL funding a rural fire service do so on the following grounds.

- Funding a rural fire service from the ESL is consistent with the intent of the ESL and emergency services legislation.⁷⁰⁹
- The ESL is the most equitable means of funding a rural fire service.⁷¹⁰
- A rural fire service will increase prevention activities and therefore decrease the need to spend ESL funds on fire response in the long term.⁷¹¹ These savings can be used to fund a rural fire service.
- Current ESL revenue is sufficient to fund a rural fire service if DFES reduces its expenditure by improving efficiency and transferring some responsibilities, such as managing volunteers, to the rural fire service.⁷¹²

⁷⁰⁷ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 9.

⁷⁰⁸ United Firefighters Union of Australia West Australian Branch, *Submission to draft report*, 11 August 2017, pp. 3-4.

⁷⁰⁹ For example, Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 13 March 2017, p. 11.

⁷¹⁰ For example, Mangini, J., *Submission to issues paper*, 10 March 2017, p. 9.

⁷¹¹ For example, Cascade Scaddan Fire Review, *Submission to issues paper*, 10 March 2017, pp. 1-2.

⁷¹² For example, City of Swan, *Submission to issues paper*, 10 March 2017, p. 3.

- ESL funds allocated to DFES for rural fire management should be reallocated to a rural fire service as DFES has not fulfilled its role in rural fire management.⁷¹³

Some submissions do not explicitly provide support for the ESL funding a rural fire service, but note the importance of equitable access to emergency services across the State.

Most submissions state that, although they support the ESL funding a rural fire service, this should not lead to an increase in ESL rates. Some stakeholders, including the Association of Volunteer Bushfire Brigades, say that DFES's expenditure should be thoroughly and independently assessed to determine cost savings that can be used to fund a rural fire service.⁷¹⁴

Some other stakeholders are concerned that the ESL will not be sufficient to fund a rural fire service, and that to do so would require a significant increase in ESL rates. The Shire of Harvey says in its submission that "the ESL was not set up for, or contemplated funding a rural fire service".⁷¹⁵

Some stakeholders state they do not support the establishment of a rural fire service, or that a rural fire service would increase the cost of service provision. For example, the United Firefighters Union notes a rural fire service will duplicate bureaucracy, and increase ESL rates and therefore costs for families and businesses.⁷¹⁶

Chapter 5 established principles about the emergency management activities that should be funded from the ESL. The ESL should fund those emergency management activities that governments provide on behalf of the community if they can do so more effectively than individual property owners. The ESL should not be used to fund emergency management activities that primarily benefit individual property owners (for example, putting in appropriate fire-breaks and conducting prescribed burns) — these costs should continue to be funded by property owners, including state and local governments in their capacity as land owners and/or managers.

If a rural fire service is funded through the ESL, the emergency management activities funded by the ESL should be consistent with those funded for DFES. This approach will best ensure that governments and private property owners have appropriate incentives to manage risks for which they are responsible. It is also consistent with universality of service principle on which the ESL was based.⁷¹⁷

In response to the draft report, several stakeholders argue that, while the ESL should fund a rural fire service, it should not fund its administration costs – this is based on the same arguments put forward as to why the ESL should not fund DFES's administration costs.⁷¹⁸

⁷¹³ For example, Shire of Plantagenet, Chief Bushfire Control Officer, *Submission to issues paper*, 13 February 2017, p. 1.

⁷¹⁴ For example, Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 13 March 2017, p. 8.

⁷¹⁵ Shire of Harvey, *Submission to issues paper*, 24 February 2017, p. 1.

⁷¹⁶ United Firefighters Union of Australia West Australian Branch, *Submission to issues paper*, 17 March 2017, p. 1.

⁷¹⁷ The universality of service principle suggests that access to fire and emergency services is not discretionary in a developed society. The nature of disaster means that 'we are each protected only when we are all protected. (Source: Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 17.)

⁷¹⁸ Association of Volunteer Bush Fire Brigades, *Submission to draft report*, 15 August 2017, p. 8; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 7; Mangini, J., *Submission to draft report*, 11 August 2017, p. 4; Pastoralists and Graziers Association of WA, *Submission to draft report*, 16 August 2017, p. 7;

The ERA's response to these arguments is set out in Section 5.4.1. In summary, a proportion of a rural fire service model's corporate services costs should be funded from general government revenue, to allow for scrutiny over the efficiency of this expenditure, and to maintain public confidence in the ESL.

People living in the metropolitan area appear willing to contribute to the current costs of providing emergency services. However, as set out in Chapter 6, some submissions to the draft report express concern that establishing a separate rural fire service could increase the extent metropolitan property owners subsidise rural property owners.⁷¹⁹ The ERA's response to these concerns is set out in Chapter 6.

However, the ERA notes that when the ESL was originally implemented, the State Government determined that requiring individual communities to fund their own services would favour areas with dense or large populations because of the high capital costs of maintaining response capacity.⁷²⁰ DFES is not required to ensure that spending on emergency management matches funds raised in the area they are spent.⁷²¹ Indeed, one of the objectives of the ESL was to ensure that regional communities have access to essential emergency services regardless of cost and ability to pay.

There is no compelling reason why this approach should not continue if the ESL funds a rural fire service. This report does not advocate any particular approach for recovering the costs of a rural fire service across ESL categories, but presents two options later in this chapter.

In conclusion, the principles established in Chapter 5 to determine the DFES activities that the ESL should fund should be applied to a rural fire service.

7.3 Factors that will affect the cost a rural fire service

The cost of a rural fire service will depend on its model.

Rural fire services in other Australian jurisdictions have a range of different models, including differing responsibilities, structures, and governance arrangements. For example, the rural fire service authority in Victoria is a statutory authority, operated by both career and volunteer firefighters, providing firefighting services, community education, search and rescue, and marine response services outside of Victoria's metropolitan fire district.⁷²² The rural fire service authority in Queensland is a government department and a

Shire of Corrigin, *Submission to draft report*, 14 August 2017, p. 7; Shire of Manjimup, *Submission to draft report*, 1 August 2017, p. 4; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 4; Smith, R., *Submission to draft report*, 11 August 2017, p. 6; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 9; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, pp. 3-4.

⁷¹⁹ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 9.

⁷²⁰ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, pp. 17-18.

⁷²¹ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 23.

⁷²² Country Fire Authority, *What we do*, Melbourne, Government of Victoria, <http://www.cfa.vic.gov.au/about/what-we-do/>, (accessed 31 January 2017).

volunteer-based organisation that provides fuel reduction, firefighting, community education, and fire preparedness services in rural and semi-rural areas.⁷²³

Stakeholders have different views on the model of a rural fire service the ERA should cost. This is reflected in submissions to this review, as well as the outcomes of the State Government's bushfire mitigation summit.

For example, the Pastoralists and Graziers Association said in its submission to the issues paper that the "RFS [rural fire service] would be a relatively small administrative 'hub' where the bulk of the rural bushfire fighting capacity (resources and decision-making) is dispersed across rural landscape".⁷²⁴ In contrast, Cascade Scaddan Fire Review said in its submission to the issues paper that a core function of a rural fire service would be prevention activities⁷²⁵ and the United Firefighters Union said in its submission to the issues paper that 'there is a need to better resource existing professional and volunteer brigades and DFES regional offices to improve mitigation and prevention'.⁷²⁶

Many factors will affect the cost of each model of a rural fire service. These include:

- whether a rural fire service has a coordination role only, or also has operational responsibilities;
- whether operational functions are undertaken by volunteers or paid career fire fighters;
- the geographic area a rural fire service covers, which could range from those areas currently serviced by a bush fire brigade to all areas outside the metropolitan region;
- whether a rural fire service shares resources, such as offices and operational centres, with other organisations; and
- governance arrangements, including whether a rural fire service is established as an independent organisation, separate from DFES.

These considerations will affect costs such as wages, offices, and equipment, and have informed the design of the low and high cost models.

7.4 Rural fire service models

The ERA has costed two models of a rural fire service – one low cost and one high cost – to indicate the range of possible costs for a rural fire service. Any variations of these models should fall within the cost range.

⁷²³ Queensland Rural Fire Service, *About*, Brisbane, Government of Queensland, <https://www.ruralfire.qld.gov.au/About/Pages/default.aspx>, (accessed 31 January 2017).

⁷²⁴ Pastoralists and Graziers Association of WA, *Submission to issues paper*, 10 March 2017, p. 9.

⁷²⁵ Cascade Scaddan Fire Review, *Submission to issues paper*, 10 March 2017, p. 6.

⁷²⁶ United Firefighters Union of Australia West Australian Branch, *Submission to issues paper*, 17 March 2017, p. 6.

The models costed are:

- *Model 1:* A rural fire service that coordinates existing resources and volunteers.
- *Model 2:* A rural fire service that coordinates existing resources and volunteers and has career fire fighters for day-to-day operations.

The main difference between the two models is that model one is a single team that coordinates existing resources, whereas model two is a professionalised service that duplicates some of DFES's functions and requires significant investment in additional resources. A detailed description of the models is provided in Table 22.

The following assumptions were applied to both models:

- A rural fire service is responsible for rural fire management only (it is not responsible for other hazards).⁷²⁷
- A rural fire service is responsible for all areas outside the metropolitan region.
- A rural fire service undertakes a coordination role (but may have additional roles depending on the model).
- The Office of Bushfire Risk Management continues to undertake bushfire risk management planning.
- A rural fire service is responsible for allocating ESL funds to local governments (discussed in Chapter 8).
- The Department of Biodiversity, Conservation and Attractions continues to be responsible for fire management on land it manages.

⁷²⁷ DFES noted that this assumption neglects other hazards such as structural firefighting, road crash, rescues, and hazmat incidents. (Source: Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, pp. 15-16.) The number of hazards that is managed by a rural fire service will depend on the State Government's preferred structure of a rural fire service.

Table 22 Models of a rural fire service

Consideration	Model 1	Model 2
Role and responsibilities	The rural fire service coordinates rural fire management and oversees volunteer brigades undertake operational activities.	The rural fire service coordinates rural fire management and has paid career firefighters to undertake operational activities. The rural fire service is also responsible for undertaking prevention activities on State and local government land.
Contribution of volunteers	The rural fire service is a volunteer based organisation that does not employ career firefighters.	The rural fire service employs career firefighters who are supported by volunteers.
Staff requirements	The rural fire service has a team of about 30 to 40 paid staff. These staff have administration and coordination roles.	The rural fire service has a larger team of paid staff who have varying roles, including administration and coordination, and incident response.
Head and regional offices, and operational centres	The rural fire service shares its head and regional offices, and operational centres, with other organisations, including DFES and Department of Biodiversity, Conservation and Attractions.	The rural fire service has its own head and regional offices, and operational centres.
Equipment	The rural fire service does not require its own firefighting equipment. Volunteers use equipment owned by volunteer brigades.	The rural fire service owns trucks and other equipment.

The two models were costed by estimating the cost of the following categories:

- human resources, including fire fighters and administration staff;
- headquarters, regional offices and operations centres; and
- equipment, including trucks, personal protection equipment, uniforms and bedding.

These cost categories were estimated using information from DFES and the former Department of Parks and Wildlife. Cost estimates include data from the former Department of Parks and Wildlife's Fire Management Services branch in some cases, as it is considered to be the most relevant data source given its size and fire management function.

Assumptions were made where information was not available, as follows:

- Model one: model one is a rural fire service that coordinates existing resources and volunteers. To do this, it would require a small administration team, similar to the former Department of Parks and Wildlife's Fire Management Services branch. Model one would cost approximately \$4.2 million, consistent with the cost of the former Department of Parks and Wildlife's Fire Management Services branch.⁷²⁸
- Model two: model two coordinates existing resources and volunteers, and also has career fire fighters for day-to-day operations. The assumptions for model two are set out in Table 23.

In response to the draft report, stakeholders note that while the ERA was not tasked with recommending a rural fire service model, they do not agree with the models the ERA has costed.⁷²⁹ The United Firefighters Union argues that model one will merely add an additional layer of co-ordination, and not deliver additional resources to regional areas.⁷³⁰ Stakeholders argue that model two is unrealistic for the following reasons:

- The total replacement of volunteer brigades with career firefighters would be unacceptable and unaffordable⁷³¹ – it does not recognise the existing resources available in volunteer brigades.⁷³²
- It does not capture the savings that could come from elsewhere – for example, from a decrease in DFES equipment expenditure and staff;⁷³³ and/or the sharing of assets with DFES.⁷³⁴

The Department of Biodiversity, Conservation and Attractions calls for a “more sophisticated treatment” of middle ground options and hybrid models.⁷³⁵ It says that a rural fire service could function effectively with the same capacity and budget as the Department's prescribed burning and fire management branch – that budget being about \$50 million a year.⁷³⁶

However, beyond this general commentary stakeholders do not:

- provide specific views about which of the ERA's assumptions should be changed — for example, they do not provide views on how many fire fighters should be career fire fighters; or

⁷²⁸ This report recommends that corporate services are not funded by the ESL. The former Department of Parks and Wildlife's estimate may include some corporate services costs, however, these will be immaterial for the purpose of modelling the effect on ESL rates.

⁷²⁹ For example: Department of Biodiversity, Conservation and Attractions, Mr. John Mangini, and United Firefighters Union of Australia West Australian Branch.

⁷³⁰ United Firefighters Union of Australia West Australian Branch, *Submission to draft report*, 11 August 2017, p. 3.

⁷³¹ Anonymous, *Submission to draft report*, 9 August 2017, p. 1; Shire of Corrigin, *Submission to draft report*, 14 August 2017, p. 13; United Firefighters Union of Australia West Australian Branch, *Submission to draft report*, 11 August 2017, p. 3.

⁷³² van Rijnsdoud, E., *Submission to draft report*, 3 August 2017, p. 1.

⁷³³ Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 2; ERA regional consultation session, held at City of Bunbury offices, 8 August 2017; Mangini, J., *Submission to draft report*, 11 August 2017, pp. 1-2; Shire of Corrigin, *Submission to draft report*, 14 August 2017, p. 13; Smith, R., *Submission to draft report*, 7 August 2017, p. 8.

⁷³⁴ Mangini, J., *Submission to draft report*, 11 August 2017, pp. 1-2.

⁷³⁵ Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 2.

⁷³⁶ Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 2.

- question the value of the inputs used by the ERA – for example, the salary for a firefighter, or the cost of firefighting equipment.

The ERA reiterates that it has not been asked to recommend a preferred model for a rural fire service. However, to inform considerations of a rural fire service model(s), the ERA has used data set out in the draft report to present an estimate of what a single additional fire station would cost. This information is presented in Section 7.5 below.

7.5 Cost of a rural fire service

It is not possible to provide a specific or reliable estimate of the cost of a rural fire service unless the State Government announces a model of a rural fire service. This is consistent with the view of many stakeholders, including the Association of Volunteer Bush Fire Brigades,⁷³⁷ WALGA⁷³⁸ and DFES.⁷³⁹

Of the stakeholders that have commented on the cost of a rural fire service, their estimates of its cost vary substantially.

The foundations of a rural fire service already exist. This includes the Office of Bushfire Risk Management, the network of DFES and Department of Biodiversity, Conservation and Attractions regional offices, the state and regional operations centres and volunteer brigades and their assets.

For this reason, some stakeholders consider a rural fire service would not be expensive, or require an increase in ESL rates. In particular, some stakeholders, including the Bushfire Front⁷⁴⁰ and the Gidgegannup Progress Association⁷⁴¹, suggest DFES's existing resources could be redirected to a rural fire service, or a rural fire service could be funded by savings from increasing the operational efficiency of DFES. In its submission to the issues paper, the Association of Volunteer Bush Fire Brigades said:

"We do not expect the RFS [rural fire service] to be used as a vehicle for an increase in ESL revenue through higher tax levels. We expect government to ensure the ESL and DFES expenditures are thoroughly and independently assessed to identify cost savings through the restructure as a result of the RFS [rural fire service], and general efficiencies through change in DFES operations."⁷⁴²

⁷³⁷ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 13 March 2017, p. 11.

⁷³⁸ Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, p. 22.

⁷³⁹ Department of Fire and Emergency Services, *Submission to issues paper*, 10 March 2017, p. 5.

⁷⁴⁰ The Bushfire Front Inc., *Submission to issues paper*, 25 February 2017, p. 5.

⁷⁴¹ Gidgegannup Progress Association (Inc.), *Submission to issues paper*, 27 February 2017, p. 8

⁷⁴² Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 13 March 2017, p. 11.

Table 23 Rural fire service cost assumptions

Cost category	Model two assumptions
Human resources	
<i>Firefighters</i>	<p>30 firefighters (including station officers) for each rural fire service station. <i>(This is based on the average staff levels of regional Career Fire and Rescue Service stations. DFES provided this data.)</i></p> <p>120 new rural fire service stations, assuming each of the Volunteer Fire and Rescue Service and Volunteer Fire and Emergency Service units are replaced with a rural fire service station. <i>(This is based on current station numbers. DFES provided this data.)</i></p> <p>Each firefighter receives a salary of \$105,000 a year, plus a 35 per cent loading for superannuation, allowances, long-service leave and workers compensation. <i>(This is based on the average firefighter cost. DFES provided this data, including the percentage loading.)</i></p>
<i>Administration</i>	100 administration staff, with a salary of \$100,000 each. ⁷⁴³ <i>(This is an ERA assumption.)</i>
Headquarters	
<i>Construction</i>	<p>\$30 million construction cost. <i>(This is based on the cost to construct the former Department of Parks and Wildlife's new Bunbury offices, which will accommodate 100 workers. The former Department of Parks and Wildlife provided this information.)</i></p> <p>Straight line depreciation over 50 years. <i>(DFES Local Government Grants Manual, p. 18)</i></p> <p>Finance costs are not included in calculations. DFES advises the approach to funding capital expenditure varies depending on DFES's cash flow.</p>
<i>Overheads</i>	\$500,000 a year <i>(This is an estimate provided by the former Department of Parks and Wildlife.)</i>

⁷⁴³ This report recommends that corporate services are not funded by the ESL. Administration staff that undertake functions consistent with the principles established in Chapter 5 should be funded by the ESL. The corporate services costs of a rural fire service should not be funded by the ESL.

Regional offices/operations centres	
Overheads	<p>Seven joint regional offices and operational centres (one located in each of DFES's seven regions). <i>(This is an ERA assumption).</i></p> <p>Overheads (including leases and depreciation) of \$1 million for each location. <i>(This is calculated from:</i></p> <ul style="list-style-type: none"> <i>DFES's estimate that each of its regional offices costs \$650,000 (excluding some items such as depreciation and leases); plus</i> <i>the ERA's assumption of the cost of excluded overheads (that is, depreciation and leases).</i> <p><i>DFES was unable to provide an estimate for all overheads in its regional offices).</i></p>
Equipment	
Trucks	<p>\$1.9 million in fire trucks is required for each rural fire service station. <i>(This is based on the average cost for each Career Fire and Rescue Service station. DFES provided this information).</i></p> <p>120 new RFS stations. <i>(This is based on current Volunteer Fire and Rescue Service and Volunteer Fire and Emergency Service station numbers. DFES provided this data.)</i></p> <p>Straight line depreciation over 20 years. <i>(DFES Local Government Grants Scheme Manual, p. 14)</i></p> <p>Finance costs are not included its calculations. DFES advises the approach to funding capital expenditure varies depending on DFES's cash flow.</p>
Truck maintenance	<p>5 per cent of the truck purchase price (each year). <i>(This is an ERA assumption, informed by information from DFES.)</i></p>
Personal Protective Equipment (PPE), uniforms, footwear and bedding	<p>5 year depreciable life. <i>(This is an ERA assumption, informed by information from DFES.)</i></p>

This view is conveyed in submissions to the draft report by the Shire of Corrigin, Mr. John Mangini, and the Department of Biodiversity, Conservation and Attraction.⁷⁴⁴ As noted, the Department of Biodiversity, Conservation and Attractions states that a rural fire service modelled after the Department's prescribed burning and fire management branch would cost approximately \$50 million a year.⁷⁴⁵

Only the marginal cost of a rural fire service has been considered by the ERA to determine the effect on ESL rates. The effect of undertaking the analysis in this way is that, for example, if an existing resource was reallocated to the rural fire service, its cost is not included in the estimate of the cost of a rural fire service. The ERA has conducted the analysis in this way in order to be able to assess the *incremental* effect on current ESL rates.

In addition, the estimated costs of a rural fire service do not include any offsets from possible savings in rationalising or restructuring DFES's resources. Consideration of whether DFES should be rationalised or restructured, and any savings from doing so, is outside the terms of reference. Whether DFES is operating efficiently is discussed in more detail in Chapter 8.

A small number of stakeholders consider a rural fire service would be high cost. For example, in its submission to the issues paper, the United Firefighters Union said that a rural fire service would cost about \$400 million.⁷⁴⁶ The Union does not provide information about how it estimated this figure. Further, the Hon. Stephen Dawson, on behalf of the Minister for Emergency Services, has said that the \$400 million "was not an estimate, but a figure used to demonstrate the unaffordability of a Western Australian rural fire service comparable with eastern states models".⁷⁴⁷

In 2002, the Hon. John Charles Kobelke, on behalf of the Minister for Emergency Services, said the cost to replace 24,000 fire services and State Emergency Service volunteers with paid personnel would be \$300 million (or \$434.4 million in 2015-16 terms⁷⁴⁸), and that this was considered to be an estimate at the lower end of the scale.⁷⁴⁹

The cost of the two models of a rural fire service has been estimated using the assumptions in Section 7.4. These assumptions enable cost estimates to include the cost of different expenditure categories, including wages and office facilities. These estimates have only been used to demonstrate the scale of these categories to provide an approximate cost of a rural fire service. A more detailed analysis is not possible unless a specific model of a rural fire service is announced by the State Government.

Table 24 shows that the annual marginal cost of a rural fire service, based on the assumptions and cost estimates, will be between \$4.2 million and \$560 million.

⁷⁴⁴ Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 2; Mangini, J., *Submission to draft report*, 11 August 2017, pp. 1-2; Shire of Corrigin, *Submission to draft report*, 14 August 2017, p. 13.

⁷⁴⁵ Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 2.

⁷⁴⁶ United Firefighters Union of Australia West Australian Branch, *Submission to issues paper*, 17 March 2017, p. 6.

⁷⁴⁷ Western Australia, Legislative Council, *Debates*, 13 June 2017, p. 715-716.

⁷⁴⁸ ERA analysis, indexed to 2015-16 dollars using CPI data from the Australian Bureau of Statistics.

⁷⁴⁹ Kobelke, J., Fire and Emergency Services Legislation (Emergency Services Levy) Amendment Bill 2002: *Introduction and First Reading*, Assembly, *Hansard*, 25 September 2002, p. 1570b-1572a.

Table 24 Annual marginal cost of a rural fire service (\$ million)

Cost category	Model One		Model Two	
	Capital expenditure	Operating expenditure	Capital expenditure	Operating expenditure
Human resources	-	\$4.2	-	\$520.3
Fire fighters	-	-	-	\$510.3
Administration staff	-	\$4.2	-	\$10
Headquarters	-	-	\$0.6	\$0.5
Construction	-	-	\$0.6	-
Overheads	-	-	-	\$0.5
Regional offices/operations centres	-	-	-	\$7.0
Overheads (including leases)	-	-	-	\$7.0
Equipment	-	-	\$17.5	\$11.4
Trucks - capital	-	-	\$11.4	-
Trucks - maintenance	-	-	-	\$11.4
PPE, uniforms, footwear and bedding	-	-	\$6.1	-
Sub total	-	\$4.2	\$18.1	\$539.2
TOTAL MARGINAL COST		\$4.2		\$557.3

As discussed in Section 7.4, the cost estimates represent a range that a rural fire service may cost. If the State Government decides to establish a rural fire service, it will probably develop a model that falls within this cost range.

The cost of a rural fire service model is primarily driven by the cost of firefighters.

Model one is relatively inexpensive because it coordinates existing resources and volunteers. It does not have any new paid firefighters. Model two has a substantially higher cost because it has an additional 3,600 paid firefighters. The average salary for a firefighter is \$105,000 plus superannuation, allowances and other on costs,⁷⁵⁰ which is estimated to be about 35 per cent based on advice from DFES. The average cost of a firefighter, including allowances and other on costs, is about \$142,000.

Other costs, including the cost of headquarters, regional offices and equipment, are insignificant compared to the total cost of firefighters. This means that where a particular model falls within the cost range will depend on how many paid firefighters it has.

The cost estimates assume a rural fire service is established within DFES. Establishing a rural fire service as an independent organisation would probably not add substantially to its cost. In the case of model one, resources could continue to be shared with other organisations, with some additional resources potentially being required. In model two, a rural fire service would have extensive resources and would be unlikely to require any additional resources if it was an independent organisation. The exception is that an independent organisation would also require its own Chief Executive Officer (at a cost of about \$250,000⁷⁵¹). It may also require a small team of additional corporate services staff

⁷⁵⁰ Long service leave and workers' compensation.

⁷⁵¹ Based on the average 'Chief Executive Officer' salary of Western Australian Government organisations with a Chief Executive Officer. (Source: Salaries and Allowances Tribunal, *Determination of the Salaries and*

(for example, payroll). For model one, this may represent a material percentage increase in the cost of a rural fire service. However, it is immaterial in the context of total ESL revenue.

In response to submissions to the draft report, to inform an independent consideration of a rural fire service model(s), the ERA has used data set out in the draft report to present an estimate of what a single additional fire station would cost (Figure 34).

As noted above, the cost of a rural fire service model is primarily driven by the cost of firefighters. DFES has advised that the current average number of career firefighters at each regional Career Fire and Rescue Service station is 30. Assuming an additional rural fire station has this many career firefighters, an additional rural fire service station would cost about \$4.5 million. This cost includes the annual cost of each career firefighter station and their personal protective equipment and bedding; and a truck fleet (Figure 34).⁷⁵² Decisions about the average number of career firefighters and the equipment required for each station will determine the actual cost of each fire station.

In addition to these costs, there would be costs that are of a more 'fixed' nature and which would be shared across all new fire stations, such as the cost of a head office of a rural fire service – head office staff costs, the costs of constructing head office buildings and other corporate overheads (Figure 34). The more stations that are deployed, the lower the allocation of these fixed costs to each station.

The ERA has not added these fixed costs to the above costs of each fire station, because the amount that should be added depends on the total number of stations deployed.⁷⁵³

Allowances Tribunal for Clerks and Deputy Clerks of the Parliament, Public Service Holders included in the special division of the public service and persons holding offices prescribed in Salaries and Allowances Regulation Number 3, Perth, Government of Western Australia, 2016, <https://www.sat.wa.gov.au/SpecialDivisionAndPrescribedOfficeHolders/Documents/Special%20Division%20and%20Prescribed%20Office%20Holders%20Determination%2021%2006%202016.pdf>, (accessed on 29 June 2017).

⁷⁵² It is assumed that any new fire station would utilise existing Volunteer Fire and Rescue Service buildings, therefore no incremental costs for new station construction or leasing is included in these estimates.

⁷⁵³ The ERA has nonetheless included corporate services costs in its costing of model two to demonstrate the upper limit of what a rural fire service could cost and the upper limit on the increase in ESL rates, in the case that corporate services costs are fully funded by the ESL.

Figure 34 Assumptions for the additional cost of an average rural fire service station

Assumptions				An additional cost of a rural fire service station						
Human resources (firefighters)				Firefighter per rural fire service station						
Firefighter	➡	\$105,000 per year	+ 35% loading*	=	\$141,750 per firefighter	30 firefighters	×	\$141,750	=	\$4,252,500 per rural fire service station
Equipment				Equipment costs per rural fire service station						
Trucks	➡	\$95,000 per year (capital)	+ \$95,000 per year (operational)	=	\$190,000 per year	1 truck	×	\$190,000	=	\$190,000 per rural fire service station
PPE, uniforms, footwear & bedding	➡	\$1,694 per firefighter				30 firefighters	×	\$1,694	=	\$50,833 per rural fire service station
Assumptions				An additional cost of a rural fire service per year						
Human resources (administration)				Administration cost per personnel per year						
Administration	➡	\$100,000 per year				1 personnel	×	\$100,000	=	\$100,000 per personnel
Headquarters				Construction and overhead costs per year						
Construction & overheads	➡	\$30 million construction costs (that accommodates 100 personnel); 50 year depreciation		\$500,000 overhead costs per year		\$600,000	+	\$500,000	=	\$1,100,000 per year
Regional offices/operations centres				Costs per year						
Overheads	➡	(est.) DFES has seven joint regional offices and operational centres		\$1 million per location per year		1 regional office/operational centre	×	\$1,000,000	=	\$1,000,000 per year

Source: ERA analysis.

7.6 Effect on Emergency Services Levy rates

A rural fire service will cost between \$4.2 million and \$560 million. Table 25 shows the new ESL rates required to fund each rural fire service model if all property owners in the state contribute to its cost. New ESL rates have been calculated so the contribution from each ESL category is consistent with the current percentage of total ESL revenue collected from each category.⁷⁵⁴

ESL rates would need to increase by about 1.2 per cent to fund model one and about 166 per cent for model two.⁷⁵⁵

Table 25 New ESL rates

Rate category	Model one	Change	Model two	Change
Category One	0.013422	1.2%	0.035288	166.1%
Category Two	0.010067	1.2%	0.026466	166.2%
Category Three	0.006711	1.2%	0.017644	166.2%
Category Four	0.004698	1.2%	0.012351	166.1%
Category Five	\$76	1.3%	\$200	166.7%

Tables 26 and 27 show the new minimum and maximum rates applied to the new rates in Table 25. The method used to calculate the minimum and maximum rate is consistent with DFES's current process, as described in Section 2.4.1.

The change in rates is consistent with the rate increase for each ESL category.

Table 26 New minimum and maximum payment (vacant land, residential and farming)

	Rate category	Model one	Change	Model two	Change
Maximum payment	Category One	\$400	1.3%	\$1,054	166.8%
	Category Two	\$300	1.4%	\$790	166.9%
	Category Three	\$200	1.5%	\$527	167.5%
	Category Four	\$140	1.4%	\$368	166.7%
	Category Five	\$76	1.3%	\$200	166.7%
Minimum payment		\$76	1.3%	\$200	166.7%

⁷⁵⁴ Mining tenements have been included in Category Five. Both categories paid a fixed rate of \$75 in 2017-18. Most mining tenements are outside the Perth and Peel region.

The cost has not been allocated to Albany, Bunbury, Geraldton and Kalgoorlie as these centres are in ESL Category Three (along with metropolitan peri-urban areas) because they each have a Career Fire and Rescue Service station.

⁷⁵⁵ All averages are weighted by the number of properties in each ESL rate category.

Table 27 New minimum and maximum payment (commercial, industrial and miscellaneous)

	Rate category	Model one	Change	Model two	Change
Maximum payment	Category One	\$228,000	1.3%	\$600,000	166.7%
	Category Two	\$171,000	1.8%	\$450,000	167.9%
	Category Three	\$114,000	1.8%	\$300,000	167.9%
	Category Four	\$79,000	1.3%	\$208,000	167.7%
Minimum payment		\$76	1.3%	\$200	166.7%

If the rates in Tables 25, 26, and 27 are applied, total ESL revenue raised will be as outlined in Table 28.

Property owners in Categories One, Two, and Three will contribute 92 per cent of the cost of a rural fire service, being \$3.9 million for model one and \$517.2 million for model two. Rural property owners (Categories Four and Five) will contribute the remaining 8 per cent, being \$0.3 million for model one and \$42.9 million for model two. This contribution is consistent with the current percentage of total ESL revenue collected from each category.

Table 28 Total revenue raised (\$ million)

Rate category	Model one	Change	Model two	Change
Category One	\$286.2	1.2%	\$752.7	166.2%
Category Two	\$20.6	1.3%	\$54.1	166.2%
Category Three	\$8.2	1.2%	\$21.5	166.1%
Category Four	\$17.3	1.3%	\$45.6	166.4%
Category Five	\$8.3	1.3%	\$21.8	166.8%

Table 29 shows the average residential charge required to raise the revenue in Table 28.

The average residential charge (weighted across all ESL categories) will increase by \$2.41 (1.2 per cent) to \$220.52 for model one and \$362.74 (166 per cent) to \$580.84 for model two.

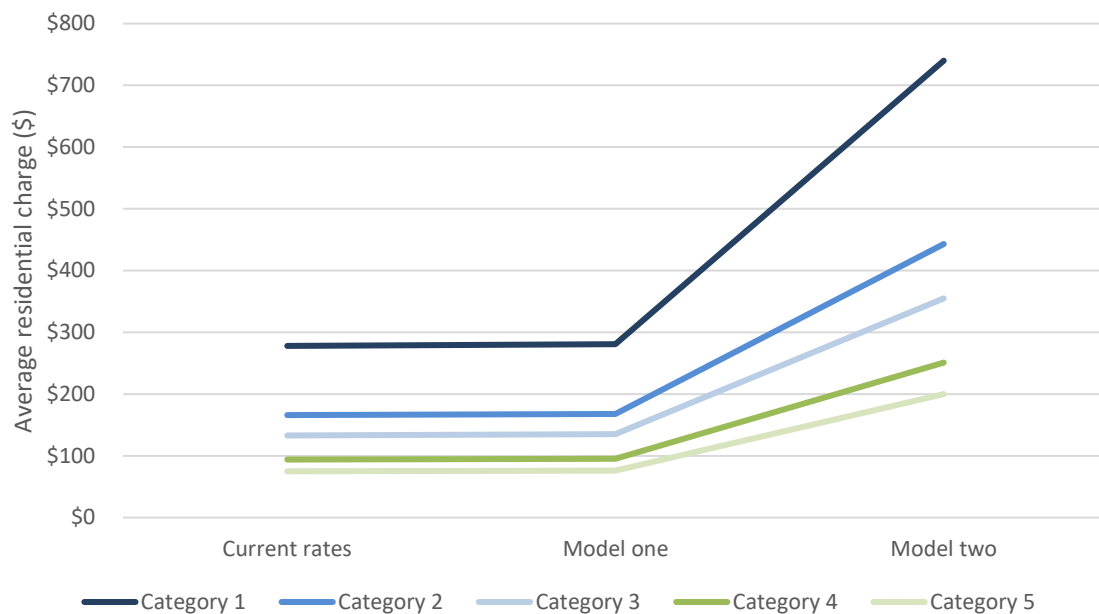
Table 29 Average residential charge

Rate category	Model one	Change	Model two	Change
Category One	\$281	1.1%	\$740	166.2%
Category Two	\$168	1.2%	\$443	166.9%
Category Three	\$135	1.5%	\$355	166.9%
Category Four	\$95	1.1%	\$251	167.0%
Category Five	\$76	1.3%	\$200	166.7%
Weighted average	\$220.52	1.1%	\$580.84	166.3%

The actual charge paid by each property owner will vary depending on the gross rental value of their property, except for Category Five and mining tenements as these pay a fixed charge.

The change in average residential charge for each category is shown in Figure 35.

Figure 35 Average residential charge if all property owners contribute to the marginal cost of a rural fire service



Submissions to the draft report note concern that a rural fire service will increase the extent to which metropolitan property-owners fund the cost of services in regional and rural areas (see Section 6.3.1).

The ERA does not advocate any particular approach for recovering the costs of a rural fire service across ESL categories. However, increasing the extent metropolitan property owners fund rural and regional services (due to the ESL funding a rural fire service) does not raise concerns from an efficiency perspective. The willingness of property owners in the metropolitan area to contribute to the costs of a rural fire service may, however, have limits, particularly if it is perceived as operating inefficiently.

7.7 Recommendations

- If a rural fire service is established, the ESL should be used to fund emergency management activities it provides on behalf of the community if it can do so more effectively than individual property owners.
- A proportion of any rural fire service's corporate services costs should be funded by general government revenues, rather than the ESL.

8 Governance, transparency and accountability arrangements

Key points

- Several previous inquiries have questioned the appropriateness of how the ESL is governed, including the 2011 Keelty report and the 2016 Ferguson report.
- DFES is both a recipient and distributor of ESL funds. There is a perception among some stakeholders that ESL funds are not being spent in a way that maximises benefits to the broader community. There is some evidence to support this perception, but the evidence is not conclusive.
- Conflicts of interest may be real or perceived – both should be avoided. The issue is therefore not only whether DFES has used its authority to its own advantage, but whether it has the opportunity to do so.
- DFES is subject to the same administrative and financial controls that apply to all state government agencies in Western Australia. These external constraints are effective for their intended purpose. However, their intended purpose is not to ensure that DFES allocates and spends ESL funds efficiently.
- There have not been any general reviews undertaken (for example, by the Office of the Auditor General, the Department of Treasury and the Public Sector Commission) on the performance of DFES.
- An important part of improving administration of the ESL is to make it more transparent. This will provide stakeholders better information about the ESL so they can be informed about how DFES is allocating ESL funds. DFES has, over time, reduced the amount and type of information it publishes on the ESL.
- While DFES has structures and processes in place that allow it to obtain stakeholder input into grant allocations, some stakeholders consider they are not provided sufficient opportunity to inform DFES's decisions, including about the allocation of funds through the Local Government Grants Scheme.
- The ERA has made a number of recommendations aimed at improving governance arrangements for the ESL to increase accountability and transparency, and ensure DFES has appropriate incentives to best manage ESL funds.
- While there are many ways these recommendations could be implemented, the most important principle is that the organisation that advises the Minister for Emergency Services on ESL rates, and oversees how DFES allocates ESL funds, does not benefit from the ESL.

8.1 Introduction

The terms of reference for this review require the ERA to consider the current transparency and accountability arrangements for the distribution of the ESL, and whether ESL funds should be allocated by an agency other than DFES.

This chapter is structured as follows:

- a summary of previous inquiries that discussed the governance of the ESL;
- an assessment of the existing governance, transparency and accountability arrangements applying to DFES and its administration of the ESL; and
- a discussion of how the governance arrangements applying to the ESL can be improved; and
- a discussion of how information on the ESL should be published.

The draft report included several recommendations about the transparency and accountability arrangements for the distribution of the ESL. Stakeholders' submissions to the draft report support changes to improve transparency in how decisions about the ESL are made, including the draft recommendations that:

- an organisation other than DFES should advise the Minister for Emergency Services on ESL rates;⁷⁵⁶ and
- the Office of Emergency Management should oversee DFES's, and a rural fire service if established, administration of the ESL⁷⁵⁷ (with some stakeholders stating the role of the independent organisation should be increased to include day-to-day administration of the ESL).⁷⁵⁸

Some stakeholders preferred an organisation other than the Office of Emergency Management (for example the departments of Treasury or Finance) undertake the oversight and advisory role. They argue it is critical the organisation is independent, and that this is more important than having experience in emergency management and grant administration.⁷⁵⁹

⁷⁵⁶ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 3; Dewhurst, D., *Submission to draft report*, 11 August 2017, p. 4; Mangini, J., *Submission to draft report*, 11 August 2017, p. 3; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 5; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 1; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 3; The Bushfire Front, *Submission to draft report*, 15 August 2017, p. 1; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 4.

⁷⁵⁷ Mangini, J., *Submission to draft report*, 11 August 2017, p. 4; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 5; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 2; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 3; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 2; The Bushfire Front, *Submission to draft report*, 15 August 2017, p. 1; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 5.

⁷⁵⁸ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 4; Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 3; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 5.

⁷⁵⁹ Pastoralists and Graziers Association of WA, *Submission to issues paper*, 10 March 2017, p. 8; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 1.

There was mixed support for the Office of Emergency Management undertaking the appeal role, with some stakeholders of the view that the appeal body should be a panel or board,⁷⁶⁰ and not the organisation that oversees or administers the ESL.⁷⁶¹

At least one stakeholder has misinterpreted the ERA's draft recommendations about the role of the independent advisory and oversight organisation.⁷⁶² For clarity – and as noted later in this chapter – the ERA does *not* recommend that the independent advisory and oversight organisation undertake the day-to-day administration of the ESL. Rather, the independent advisory and oversight organisation would *oversee* the administration of the ESL, as well as advise the Minister for Fire and Emergency Services on ESL rates. DFES would continue to undertake the day-to-day administration of the ESL.

At least one stakeholder is of the view that the Office of Emergency Management is currently funded by the ESL.⁷⁶³ However, as mentioned in Chapter 2 the Office of Emergency Management is not currently funded by the ESL – it is funded from general government revenue.

The ERA recommends that if the Office of Emergency Management is to be the independent advisory and oversight body, and/or have an appeal function, it should be made independent of DFES, continue to be funded from general government revenue, and not be involved in the day-to-day administration of the ESL.

These points are clarified in the discussion below.

8.2 Previous inquiries

Several previous inquiries have questioned the appropriateness of how the ESL is governed. The 2011 Keelty report on the 2011 Perth Hills bushfire questioned whether it is appropriate for DFES to both allocate and receive ESL funds.

The report recommended:

“The State Government move the responsibility for the management and distribution of the Emergency Services Levy to the Department of Finance.”⁷⁶⁴

The 2016 Ferguson report on the Waroona fire also discussed governance of the ESL. The report said stakeholders were concerned that revenue from the ESL has been used to fund the administrative costs of DFES rather than being applied to frontline services. Stakeholders called for a clear separation of responsibilities, for the rules to be revisited to

⁷⁶⁰ Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 3; Smith, R., *Submission to draft report*, 7 August 2017, p. 6.; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p.4.

⁷⁶¹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 4; Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 3; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 2; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 4.

⁷⁶² Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 3;

⁷⁶³ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 3, Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 5.

⁷⁶⁴ Keelty, M. APM AO, *A Shared Responsibility: Perth Hills Bushfire Inquiry*, Perth, 2011, p. 22.

ensure volunteers and local governments have access to the necessary funding for bushfire mitigation, and for fairer access to equipment and resources funding.⁷⁶⁵

To address these concerns, the report recommended:

“The Department of Premier and Cabinet [] conduct an independent review of the current arrangement for the management and distribution of the Emergency Services Levy.”⁷⁶⁶

The Community Development and Justice Standing Committee’s 2006 report did not support removal of management of the ESL from Fire and Emergency Services Authority.

The Committee considered:

“...grants are appropriately placed with FESA as the “expert” agency in emergency services. The Committee is satisfied that FESA has established appropriate and transparent grant committee processes with adequate external representation. FESA reports annually on its grants allocation via its website. The Authority is also able to provide administrative support to the grant process resulting in cost efficiencies.”⁷⁶⁷

However, the Committee acknowledged the Fire and Emergency Service Authority’s allocation of ESL funds (through the grants process) could be improved,⁷⁶⁸ and said:

“...it would be appropriate for the Auditor General to consider conducting an assessment of the effectiveness of the ESL, taking into consideration the impact of resource-to-risk assessment models employed in the distribution of the levy.”⁷⁶⁹

When the Fire and Emergency Service Authority transitioned to DFES there were some changes in how the ESL was administered, in particular the quantity and type of information it published on the ESL and how funds are spent. This is discussed in more detail in Section 8.3.2.3 below.

8.3 Assessment of existing governance, transparency and accountability arrangements

Stakeholders have raised three main concerns about the administration of the ESL. These are:

- DFES has a conflict of interest as it is both a recipient and distributor of ESL revenue.

⁷⁶⁵ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, Vol. 1, p. 55.

⁷⁶⁶ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, Vol. 1, p. 25.

⁷⁶⁷ Legislative Council Community Development and Justice Standing Committee, *Inquiry into Fire and Emergency Services Legislation*, Report No. 3 in the 37th Parliament, Perth, Parliament of Western Australia, 2006, p. 191.

⁷⁶⁸ Legislative Council Community Development and Justice Standing Committee, *Inquiry into Fire and Emergency Services Legislation*, Report No. 3 in the 37th Parliament, Perth, Parliament of Western Australia, 2006, p. 191.

⁷⁶⁹ Legislative Council Community Development and Justice Standing Committee, *Inquiry into Fire and Emergency Services Legislation*, Report No. 3 in the 37th Parliament, Perth, Parliament of Western Australia, 2006, p. 10.

- There is a lack of transparency and accountability in how DFES spends ESL revenue.
- DFES does not undertake adequate stakeholder consultation on the allocation of ESL revenue.

Each issue is described in more detail, along with the ERA's assessment, in the following sections.

8.3.1 Conflict of interest

8.3.1.1 Stakeholder views on the current system

DFES is both a recipient and distributor of ESL funds. There is a perception among some stakeholders that ESL funds are not being spent in a way that maximises benefits to the broader community.

DFES considers that conflicts are adequately managed.

"The range of controls and oversight in conjunction with their supporting legislative frameworks...ensure robust and transparent accountability for the administration of ESL funds. Further the existing legislation ensures that ESL funding can only be used for the purpose for which it was raised."⁷⁷⁰

DFES states that it manages any potential conflicts of interest by having different teams set ESL rates and allocate ESL funds. The Funding Services branch sets ESL rates in accordance with the process outlined in Section 2.4.1. The Corporate Leadership team, which includes managers from operations and capability commands, makes decisions about how the ESL is spent (see Section 4.7.1).

However, many stakeholders disagree and consider that DFES has a conflict of interest in managing ESL revenue.⁷⁷¹ Cascade Scaddan Fire Review states:

"There is little doubt that DFES are in a position of conflict, in regards to the administration and distribution of the Emergency Services Levy (ESL). This is so given that:

- DFES are reliant upon the ESL to their operating costs;
- DFES are currently the major recipient of ESL funds; and
- DFES are currently the body that otherwise distributes the remainder of the ESL funds to other bodies seeking a portion of those funds."⁷⁷²

⁷⁷⁰ Department of Fire and Emergency Services, *Submission to issues paper*, 10 March 2017, p. 4.

⁷⁷¹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 25 February 2017, p. 3; The Bushfire Front Inc., *Submission to issues paper*, 25 February 2017, p. 2.; Cascade Scaddan Fire Review, *Submission to issues paper*, 10 March 2017, p. 3; Gidgegannup Progress Association (Inc.), *Submission to issues paper*, 27 February 2017, p. 8; Grape Growers Association of W.A. (Inc.), *Submission to issues paper*, 8 March 2017, p. 1; Mangini, J., *Submission to issues paper*, 10 March 2017, p. 9; Shire of Plantagenet Chief Bushfire Officer, *Submission to issues paper*, 21 February 2017, p. 1; Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, p. 21.

⁷⁷² Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, pp. 2-3.

The Bushfire Front says in its submission to the issues paper:

“It is clear that DFES is failing to administer the ESL either efficiently or in accord with the original purpose of the funds, and that there is a grave conflict of interest in allowing DFES to allocate ESL funds to itself.”⁷⁷³

Stakeholders suggest DFES has used its position to allocate ESL funds in a way that prioritises the Department’s objectives and requirements over those of other stakeholders.⁷⁷⁴ For example, some stakeholders consider DFES has allocated too much ESL revenue to response.⁷⁷⁵ The Bushfire Front states that “these funds must be re-directed into bushfire mitigation, especially fuel reduction”.⁷⁷⁶ There was a general theme in submissions that a greater proportion of ESL funds should be spent on prevention⁷⁷⁷ as prevention reduces the risk of a fire or other event,⁷⁷⁸ and “provide[s] a better return for the community than monies spent on response activities”.⁷⁷⁹ The allocation of funding to prevention is discussed in Chapters 3, 4 and 5.

Some stakeholders consider that DFES treats the funding needs of stakeholders inequitably when compared to the requirements of DFES.⁷⁸⁰ The City of Greater Geraldton provides an

⁷⁷³ The Bushfire Front Inc., *Submission to issues paper*, 25 February 2017, p. 2.

⁷⁷⁴ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 25 February 2017, p. 3; Cascade Scaddan Fire Review, *Submission to issues paper*, 10 March 2017, p. 3; Mangini, J., *Submission to issues paper*, 10 March 2017, p. 9; Shire of Plantagenet Chief Bushfire Officer, *Submission to issues paper*, 21 February 2017, p. 1; Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, p. 21.

⁷⁷⁵ The Bushfire Front Inc., *Submission to issues paper*, 25 February 2017, p. 2; Shire of Murray, *Submission to issues paper*, 28 February 2017, p. 4; Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, p. 4.

⁷⁷⁶ The Bushfire Front Inc., *Submission to issues paper*, 25 February 2017, p. 1.

⁷⁷⁷ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 25 February 2017, p. 8; City of Canning, *Submission to issues paper*, 10 March 2017, p. 2; City of Swan, *Submission to issues paper*, 10 March 2017, p. 1; Community and Public Sector Union/Civil Service Association of WA, *Submission to issues paper*, 10 March 2017, p. 1; Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 2; Department of Lands, *Submission to issues paper*, 14 March 2017, pp. 3-4; Shire of Esperance, *Submission to draft report*, 11 August 2017, p. 3; City of Swan, *Submission to issues paper*, 10 March 2017, p. 1; van Rijnswood, E., *Submission to issues paper*, 8 March 2017, p. 1; Gidgegannup Progress Association, *Submission to issues paper*, 27 February 2017, p. 1; Mangini, J., *Submission to issues paper*, 10 March 2017, p. 2; Pastoralists and Graziers Association, *Submission to issues paper*, 10 March 2017, p. 4; Shire of Augusta-Margaret River, *Submission to issues paper*, 9 March 2017, p. 3; Shire of Plantagenet Chief Bushfire Control Officer, *Submission to issues paper*, 13 February 2017, p. 1; The Bushfire Front, *Submission to issues paper*, 25 February 2017, p. 1; Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, p. 4.

⁷⁷⁸ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 1; Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 25 February 2017, p. 8; Cascade Scaddan Fire Review, *Submission to issues paper*, 10 March 2017, p. 2; City of Canning, *Submission to issues paper*, 10 March 2017, p. 2; City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1; Department of Biodiversity, Conservation and Attractions, *Submission to draft report*, 11 August 2017, p. 2; Department of Lands, *Submission to issues paper*, 14 March 2017, pp. 3-4; Shire of Esperance, *Submission to draft report*, 11 August 2017, p. 3; Smith, R., *Submission to draft report*, 7 August 2017, p. 4; The Bushfire Front, *Submission to draft report*, 15 August 2017, p. 1; van Rijnswood, E., *Submission to issues paper*, 8 March 2017, p. 1; Pastoralists and Graziers Association, *Submission to issues paper*, 10 March 2017, p. 4; Shire of Augusta-Margaret River, *Submission to issues paper*, 9 March 2017, p. 3; The Bushfire Front, *Submission to issues paper*, 25 February 2017, p. 1.

⁷⁷⁹ Cascade Scaddan Fire Review, *Submission to issues paper*, 10 March 2017, p. 2.

⁷⁸⁰ Shire of Denmark Chief Bushfire Control Officer, *Submission to issues paper*, 27 February 2017, p. 1; Shire of Esperance, *Submission to draft report*, 11 August 2017, pp. 1-2; Shire of Murray, *Submission to issues paper*, 28 February 2017, p. 3; Shire of Nannup, *Submission to draft report*, 10 August 2017, pp. 1-2; Shire of Woodanilling, *Submission to draft report*, 8 August 2017, p. 1.

example of all expenses for a DFES managed fire being eligible for ESL funding, but heavy machinery and volunteer meals being ineligible for a local government managed fire.⁷⁸¹

Further, the Shire of Denmark's Chief Bush Fire Control Officer says in their submission:

"I believe that this differential treatment of two volunteer services both funded by the ESL is inequitable and contributes to the wide held belief that the BFS [bush fire brigades] is treated as the poor country cousin."⁷⁸²

Other stakeholders consider DFES's control over the ESL has resulted in growth in the number of DFES staff and led to an inefficient organisational size and structure.⁷⁸³ FireStorm Training says in its submission:

"The current system allows an organisation with self-interests to control hundreds of millions of taxpayers' dollars that has resulted in building a megalithic bureaucracy..."⁷⁸⁴

8.3.1.2 Stakeholder views on how the system can be improved

Most stakeholders who have commented on this issue throughout the review consider that any conflict of interest would be best managed by ensuring that entities that receive ESL funds do not have a role in allocating ESL funds, or advising the Minister for Emergency Services on ESL rates.⁷⁸⁵ They also request that a review of DFES's structure be undertaken to ensure it is operating and allocating resources efficiently.⁷⁸⁶

To address concerns about a conflict of interest, the draft report recommended:

- The agency that advises the Minister for Emergency Services on ESL revenue and rates should not benefit from the ESL.
- The Office of Emergency Management should oversee how DFES, and a rural fire service if established:
 - allocates ESL funds to stakeholders; and

ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017

⁷⁸¹ City of Greater Geraldton, *Submission to issues paper*, 20 March 2017, pp. 2-3.

⁷⁸² Shire of Denmark, Chief Bush Fire Control Officer, *Submission to issues paper*, 28 February 2017, p. 1.

⁷⁸³ Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 8; City of Swan, *Submission to issues paper*, 10 March 2017, p. 2; Pastoralists and Graziers Association of Western Australia, *Submission to draft report*, 16 August 2017, p. 5; United Firefighters Union of Australia West Australian Branch, *Submission to draft report*, 11 August 2017, p. 2.

⁷⁸⁴ FireStorm Training, *Submission to issues paper*, 10 March 2017, p. 1.

⁷⁸⁵ Cascade Scaddan Fire Review, *Submission to issues paper*, 10 March 2017, p. 4; Shire of Plantagenet's Chief Bushfire Control Officer, *Submission to issues paper*, 13 February 2017, p. 1; Community and Public Sector Union/Civil Service Association of WA, *Submission to issues paper*, 10 March 2017, p. 7; Department of Lands, *Submission to issues paper*, 14 March 2014, p. 7; Gidgegannup Progress Association (Inc.), *Submission to issues paper*, 27 February 2017, p. 8; Grape Growers Association of WA (Inc.), *Submission to issues paper*, 8 March 2017, p. 1; Shire of Mundaring, Shire of Murray, *Submission to issues paper*, 3 March 2017, p. 1.

⁷⁸⁶ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 13 March 2017, p. 8; City of Swan, *Submission to issues paper*, 10 March 2017, p. 2; Mangini, J., *Submission to issues paper*, 10 March 2017, p. 9.

- spends its share of ESL funds.
- The Department of Treasury should undertake a review of DFES's structure, resources and administration costs to determine whether services are efficiency delivered.

There was strong support from stakeholders for the draft recommendations about the independent advisory and oversight body.⁷⁸⁷ For example, WALGA states that “[t]he sector fully supports the proposition that the agency advising the Minister for Emergency Services on ESL revenue and rates, should not benefit from the ESL”.⁷⁸⁸

The Association of Volunteer Bush Fire Brigades⁷⁸⁹ and Cascade Scaddan Fire Review⁷⁹⁰ state that DFES should not have any involvement in administering the ESL at all.

Stakeholders express differing views in their submissions to the draft report on which organisation should administer the ESL.⁷⁹¹

- The Association of Volunteer Bush Fire Brigades supports the Office of Emergency Management undertaking the role, subject to it being independent of DFES and being funded from general government revenue.⁷⁹²
- The Shire of Plantagenet would prefer that the Department of Premier and Cabinet or the Department of Finance administer the ESL, noting that the Office of Emergency Management’s “existing ties with DFES may take some time to break”, and that “[e]xpertise in emergency management can be gained through recruitment, or through contracting independent expertise....”⁷⁹³
- Mr Glenn Dewhurst suggests that a board comprising members from government, the community and the private sector could manage the ESL.⁷⁹⁴

⁷⁸⁷ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 3; Dewhurst, D., *Submission to draft report*, 11 August 2017, p. 4; Mangini, J., *Submission to draft report*, 11 August 2017, p. 3; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 5; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 1; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 3; The Bushfire Front, *Submission to draft report*, 15 August 2017, p. 1; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 4.

⁷⁸⁸ Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p.1.

⁷⁸⁹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 4.

⁷⁹⁰ Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 1.

⁷⁹¹ In their submissions to the issues paper, the Bushfire Front and Cascade Scaddan Fire Review agreed with the recommendations of the Ferguson report that the Department of Finance should administer the ESL. Other stakeholders suggested that the Department of Treasury, the Public Sector Commission, the ERA or the Office of the Auditor General could administer the ESL. These stakeholders included Mr. J Mangini, the Pastoralists and Graziers Association, Mr. E van Rinswoud, and the Western Australian Local Governments Association.

The Office of Emergency Management noted in its submission to the issues paper that it “administers a range of State and Commonwealth Government grant programs to the emergency management sector”, “has complete financial independence” and “has developed a broad and deep understanding of the State’s emergency management arrangements, including the risks and capabilities that exist across the sector”. (Source: Office of Emergency Management, *Submission to issues paper*, 9 March 2017, p. 5.)

⁷⁹² Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 3.

⁷⁹³ Shire of Plantagenet, *Submission to draft report*, 11 August 2017, pp. 1-2.

⁷⁹⁴ Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 4.

Other stakeholders are concerned that establishing a new organisation to oversee administration of the ESL would create an additional layer of bureaucracy. DFES states:

“[A]dding an additional layer of oversight and bureaucracy to the current budget development and review process through the transfer of the ESL administration to the Office of Emergency Management (OEM), is considered an excessive and unnecessarily costly approach to addressing a perceived rather than real conflict of interest. While DFES does not oppose the administration of the ESL in relation to rate determination, collection and disbursement, being transferred to an independent agency, it considers the existing level of oversight that is provided by the Minister, Cabinet and Treasury through the State Budget process to be appropriate.”⁷⁹⁵

The United Firefighters Union suggests:

“[I]f there is a need to increase the oversight of DFES’s, spending management and distribution of the ESL then Government could set up an enhanced regime of reporting through the Departments or officers of the Treasury or Auditor General in WA. DFES could be compelled to provide further reports to the Parliament without the need to establish a new OEM [Office of Emergency Management].”⁷⁹⁶

All stakeholders that commented on the draft recommendation that the Department of Treasury should undertake a review of DFES structure, resources and administration support it, including DFES.⁷⁹⁷ DFES notes that this recommendation could:

“...alleviate the perceived conflict of interest issue in relation to how DFES allocates and spends ESL revenue.”⁷⁹⁸

8.3.1.3 Economic Regulation Authority assessment

This section sets out the ERA’s assessment of two issues:

- Whether there is a conflict of interest – actual or perceived.
- Whether there are sufficient external controls to address any actual or perceived conflict of interest.

The nature of conflict of interest

Stakeholders consider that DFES has a conflict of interest in its administration of the ESL, which influences how ESL funds are allocated.

There is some evidence to support this view, but the evidence is not conclusive.

The evidence includes that:

- while DFES’s own-purpose expenditures have grown since the ESL was introduced, the grant funding provided to the volunteer organisations managed by local

⁷⁹⁵ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 4.

⁷⁹⁶ United Firefighters Union of Australia West Australian Branch, *Submission to draft report*, 11 August 2017, p. 2.

⁷⁹⁷ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 5; Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 5; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 5.

⁷⁹⁸ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 5.

governments has made up a lower proportion of DFES's total expenditure in recent years compared to when the ESL was first introduced,⁷⁹⁹ and

- the proportion of DFES's expenditures that are funded by the ESL has increased from 66 per cent in 2004-05 to 82 per cent in 2015-16.⁸⁰⁰

In its submission to the draft report, DFES states:

"This statement is unsubstantiated and incorrect. DFES can provide evidence that the extent of eligible expenditure under the LGGS [Local Government Grants Scheme] has expended."⁸⁰¹

The ERA sought this additional information from DFES. DFES advises the expansion in eligible expenditure for operating grants includes sustaining fleet, equipment and facility operating costs; providing and maintaining personal protective clothing and equipment; enhanced and additional operational equipment; and the provision of additional goods and services to assist volunteer retention. DFES states eligible expenditure for capital grant items now includes enhanced design and capability of fleet assets, additional fleet asset acquisitions identified to Resource to Risk and Service Level Agreements and additional specialised fleet acquisitions.⁸⁰²

Further information about the amount of funds DFES has allocated to local governments and the volunteer organisations they manage can be found in Section 3.3.1.

Not all of these issues reflect decisions by DFES. The State Government has made policy decisions to maximise DFES's expenditures that are funded through the ESL and minimise the expenditures funded through general government revenue.⁸⁰³ The State Government's contribution (from general government revenue) to DFES's funding decreased by 5.9 per cent a year in real terms from 21 per cent of DFES's total revenue in 2004-05 to 13 per cent in 2015-16.⁸⁰⁴

Conflict of interest may be real or perceived. To ensure good governance, both should be avoided. The issue is therefore not only whether DFES has used its authority to its own advantage, but whether it has the opportunity to do so.

Many stakeholders who have made submissions to this review perceive that there is a conflict of interest in DFES administering the ESL, and some believe that DFES has taken advantage of this. These perceptions are long-held, having previously been considered by

⁷⁹⁹ As shown in Chapter 3, DFES expenditures increased by an average of 4.8 per cent a year in real terms between 2004-05 and 2015-16. Over this period, grants and subsidies paid to local governments have varied from year to year. However, a lower proportion of DFES's expenditure has been on grants paid to local governments in recent times compared to when the ESL was first introduced.

⁸⁰⁰ As shown in Chapter 3, based on data provided in DFES's annual reports between 2005-06 and 2015-16.

⁸⁰¹ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 11.

⁸⁰² Communication with the Department of Fire and Emergency Services, 12 September 2017

⁸⁰³ Quirk, M., Motion, *Hansard*, Assembly, 9 September 2015, p. 6029b-6041a.

⁸⁰⁴ As shown in Chapter 3, based on data provided in DFES's annual reports between 2005-06 and 2015-16.

the Community Development and Justice Standing Committee⁸⁰⁵ in 2006 and in the Ferguson⁸⁰⁶ and Keilty reports.⁸⁰⁷

Previous efforts to address DFES's conflict of interest have not resolved the issue. For example, the 2011 Keilty report recommended that the State Government move responsibility for the management and distribution of the ESL to the Department of Finance.⁸⁰⁸ DFES and the Department of Finance examined this issue, but found no major benefit evident in transferring the assessment and collection of the ESL to the Department of Finance.⁸⁰⁹ Stakeholders and Mr Ferguson considered that this recommendation had not been implemented because considerations about doing so were not sufficiently inclusive or transparent.⁸¹⁰

Such concerns will continue unless stakeholders consider that appropriate measures are in place to manage conflicts of interest. Additional external oversight of how ESL revenue is allocated is needed, because DFES has an opportunity to use its dual role in allocating and spending ESL revenue to favour its own needs over that of other stakeholders. However, the additional oversight should be proportionate to the risk posed by the conflict of interest. Recommendations on this issue are in Section 8.6.

Current external oversight of DFES's decisions

DFES is subject to the same administrative and financial controls that apply to all state government agencies (accountable authorities) in Western Australia.⁸¹¹ In the case of DFES, these controls include:

- compliance with the *Public Sector Management Act 1994* and the *Financial Management Act 2006*;
- compliance with legislation specific to DFES,⁸¹² which ensures that ESL funds can only be applied for the purposes it was raised;⁸¹³
- oversight by a Cabinet minister (being the Minister for Emergency Services);
- twice yearly consideration of the DFES budget by the Department of Treasury and the Economic and Expenditure Review Committee of Cabinet through the State Budget process and the mid-year review;

⁸⁰⁵ Legislative Council Community Development and Justice Standing Committee, *Inquiry into Fire and Emergency Services Legislation*, Report No. 3 in the 37th Parliament, Perth, Parliament of Western Australia, 2006, p. xxxi.

⁸⁰⁶ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, 2016, Vol. 1, p. 54.

⁸⁰⁷ Keilty, M. APM AO, *A Shared Responsibility: Perth Hills Bushfire Inquiry*, Perth, Government of Western Australia, 2011, p. 177.

⁸⁰⁸ Keilty, M. APM AO, *A Shared Responsibility: Perth Hills Bushfire Inquiry*, Perth, Government of Western Australia, 2011, p. 22.

⁸⁰⁹ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, Vol. 1, p. 55.

⁸¹⁰ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, 2016, Vol. 1, p. 56.

⁸¹¹ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 5.

⁸¹² *Fire Brigades Act 1942*, *Bush Fires Act 1954*, *Fire and Emergency Services Act 1998*.

⁸¹³ Department of Fire and Emergency Services, *Submission to issues paper*, 10 March 2017, p. 4.

- application of expenditure limits, salary caps and full time equivalent staff numbers; and
- annual financial audits by the Office of the Auditor General.

DFES is meeting its obligations under the *Financial Management Act 2006*. DFES has not received qualified audits from the Office of the Auditor General.⁸¹⁴

The Department of Treasury has advised the ERA that, compared to other state government agencies, DFES may be subject to additional scrutiny as part of the annual budget process. This is because the Department of Treasury considers the effect the ESL has on the household fees and charges model, as well as considering the overall DFES budget.⁸¹⁵

DFES is of the view that the current budget process is “appropriate, efficient and equitable”, and “ensures that the FES [Fire and Emergency Services] Commissioner is afforded the same level of responsibility and accountability as other Accountable Authorities for the financial management of the functions and services under their control as prescribed in part 4 of the *Financial Management Act 2006*”.⁸¹⁶ DFES⁸¹⁷ and the Western Australian Volunteer Fire and Rescue Services Association⁸¹⁸ note that the financial responsibilities of the Commissioner under the *Financial Management Act 2006* should not be viewed in isolation of the emergency services Acts.

These external constraints are effective for their intended purpose. However, their intended purpose is not to ensure that DFES allocates and spends the ESL efficiently. The audits only provide assurance to Parliament that the financial statements and key performance indicators of DFES are based on proper accounts and are fairly presented.⁸¹⁹ The audits do not examine whether DFES is acting in an efficient manner.

Further, the household fees and charges model referred to by the Department of Treasury does not determine whether an increase in ESL rates is reasonable or necessary. The model estimates the costs incurred by a representative household through the consumption of certain goods and services to show the effect of changes in major government tariffs, fees and charges.⁸²⁰

Other external constraints could help to address some of stakeholders’ concerns. For example, some government agencies have the power to undertake reviews to determine whether other agencies are operating efficiently.

To date there have not been general reviews of the performance of DFES. The Office of the Auditor General has not undertaken a performance review of DFES, which would assess whether DFES is exercising restraint when it raises ESL rates and is spending ESL funds efficiently. The Department of Treasury and the Public Sector Commission have not undertaken a value for money audit or performance review of DFES. Such reviews would

⁸¹⁴ Communication with Department of Fire and Emergency Services, 14 June 2017.

⁸¹⁵ Communication with the Department of Treasury, 1 March 2017.

⁸¹⁶ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 4.

⁸¹⁷ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 5.

⁸¹⁸ Western Australian Volunteer Fire and Rescue Service Association, *Submission to draft report*, 11 August 2017, p.1.

⁸¹⁹ Office of the Auditor General, *What we do*, Perth, Government of Western Australia, <https://audit.wa.gov.au/about-the-oag/what-we-do/>, (accessed on 13 June 2017).

⁸²⁰ Department of Treasury, *2016-17 Budget Paper No. 3 Economic and Fiscal Outlook*, Perth, Government of Western Australia, 2017, p. 283.

also help to determine whether DFES is operating efficiently, including in how it allocates and spends ESL revenue.

This report does not include a review of DFES to determine whether it is operating efficiently, as this is outside the terms of reference. However, it would be beneficial for an organisation such as the Department of Treasury to review DFES's structure and resources.

8.3.2 Transparency

8.3.2.1 Stakeholder views on the current system

Another theme in stakeholder submissions is that information on the administration of the ESL, including how and where funds are allocated, should be made transparent.

DFES is of the view its administration of the ESL is transparent, stating in its submission to the issues paper:

"All information regarding the administration and distribution of ESL funding is readily available to the public on the DFES website. In addition comprehensive audited financial reports are published annually in DFES' Annual Report, which is tabled in Parliament as are DFES' budget papers which are available on the Department of Treasury's website."⁸²¹

Many stakeholders had different views, with volunteers,⁸²² local governments,⁸²³ the United Firefighters Union⁸²⁴ and members of the public⁸²⁵ in their submissions to the issues paper stating that the information DFES publishes on the ESL is insufficient, or calling for greater transparency.

Some of these stakeholders commented on a lack of information being provided, and information that is provided not being published in a sufficiently disaggregated form:

"The process of both collecting and distributing ESL funds should be completely public with statistical data produced indicating where funds are sourced from and where funds are allocated."⁸²⁶

"DFES should release expenditure data at a more detailed level, such as separating direct career fire station staff and costs separate to its other activities, which should be reported on as individual activity hubs. Furthermore, this detail should further be refined to show spending by geographical area."⁸²⁷

Some stakeholders, including the Association of Volunteer Bush Fire Brigades⁸²⁸ and the City of Swan,⁸²⁹ said not having access to information on the ESL makes it difficult to

⁸²¹ Department of Fire and Emergency Services, *Submission to issues paper*, 10 March 2017, p. 4.

⁸²² These include, for example, the Association of Volunteer Bush Fire Brigades WA Inc. and the State Emergency Service Volunteers Association.

⁸²³ Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, p. 2.

⁸²⁴ United Firefighters Union of Australia West Australian Branch, *Submission to issues paper*, 17 March 2017, p. 5.

⁸²⁵ These include, for example, Mr. J. Mangini and Mr. E. van Rinjsoud.

⁸²⁶ Shire of Harvey, *Submission to issues paper*, 24 February 2017, p. 2.

⁸²⁷ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 13 March 2017, p. 2.

⁸²⁸ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 13 March 2017, p. 7.

⁸²⁹ City of Swan, *Submission to issues paper*, 10 March 2017, p. 2.

scrutinise or make DFES accountable for how ESL funds are spent. Some local governments feel that they do not have suitable information to assess how DFES administers the ESL, despite collecting ESL revenue and receiving some ESL funds as grants and for administration purposes. The Shire of Harvey calls for “[t]he entire process [to] be open to scrutiny for all stakeholders including local governments and members of the community”.⁸³⁰

Information on the ESL is available in DFES’s annual report. However, it can be difficult for stakeholders to understand this information, as it is prepared for accounting purposes. As an example, the Association of Volunteer Bush Fire Brigades presented analysis in its submission to the issues paper which demonstrated the disparity of growth between ESL revenue allocated to DFES and that allocated to bush fire brigades. The ERA attempted to replicate the analysis and found that an additional line item should have been included in the Association of Volunteer Bush Fire Brigades’ analysis. This demonstrates that the information DFES publishes on the ESL is not clear or easy to interpret.

8.3.2.2 Stakeholder views on how the system can be improved

The draft report included several recommendations to improve transparency. These are:

- The Office of Emergency Management should prepare and publish an annual report on the ESL.
- The Office of Emergency Management should prepare a brochure on the ESL and provide it to local governments to distribute with rate notices. The brochure should explain the purpose of the ESL and that it is a state government levy, and describe how ESL revenue is raised and spent.
- The Office of Emergency Management should prepare annual estimates of the funding required by the former Department of Lands and the former Department of Parks and Wildlife to conduct prevention activities on their estates. These estimates should be published in the annual report of each agency, along with the amount of funding provided by the State Government.
- DFES should publish data in accordance with the State Government’s *Whole of Government Open Data Policy*.
- The Office of Bushfire Risk Management should require local governments to publish their bushfire risk management plans and treatment strategies.
- DFES should publish a capital grants manual for volunteer organisations it manages (for example the Volunteer Fire and Rescue Service).
- The Office of Emergency Management should prepare a report to the Minister for Emergency Services recommending total ESL revenue and rates. This Minister should table the report in Parliament within 28 days of receiving it.
- DFES, and a rural fire service if established, should provide a report to the Office of Emergency Management explaining how it has spent ESL funds and the rationale for this expenditure.

⁸³⁰ Shire of Harvey, *Submission to issues paper*, 24 February 2017, p. 2.

Submissions to the draft report include mostly positive feedback on these recommendations. WALGA states when it consulted with members there was “overwhelming support for greater transparency around the administration and distribution of the ESL”.⁸³¹ The Shire of Nannup is of the view that greater transparency may be a way of addressing the distrust of State Government from most local governments.⁸³² The Bushfire Front,⁸³³ Association of Volunteer Bush Fire Brigades,⁸³⁴ and DFES⁸³⁵ also support a move to greater transparency. Mr Glenn Dewhurst states that, “[w]e need to increase transparency and accountability of the process”.⁸³⁶

Many stakeholders state that an important part of improving transparency is increasing engagement with stakeholders. For example, the Association of Volunteer Bush Fire Brigades states that there is a “need to promote transparent decision-making processes that involve public consultation”.⁸³⁷ Stakeholder consultation is discussed in Section 8.3.3. Even where stakeholders had concerns about a particular recommendation, many acknowledge the intent of the recommendation to improve transparency.

8.3.2.3 Economic Regulation Authority assessment

Administration of the ESL should be more transparent. This will provide stakeholders better information about the ESL so they can be informed about how DFES is allocating ESL funds.

DFES has, over time, reduced the amount and types of information it publishes on the ESL. Until 2013, DFES published a brochure on ESL administration that local governments included with rating notices. Relatively detailed information on how the ESL was spent (but not raised) was also available in the *State of the Service* report. DFES last published this report in December 2012.⁸³⁸

At present, only limited information on the ESL is available on DFES’s website. This includes a brief overview of why the ESL was introduced, what it pays for and answers to frequently asked questions.

The DFES website also lists the volunteer organisations whose operating costs are funded by the ESL, and the general cost categories that are considered operating costs (for example, running and maintaining vehicles). Additional information about eligible items for State Emergency Service units and bush fire brigades is available in the local government grants manual. However, DFES does not publish information on the eligible items and the process for ESL fund allocation for the volunteer organisations that it administers (for example, the Volunteer Fire and Rescue Service).

DFES does not publish information on where ESL funds are raised, either by ESL category, or by local government area. It also does not provide information on revenue raised compared to expenses incurred in each ESL category or local government area. DFES has extensive data on the resources allocated to incidents by location, as well as accounting

⁸³¹ Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 5.

⁸³² Shire of Nannup, *Submission to draft report*, 10 August 2017, p. 1.

⁸³³ The Bushfire Front, *Submission to draft report*, 15 August 2017, p. 1.

⁸³⁴ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 1.

⁸³⁵ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 5.

⁸³⁶ Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 9.

⁸³⁷ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 1.

⁸³⁸ Department of Fire and Emergency Services, *State of the Service: December 2012*, Perth, Government of Western Australia, 2012.

information on grants provided by local government area, and overall costs incurred. If DFES implements an activity-based costing system (as recommended in Chapter 4), and uses this along with its incident data, it could produce and publish more informative data on how the ESL is allocated and spent.

8.3.3 Stakeholders' role in decision-making

8.3.3.1 Stakeholder views on the current system

DFES has structures and processes in place that allow it to obtain stakeholder input into grant allocations. These include:

- review of the Capital and Operating Grants Manual is done in consultation with the State Emergency Services Volunteer Advisory Committee, the Association of Volunteer Bush Fire Brigades (in the absence of a Bush Fire Brigade Volunteer Advisory Committee) and WALGA;⁸³⁹ and
- the Bush Fire Brigades Capital Grants Committee and the State Emergency Service Capital Grants Committee oversee capital funding allocations to local governments for bush fire brigades and State Emergency Service units.⁸⁴⁰

Stakeholders are of the view they are not provided with sufficient opportunity to be involved in decisions about ESL expenditure,⁸⁴¹ and that when DFES does consult, it is not genuine.⁸⁴² In its response to the issues paper, the State Emergency Services Volunteers Association notes that:

“...there are misleading comments on page 3 of the [local government grants scheme] manual about the SES VAC [State Emergency Service Volunteer Advisory Committee] being consulted. The interaction of the VAC may have been construed by the LGGS [Local Government Grants Scheme] author as consultation. Where the SES VAC has offered input, [] and usually not invited by DFES, does not constitute ‘consultation’ in any collaborative sense.”⁸⁴³

At regional consultation sessions, one stakeholder said it was listed as being consulted in the review of the Capital and Operating Grants Manual, but this is not the case. Stakeholders also said volunteer organisations have few representatives on the committees.⁸⁴⁴

⁸³⁹ Department of Fire and Emergency Services, *Local Government Grants Scheme Manual for Capital and Operation Grants 2017/18*, Perth, Government of Western Australia, 2017, p. 3.

⁸⁴⁰ Department of Fire and Emergency Services, *Local Government Grants Scheme Manual for Capital and Operation Grants 2017/18*, Perth, Government of Western Australia, 2017, p. 22.

⁸⁴¹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 13 March 2017, p. 8; State Emergency Service Volunteer Association, *Submission to issues paper*, 13 March 2017, p. 5.

ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017.

⁸⁴² State Emergency Service Volunteer Association, *Submission to issues paper*, 13 March 2017, p. 5.

ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017

⁸⁴³ State Emergency Service Volunteer Association, *Submission to issues paper*, 13 March 2017, p. 5.

⁸⁴⁴ ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017

The Association of Volunteer Bush Fire Brigades is of the view it is not provided a sufficient right to appeal when DFES makes decisions about the ESL:

“Emergency Service organisations that are funded by the ESL have no role in decision making and importantly no avenue to dispute DFES decisions, other than appealing to the [] Fire and Emergency Services Commissioner, on the use and distribution of the ESL. [The] Department of Fire and Emergency Services have changed the rules over time that they can now direct Local Government to change their applications to “do as they are told without any right of appeal...”⁸⁴⁵

8.3.3.2 Stakeholder views on how the system can be improved

The draft report made the following recommendations aimed at addressing these concerns:

- The Office of Emergency Management should consult stakeholders when:
 - determining the ESL revenue to be allocated to stakeholders; and
 - advising the Minister for Emergency Services on ESL revenue and rates.
- The Office of Emergency Management should be the body of appeal for ESL-related issues, and the Fire and Emergency Services Commissioner’s appeal role should be revoked.

Further recommendations to improve stakeholder consultation on what the ESL can fund are discussed in Section 8.3.2.2.

Stakeholders support the draft recommendations about governance, transparency and accountability, but this support is conditional on them being consulted when the recommendations are implemented. For example, stakeholders call for the Office of Emergency Management to consult with stakeholders as part of its management of the ESL,⁸⁴⁶ when developing new emergency services legislation,⁸⁴⁷ preparing a brochure on the ESL⁸⁴⁸ and reviewing the Local Government Grants Scheme Manual.⁸⁴⁹

The Western Australian Volunteer Fire and Rescue Services Association calls for local governments to also increase consultation:

“Local Governments should ensure their BGU’s [brigades, groups and units] are aware of any funding requests and seek the support of same prior to submitting requests to OEM [Office of Emergency Management]. This would also ensure that any funding sought is actually required (in terms of equipment, vehicles etc.) by the BGU concerned”.⁸⁵⁰

⁸⁴⁵ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 13 March 2017, p. 7.

⁸⁴⁶ van Rijnsdoud, E., *Submission to draft report*, 2 August 2017, p. 1.

⁸⁴⁷ Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 7.

⁸⁴⁸ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 14.

⁸⁴⁹ Hawke, A., *Submission to issues paper*, 10 March 2017, p. 8.

⁸⁵⁰ Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 4.

DFES acknowledges that stakeholders would like more involvement in funding allocation decisions.⁸⁵¹

It suggests that an alternative and more cost effective approach to the Office of Emergency Management having an advisory and oversight role could be to extend the role of the Volunteer Advisory Committees to include advising the Accountable Authority⁸⁵² on strategic resourcing matters.⁸⁵³ It considers that this would provide “an effective mechanism for raising budget concerns”.⁸⁵⁴

It also suggests that current governance arrangements, including committee structures, terms of reference and appeal mechanisms, should be strengthened to meet stakeholders’ expectations.⁸⁵⁵

This is consistent with the views of many other stakeholders, including Mr Alan Hawke who states:

“The ESL allocation to SES to require a deliberative process that includes stakeholders who have an effective say, with a right of appeal to an independent person, such as the Director-General for Finance”.⁸⁵⁶

DFES notes that it is working with stakeholders to understand how resourcing requirements are changing, but that to meet their demands, greater funding would be required.⁸⁵⁷

The Association of Volunteer Bush Fire Brigades only partially supports the draft recommendation that the Office of Emergency Management should consult stakeholders when determining the high level allocation of ESL funds to stakeholders and advising the Minister for Emergency Services on ESL rates.⁸⁵⁸ It is concerned that this consultation would provide a disincentive for the Minister to be kept informed on ESL matters.⁸⁵⁹

It is not clear why requiring the Office of Emergency Management to consult stakeholders would reduce the extent to which the Minister is kept informed on ESL matters. The Minister of Emergency Services must set ESL rates each year, as required by the *Fire and Emergency Services Act 1998* (Division 3). DFES currently advises the Minister on what these rates should be (following the process outlined in Section 2.4.1). The draft report recommended that responsibility for advising the Minister on ESL rates should transfer to the Office of Emergency Management as the independent advisory and oversight body. That is, the Office of Emergency Management would be required to provide advice to the Minister, and must consult with stakeholders to develop this advice. The recommendation for the Office of Emergency Management to consult stakeholders during this process is to assist address stakeholder concerns that ESL rates (and hence revenue) have increased, as well as comments that there is insufficient ESL funding to provide the necessary emergency management activities.

⁸⁵¹ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 5.

⁸⁵² As defined in Part 4 of the *Financial Management Act 2006*

⁸⁵³ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 4.

⁸⁵⁴ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 4.

⁸⁵⁵ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 5.

⁸⁵⁶ Hawke, A., *Submission to issues paper*, 10 March 2017, p. 6.

⁸⁵⁷ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 5.

⁸⁵⁸ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 13.

⁸⁵⁹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 13.

8.3.3.3 *Economic Regulation Authority assessment*

DFES has processes in place to consult stakeholders on decisions about how the ESL is spent. Despite this, some stakeholders consider they do not have sufficient opportunity to inform DFES's decisions, including decisions to allocate funds through the Local Government Grants Scheme.

It is important stakeholders have sufficient opportunities to provide input into decisions about how the ESL is spent. As set out in Section 8.4, this could include the following:

- DFES consulting with stakeholders when preparing a submission to the independent advisory and oversight organisation on how ESL funds should be allocated between DFES, the Career Fire and Rescue Service, local government and each type of volunteer brigade.
- The independent advisory and oversight organisation consulting stakeholders when it advises the Minister for Emergency Services on ESL revenue and rates, and recommends how the ESL funds should be allocated between DFES, the Career Fire and Rescue Service, local government and each type of volunteer brigade.
- DFES consulting stakeholders, including WALGA and volunteer advisory committees when developing the funding allocation manual for frontline services (capital and operating expenditure).
- DFES consulting stakeholders, including WALGA, to develop a process for local governments to apply for funding for emergency management activities (as set out in Chapter 5).
- The independent advisory and oversight organisation working with WALGA to determine how to best communicate to property owners the purpose of the ESL.

This report also recommends changes to the appeals process which will provide stakeholders greater opportunity to appeal a decision on a funding application. These changes are discussed in Section 8.4.

8.3.4 *Local Government Grants Scheme Manual*

Some stakeholders question the appropriateness of decisions by DFES about the items that are eligible and ineligible to be purchased using ESL revenue, as identified in the Local Government Grants Scheme manual.⁸⁶⁰ They say that decisions about what items are

⁸⁶⁰ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, pp. 1 and 12; Bayswater State Emergency Services Unit, *Submission to issues paper*, 1 February 2017, p. 1; City of Greater Geraldton, *Submission to issues paper*, 20 March 2017, pp. 1-3; City of Swan, *Submission to issues paper*, 10 March 2017, p. 2; Shire of Denmark Chief Bushfire Control Officer, *Submission to issues paper*, 27 February 2017, p. 1; Shire of Esperance, *Submission to draft report*, 11 August 2017, pp. 1-2; Shire of Manjimup, *Submission to issues paper*, 10 March 2017, p. 1; Shire of Mundaring, *Submission to issues paper*, 3 March 2017, p. 2; Shire of Murray, *Submission to issues paper*, 28 February 2017, p. 3; Shire of Nannup, *Submission to draft report*, 10 August 2017, pp. 1-2; Shire of Woodanilling, *Submission to draft report*, 8 August 2017, p. 1; State Emergency Services Volunteer Association, *Submission to issues paper*, 10 March 2017, p.1, 3, 5-7; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 1; Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, pp. 16, 19-20.

ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017

eligible and ineligible do not always reflect the needs of volunteer organisations, for example, equipment that they require may be deemed by DFES to be ineligible.⁸⁶¹ They also feel they are treated inequitably in resource allocation decisions compared to DFES managed organisations, including the Career Fire and Rescue Service and Volunteer Fire and Rescue Service.⁸⁶²

The Shire of Nannup states:

“An example of this includes but is not limited to the reimbursement for IT [information technology] devices bought for brigades to ensure that they remain up to date while participating in a current emergency situation. At present only career fire fighters can make expenditure claims for these types of items. This further enhances the perception that is held by many volunteers that the colour of the truck goes a long way in deciding the level of funding and support offered. This should not be the case.”⁸⁶³

The City of Bayswater State Emergency Service Unit provides another example:

“When it comes to the Manual for Capital and Operating Grants, - it is full of discrepancies and confusion and the list of eligible/ineligible items has been drawn up without any consultation leading to such things as “Compass – hand held- 1 per brigade/unit” as an SES unit that provides a search capability this is ludicrous.”⁸⁶⁴

The Shire of Esperance provides the example of many ineligible items, including mobile pump units, radio networks and standard first aid equipment, being critical during an incident.⁸⁶⁵

Stakeholders also state that the equipment they are eligible for is not fit for purpose, in part due to a ‘one-size-fits-all’ approach being applied.⁸⁶⁶

WALGA calls for a review of the Local Government Grants Scheme manual.⁸⁶⁷

⁸⁶¹ Bayswater State Emergency Services Unit, *Submission to issues paper*, 1 February 2017, p. 1; City of Greater Geraldton, *Submission to issues paper*, 20 March 2017, pp. 1-3; City of Swan, *Submission to issues paper*, 10 March 2017, p. 2; Shire of Denmark Chief Bushfire Control Officer, *Submission to issues paper*, 27 February 2017, p. 1; Shire of Esperance, *Submission to draft report*, 11 August 2017, pp. 1-2; Shire of Mundaring, *Submission to issues paper*, 3 March 2017, p. 2; Shire of Murray, *Submission to issues paper*, 28 February 2017, p. 3; Shire of Nannup, *Submission to draft report*, 10 August 2017, pp. 1-2; Shire of Woodanilling, *Submission to draft report*, 8 August 2017, p. 1; State Emergency Services Volunteer Association, *Submission to issues paper*, 10 March 2017, p. 1, 3, and 5-7; and Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 1.

ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017

⁸⁶² Shire of Denmark Chief Bushfire Control Officer, *Submission to issues paper*, 27 February 2017, p. 1; Shire of Esperance, *Submission to draft report*, 11 August 2017, pp. 1-2; Shire of Murray, *Submission to issues paper*, 28 February 2017, p. 3; Shire of Nannup, *Submission to draft report*, 10 August 2017, pp. 1-2; and Shire of Woodanilling, *Submission to draft report*, 8 August 2017, p. 1.

ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017

⁸⁶³ Shire of Nannup, *Submission to draft report*, 10 August 2017, p. 1.

⁸⁶⁴ Bayswater State Emergency Service, *Submission to issues paper*, 1 February 2017, p. 1.

⁸⁶⁵ Shire of Esperance, *Submission to draft report*, 11 August 2017, p. 4.

⁸⁶⁶ ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017

⁸⁶⁷ Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 1.

The ERA has included recommendations about the processes by which local governments should be able to access ESL funding, including about the Local Government Grants Scheme Manual, in Section 8.4 below.

8.4 Alternative governance arrangements

As set out above, there is a perception that there are not sufficient controls on the use of ESL revenue by DFES, and a view that there should be improved transparency and accountability in administering ESL revenue.

This does not necessarily mean that DFES has made inappropriate decisions about how the ESL is spent. For example, many stakeholders think DFES should spend more on prevention, but the ERA broadly agrees with DFES that the main responsibility for prevention lies with property owners (see Chapter 5).

However, good governance requires that appropriate controls and processes are in place, and that these are seen by stakeholders to be applied appropriately. The remainder of this chapter provides the ERA's considerations and recommendations about how governance arrangements for the ESL could be improved to increase accountability and transparency, and ensure DFES has appropriate incentives to best manage ESL funds.

Broadly, the package of measures that this report recommends includes that:

- DFES should continue to administer the ESL;
- an independent organisation should oversee DFES's administration of the ESL;
- the same independent organisation should advise the Minister on the setting of ESL revenue and rates;
- DFES should develop processes in consultation with stakeholders which guide how decisions are made about allocating funds to the Career Fire and Rescue Service, volunteer brigades and local governments; and
- the appeal role should transfer from the Fire and Emergency Services Commissioner to the independent advisory and oversight body.

8.4.1 *Should an organisation other than the Department of Fire and Emergency Services administer the Emergency Services Levy?*

DFES's authority in administering the ESL means there is the opportunity for it to make decisions that advantage itself rather than the broader community. It having this opportunity is not aligned with stakeholder expectations. DFES should not advise the Minister for Emergency Services on ESL rates, and there need to be better checks and balances on how DFES allocates ESL funds. An independent organisation should advise the Minister for Emergency Services on ESL rates, and oversee how DFES allocates ESL funds.

Some other Australian jurisdictions have organisations that provide an oversight function of emergency services funding. For example, in Victoria Emergency Management Victoria and the Inspector-General for Emergency Management provide a strategic direction and

oversight function.⁸⁶⁸ The Queensland Inspector-General Emergency Management performs reviews and assessments of Queensland's disaster and emergency management arrangements.⁸⁶⁹ South Australia has a board – the South Australian Fire and Emergency Services Commission – that manages the fire services and State Emergency Services.⁸⁷⁰

Some stakeholders are of the view that having an organisation undertake an independent advisory and oversight role is not sufficient to address DFES's conflict of interest (see Section 8.3.1.2).⁸⁷¹ These stakeholders have suggested that responsibility for administering the ESL be transferred from DFES to another organisation to overcome concerns about conflicts of interest in the administration of the ESL.⁸⁷²

DFES is of the view that it should continue to administer the ESL,⁸⁷³ stating that it:

“...has emergency service expertise, financial management experience and adheres to the State Government financial controls, to ensure the accountable and efficient distribution of ESL funds in a cost effective and transparent manner.”⁸⁷⁴

In its submission to the draft report, DFES states:

“While DFES does not oppose the administration of the ESL in relation to rate determination, collection and reimbursement, being transferred to an independent agency, it considers the existing level of oversight that is provided by the Minister, Cabinet and Treasury through the State budget process to be appropriate.”⁸⁷⁵

Day-to-day administration of the ESL should not transfer from DFES to an independent organisation. Providing emergency services (including broader emergency management activities) is a core function of DFES, and it is best placed to make decisions about where the greatest risks are and the priorities for funding.

As noted above, any additional oversight over administration of the ESL should be proportionate to the risk posed by the conflict of interest. The ERA's recommendations about the independent oversight and advisory body, combined with those set out below to increase transparency and consultation, should address DFES's perceived conflict of

⁸⁶⁸ Emergency Management Victoria, *About us*, Melbourne, Government of Victoria, <https://www.emv.vic.gov.au/about-us>, (accessed 31 January 2017); Inspector-General for Emergency Management, *About the Inspector-General for Emergency Management*, Melbourne, Government of Victoria, <http://www.igem.vic.gov.au/home/about+us/about+the+inspector+general+for+emergency+management/>, (accessed 31 January 2017).

⁸⁶⁹ Australasian Fire and Emergency Services Authorities Council, *Understanding Our Business Survey 2015/16*, Australasian Fire and Emergency Services Authorities Council, Melbourne, 2016, p.7.

⁸⁷⁰ South Australian Fire and Emergency Services Commission, *About Us*, Adelaide, Government of South Australia, http://www.safecom.sa.gov.au/site/about_us.jsp, (accessed 31 January 2017).

⁸⁷¹ Department of Fire and Emergency Services, *Submission to issues paper*, 10 March 2017, p. 5.

⁸⁷² Cascade Scaddan Fire Review, *Submission to issues paper*, 10 March 2017, p. 4; Shire of Plantagenet's Chief Bushfire Control Officer, *Submission to issues paper*, 13 February 2017, p. 1; Community and Public Sector Union/Civil Service Association of WA, *Submission to issues paper*, 10 March 2017, p. 7; Department of Lands, *Submission to issues paper*, 14 March 2014, p. 7; Gidgegannup Progress Association (Inc.), *Submission to issues paper*, 27 February 2017, p. 8; Grape Growers Association of WA (Inc.), *Submission to issues paper*, 8 March 2017, p. 1; Shire of Mundaring, Shire of Murray, *Submission to issues paper*, 3 March 2017, p. 1.

⁸⁷³ Department of Fire and Emergency Services, *Submission to issues paper*, 10 March 2017, p. 5.

⁸⁷⁴ Department of Fire and Emergency Services, *Submission to issues paper*, 10 March 2017, p. 5.

⁸⁷⁵ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 4.

interest while at the same time allowing it to apply its expertise in emergency management to efficiently allocate the ESL.

8.4.2 Which organisation should undertake the independent advisory and oversight role?

There are several attributes that the independent advisory and oversight body should have, which are outlined in Table 30. There is not a single organisation that has all of these attributes, however, there are many organisations that meet several of these criteria to varying degrees. An assessment of the organisations that could undertake the advisory and oversight role is included in Table 30 and the discussion below.

8.4.2.1 Assessment of organisations against the criteria

The 2016 Ferguson report on the Waroona Fire recommended the State Emergency Management Committee Secretariat (now the Office of Emergency Management) have an assurance function including monitoring and reporting on the transparency of emergency management standards, preparedness, capability, service delivery and investment performance outcomes.⁸⁷⁶

In submissions to the issues paper, some stakeholders, including the Pastoralists and Graziers Association⁸⁷⁷ and Cascade Scaddan Fire Review,⁸⁷⁸ considered the Office of Emergency Management should administer the ESL. For example, the Community and Public Sector Union/Civil Service Union said in its submission, “The Office of Emergency Management should be the body charged with the management of the Emergency Services Levy”.⁸⁷⁹

The Office of Emergency Management is responsible for emergency management, not provision of emergency services. While there is a difference between the two, the Office of Emergency Management undertaking the independent advisory and oversight role would be complementary to its existing emergency management role. Staff within the Office of Emergency Management are better placed than staff in organisations such as the departments of Finance or Treasury to make decisions about emergency service priorities and how ESL funds should be spent.

The Office of Emergency Management said in its submission to the issues paper it “has expert knowledge of emergency management and grant administration”.⁸⁸⁰ It also states that although it is a sub department of DFES, “conflict of interest can be minimised by reinforcing the enhanced independence of OEM [Office of Emergency Management]”.⁸⁸¹ As noted in Chapter 2, while the Office of Emergency Management is a sub-department of DFES, it is not funded by the ESL.

⁸⁷⁶ Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, Vol. 1.

⁸⁷⁷ Pastoralists and Graziers Association of WA, *Submission to issues paper*, 10 March 2017, p. 8.

⁸⁷⁸ Cascade Scaddan Fire Review, *Submission to issues paper*, 10 March 2017, p. 5.

⁸⁷⁹ Community and Public Sector Union/Civil Service Association, *Submission to issues paper*, 10 March 2017, p. 1.

⁸⁸⁰ Office of Emergency Management, *Submission to issues paper*, 9 March 2017, p. 4.

⁸⁸¹ Office of Emergency Management, *Submission to issues paper*, 9 March 2017, p. 4.

Table 30 Assessment of organisations that could undertake the independent advisory and oversight role

Criteria	Department of Finance	Department of Treasury	Department of Premier and Cabinet	Economic Regulation Authority	Office of Emergency Management	Office of the Auditor General	Public Sector Commission
The organisation does not benefit from the ESL.	✓✓	✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓
The organisation can make independent decisions.	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓ (if in DFES) ✓✓✓ (if independent of DFES)	✓✓✓	✓✓✓
The organisation has knowledge of emergency management and how emergency services should be provided.			✓	✓	✓✓✓ (emergency management) ✓ (emergency services)		
The organisation has experience in grant administration.	✓✓✓	✓✓	✓		✓✓		✓

Key

no tick – does not meet criteria

✓ – partially meets criteria

✓✓ – largely meets criteria

✓✓✓ – meets criteria

The draft report recommended that the Office of Emergency Management advise the Minister for Emergency Services on ESL revenue and rates, and oversee DFES's allocation and expenditure of ESL funds. Stakeholders have mixed support for the Office of Emergency Management undertaking the independent advisory and oversight role. However, stakeholders expressed strong support that any organisation that undertakes this role must be independent of DFES (see Section 8.3.1).⁸⁸²

Some other stakeholders said the departments of Treasury, Finance or Premier and Cabinet⁸⁸³ could administer the ESL. The 2011 Keelty report and the 2016 Ferguson report also recommended the Department of Finance administer the ESL.⁸⁸⁴

The departments of Treasury and Finance have experience administering grants and are independent of DFES. However, both organisations have responsibilities for the State Budget, which means they may have an incentive to allocate ESL funds to activities that would otherwise be funded by general government revenue. They also do not have detailed knowledge of emergency management or emergency services.

Neither the ERA nor the Public Sector Commission should not undertake the independent advisory and oversight role. Although these organisations are independent and do not benefit from the ESL, undertaking this role would not be consistent with their purpose or functions. Further, these organisations do not have experience in grants administration or detailed knowledge of emergency management or emergency services.

The Department of Premier and Cabinet is well placed to undertake the independent advisory and oversight role. This is because it is independent, does not benefit from the ESL and it has experience in emergency management, having previously had responsibilities for the Western Australian National Disaster Relief and Recovery Arrangements. The Department of Premier and Cabinet is also experienced in taking on specialist functions that require independent oversight or are a government priority.

However, the Office of Emergency Management is probably best placed to undertake the independent advisory and oversight role due to its knowledge of emergency management and previous experience in grant administration.

8.4.2.2 *Independence of the Office of Emergency Management*

Under the current governance arrangements the Office of Emergency Management sits within DFES, although is not funded by the ESL. Although the Office of Emergency Management is a sub department with an independent budget and decision making ability, it is ultimately responsible to the Fire and Emergency Services Commissioner. The potential for the Fire and Emergency Services Commissioner to influence the Office of Emergency

⁸⁸² Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 3; Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 1; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 4; Mangini, J., *Submission to draft report*, 11 August 2017, p. 3; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 5; Shire of Corrigin, *Submission to draft report*, 10 August 2017, pp. 1-2; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 2; van Rinjswoud, E., *Submission to draft report*, 11 August 2017, p. 6; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 2; and Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 4.

⁸⁸³ Department of Treasury or Finance (Source: Pastoralists and Graziers Association of WA, *Submission to issues paper*, 10 March 2017, p. 8); Department of Finance or Premier and Cabinet (Source: Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 1).

⁸⁸⁴ Keelty, M. APM AO, *A Shared Responsibility: Perth Hills Bushfire Inquiry*, Perth, Government of Western Australia, 2011, p. 22; Ferguson, E., *Reframing Rural Fire Management: Report of the Special Inquiry into the January 2016 Waroona Fire*, Perth, Government of Western Australia, Vol. 1, p. 54.

Management's decisions means it may have a conflict of interest when undertaking the advisory and oversight role.

If the Office of Emergency Management was to be the independent advisory and oversight body it would need to be made independent of DFES and the Fire and Emergency Services Commissioner to effectively undertake the role. This would require changes to current governance arrangements, including removing the Office of Emergency Management from DFES so that the Office of Emergency Management does not report to the Fire and Emergency Services Commissioner. The Office of Emergency Management could report directly to the Minister for Fire and Emergency Services on ESL matters, rather than the State Emergency Management Committee, given the Commissioner is a Committee member. The Office of Emergency Management, as the State Emergency Management Committee Secretariat, would retain its existing functions and report to the State Emergency Management Committee for all non-ESL related matters.

Without these changes, the Office of Emergency Management having an independent advisory and oversight role would not address current concerns about governance issues.

It is important the organisation that has the independent advisory and oversight role does not benefit from ESL funds. The Office of Emergency Management would therefore need to continue to be funded by general government revenue – not the ESL – so that it does not have a conflict of interest.

8.4.3 Process for advising the Minister and overseeing allocation of ESL funds

The independent advisory and oversight body should use transparent and consultative processes when advising the Minister for Emergency Services on ESL revenue and rates, and overseeing how ESL funds are allocated and spent.

This could take many forms – for instance, a top-down approach where the independent advisory and oversight body makes decisions about funding requirements for the organisations that receive the ESL or a bottom-up approach, where organisations present submissions on funding requirements to the independent advisory and oversight body for consideration.

The following is an example of a way the independent advisory and oversight body could manage the process of providing advice to the Minister, although it is by no means the only possible approach. The ERA's intent is to set out what it considers to be the key principles required to ensure there is no perceived conflict of interest, stakeholders are adequately consulted and there is a suitable level of transparency. How this is implemented in practice would need further consideration, including consultation with stakeholders.

A process such as the example below could also apply to any rural fire service that is established.

Revenue requirements and high-level funding allocation

1. DFES makes a proposal to the independent advisory and oversight body detailing the amount of ESL revenue required for the coming financial year. DFES consults with local governments and volunteer brigades to develop these proposals.
2. The independent advisory and oversight body considers these proposals and estimates the total ESL revenue required, and how ESL funds ought to be allocated between DFES, the Career Fire and Rescue Service, local government (in

aggregate) and each type of volunteer brigade (for example, to volunteer bush fire brigades in aggregate) (referred to as stakeholder groups).

3. The independent advisory and oversight body calls for submissions from stakeholders to seek their views on the proposed high-level funding allocation.
4. Taking into account submissions from stakeholders, the independent advisory and oversight body informs DFES how much revenue each stakeholder group ought to receive. However, DFES remains responsible for distributing funds to individual local governments and volunteer brigades through an application process. DFES allocates funds to the Career Fire and Rescue Service for it to allocate internally (consistent with the current process).

The above stages deal with the allocation of funds between DFES, the local government sector and volunteer brigades. They do not deal with the process for allocating funds to individual stakeholders (for example individual local governments and individual volunteer brigades). This stage of the process is discussed further below.

Setting ESL rates

5. The independent advisory and oversight body prepares and provides a report to the Minister for Emergency Services on proposed ESL revenue and rates, informed by stakeholder submissions received through the high level funding allocation process.
6. The Minister for Emergency Services approves ESL rates for the coming year, based on consultation with the independent advisory and oversight body.

Collecting the ESL

7. Local governments continue to collect ESL revenue on behalf of the State Government (consistent with the current process).
8. DFES allocates ESL funds internally (including to the Career Fire and Rescue Service), and to external stakeholders (for example individual local governments). This stage of the process is discussed in more detail in Section 8.4.3.3.

Review of how funds are allocated and spent

9. At the end of each financial year, DFES prepares a report to the independent advisory and oversight body outlining how ESL funds have been allocated, and the rationale for all allocation and expenditure decisions. The independent advisory and oversight body then considers the information in this report when preparing its initial funding allocation for how ESL funds should be allocated in the future.

Stakeholders should be able to appeal to the independent advisory and oversight body should they object to allocation and expenditure decisions of DFES and local government.

This process is explained in more detail in the following sections. To reiterate, this process is just one approach that could be adopted. The implementation of any process would need further consideration, including consultation with stakeholders.

8.4.3.1 *Setting total Emergency Services Levy revenues and rates*

The *Fire and Emergency Services Act 1998* states the Minister for Emergency Services is responsible for setting ESL rates. Responsibility for advising the Minister for Emergency

Services on ESL rates should be transferred from DFES to the independent advisory and oversight body.

In advising the Minister for Emergency Services, the independent advisory and oversight body would consider the total ESL revenue required. Total ESL revenue should be equal to the expenditure needed to provide emergency services, less the amount that is already funded by state government appropriations and other sources. This is essentially the process currently followed by DFES.

As explained in Chapter 4, there will be many expenditure proposals that will have benefits that exceed their costs, and with limited funds, agencies choose the proposals that deliver the best value. Adopting every risk-reducing proposal would result in an untenable increase in ESL rates. Therefore, it would be important for the independent advisory and oversight body to balance expenditure increases with a reasonable increase in ESL revenue. The independent advisory and oversight body could monitor whether stakeholders are spending ESL funds efficiently to ensure increases in ESL revenue requirements are kept to a minimum.

The independent advisory and oversight body would determine high level funding allocations to stakeholder groups. That is, the total funding provided to DFES, the Career Fire and Rescue Services, local governments (in aggregate) and volunteer organisations. The independent advisory and oversight body could seek stakeholders' views as part of the funding allocation process.

The independent advisory and oversight body could also provide guidance to DFES on how ESL funds should be allocated between activities, such as prevention, preparedness and response, and between different hazards.

In order to provide stakeholders with more information about how decisions on ESL rates are made, the independent advisory and oversight body could prepare a report to the Minister for Emergency Services outlining total ESL revenue required and the proposed ESL rates, and explaining the rationale for any rate increases. The Minister could table this report in Parliament to ensure the independent advisory and oversight body's advice is publically available.

8.4.3.2 *Collecting Emergency Services Levy revenue*

Local governments collecting and remitting ESL revenue

The draft report recommended that local governments should continue to collect ESL revenue on behalf of the State Government. This is because:

- the system whereby local governments collect ESL revenue through rate notices is efficient, because the State and local governments are not duplicating process and expenditure (for example, production of rates notices and postage); and
- while the State Government has other systems that could be used to collect the ESL (for example, Water Corporation rate notices and the Office of State Revenue land tax statements) neither of these systems cover all property owners in the State.

Submissions from some local governments raise concerns about collecting the ESL on behalf of the State Government. The City of Swan stated that rate payers do not understand that ESL revenue goes to the State Government, and it argued the ESL should be collected separately from local government rates to improve transparency.

“The collection of the ESL by Local Government within the rates notice essentially hides this charge, in particular, since the State Government stopped providing an explanation brochure of the ESL to accompany the rates notice. A high number of residents do not understand this revenue is not going to the Local Government but to the State Government. The City is of the view that it should be collected separately from Local Government rates as a standalone bill. This would make it more open and transparent.”⁸⁸⁵

In their responses to the draft report, although some stakeholders are of the view that it is not preferable for local governments to collect ESL revenue, they note that it is an efficient system.⁸⁸⁶

The ERA recommends that local governments should continue to collect ESL revenue on behalf of the State Government. How the City of Swan’s concerns may be addressed is discussed in Section 8.5.

The draft report also stated local governments should pass ESL revenue on to DFES, except in the event that a rural fire service is established – in this case, local governments should provide ESL revenue to the Office of Emergency Management to allocate to DFES and a rural fire service.

In its submission to the draft report, DFES states that if there is a rural fire service, local governments should return to DFES the ESL revenue that is raised in Categories One and Two, and the Rural Fire Service the ESL revenue that is raised in Categories Three, Four, and Five.⁸⁸⁷

The ERA does not agree with this suggestion, and maintains that local governments should provide all ESL revenue to a single entity (for example, the independent advisory and oversight organisation) for distribution, if a rural fire service is established. This entity would then determine how much to allocate to each of DFES and a rural fire service. This is because the ESL is based on a principle that the amount of ESL revenue raised in an area need not equal the amount of ESL revenue received by that area to fund emergency management (see Chapter 6).

Local governments may, however, have to apply to both DFES and a rural fire service for funding if the boundaries of a rural fire service intersect a local government. The complexities this may create should be considered if and when the State Government establishes a rural fire service.

In conclusion, local governments should continue to collect ESL revenue on behalf of the State Government. Local governments should pass this revenue on to DFES, except in the event that a rural fire service is established. In this case, local governments could provide ESL funds to a single entity to allocate to DFES and a rural fire service.

⁸⁸⁵ City of Swan, *Submission to issues paper*, 10 March 2017, p. 2.

⁸⁸⁶ City of Gosnells, *Submission to draft report*, 8 August 2017, p. 1; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 8.

⁸⁸⁷ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 16.

Compensating local governments for the cost of collecting and remitting the ESL

The draft report recommended that the Office of Emergency Management, in its independent oversight and advisory role, should determine the costs to local government of collecting ESL revenue (including the costs of recovering unpaid debts and any ESL revenue that cannot be recovered) and compensate local governments accordingly. This is because, in submissions to the issues paper, local governments were concerned that they are not appropriately compensated by DFES for the costs of collecting ESL revenues.

For example, the Kimberley Zone of WALGA said that the Shire of Halls Creek receives \$4,000 a year from DFES to collect the ESL. The Shire said this amount has remained the same over the past 10 years, and falls short of the estimated \$15,000 a year it costs to collect the ESL. The Shire also estimated it is unlikely to recover from property owners about \$10,000 of the \$55,000 of ESL charges it invoiced in 2016-17.⁸⁸⁸

The draft report recommended the amount paid from ESL revenue for debt recovery costs should be proportionate to the share the ESL makes up of the value of the total unpaid rate invoice. Local governments should not have to provide to the State Government the value of any ESL revenue that they have been unable to recover.

Submissions to the draft report support this recommendation.⁸⁸⁹ However, DFES states:

“...the ESL is legally established as a charge against a property which is ultimately recoverable when a property changes ownership. Furthermore, in certain Council Rating systems that hierarchically acquit debit, the ESL ranks higher than Council Rates and charges and therefore, where accounts are only partially paid, the ESL may have been acquitted even if other Council charges remain unpaid. For these reasons there is very little unrecoverable ESL debt. Nevertheless, in rare circumstances where debts is unrecoverable, current procedures are in place to enable local governments to apply to the FES [Fire and Emergency Services] Commissioner to write-off debt. The ESL Manual of Operating Procedures also stipulates that DFES will fund unrecoverable legal costs that local governments may incur recovering ESL debt. Other (non-legal) costs that local government incur in attempting to recover ESL debt are covered by the annual ESL Administration Fee payment. DFES has never received a claim from local government to recoup out of pocket expenses associated with ESL debt recovery”.⁸⁹⁰

There are already processes in place to compensate local governments for debt recovery costs and unpaid debts. These processes should continue. However, responsibility for administering them could transfer to the independent oversight and advisory body.

8.4.3.3 Allocating Emergency Services Levy funds

The independent advisory and oversight body should oversee how ESL funds are allocated at a high level, given the transparency and accountability issues outlined in previous sections. The independent advisory and oversight body would be able to provide a State-wide strategic view, informed by advice from DFES (including the Office of Bushfire

⁸⁸⁸ Kimberley Zone of Western Australian Local Government Association, *Submission to issues paper*, 7 March 2017, p. 8.

⁸⁸⁹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 8; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 7; Mangini, J., *Submission to draft report*, 11 August 2017, p. 4; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 4; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 4; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 4; and Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 8.

⁸⁹⁰ Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 9.

Risk Management) and local governments, so that funds are divided between stakeholders based on levels of risk and resource requirements. This will address concerns from stakeholders that DFES is not providing sufficient funding to the regions and volunteers.

The independent advisory and oversight body would determine how ESL funds ought to be allocated between DFES, the Career Fire and Rescue Service, local government (in aggregate) and each type of volunteer brigade (for example, to volunteer bush fire brigades in aggregate). DFES would then allocate funds to individual local governments and brigades.

This section discusses the process by which funds should be allocated to individual local governments and brigades.

Allocation of funds for front-line services – capital and operating expenditure

Local governments' administration of ESL funds provided to front-line services

Currently, local governments are responsible for administering the grants DFES provides to bush fire brigades and state emergency service units.

In its submission to the issues paper, WALGA said that stakeholders have identified a need for local government to play an even greater role in distribution of ESL funds.⁸⁹¹

The Office of Emergency Management was of the view that having local governments administer the ESL means there is closer alignment with risk management processes:

“Ideally, each local government area would have a fully developed emergency management risk plan – to a state-wide standard – complete with costed treatments. This plan would form the basis of a local government business case for ongoing support. Base, or foundation funding support to each local government, simply based on population, land use or land value (or a combination of these) would always be the start point, with an emergency management risk plan forming the basis for additional funding.”⁸⁹²

In contrast, an anonymous submission stated that local government should not administer the ESL. It recommended:

“That Local Govt [Government] no longer be required to administer ESL funds for SES [State Emergency Service] and BFB [bush fire brigades]...”; and

“That ESL grants be made directly to either [] brigades and units, or to their nominated DFES Manager.”⁸⁹³

It is important for local governments to remain involved in ESL administration. Local governments provide valuable local knowledge, and are able to provide advice to the State Government on the priorities for each local area. Having volunteer brigades submit funding applications directly to the State Government would make it difficult to prioritise applications for local areas based on risk and resource requirements, and may reduce engagement between volunteer organisations, local governments, and the State Government.

Bush fire brigades and state emergency service units should continue to prepare applications for funds and submit these to local governments. Local governments should

⁸⁹¹ Western Australian Local Government Association, *Submission to issues paper*, 13 March 2017, p. 11.

⁸⁹² Office of Emergency Management, *Submission to issues paper*, 9 March 2017, p. 3.

⁸⁹³ Anonymous, *Submission to issues paper*, 18 February 2017, p. 6.

assess each funding application's costs and benefits, and against risks in their area (including risks identified in their bushfire risk management plans) to determine the funding priorities in their local government area.

Each local government should submit the funding applications to DFES. This could, for example, include a covering report outlining the priority items in the funding applications, and how funding these items will mitigate risk and enable volunteer organisations to undertake emergency management activities.

DFES should consider funding applications using the risk-based, and robust analytical, approaches discussed in chapter 4.

Front-line services' eligible capital and operating expenditure

As discussed in Section 8.3.4, many stakeholders are of the view that:

- the Career Fire and Rescue Service and DFES volunteer brigades are provided with additional eligible items compared to local government volunteer brigades;⁸⁹⁴
- the eligible items in the Local Government Grant Scheme Manual do not reflect the needs of volunteer brigades;⁸⁹⁵
- the Local Government Grants Scheme Manual is too prescriptive and applies a one-size-fits-all approach;⁸⁹⁶ and
- stakeholder are not consulted on the eligible items in the Local Government Grants Scheme Manual.⁸⁹⁷

Many stakeholders call for a review of the Local Government Grants Scheme Manual, in consultation with stakeholders.⁸⁹⁸ Some call for the Local Government Grants Scheme

⁸⁹⁴ Shire of Denmark Chief Bushfire Control Officer, *Submission to issues paper*, 27 February 2017, p. 1; Shire of Esperance, *Submission to draft report*, 11 August 2017, pp. 1-2; Shire of Murray, *Submission to issues paper*, 28 February 2017, p. 3; Shire of Nannup, *Submission to draft report*, 10 August 2017, pp. 1-2; and Shire of Woodanilling, *Submission to draft report*, 8 August 2017, p. 1.

ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017

⁸⁹⁵ Bayswater State Emergency Services Unit, *Submission to issues paper*, 1 February 2017, p. 1; City of Greater Geraldton, *Submission to issues paper*, 20 March 2017, pp. 1-3; City of Swan, *Submission to issues paper*, 10 March 2017, p. 2; Shire of Denmark Chief Bushfire Control Officer, *Submission to issues paper*, 27 February 2017, p. 1; Shire of Esperance, *Submission to draft report*, 11 August 2017, pp. 1-2; Shire of Mundaring, *Submission to issues paper*, 3 March 2017, p. 2; Shire of Murray, *Submission to issues paper*, 28 February 2017, p. 3; Shire of Nannup, *Submission to draft report*, 10 August 2017, pp. 1-2; Shire of Woodanilling, *Submission to draft report*, 8 August 2017, p. 1; State Emergency Services Volunteer Association, *Submission to issues paper*, 10 March 2017, p.1, 3, and 5-7; and Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 1.

ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017.

⁸⁹⁶ ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017.

⁸⁹⁷ ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017.

⁸⁹⁸ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 12; ERA regional consultation session, held at the Shire of Plantagenet offices, 7 August 2017; ERA regional consultation session, held at the City of Bunbury offices, 8 August 2017.

Manual to be made consistent with the items available to the Career Fire and Rescue Service and DFES managed volunteer organisations.⁸⁹⁹

Needs are likely to vary between organisations. For example, the nature of the activities of a Career Fire and Rescue Service unit means that it is likely to require different equipment to a bush fire brigade. This might be an argument for having separate manuals for each organisation, with the eligible items in each manual reflecting the needs of the type of organisation to which it applies.

However, there is also variation in needs within particular types of organisations. For example, a Volunteer Fire and Rescue Service unit in a regional area is likely to require different equipment to a Volunteer Fire and Rescue Service unit in Perth.

An approach that balances stakeholders' desire for consistency across organisations is to have a single manual that applies to all organisations. This manual should be prescribed at an appropriate level of detail so as to allow DFES to be flexible in making its decisions about approving (or otherwise) ESL funding applications to accommodate the needs of each organisation.

Put another way, any capital and operating expenditure manual should describe items sufficiently broadly to allow the decision maker to identify the best specific item to meet the needs of the organisation. For example, all organisations would be allowed to apply for ESL funding for a truck, but all organisations would not be supplied with the *same* truck, because the model may not be suitable across all terrains.

This would mean that all organisations face the same limits on the items they can apply for. The ERA considers that it is inequitable, and not consistent with ensuring at least the minimum level of service, for this not to be the case. If a bush fire brigade can demonstrate a need for a piece of equipment typically provided to a Volunteer Fire and Rescue Service unit, and DFES decides that this provides greater net benefits compared to other funding applications, then the bush fire brigade should be provided with ESL funding for that item.

The recommendation that there should be one capital and operating expenditure manual for all frontline service delivery organisations (including the Career Fire and Rescue Service and all volunteer brigades) is not intended to result in all brigades and units being provided with the same items. Rather, it is intended to allow all organisations to have the opportunity to submit an ESL funding application for the same items.

DFES has advised that in some cases it is important there is consistency. For example, an advantage of having a consistent truck fleet is that emergency services personnel (careers and volunteers) can use equipment of other brigades or units in the case of an emergency.⁹⁰⁰ There may also be other advantages, such as bulk purchases and ease of servicing.

⁸⁹⁹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, pp. 1, 12 and 15; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 9 and 11; Mangini, J., *Submission to draft report*, 11 August 2017, pp. 6-7; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 9; Shire of Corrigin, *Submission to draft report*, 10 August 2017, pp. 8 and 11; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 5; Shire of Nannup, *Submission to draft report*, 10 August 2017, p. 1; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, pp. 1 and 8; Shire of Woodanilling, *Submission to draft report*, 8 August 2017, p. 1; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, pp. 12 and 14.

⁹⁰⁰ Communication with Department of Fire and Emergency Services, 21 February 2017.

Having the capital and operating expenditure manual prescribed at a broad level of detail gives DFES the discretion to provide volunteers with specialist equipment or equipment not typical of that organisation type if required, but also allows DFES to maintain uniformity where there are good reasons to do so.

DFES's decisions on ESL funding applications should be guided by the objectives of achieving:

- at least the minimum level of service (where services are provided); and
- an allocation of funds to activities that provide the greatest net benefits.

This report recommends that DFES develops the capital and operating expenditure manual in consultation with stakeholders, and that the manual should be reviewed regularly (also in consultation with stakeholders).

Recommendations about the role of the independent oversight and advisory body set out in this chapter are aimed at addressing stakeholders concerns about DFES's funding decisions. In addition, this report recommends an appropriate appeal process be established – this would provide a mechanism for organisations to dispute DFES's decisions about applications for funding.

Allocation of funds for local government emergency management

Chapter 5 discusses the activities that the ESL should fund. The chapter includes recommendations that the ESL be used to fund activities that local governments provide on behalf of the community if they can do so more effectively than individual property owners.

While local governments can currently obtain ESL funding for Community Emergency Services Managers by application to DFES, and for the response activities of the volunteer brigades through the Local Government Capital and Operating Grants manual, there is currently no mechanism for them to obtain ESL funding for other emergency management costs.

It is therefore recommended that DFES develop a process, in consultation with WALGA, which allows local governments to access funding for the functions outlined in the recommendations in Chapter 5.

Consistent with the ERA's recommendations about the revised capital and operating expenditure manual:

- What local governments can access funds for should be described sufficiently broadly to enable DFES to make decisions that reflect the needs of individual local governments — that is, what can be funded should not be described so prescriptively as to eliminate flexibility.
- In making its decisions about how much funds to allocate, DFES should be guided by the objectives of achieving:
 - at least the minimum level of service (where services are provided); and
 - an allocation of funds to activities that provide the greatest net benefits.

While the process would provide all local governments with the opportunity to apply for funding, this does not mean that all local governments would be provided with the same level of funding. As noted, DFES would make decisions aimed at achieving at least the minimum level of service (where services are provided), and allocating resources to where they will have their biggest impact.

Recommendations about the role of the independent oversight and advisory body (including its appeal role) set out in this chapter are aimed at addressing stakeholders' concerns about DFES's decisions regarding Community Emergency Services Managers.

8.4.3.4 *Review of how the Emergency Services Levy is allocated and spent*

The independent advisory and oversight body should review how DFES allocates ESL funds. At the end of each financial year, DFES should prepare a report to the independent advisory and oversight body outlining how ESL funds have been allocated, and the rationale for all allocation and expenditure decisions.

If DFES has not allocated stakeholder groups sufficient funding to reflect the independent advisory and oversight body's recommendations about the high-level allocations, the independent advisory and oversight body could take action by recommending that fewer funds be allocated to DFES for its own use in the future. If DFES consistently distributes more funds to itself than the independent oversight and advisory body recommended, the independent advisory and oversight body could escalate the issue to the Minister for Fire and Emergency Services.

The independent advisory and oversight body should also review how DFES makes funding decisions. This includes review of the funding applications approved (and the rationale for this) and the applications that were not approved. If the independent advisory and oversight body considers DFES's decisions are not consistent with the best practice principles discussed in Chapter 4 (for example a risk-based approach), then it could escalate the issue to the Minister for Emergency Services.

8.4.3.5 *Right of appeal*

In their submissions to the issues paper, stakeholders told the ERA that the current governance arrangements do not include appropriate rights of appeal (see Section 8.3.3).⁹⁰¹ For example, the Association of Volunteer Bush Fire Brigades considered that appeals on grant application decisions should not be submitted to the Fire and Emergency Services Commissioner.⁹⁰²

It is important for stakeholders who receive ESL funds to have an appropriate right of appeal. The current arrangements, where stakeholders appeal to the Fire and Emergency Services Commissioner, is not appropriate because the Commissioner is the head of DFES, which is a beneficiary of ESL funds.

The draft report recommended the Office of Emergency Management, as the independent advisory and oversight body, is best suited to consider any appeals regarding the allocation of ESL funds.

⁹⁰¹ Hawke, A., *Submission to issues paper*, 10 March 2017, p. 6.

⁹⁰² Association of Volunteer Bush Fire Brigades WA Inc., *Submission to issues paper*, 13 March 2017.

Some submissions to the draft report are of the view that it is not appropriate to have the organisation that administers the ESL undertake an appeals role.⁹⁰³

The ERA agrees with this view, but notes that it is not recommending that the independent advisory and oversight body undertake the day-to-day administration of the ESL. Rather, it is recommended that it only undertakes an advisory and oversight role.

Stakeholders suggest the following as alternatives to the independent advisory and oversight body undertaking the appeals role:

“The OEM [Office of Emergency Management] should not be the body of appeal for ESL-related issues. The OEM has limited bushfire experience and possibly limited funding experience at the macro-level. This should be a role for the Departments of Treasury with support from specialises in the field.”⁹⁰⁴

“It is imperative that a system be put in place that allows the applicant to appeal a decision either directly to the Minister or to an administrative tribunal should they believe that their submission has not been given due consideration by the OEM [Office of Emergency Management].”⁹⁰⁵

“A similar appeals process to that which applied to Freedom of Information (FOI) appeals should be implemented in regards to ESL appeals.”⁹⁰⁶

The ERA remains of the view that the independent advisory and oversight body is best placed to undertake the appeals role. The independent advisory and oversight body would have the information and expertise required to undertake the role, whereas the Department of Treasury and the Minister for Emergency Services are less likely to. It is not necessary to add a layer of legal review (such as a tribunal), which may increase time, resource requirements and cost, to the process. Such arrangements could be considered at a future date if the above process does not work effectively.

The independent advisory and oversight body will not be assessing funding applications from local government and volunteer brigades and hence would not be reviewing its own decisions. The independent advisory and oversight body would be well placed to determine whether funding has been appropriately allocated because it:

- should have experience in emergency management; and
- will have considered risks and funding requirements as part of the process of making its high level funding allocation recommendations.

8.5 Reporting on Emergency Services Levy revenue and expenditure

The lack of publicly available information about how ESL revenue is raised and spent makes it difficult for stakeholders to hold DFES to account for its decisions and may contribute to

⁹⁰³ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 4; Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 3; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 2; Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 4.

⁹⁰⁴ Smith, R., *Submission to draft report*, 7 August 2017, p. 6.

⁹⁰⁵ Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 4.

⁹⁰⁶ Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 3.

a perception that DFES is not allocating ESL funds in the best interests of all stakeholders. Increasing the amount and quality of information available to stakeholders may alleviate some stakeholder concerns.

Information published on the ESL should be readily understood by the general public. Some stakeholders, for example the Gidgegannup Progress Association⁹⁰⁷ and Mr John Mangini,⁹⁰⁸ consider that the information that DFES currently publishes is difficult to understand.

The organisation that undertakes the independent advisory and oversight role should prepare an annual report on the ESL. This should include input from DFES, a rural fire service if established and WALGA on behalf of local governments and their volunteers.

The report should provide stakeholders with detailed information on where ESL funds are raised and how they are spent. This would include, for example, the total amount of ESL revenue and expenditure, growth in ESL revenue and expenditure, the amount of ESL revenue raised by ESL categories and local government areas, and the allocation of expenditures to metropolitan and rural regions and to each hazard management activity (for example, preparedness, prevention, response and administration). The report should also include a summary of the independent advisory and oversight body's review of how ESL funds have been allocated and spent.

Publication of an annual report would be consistent with stakeholder submissions to the issues paper, including Cascade Scaddan Fire Review⁹⁰⁹ and the former Department of Lands,⁹¹⁰ that DFES should publish a detailed breakdown of ESL expenditure. Publication of an annual report would also be consistent with the State Government's *Whole of Government Open Data Policy*.⁹¹¹

Submissions to the draft report support the recommendation that Office of Emergency Management should publish an annual report on the ESL.⁹¹² For example, the Pastoralists and Graziers Association supports the draft recommendation that the Office of Emergency Management should prepare and publish an annual report on the ESL. It states:

"The PGA [Pastoralists and Graziers Association] believe that a detailed reporting framework needs to be established to ensure all critical information is transparently available to all stakeholders; from ESL contributors through to Ministers".⁹¹³

⁹⁰⁷ Gidgegannup Progress Association (Inc.), *Submission to issues paper*, 27 February 2017, p. 7.

⁹⁰⁸ Mangini, J., *Submission to issues paper*, 10 March 2017, p. 8.

⁹⁰⁹ Cascade Scaddan Fire Review, *Submission to issues paper*, 10 March 2017, p. 4.

⁹¹⁰ Department of Lands, *Submission to issues paper*, 14 March 2014, p. 6.

⁹¹¹ Government of Western Australia, *Whole of Government Open Data Policy*, Perth, Government of Western Australia, 2015.

⁹¹² Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 14; Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 10; Department of Fire and Emergency Services, *Submission to draft report*, 11 August 2017, p. 5; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 10; Mangini, J., *Submission to draft report*, 11 August 2017, p. 6; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 10; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 11; Shire of Manjimup, *Submission to draft report*, 10 August 2017, p. 6; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 7; and Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 13.

⁹¹³ Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 10.

The Western Australian Volunteer Fire and Rescue Service Association states:

“Any annual report on the ESL funding must be as open and transparent as possible and should include the basic details of every application for funding received (in terms of [local governments]) and DFES must provide more detailed financial reporting with regards to operational/non-operational expenditure and what funding is being used for”.⁹¹⁴

The draft report recommended that Office of Emergency Management publish an annual brochure that accompanies rate notice explaining the purpose of the ESL and that it is a state government charge. This draft recommendation was to address stakeholder concerns that property owners are not informed about the ESL and that the ESL does not fund local government expenditure. For example the former Department of Lands said in its submission to the issues paper:

“...This detailed report would be most effective if included within the physical distribution of Local Government Rate Notices for the following year, so that every ESL Ratepayer would then be directly informed as to where their ESL rate contributions has gone.”⁹¹⁵

Many stakeholders, including local governments, support the draft report’s recommendation that Office of Emergency Management publish a brochure on the ESL.⁹¹⁶

In a meeting with the ERA, a stakeholder raised concerns about the cost of preparing the brochure, and was of the view that most stakeholders will not read it. In submissions to the draft report, several stakeholders said that if a brochure is to be prepared this must be funded by general government revenue, not the ESL,⁹¹⁷ and should be prepared in consultation with stakeholders.⁹¹⁸

The purpose of this draft recommendation was to address stakeholders’ concerns that the general public is not informed about the purpose of the ESL and that it is a state government levy. In light of stakeholders’ concerns, the ERA has amended this recommendation. This report recommends that the independent oversight and advisory body should work with WALGA to develop an alternative means of communicating with property owners about the ESL. Any community awareness campaign or similar should be funded from general government revenue, consistent with stakeholder expectations.⁹¹⁹

⁹¹⁴ Western Australian Volunteer Fire and Rescue Services Association, *Submission to draft report*, 11 August 2017, p. 4.

⁹¹⁵ Department of Lands, *Submission to issues paper*, 14 March 2017, p. 7.

⁹¹⁶ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 14; Cascade Scaddan Fire Review, *Submission to draft report*, 11 August 2017, p. 10; Dewhurst, G., *Submission to draft report*, 11 August 2017, p. 10; Mangini, J., *Submission to draft report*, 11 August 2017, p. 7; Pastoralists and Graziers Association, *Submission to draft report*, 16 August 2017, p. 10; Shire of Corrigin, *Submission to draft report*, 10 August 2017, p. 9; Shire of Plantagenet, *Submission to draft report*, 4 August 2017, p. 7; and Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 13.

⁹¹⁷ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 14; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 13.

⁹¹⁸ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 14;

⁹¹⁹ Association of Volunteer Bush Fire Brigades WA Inc., *Submission to draft report*, 15 August 2017, p. 14; Western Australian Local Government Association, *Submission to draft report*, 11 August 2017, p. 13

8.6 Recommendations

- The Department of Treasury should undertake a review of the Department of Fire and Emergency Services' structure, resources and administration costs to determine whether services are efficiently delivered.
- An independent organisation should:
 - a. advise the Minister for Emergency Services on ESL revenue and rates;
 - b. allocate funds to the Department of Fire and Emergency Services, and a rural fire service if established;
 - c. oversee how the Department of Fire and Emergency Services, and a rural fire service if established, allocate ESL funds to other stakeholders; and
 - d. review how ESL funds are spent.
- The Office of Emergency Management could undertake the independent advisory and oversight role. If it was to do so it:
 - a. must be made independent of the Department of Fire and Emergency Services and report directly to the Minister for Emergency Services;
 - b. must continue to be funded from general government revenue; and
 - c. should receive additional funds from general government revenue to fund the additional functions.
- The independent advisory and oversight organisation should consult stakeholders when:
 - a. advising the Minister for Emergency Services on ESL revenue and rates; and
 - b. considering how ESL funds should be allocated to stakeholders.
- The independent advisory and oversight organisation should prepare a report to the Minister for Emergency Services recommending total ESL revenue and rates. The Minister should table the report in Parliament within 28 days of receiving it.
- The Department of Fire and Emergency Services, and a rural fire service if established, should provide a report to the independent advisory and oversight organisation explaining how it has allocated ESL funds and the rationale for this allocation.

- Local governments should continue to collect the ESL on behalf of the State Government.
- The independent advisory and oversight organisation should compensate local government for the cost of collecting ESL revenue (including the costs of recovering unpaid debts) and not invoice the local government for ESL revenue that cannot be recovered.
- The Department of Fire and Emergency Services, together with a rural fire service if one is established, should develop one funding allocation manual for frontline service delivery organisations (the Career Fire and Rescue Service and all volunteer services). This manual should:
 - a. be described sufficiently broadly so as to not be too prescriptive, in turn allowing for discretion and flexible decision making based on needs; and
 - b. be developed and reviewed regularly in consultation with stakeholders, including the Western Australian Local Government Association and Volunteer Advisory Committees.
- The Department of Fire and Emergency Services, together with a rural fire service if one is established, should, in consultation with the Western Australian Local Government Association, develop a procedure for local governments to apply for ESL funding for prevention, preparedness and response activities that:
 - a. anyone can access and which may be used simultaneously by many people without other users being disadvantaged;
 - b. everyone should have access to regardless of ability or willingness to pay, and which benefit the broader community not just the users; and/or
 - c. require government coordination.
- The assessment of applications for ESL funds by the Department of Fire and Emergency Services, and a rural fire service if established, should be guided by the objectives of achieving:
 - c. at least the minimum level of service (where services are provided); and
 - a. an allocation of funds to activities that provide the greatest net benefits.
- The independent advisory and oversight organisation should be the body of appeal for ESL-related issues, and the Fire and Emergency Services Commissioner's appeal role should be revoked.
- The independent advisory organisation should prepare and publish an annual report on the ESL.

- The independent advisory organisation should work with the Western Australian Local Government Association to determine how to best communicate to property owners the purpose of the ESL and that it is a state government levy. Any community awareness programs should be funded by general government revenue.

9 Summary of the Economic Regulation Authority's assessment

The ERA was asked to prepare a report on the current arrangements for, and options to improve, the management and distribution of the ESL. This chapter summarises the ERA's findings and recommendations.

Is the current methodology for setting ESL rates appropriate?

The ERA was asked to consider the extent to which the current methodology for setting ESL rates is appropriate, now and into the future.

Assessing the ESL against the four principles of good levy design — equity, efficiency, simplicity and effectiveness — the ESL performs well. There are inevitably trade-offs between each of the four principles. However, the objective of good levy design is to ensure an appropriate balance is struck between these principles. The current design of the ESL strikes a reasonable balance, and the basic structure of the ESL system should be retained.

In particular, gross rental value should be retained as the basis for calculating the ESL levied on a property for Categories One to Four. While using gross rental value only partially reflects service availability and capacity to pay, it remains the most practical option. A fixed charge should continue to be levied on properties in Category Five. While, when combined with grouping, this means that some properties in Category Five are likely to be paying less than property owners in Categories One to Four, alternative approaches are too administratively complex to implement.

Rates should continue to be based on service availability, rather than risk. The State Government made an explicit decision to charge by service availability when establishing the ESL. Moving towards risk based rates would be a significant departure from this policy, and complex and potentially expensive to implement.

The ESL was designed on the basis that the allocation of ESL funds to regions should not be dictated by local capacity to raise revenue – instead, expenditure needs should dictate the allocation of funds. In markets for some goods and services, this could affect behaviour, because people pay more or less than the cost of providing them with the goods or services. However, the ERA has found that the ESL is unlikely to change people's behaviour. Increasing the extent to which metropolitan property owners fund rural and regional services is therefore less concerning from an efficiency perspective.

However, having a clearer understanding of the extent each ESL category raises more or less funds than its expenditure needs would enable better informed policy decisions. DFES should use its cost and incident data to determine the direct costs of providing emergency services to each of the five ESL categories, and publish information about how this compares to the ESL revenue earned from those categories.

What is the current allocation of ESL funds to prevention, preparedness, response and recovery?

The ERA was asked to consider the current ESL expenditure applied to managing the prevention of, preparedness for, response to and recovery from natural hazard emergencies, and the proportion of ESL funding directed towards prevention, preparedness, response and recovery.

A much larger proportion of DFES's expenditure is directed towards response than prevention and preparedness.⁹²⁰ In 2015-16, DFES's expenses for prevention services were 12.9 per cent of total expenses, and for emergency services were 87.1 per cent of total expenses.⁹²¹

While the ESL is not DFES's only source of funds, at 82 per cent of its total revenues in 2015-16, it is reasonable to conclude that a much larger proportion of ESL funds is being applied to response than to prevention and preparedness.

DFES does not make all of the cost and revenue data that the ERA has used for its analysis available to the public. As set out below, transparency would be improved by the release of additional data.

Does the current allocation of ESL funds reflect best practice?

The ERA was asked to consider the extent to which the current allocation of ESL funds towards prevention and response reflects best practice in managing the risk of bushfire and other hazards.

Best practice requires setting priorities, and when selecting certain activities over others, choosing those that offer the best value. Response is a critical function of government, and governments must be resourced to meet this role. However, spending too much on response has consequences, particularly if it comes at the cost of effective prevention. Prevention is important because it can reduce future costs, however, not all prevention activities produce a net benefit in all circumstances.

It is possible that prevention has not been prioritised, and that a greater focus on prevention could result in benefits to the community. It does not, however, follow that all prevention should be funded by the ESL.

There is a perception that state government organisations in particular are not undertaking enough prevention on land they own and/or manage. A review of state government organisations' prevention on land that they own and/or manage should be undertaken. This review could also include local governments.

There is a perception that DFES spends too much on response at the expense of prevention. Greater clarity is needed for all stakeholders about DFES's obligations to undertake direct prevention activities (prescribed burning in particular). Without this clarity, it is hard to determine whether DFES has spent 'too much' or 'too little' on particular activities.

Providing more accountability and transparency in the processes that DFES uses to allocate ESL funds would also reduce the likelihood of it spending too much on response.

While DFES complies with the Department of Treasury's budgeting process and is implementing various internal frameworks (the Strategic Planning Framework and the Capability Framework), DFES's current funding allocation process is not ideal. It is important to apply robust analytical techniques wherever possible and take them into account when making decisions.

⁹²⁰ DFES does not have any significant recovery-related costs.

⁹²¹ After allocating overheads. Department of Fire and Emergency Services, *Annual Report 2015/16*, Perth, Government of Western Australia, 2016, p. 55.

This report recommends that DFES should apply robust analytical techniques for its funding allocation decisions, and continue to implement and comply with policies and procedures that enable the best practise management of hazards, such as the ISO 31000 standard, the Capability Framework, high level activity-based costing, post-project effectiveness reviews and the *Whole of Government Open Data Policy*.

What should the ESL be spent on?

The ESL should fund the following activities:

- Those with ‘public good’ characteristics – those that anyone can access and which may be used simultaneously by many people without other users being disadvantaged (for example, emergency management plans and community safety campaigns).
- Those with ‘merit good’ characteristics – those that everyone should have access to (regardless of ability or willingness to pay), and/or which benefit the broader community not just the users (for example, response).
- Those that require government coordination (for example, coordinating emergency management activities across different land tenures in a specific area).

At a high level, this means the ESL should be used to fund those emergency management activities that DFES and local governments provide on behalf of the community if they can do so more effectively than individual property owners. The ESL should not be used to fund prevention, preparedness and response activities that primarily benefit individual property owners, including state and local governments in their capacity as property owners or managers.

The ESL should therefore fund the following DFES and local government functions:⁹²²

- prevention, except for direct prevention activities on land they own and manage, or that they undertake on behalf of others (for example, prescribed burning);
- preparedness, except for direct preparedness activities on land they own and manage, or that involve investment in infrastructure (for example, construction of a refuge shelter); and
- response, including the Career Fire and Rescue Service and volunteer brigades.

In practice, this means that the ESL would continue to fund most of DFES’s activities, including the Career Fire and Rescue Service and DFES managed volunteer brigades.

Local governments would continue to be able to access ESL funds for their volunteer brigades. However, the recommendation means they would be able to apply for ESL funding for a broader range of prevention, preparedness and response functions than they are currently able to apply for. In particular, they would be able to apply for ESL funds for emergency management functions they provide on behalf of the community if they can do so more effectively than individual property owners — irrespective of whether these functions are performed by a Community Emergency Services Manager, or another officer.

⁹²² To the extent permitted by the emergency services Acts.

The process by which local governments' funding applications could be facilitated should be worked through between WALGA and DFES in developing the local government funding processes recommended in Chapter 8 and described below.

There are arguments for and against the ESL funding DFES's corporate service functions. Funding corporate services functions from emergency services levies is not uncommon in other jurisdictions around Australia. However, stakeholder responses to this review clearly indicate there is a risk that confidence in the ESL will decline if the ESL continues to fund an increasing proportion of DFES's corporate services costs. In addition, it means DFES will be competing with other services for funding for an increasingly smaller proportion of its revenue. This in turn has implications for the level of scrutiny over DFES's expenditure on corporate services functions. Given these issues, a proportion of DFES's corporate services costs should continue to be funded by general government revenues, rather than the ESL.

The ESL should not be used to fund local governments' corporate services functions. The argument against the ESL funding these functions is clearer in the case of local governments than DFES. In particular, corporate services functions in local governments support a range of local government services, not just emergency management. Local governments have alternative revenue streams, such as rates and grants, that they can draw upon to fund these functions. Allowing the ESL to fund them could reduce the incentive for local governments to make efficient decisions about how they allocate funds from non-ESL sources.

The ESL does not currently fund recovery activities, and this should continue to be the case. Recovery expenditures vary greatly from year to year, depending on the number and scale of disasters, and the extent they affect communities. Special purpose levies such as the ESL are better suited to funding expenditures that are relatively stable and predictable from year to year.

Funding a rural fire service

The ERA was asked to consider the extent to which the ESL should be available to fund administrative and/or operational costs of a rural fire service, and the extent to which the use of the ESL to fund a rural fire service would impact on ESL rates.

The ESL should fund the same functions of a rural fire service as for DFES. This includes those aspects of emergency management that a rural fire service provides on behalf of the community if it can do so more effectively than individual property owners. A proportion of a rural fire service's corporate services costs should be funded from general government revenue, to allow for scrutiny over the efficiency of this expenditure, and to maintain public confidence in the ESL.

To assess the extent to which using the ESL to fund a rural fire service would increase ESL rates, the ERA has developed lower and upper bound estimates of the annual marginal cost of a rural fire service. A rural fire service will cost between an additional \$4.2 million and \$560 million each year. This would see average annual residential charges increase by \$2.41 (1.2 per cent) for model one and \$362.74 (166 per cent) for model two.

The cost of a rural fire service will vary depending on its model, including its role, level of resourcing, and governance arrangements. At the time of the final report, the State Government has not announced a preferred rural fire service model.

It is beyond the terms of reference for this review to examine the merits of a rural fire service or form a view on the best model of a rural fire service. The ERA has not taken a position

on whether the State Government should establish a rural fire service, and has not considered the merits of each model that the ERA has costed.

To allow stakeholders to conduct their own analysis about the cost of their preferred rural fire service model, the ERA has estimated that the cost of an additional rural fire station with 30 paid career firefighters would be about \$4.5 million each year. This cost includes the annual cost of career firefighters and their personal protective equipment and bedding; and a truck fleet.

The ERA does not advocate any particular approach for recovering the costs of a rural fire service across ESL categories. However, increasing the extent metropolitan property owners fund rural and regional services (due to the ESL funding a rural fire service) does not raise concerns from an efficiency perspective. The willingness of property owners in the metropolitan area to contribute to the costs of a rural fire service may, however, have limits, particularly if it is perceived to be operating inefficiently.

Arrangements for distributing the ESL

The ERA was asked to consider the current transparency and accountability arrangements for the distribution of the ESL, and whether it would be better for the allocation of ESL funds to be the responsibility of an agency other than DFES. Several previous inquiries have questioned the appropriateness of how the ESL is governed, including the 2011 Keilty report and the 2016 Ferguson report.

DFES's perceived conflict of interest

DFES is both a recipient and distributor of ESL funds. There is a perception among some stakeholders that ESL funds are not being spent in a way that maximises benefits to the broader community. There is some evidence to support this perception, but the evidence is not conclusive.

Conflicts of interest may be real or perceived – both should be avoided. The issue is therefore not only whether DFES has used its authority to its own advantage, but whether it has the opportunity to do so.

To address this issue, an independent organisation should advise the Minister for Emergency Services on ESL revenue and rates. This organisation should not benefit from the ESL. The independent organisation should:

- advise the Minister for Emergency Services on ESL revenue and rates;
- allocate funds to DFES and a rural fire service (if established);
- oversee how DFES and a rural fire service (if established) allocate ESL funds to other stakeholders; and
- review how ESL funds are spent.

The Office of Emergency Management could undertake this independent advisory and oversight role. However, if it was to do so it must be made independent of DFES and report directly to the Minister for Emergency Services. It must also continue to be funded by general government revenue.

In addition, the Department of Treasury should undertake a review of DFES's structure, resources and administration costs, to determine whether services are efficiently delivered.

Transparency of arrangements for distribution of the ESL

Making administration of the ESL more transparent will provide stakeholders better information about the ESL so they can be informed about how DFES is allocating ESL funds. DFES has, over time, reduced the amount and types of information it publishes on the ESL.

To address this issue, the independent advisory and oversight organisation should prepare a report to the Minister for Emergency Services recommending total ESL revenue and rates, and the Minister for Emergency Services should table the report in Parliament. The independent advisory and oversight organisation should also prepare and publish an annual report on the ESL.

Further, DFES and a rural fire service (if established) should provide a report to the independent advisory and oversight organisation explaining how they have allocated ESL funds and the rationale for their allocations.

Stakeholders' involvement in decision-making about distribution of the ESL

DFES has structures and processes in place that allow it to obtain stakeholder input into grant allocations, for example, capital grants committees for the bush fire brigades and the State Emergency Service, and a State Emergency Service Advisory Committee. However, some stakeholders consider they are not provided sufficient opportunity to inform DFES's decisions, including about the allocation of funds through the Local Government Grants Scheme.

To address this issue, the independent advisory and oversight organisation should consult stakeholders when:

- advising the Minister for Emergency Services on ESL revenue and rates; and
- considering how ESL funds should be allocated to stakeholders.

DFES should also consult with stakeholders, including WALGA, in developing the funding processes and manuals recommended by the ERA below.

Specific processes for distributing funds to non-DFES organisations

Stakeholders raise specific concerns with DFES's decisions about the Local Government Grants Scheme Manual and Community Emergency Services Managers.

To address concerns about DFES's decision making when it comes to approving local governments' requests for ESL funding, this report recommends the following:

- DFES, together with a rural fire service if one is established, should develop one funding allocation manual for frontline service delivery organisations (the Career Fire and Rescue Service and all volunteer services). This manual should be developed and reviewed regularly in consultation with stakeholders, including WALGA and Volunteer Advisory Committees.
- DFES, together with a rural fire service if one is established, should, in consultation with WALGA, develop a procedure for local governments to apply for ESL funding for prevention, preparedness and response activities that:

- anyone can access and which may be used simultaneously by many people without other users being disadvantaged;
- everyone should have access to regardless of ability or willingness to pay, and which benefit the broader community not just the users; and/or
- require government coordination.

What can be funded under these processes should be described sufficiently broadly so as to not be too prescriptive, in turn allowing for flexible decision making by DFES based on needs. DFES's assessment of applications for ESL funds should be guided by the objectives of achieving:

- at least the minimum level of service (where services are provided); and
- an allocation of funds that provides the greatest net benefit.

A more robust approach should be taken when assessing the costs and benefits of funding applications than the approach DFES currently undertakes.

These processes should be reviewed regularly in consultation with stakeholders, including WALGA and Volunteer Advisory Committees.

An appropriate appeals process should also be established. This would provide a mechanism for local governments to dispute DFES's decisions about applications for funding. The independent advisory and oversight organisation should be the body of appeal for ESL related issues, and the Fire and Emergency Services Commissioner's appeal role should be revoked.

Table 31 summarises the ERA's recommendations about the organisations and activities that the ESL should fund, including the processes by which that funding is allocated.

Table 31 What the ESL should fund

Activity	DFES	Local government	Rural fire service	How to access ESL funding
Prevention – activities that individual property owners should undertake (for example, prescribed burning)	×	×	×	NA
Prevention – activities that governments undertake more effectively than individual property owners (for example, bushfire risk management planning)	✓	✓	✓	DFES and Rural Fire Service: internal budget process Local governments: application to DFES or Rural Fire Service
Preparedness – activities that individual property owners should undertake (for example, building a cyclone shelter)	×	×	×	NA
Preparedness – activities that governments undertake more effectively than individual property owners (for example, education campaigns)	✓	✓	✓	DFES and Rural Fire Service: internal budget process Local governments: application to DFES or Rural Fire Service
Response – Career Fire and Rescue Service or RFS equivalent	✓	NA	✓	DFES and Rural Fire Service: internal budget process
Response – volunteer units and brigades	✓	✓	✓	Application to DFES or Rural Fire Service
Response – activities that governments undertake more effectively than individual property owners (for example, response coordination)	✓	✓	✓	DFES and Rural Fire Service: internal budget process Local governments: application to DFES or Rural Fire Service
Recovery	×	×	×	NA
Administration – emergency management (for example, Community Emergency Services Managers or similar)	✓	✓	✓	DFES and Rural Fire Service: internal budget process Local governments: application to DFES or Rural Fire Service
Administration – corporate services functions	%	×	%	DFES and Rural Fire Service: internal budget process

Note: decisions made by DFES and a rural fire service about local governments' applications for ESL funding would be assessed (a) for the response activities of the volunteer unit and brigades, against the same manual that is used by DFES and a rural fire service for their response activities (b) for all other activities, in accordance with the process outlined in Chapter 8 of this report, which is to be developed in conjunction between DFES, a rural fire service and local governments.

Appendix A Stakeholder consultation

The ERA received 40 stakeholder submissions to the issues paper and 42 stakeholder submissions to the draft report. Three stakeholders have requested that their submissions not be published and be treated as confidential. Two stakeholders requested their identifying information to be redacted, but otherwise approved publication of their submission.

The ERA met with 23 organisations and individuals in conducting this review. These meetings were confidential. When referencing these meetings in the report the ERA has excluded stakeholder information to maintain confidentiality, in accordance with section 55 of the *Economic Regulation Authority Act 2003*.

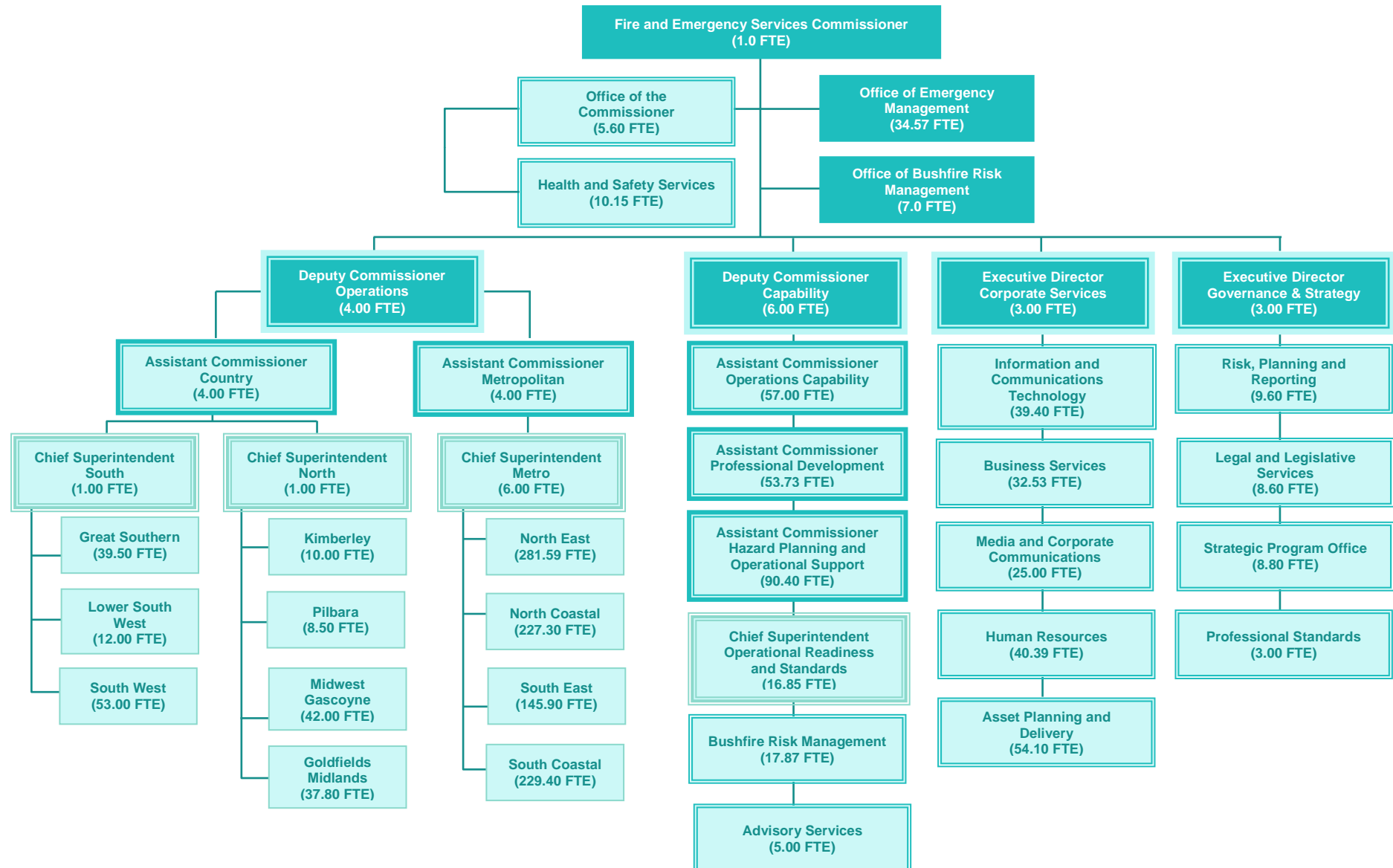
The list of stakeholder submissions (except three confidential submissions) and the organisations and individuals the ERA met with are shown in the table below.

Stakeholder list	Submission to the issues paper	Submission to the draft report	Met with the ERA
Anonymous (1)	✓		
Anonymous (2)		✓	
Association of Volunteer Bush Fire Brigades	✓	✓	✓
Australian Red Cross	✓		
Mr Terry Baker		✓	
Bayswater SES	✓		
The Bushfire Front Inc.	✓	✓	✓
Cascade Scaddan Fire Review Ltd	✓	✓	
Mr Martin Chambers		✓	
Chair, State Emergency Management Committee	✓		✓
Chief Bushfire Control Officer, Shire of Denmark	✓		
Chief Bushfire Control Officer, Shire of Plantagenet	✓		
Chief of Staff, (former) Minister for Emergency Services			✓
Chief of Staff, Treasurer			
City of Canning	✓		
City of Gosnells		✓	
City of Greater Geraldton	✓		
City of Swan	✓	✓	
Community and Public Sector Union/Civil Service Association	✓		
Department of Agriculture and Food			✓

Department of Biodiversity, Conservation and Attractions (formerly the Department of Parks and Wildlife)		✓	✓
Department for Child Protection and Family Support	✓		
Department of Fire and Emergency Services	✓	✓	✓
Department of Planning, Lands and Heritage (formerly the Department of Lands)	✓		✓
Department of Treasury			✓
Mr Glenn Dewhurst		✓	
Emergency Services Volunteers Association	✓		✓
Fire Storm Training	✓		
Gidgegannup Progress Association	✓		
Mr Geoffrey Gorham		✓	
Grape Growers Association	✓		
Mr Alan Hawke	✓		
Mr Colin Jones		✓	
Mr Jeff Howe, Volunteer Marine Rescue Western Australia		✓	
Mr Ian Howlett		✓	
Kimberley Zone of WALGA	✓		✓
Mr Kim Klaka		✓	
Mr John Lyon		✓	
Mr Jim Macbeth		✓	
Mr Steve MacPherson		✓	
Mr John Mangini	✓	✓	
Members of the Legislative Council: Hon. Ricky Mazza MLC, Hon. Robin Scott MLC, Hon. Charles Smith MLC, Hon. Aaron Stonehouse MLC and Hon. Colin Tincknell MLC.			✓
Office of Bushfire Risk Management			✓
Office of Emergency Management	✓	✓	✓
Office of the Auditor General			✓
Pastoralists and Graziers Association	✓	✓	✓
Mr Daryl Poole		✓	
Public Sector Commission			✓
Mr Eddie van Rijnswood	✓	✓	
Mr Ian Rotheram		✓	
Shire of Augusta-Margaret River	✓		
Shire of Corrigin		✓	
Shire of Esperance		✓	
Shire of Harvey	✓		
Shire of Manjimup	✓	✓	

Shire of Mundaring	✓		
Shire of Murray	✓		
Shire of Nannup		✓	
Shire of Plantagenet		✓	
Shire of Woodanilling		✓	
Mr Ralph Smith		✓	
State Emergency Service Volunteers Association	✓		✓
Superannuated Commonwealth Officers Association Western Australia		✓	
Mr Matt Thomas		✓	
Mr Marcus Turner		✓	
United Firefighters Union	✓	✓	✓
Valuer-General, Landgate		✓	✓
WA Farmers Federation	✓		✓
WA Police	✓		
WA Self-Funded Retirees Inc.	✓	✓	
Western Australian Local Government Association	✓	✓	✓
Western Australian Volunteer Fire and Rescue Services Association		✓	✓
Mr Michael Walker		✓	
Mr Derek Williams		✓	
Mr Erik Wright		✓	

Appendix B DFES organisational structure



Appendix C Emergency services in other jurisdictions

Emergency services arrangements vary significantly across Australia's states and territories, both in terms how service provision is structured, and in terms of funding and governance arrangements. This appendix provides an overview of the arrangements that apply in each jurisdiction.

Service providers

Table 32 details the responsible agencies and lines of reporting for providers of fire and emergency services in each State and Territory.

Some jurisdictions (for example, Western Australia and Queensland) have an overarching department that is responsible urban and rural fire response, rescue, and emergency services. Others (for example, New South Wales and Victoria) have three independent authorities providing metropolitan fire services, rural fire services, and emergency services respectively.

All Australian jurisdictions have separate provider(s) of general fire and emergency services, and fire mitigation and response services in managed parks and reserves.

Table 32 Fire and emergency services agencies in other States and Territories

State	Organisation
NSW	Fire and Rescue NSW Provides urban fire and rescue services and hazardous material incident response across the state. ⁹²³
	NSW Rural Fire Service A volunteer-based organisation that provides firefighting, fire mitigation, community education, search and rescue, and emergency services in rural areas. ⁹²⁴
	NSW State Emergency Services A volunteer-based organisation that provides flood and storm emergency services, and search and rescue services. ⁹²⁵
	NSW National Parks and Wildlife Service (in the Office of Environment and Heritage) Undertakes fuel management and firefighting in national parks. ⁹²⁶

⁹²³ Australasian Fire and Emergency Services Authorities Council, *Understanding Our Business Survey 2015/16*, Australasian Fire and Emergency Services Authorities Council, Melbourne, 2016, p.4.

⁹²⁴ NSW Rural Fire Service, *Fast facts: About the NSW Rural Fire Service*, Sydney, Government of New South Wales, <http://www.rfs.nsw.gov.au/about-us/fast-facts>, (accessed 31 January 2017).

⁹²⁵ NSW State Emergency Service, *About Us*, Sydney, Government of New South Wales, <http://www.ses.nsw.gov.au/about/>, (accessed 31 January 2017).

⁹²⁶ Office of Environment and Heritage, *Managing fire in NSW national parks*, Sydney, Government of New South Wales, <http://www.environment.nsw.gov.au/fire/mngfireinnswnatpks.htm>, (accessed 31 January 2017).

	<p>Forestry Corporation of NSW</p> <p>Undertakes fuel management and firefighting in state forests and plantations.⁹²⁷</p>
VIC	<p>Metropolitan Fire Brigade</p> <p>Undertakes firefighting, urban search and rescue services, community education and marine response services within the Metropolitan Fire District.⁹²⁸</p> <p>Country Fire Authority</p> <p>Undertakes firefighting, community education, search and rescue, and marine response services outside of the Metropolitan Fire District.⁹²⁹</p> <p>Victorian State Emergency Service</p> <p>A volunteer-based organisation that provides disaster response, community education, and urban search and rescue services.⁹³⁰</p>
QLD	<p>Queensland Fire and Emergency Services (QFES).</p> <p>The main provider of fire, search and rescue, and emergency services in the state.⁹³¹ The Department administers:</p> <p><i>Queensland Rural Fire Service</i> – a volunteer-based organisation that provides fuel reduction, firefighting, community education, and fire preparedness services in rural and semi-rural areas.⁹³²</p> <p><i>Queensland State Emergency Services</i> – a volunteer-based organisation that is the primary responder for storm and flood emergencies, and provides incident management, community education, and search and rescue services.⁹³³</p> <p>Queensland Parks and Wildlife Service (in the Department of National Parks, Sport and Racing)</p> <p>Provides fuel reduction, fire preparedness, and firefighting services on land it manages.⁹³⁴</p>
SA	<p>South Australian Metropolitan Fire Service</p> <p>Provides urban firefighting, community education, and emergency services in Adelaide and regional centres.⁹³⁵</p>

⁹²⁷ Forestry Corporation, *Fire Management*, Sydney, Government of New South Wales, <http://www.forestrycorporation.com.au/management/fire-management>, (accessed 31 January 2017).

⁹²⁸ Metropolitan Fire Brigade, *Operations*, Melbourne, Government of Victoria, <http://www.mfb.vic.gov.au/About-Us/Operations.html>, (accessed 31 January 2017).

⁹²⁹ Country Fire Authority, *What we do*, Melbourne, Government of Victoria, <http://www.cfa.vic.gov.au/about/what-we-do/>, (accessed 31 January 2017).

⁹³⁰ Victoria State Emergency Services, *What We Do*, Melbourne, Government of Victoria, <https://www.ses.vic.gov.au/about/what-we-do>, (accessed 31 January 2017).

⁹³¹ Queensland Fire and Emergency Services, *QFES Internet*, Brisbane, Government of Queensland, <https://www.qfes.qld.gov.au/Pages/default.aspx>, (accessed 31 January 2017).

⁹³² Queensland Rural Fire Service, *About*, Brisbane, Government of Queensland, <https://www.ruralfire.qld.gov.au/About/Pages/default.aspx>, (accessed 31 January 2017).

⁹³³ Queensland State Emergency Service, *What SES Do*, Brisbane, Government of Queensland, <http://www.ses.qld.gov.au/about/Pages/What-We-Do.aspx>, (accessed 31 January 2017).

⁹³⁴ Department of National Parks, Sport and Racing, *Fire management*, Brisbane, Government of Queensland, https://www.npsr.qld.gov.au/managing/fire_management.html, (accessed 31 January 2017).

⁹³⁵ South Australian Metropolitan Fire Service, *About Us*, Adelaide, Government of South Australia, http://www.mfs.sa.gov.au/site/about_us.jsp, (accessed 31 January 2017).

	<p>South Australian Country Fire Service A volunteer-based organisation that provides fire and rescue services to outer metropolitan, regional and rural areas.⁹³⁶</p> <p>South Australian State Emergency Service A volunteer-based organisation that provides emergency services, and search and rescue services, as well as supporting the Country Fire Service during major bushfires.⁹³⁷</p> <p>Department of Environment, Water and Natural Resources Undertakes fuel management, firefighting, and fire preparedness activities on public lands.⁹³⁸</p> <p>ForestrySA Undertakes fuel management and firefighting on planation lands under its management.⁹³⁹</p>
TAS	<p>State Fire Commission, which operates the Tasmania Fire Service. Staffed by a career firefighters and volunteers and provides firefighting, community education, and search and rescue services across the state.⁹⁴⁰</p> <p>Department of Police, Fire and Emergency Management, which administers Tasmania State Emergency Services. A volunteer-based organisations that provides emergency response, and search and rescue services to the community. It also provides whole-of-government advice and executive support to its State Emergency Management Committee and Regional Emergency Management Planning Groups.⁹⁴¹</p> <p>Parks and Wildlife Service Tasmania (in the Department of Primary Industries, Parks, Water and Environment) Provides fuel management and firefighting services in national parks, regional reserves and conservation areas.⁹⁴²</p> <p>Forestry Tasmania Provides fuel management and firefighting services in the forests it manages.⁹⁴³</p>

⁹³⁶ South Australian Country Fire Service, *About*, Adelaide, Government of South Australia, <http://www.cfs.sa.gov.au/site/about.jsp>, (accessed 31 January 2017).

⁹³⁷ South Australian State Emergency Service, *About the SES*, Adelaide, Government of South Australia, http://www.ses.sa.gov.au/site/about_us/about_the_ses.jsp, (accessed 31 January 2017).

⁹³⁸ Department of Environment, Water and Natural Resources, *Fire management*, Adelaide, Government of South Australia, <https://www.environment.sa.gov.au/managing-natural-resources/fire-management>, (accessed 31 January 2017).

⁹³⁹ ForestrySA, *Fire prevention and management*, Adelaide, Government of South Australia, <https://www.forestry.sa.gov.au/Fire>, (accessed 31 January 2017).

⁹⁴⁰ Tasmania Fire Service, *About TFS*, Hobart, Government of Tasmania, <http://www.fire.tas.gov.au/Show?pagelId=colAbout>, (accessed 31 January 2017).

⁹⁴¹ Tasmania State Emergency Service, *About*, Hobart, Government of Tasmania, <http://www.ses.tas.gov.au/h/es/about-ses>, (accessed 31 January 2017).

⁹⁴² Parks and Wildlife Service Tasmania, *Bushfire Management & Planned Burns*, Hobart, Government of Tasmania, <http://www.parks.tas.gov.au/index.aspx?base=890>, (accessed 31 January 2017).

⁹⁴³ Forestry Tasmania, *Fire management*, Hobart, Government of Tasmania, <http://www.forestrytas.com.au/operations/fire-management>, (accessed 31 January 2017).

ACT	<p>ACT Emergency Services Agency (in the Justice and Community Safety Directorate),⁹⁴⁴ comprising:</p> <p><i>ACT Fire and Rescue</i> – Provides firefighting, search and rescue, and community safety services in Canberra.⁹⁴⁵</p> <p><i>ACT Rural Fire Service</i> – Staffed by career firefighters and volunteers, and provides fuel management and firefighting services in non-suburban areas.⁹⁴⁶</p> <p><i>ACT State Emergency Service</i> – A volunteer-based organisation that provides emergency response services, and search and rescue services.⁹⁴⁷</p> <p>ACT Parks and Conservation Service (in the Environment, Planning and Sustainable Development Directorate)</p> <p>Manages fuel reduction and firefighting on land is manages.⁹⁴⁸</p>
NT	<p>Northern Territory Police Fire and Emergency Services Agency, which operates the:</p> <p><i>NT Fire and Rescue Service</i> – Staffed by career and casual firefighters and volunteers, and provides firefighting, incident management and community education services in Darwin and regional centres.⁹⁴⁹</p> <p><i>NT Emergency Service</i> – Comprises permanent staff and volunteers, and is responsible for emergency management planning and response.⁹⁵⁰</p> <p>Bushfires NT (in the Department of Environment and Natural Resources)</p> <p>A volunteer-based organisation responsible for fuel management and firefighting in rural areas.⁹⁵¹</p>

⁹⁴⁴ ACT Emergency Services Agency, *About us*, Canberra, Government of Australian Capital Territory, <http://esa.act.gov.au/about-us/>, (accessed 31 January 2017).

⁹⁴⁵ ACT Fire and Rescue, *About*, Canberra, Government of Australian Capital Territory, <http://esa.act.gov.au/actfr/about/>, (accessed 31 January 2017).

⁹⁴⁶ ACT Rural Fire Service, *ACT Rural Fire Service*, Canberra, Government of Australian Capital Territory, <http://esa.act.gov.au/actrfs/>, (accessed 31 January 2017).

⁹⁴⁷ ACT State Emergency Service, *About us*, Canberra, Government of Australian Capital Territory, <http://esa.act.gov.au/actses/about-us/>, (accessed 31 January 2017).

⁹⁴⁸ Environment, Planning and Sustainable Development Directorate, *PCS Fire Management Unit*, Canberra, Government of Australian Capital Territory, <http://www.environment.act.gov.au/ACT-parks-conservation/bushfire-management/about-the-pcs-fire-management-unit>, (accessed 31 January 2017).

⁹⁴⁹ Northern Territory Fire and Rescue Service, *Our people*, Darwin, Government of Northern Territory, <http://www.pfes.nt.gov.au/Fire-and-Rescue/Our-people.aspx>, (accessed 31 January 2017).

⁹⁵⁰ Northern Territory Emergency Service, *About NTES*, Darwin, Government of Northern Territory, <http://www.pfes.nt.gov.au/Emergency-Service/About-NTES.aspx>, (accessed 31 January 2017).

⁹⁵¹ Department of Environment and Natural Resources, *Bushfires NT*, Darwin, Government of Northern Territory, <https://denr.nt.gov.au/about/bushfires-nt>, (accessed 31 January 2017).

Funding arrangements

Fire and emergency services agencies in Australian jurisdictions are generally funded – at least to some extent – by a levy. However, as shown in Table 33, there is some variation in both the application of the levy, and the use of funds raised.

Table 33 Funding arrangements for fire and emergency services in other States and Territories

State	Funding arrangements
NSW	<p>Fire and Rescue New South Wales is currently funded jointly by contributions from the Treasurer, local councils, and insurance companies (via a levy). The New South Wales Rural Fire Service has a similar funding arrangement.</p> <p>On 1 July 2017, the levy on insurance policies was to be replaced with an Emergency Services Property Levy, to be paid alongside council rates.⁹⁵² However, this process has been deferred.⁹⁵³</p>
VIC	<p>The Fire Services Property Levy covers 87.5 per cent of the cost of Metropolitan Fire Brigade and 77.5 per cent of the cost the Country Fire Authority.</p> <p>The levy is calculated based on the capital improved value of each property, and varies for residential, industrial, commercial, vacant, public benefit, and farm properties.</p> <p>Separate levies are charged in Metropolitan Fire Brigade and Country Fire Authority areas. This reflects the different costs of funding each service. The remainder of the funding for these services is provided directly by the Victorian Government.^{954 955}</p>
QLD	<p>The Emergency Management Levy is the Fire and Emergency Service's primary source of funding. It is a levy on property, and is based on the levy class (determined by the service available in the area), and the use of the property. Local governments collect the levy and remit it to the Fire and Emergency Service.</p> <p>Queensland legislation also allows local governments to levy rates or charges and contribute the amounts raised to rural fire brigades.</p> <p>The Fire and Emergency Service also receives a State-funded contribution, which is equivalent to approximately 14 per cent of Emergency Management Levy income received.⁹⁵⁶</p>

⁹⁵² New South Wales Government, *Emergency Services Property Levy*, Sydney, Government of New South Wales, <http://emergencyservicespropertylevy.nsw.gov.au/>, (accessed 31 January 2017).

⁹⁵³ Communication with the New South Wales Department of Treasury, 19 September 2017.

⁹⁵⁴ Victorian Government, *Fire Services Property Levy: Frequently Asked Questions*, Melbourne, Government of Victoria, <http://www.firelevy.vic.gov.au/faq.html>, (accessed 31 January 2017).

⁹⁵⁵ Victoria State Emergency Service, *News: On funding*, Melbourne, Government of Victoria, <https://www.ses.vic.gov.au/-/on-funding>, (accessed 31 January 2017).

⁹⁵⁶ Australasian Fire and Emergency Services Authorities Council, *Understanding Our Business Survey 2015/16*, Australasian Fire and Emergency Services Authorities Council, Melbourne, 2016, p.7.

SA	<p>The Emergency Services Levy is charged on land, and on vehicles and vessels. This funding is placed in a dedicated fund (the Community Emergency Services Fund), which is administered by the Minister for Emergency Services.</p> <p>The levy on land is calculated based on land use, the region of the state in which the property is located, and on the capital value of the property at the beginning of the financial year.</p> <p>The Community Emergency Services Fund is used to pay for the operations of the Metropolitan Fire Service, Country Fire Service, South Australian State Emergency Service, and SAFECOM.</p> <p>The fund is also used to pay for the emergency services activities of other agencies (for instance South Australia Police, and the Department for Environment, Water and Natural Resources), and the activities of non-government organisations such as Volunteer Marine Rescue.</p> <p>Approximately 95 per cent of the costs of the Metropolitan Fire Services and Country Fire Service, and 98 per cent of the costs of the South Australian State Emergency Service are covered by the Emergency Services Levy, with the remainder provided by the local, state, and federal governments.⁹⁵⁷</p>
TAS	<p>The Tasmanian Fire Service is funded by a combination of a levy on motor vehicles (approximately 10 per cent), contributions paid by insurance companies (approximately 25 per cent), and contributions paid by local councils (approximately 50 per cent). Most of the remainder of the Tasmania Fire Service's funding is provided by the Tasmania Government.</p> <p>The Tasmanian Fire Service contributes towards the funding to the Tasmania State Emergency Service by making a payment to the Department of Police, Fire and Emergency Management.</p> <p>The contribution made by a local council is calculated based on: the value of land in each service category within the local government area; the total value of land in each service category in the State; and the estimated operating and capital costs of brigades within each category of land in the state.^{958 959}</p>
ACT	<p>The Fire and Emergency Services Levy partly covers the costs of providing fire and emergency services in the ACT. Residential and rural property owners pay a fixed charge, while commercial property owners pay an amount equal to the average unimproved value of the land multiplied by a marginal rate.</p> <p>Property owners pay the Fire and Emergency Services Levy, along with rates, to the New South Wales Revenue Office.⁹⁶⁰</p>
NT	<p>The Northern Territory Government funds its fire and emergency services from general revenue.⁹⁶¹</p>

⁹⁵⁷ South Australian Fire and Emergency Services Commission, *How is the sector funded?*, Adelaide, Government of South Australia, http://www.safecom.sa.gov.au/site/about_us/how_sector_is_funded.jsp, (accessed 1 February 2017).

⁹⁵⁸ Australasian Fire and Emergency Services Authorities Council, *Understanding Our Business Survey 2015/16*, Australasian Fire and Emergency Services Authorities Council, Melbourne, 2016, p.7.

⁹⁵⁹ Department of Police, Fire and Emergency Management, *Annual Report 2015-16*, Hobart, Government of Tasmania, 2016, p.81.

⁹⁶⁰ ACT Revenue Office, *Fire and emergency services levy*, Canberra, Government of Australian Capital Territory, <http://www.revenue.act.gov.au/duties-and-taxes/other-levies-and-taxes/fire-and-emergency-services-levy>, (accessed 1 February 2017).

⁹⁶¹ New South Wales Treasury and the Ministry for Police and Emergency Services, *Funding our Emergency Services: Discussion Paper July 2012*, Sydney, Government of New South Wales, 2012.

Governance arrangements

Governance and independent oversight arrangements vary substantially across other Australian jurisdictions, as shown in Table 34.

Table 34 Governance and reporting arrangements for fire and emergency services agencies in other States and Territories

State	Organisation(s)
NSW	Fire and Rescue NSW, the NSW Rural Fire Service, and NSW State Emergency Services are government departments, and report directly to the Minister for Emergency Services. ⁹⁶²
VIC	<p>The Metropolitan Fire and Emergency Services Board, the Country Fire Authority, and the Victorian State Emergency Service are statutory authorities, reporting to the Minister for Emergency Services.⁹⁶³</p> <p>Victoria also has two offices that provide strategic direction and oversight for emergency management. These are:</p> <ul style="list-style-type: none"> • Emergency Management Victoria, which is headed by the Emergency Management Commissioner, and is responsible for coordinating a whole of government strategy for emergency management in Victoria;⁹⁶⁴ and • the Inspector-General for Emergency Management, who is responsible for monitoring, evaluating, and reporting on the capacity and performance of the state's emergency services sector.⁹⁶⁵
QLD	<p>Queensland Fire and Emergency Services is a government department, and reports to the Minister for Police, Fire and Emergency Services.</p> <p>Queensland's Inspector-General Emergency Management also reports to the Minister for Police, Fire and Emergency Services, and is responsible for developing a whole-of-government approach to public safety. The Office of the Inspector-General Emergency Management performs reviews and assessments of Queensland's disaster and emergency management arrangements.⁹⁶⁶</p>

⁹⁶² Australasian Fire and Emergency Services Authorities Council, *Understanding Our Business Survey 2015/16*, Australasian Fire and Emergency Services Authorities Council, Melbourne, 2016, p.10.

⁹⁶³ Australasian Fire and Emergency Services Authorities Council, *Understanding Our Business Survey 2015/16*, Australasian Fire and Emergency Services Authorities Council, Melbourne, 2016, p.10.

⁹⁶⁴ Emergency Management Victoria, *About us*, Melbourne, Government of Victoria, <https://www.emv.vic.gov.au/about-us>, (accessed 31 January 2017).

⁹⁶⁵ Inspector-General for Emergency Management, *About the Inspector-General for Emergency Management*, Melbourne, Government of Victoria, <http://www.igem.vic.gov.au/home/about+us/about+the+inspector+general+for+emergency+management/>, (accessed 31 January 2017).

⁹⁶⁶ Australasian Fire and Emergency Services Authorities Council, *Understanding Our Business Survey 2015/16*, Australasian Fire and Emergency Services Authorities Council, Melbourne, 2016, p.7.

SA	<p>The Metropolitan Fire Service, Country Fire Service, State Emergency Service, are statutory authorities, and are managed by the board of the South Australian Fire and Emergency Services Commission (SAFECOM).⁹⁶⁷</p> <p>SAFECOM reports to the Minister for Emergency Services, and has a lead role in emergency management planning in South Australia.⁹⁶⁸</p>
TAS	<p>The Tasmania Fire Service is the operational division of Tasmania's State Fire Commission, which oversees fire policy and operational standards, and reports to the Minister for Police, Fire and Emergency Services.⁹⁶⁹</p> <p>The Tasmania State Emergency Service is a division of the Department of Police, Fire and Emergency Management, and reports to the Minister through the Tasmania Fire Service.⁹⁷⁰</p>
ACT	<p>The Emergency Services Agency is part of the Justice and Community Safety Directorate, which reports to the ACT Attorney-General, the Minister for Police and Emergency Services, and the Minister for Justice.⁹⁷¹</p>
NT	<p>The Northern Territory Police Fire and Emergency Services Agency reports directly to the Minister for Police, Fire and Emergency Services.⁹⁷²</p>

⁹⁶⁷ South Australian Fire and Emergency Services Commission, *SAFECOM Board*, Adelaide, Government of South Australia, http://www.safecom.sa.gov.au/site/about_us/safecom_board.jsp, (accessed 31 January 2017).

⁹⁶⁸ South Australian Fire and Emergency Services Commission, *About Us*, Adelaide, Government of South Australia, http://www.safecom.sa.gov.au/site/about_us.jsp, (accessed 31 January 2017).

⁹⁶⁹ Tasmania Fire Service, *State Fire Commission*, Hobart, Government of Tasmania, <http://www.fire.tas.gov.au/Show?pageId=colStateFireCommission>, (accessed 31 January 2017).

⁹⁷⁰ Department of Police, Fire and Emergency Management, *Annual Report 2015-16*, Hobart, Government of Tasmania, Hobart, 2016, p.81.

⁹⁷¹ Justice and Community Safety Directorate, *Our Structure*, Canberra, Government of Australian Capital Territory, <http://justice.act.gov.au/page/view/195/title/our-structure>, (accessed 1 February 2017).

⁹⁷² Northern Territory Police, Fire and Emergency Services, *2015-16 Annual Report*, Darwin, Government of Northern Territory, 2016, p.10.

Appendix D Overview of DFES cost centre structure

The purpose of Appendix D is to provide an overview of the way DFES aggregates and categorises its costs. It is structured as follows:

- An overview of DFES cost centre structure, including examples cost centres within each cost category. (DFES has a total of about 9,000 in its accounting system.)
- A full list of the cost centres DFES classifies as 'Prevention Services'.
- A list of cost centres not funded by the ESL, or only partly funded by the ESL.

DFES cost centre structure

The cost centre structure below was provided to the ERA by DFES (Figure 36).⁹⁷³

Figure 36 DFES Cost Centre Structure

DFES costs	
	Direct costs
	Prevention Services (a full list of these cost centres is also provided below)
	Community Prevention
	e.g. At Risk Communities [program], Community Engagement, State Hazard Operations, Unallocated Crown Land Mitigation Works [for Department of Lands], Unexploded Ordnance Services.
	Emergency Management Services
	e.g. Emergency Services Policy & Planning, Office of Bushfire Risk Management, Natural Disaster Resilience Program, Community Engagement Services Managers [local government employed] [individual cost centres for each region].
	Emergency Services
	Fire and Rescue Services – Career
	e.g. CFRS Geraldton [and similar individual cost centres for each CFRS unit], Great Southern Regional Directorate [and similar cost centres for each region], Operational Information Systems.
	Fire and Rescue Service – Volunteer
	e.g. VFRS Yanchep [and similar individual cost centres for each VFRS unit], VFRS Association.

⁹⁷³ Department of Fire and Emergency Services, *ERA Information Request 6 Allocation of cost centers to services.pdf*, provided to the Economic Regulation Authority, 8 February 2017.

Bush Fire Services
<i>e.g. CFRS Geraldton [and similar individual cost centres for each CFRS unit], Great Southern Regional Directorate [and similar cost centres for each region], Operational Information Systems.</i>
State Emergency Service
<i>e.g. State Emergency Service Division Administration, SESU Broome [and similar cost centres in other regional towns], SESU Canine Section, SES North Coastal Metro [and similar units in other regions], VSES Association.</i>
Volunteer Marine Rescue Services
<i>e.g. VMRS Denmark [and similar cost centres in other coastal towns], VMRS Administration, VMRS Association, Surf Life Saving WA.</i>
Natural Disaster Relief Arrangements
<i>e.g. [no currently open cost centres]</i>
Local Government Grants (BFS and SES)
<i>e.g. Town of Vincent [and similar cost centres for each local government], ESL Appliance Retrieval; ESL Vehicles.</i>
FESA Unit Volunteers (Note: FESA Units are now named 'VES Units')
<i>e.g. FESA Unit Halls Creek [and similar cost centres for other regional centres]; Emergency Services Volunteer Youth Program.</i>
WA Emergency Rescue Helicopter Service
<i>e.g. WA Emergency Rescue Helicopter Services Administration, Emergency Rescue Helicopter Service – Jandakot, Emergency Rescue Helicopter Service – Bunbury.</i>
FESA Aerial Services
<i>e.g. Fire Services Air Operations Administration, State Operations Air Desk, AFS Fixed Wing – Perth [and similar cost centres for other local centres].</i>
Overhead costs

Corporate Services

CEO Corporate
<i>e.g. CEO Executive Directorate, Public Affairs, Safety Management, Digital and Social Media Communications, State Emergency Management Committee, Capability & Planning Branch, WANDRRA.</i>
Business Services Corporate
<i>e.g. Telecommunication Services, Financial Services, Information Resources, Asset Planning & Delivery, ESL Revenue, Land & Buildings, Plant & Equipment.</i>
Human Services Corporate
<i>e.g. Health & Safety Services, HR Systems, Recruitment & Payroll Services, Essential Training, Policy & Legal Services, Trainee Firefighter School.</i>

Detail of 'Prevention Services' cost centres

Table 35 provides a full list of DFES's open 'Prevention Services' cost centres as at 8 February 2017.⁹⁷⁴

Table 35 List of DFES Prevention Services Cost Centres

Number	Cost Centre Name	Funded by ESL?
	Community prevention	
500	Executive Director Governance & Strategy	Y
501	Built Environment	Y
503	Fire Investigation & Analysis	Y
504	Community Engagement	Y
507	Bushfire and Environmental Protection	Y
509	Water Policy and Strategy	Y
508	Aboriginal Advancement Unit	Y
506	Education & Heritage Centre	Y
422	Media and Communications	Y
513	Community Engagement Directorate	Y
6305	Pilbara Region Pre Easter Championship Training	Y
6306	Swan & Avon River Catchment Flood Warning	Y
6307	Pilbara-Kimberley Summer-Winter Program	Y
6308	Blue Hydrant Marker Program	Y
3001	Unallocated Crown Land - Urban	Y
3128	Unallocated Crown Land Mitigations Works (DoL)	N
3025	Bushfire Risk Management Services [DOE]	Y
3047	At Risk Communities	Y
3046	State Hazard Operations	Y
3043	Critical Infrastructure	Y
3042	Urban Capability	Y
3040	Assistant Commissioner Operations Capability	Y
3041	Assistant Commissioner Hazard Planning & Operations Support	Y
3045	EM & Hazard Planning	Y
3103	Bushfire Risk Management - Metro (Other)	Y
3104	Advisory Services	Y
428	Unexploded Ordnance Services	N
	Emergency management services	
514	EM Training & Development	Y
803	State Emergency Management Committee Community Emergency Management	Y
3017	NDRP - Community Focused Local EM Arrangements	Y
3018	NDRP - Modify & Develop Safer Community for RIC	Y
6321	Natural Disaster Resilience Programme	Y

⁹⁷⁴ Department of Fire and Emergency Services, *ERA Information Request 6 Allocation of cost centres to services.pdf*, provided to the Economic Regulation Authority, 8 February 2017.

3032	CESM LG Employed - Great Southern	Y
3031	CESM LG Employed - Midwest Gascoyne	Y
3030	CESM LG Employed - South West	Y
3029	CESM LG Employed - Lower South West	Y
3028	CESM LG Employed -South Coastal Metro	Y
3027	CESM LG Employed - North East Metro	Y
3026	CESM LG Employed - Goldfields Midlands	Y
3039	Operational Readiness & Exercise Development	Y

Cost centres not entirely funded by the ESL

Table 36 provides a list of cost centres not funded by the ESL, or only partly funded by the ESL as at 23 February 2017.⁹⁷⁵

Table 36 Cost centres not entirely funded by the ESL

Number	Cost Centre Name	Funding Source
5738	Surf Life Saving WA	General government revenue
428	Unexploded Ordnance Services	General government revenue
5960	Emergency Rescue Helicopter - Metropolitan	General government revenue
3088	Bushfire Risk Management Planning Process	General government revenue
450	Project 1955 - Volunteer Fuel Card	General government revenue
450	Project 1779 – Volunteer Fuel Card	Royalties for Regions
3079	Comprehensive Fire Crew Protection - Capital	Royalties for Regions
3080	Comprehensive Fire Crew Protection - Recurrent	Royalties for Regions
3082	Emergency Rescue Helicopter – South West	Royalties for Regions
3112	Automatic Vehicle Location (AVL) - Recurrent	Royalties for Regions
3113	Automatic Vehicle Location (AVL) - Capital	Royalties for Regions
4270	VESC Christmas Island	Australian Government
3024	Deputy Commissioner Operations Support & Capability	Special Acts Appropriation
3009	Commissioner	Special Acts Appropriation
3010	Deputy Commissioner Operations	Special Acts Appropriation
611	CESM Wanneroo	Part local government, part ESL
616	CESM Cockburn	Part local government, part ESL
626	CESM Swan	Part local government, part ESL
628	CESM Mundaring	Part local government, part ESL
629	CESM Kalamunda	Part local government, part ESL
652	CESM Geraldton-Greenough	Part local government, part ESL
661	CESM Busselton	Part local government, part ESL
3128	Unallocated Crown Land Mitigation Works	Part Royalties for Regions, part Department of Lands
3025	Bushfire Risk Management Services – DOE mitigation	Department of Education
492	Direct Brigade Alarms Support	Fees and charges
530	Commercial Training Unit	Not currently operational

⁹⁷⁵ Communication with Department of Fire and Emergency Services, 23 February 2017.

Appendix E DFES prevention and preparedness activities

The following information was provided by DFES, and is inserted below as provided to the ERA. It is summary of prevention and preparedness programs undertaken by DFES, as at 8 March 2017.

Advisory Services

- **Bushfire risk management of identified schools**
 - Operate under an MOU with the Department of Education to provide expert assessment and advice for bushfire risk management of identified schools
 - Develop and implement bushfire risk management plans for public schools in high risk bushfire areas on the Bushfire Zone Register
 - Assess and evaluate bushfire risk for each site, and prepare reports that identify and prioritise treatment schedules to minimise risk from bushfire for schools
- **Unexploded Ordnance (UXO) contamination for particular areas of land in WA**
 - Provide risk management advice on UXO matters, including historical and technical information, regarding the potential for particular areas of land in WA to be affected by UXO contamination
 - Liaise, assess, evaluate and report on UXO activities and matters regarding land use planning and compliance issues
 - Conduct independent quality assurance and control procedures on areas searched by UXO contractors across the State
- **Bushfire risk management for land use planning referrals**
 - Provide bushfire related advice to help guide decision making on planning proposals and development applications to avoid inappropriate development in bushfire prone areas
 - Assist the decision maker in understanding the bushfire risk in a location and to avoid any increase in the threat of bushfire to people, property and infrastructure
 - Assist in the assessment of proposed bushfire risk management measures required for strategic planning proposals, subdivision or development applications in bushfire prone areas to ensure the bushfire risk is acceptable.

Bushfire Risk Management Branch

- **Bushfire Risk Management Planning**
 - Support the development of Bushfire Risk Management Plans in 16 priority high bushfire risk local governments across one metropolitan and five country regions.
 - No funding has been secured for mitigation activities in these areas i.e. the land owner is responsible for any mitigation activities.
 - Funding for the project ceases 30 June 2017.

- **Mitigation for State-wide Unallocated Crown Land and Unmanaged Reserves**

- On behalf of the Department of Lands, DFES is contracting mitigation within eligible town sites to the value of \$1.3M in 2016-17.

Built Environment Branch

- **Water Policy and Strategy**

- Liaise with external stakeholders about technological improvements in the area of water supply and/or usage
- Review water management strategies to ensure they meet best practice in an emergency management context
- Contribute to research to maximise specific outcomes.

- **Fire Investigation and Analysis Unit**

- Identify and analyses fire trends.
- Conduct investigations of incidents with a view to carrying out a detailed analysis so that it can document lessons learnt for life safety and property loss purposes.
- Identify faulty products and poor work practices which cause fires.
- Use the knowledge gained from fire investigations to development more effective and focused fire and arson prevention strategies.

- **Built Environment**

- Ensure fire safety requirements of commercial and industrial building plans are fulfilled before a building permit is issued.
- Inspect completed buildings to check required fire safety equipment has been installed according to the plans.
- Test of certain fire safety equipment used by the fire service

Hazard Planning

- **Westplans and Hazard Planning**

- Manage Westplans for Cyclone, Earthquake, Fire, Storm and Tsunami which all identify and recommend risk treatment strategies.
- Review Western Australia's Flood Risk Status report to identify risk treatment strategies.
- Lead the *Earthquake Impact and Risk Assessment for Perth* project to identify risk treatment strategies to reduce the impact of earthquakes on people, residential and business buildings, transport network, electricity network and water supply network.

- **Groups/ Committees**

- Participate on the Australian Tsunami Advisory Group which considers plans and mitigation activities to reduce the impact of tsunami.
- Participate on the WA Flood Warning Consultative Committee which discusses and promotes opportunities for mitigation measures.
- Participate on the Bushfires and Natural Hazards Cooperative Research Centre – Coastal Management Cluster which researches ways to develop better predictions for extreme water levels and resilience to coastal disaster events (storm surge).

- Participate on the National Flood Warning Infrastructure Working Group which aims to improve flood warning infrastructure through the development of national technical standards and Strategic Flood Warning Infrastructure Plans, to guide national flood infrastructure investment priorities.

National Bushfire Mitigation Program (NBMP)

NBMP is a partnership between WA and Commonwealth Governments' aimed at enhancing bushfire risk mitigation throughout the state. DFES is responsible for distributing funds in WA via an open competitive grants process.

The NBMP Program aims to enhance bushfire risk mitigation throughout the state by providing funding for bushfire works, measures and related activities, focusing on the priority outcomes of both the Commonwealth and WA.

Commonwealth priorities:

1. Reduce fuel loads by creating effective land management strategies;
2. Construction or maintenance of fire trails and associated measures;
3. Implementation of cost-effective activities that reduce the impact of severe bushfires and promote community resilience; and
4. Generation of scientific information (including hazard mapping) to develop best-practice strategies.

WA priorities:

1. Completion of, or progress towards completion of, a Bushfire Risk Mitigation Plan (BRMP);
2. Implementation of cost-effective hazard reduction activities; and
3. Clear link to bushfire mitigation outcomes.

NBMP grant funding provides up to 50% of funds for various mitigation activities across the state for both Local Government and State Government Departments.

In 2015-16, 22 grants were awarded to 11 Local Governments and 11 State Government Departments. The NBMP funding contribution was \$552,982, with the total value of mitigation projects \$1,300,716.

In 2016/17, 17 grants were awarded to 5 Local Government and 12 State Government Departments. The NBMP funding contribution was \$367,683, with the total value of mitigation projects \$980, 556.

Eight projects have been completed with the remainder underway.

Marine Services

Marine Services provides funding from the ESL to Volunteer Marine Rescue (VMR) groups to operate their day to day running costs. WA Police are the Hazard Management Agency for VMR.

Community Engagement

Prevention Program	Description	Location of delivery
Bushfire Program	The bushfire program provides a strategic approach to community engagement activities that work to reduce the level of bushfire risk to the community across the South West Land Division. Specifically, the program works to facilitate a coordinated approach to community engagement across a range of stakeholders, as well as the development of skills and knowledge that support communities to understand their bushfire risk and act to reduce that risk. Treatment options identified and applied to communities based on a risk assessment and the population demographics. The development and distribution of resources and information are also key elements of the program.	State
Bushfire Ready	Bushfire Ready is a community driven program aimed at encouraging local residents to work together in preparing and protecting their families and properties against bushfires. Bushfire Ready aims to build community resilience by providing an opportunity for neighbours to network, share ideas and information and develop and implement strategies to reduce their bushfire risk.	Program available state-wide but targeted in local communities.
Areas of Community Engagement Focus (ACEF)	The objective of an ACEF is to reduce the impact that bushfires can have on the community, by improving individual and community resilience. An ACEF achieves this through the identification of localised high bushfire risk areas and targeted treatment options to meet the needs of that community based on demographic, community vulnerabilities and operational requirements.	Targeted
Flood	Flood initiatives focus on the development and distribution of flood preparedness safety messages.	State
Cyclone	Cyclone initiatives aim to increase individual and community preparedness for cyclone and flood. The program focuses on the development and distribution of resources appropriate for community members and industry in the North West such as tourism providers. Resources developed are provided in multiple languages for accessibility to tourists.	Targeted - North West
Dry Season	Dry Season initiatives focus on the development and distribution of information and resources relevant the North West dry season including factsheets and monthly themes on key prevention, preparedness and traveling safety messages.	Targeted - North West
Smoke Alarm	Smoke alarm campaign initiatives include the undertaking of research to inform key smoke alarm messages around replacement and maintenance of smoke alarms. Research and incident occurrence data then inform a targeted approach for engaging communities in prevention activities.	State
WinterSAFE	The WinterSAFE program provides key home fire safety and storm prevention messages and initiatives (including smoke alarms) between the months of April - September. The WinterSAFE program uses incident occurrence data and community profiles to identify locations and vulnerable community groups (ACEF) to provide a targeted approach to prevention and preparedness activities.	Targeted

School Aged Education - Bushfire Patrol	Bushfire Patrol is a bushfire education program for schools within the southwest land division of Western Australia. It can easily be accessed by teachers and students through the DFES website. The Australian Curriculum linked program includes classroom lesson plans and fun mission-based online games for students from Years 2-6 in primary school. Take home activities are incorporated into the program to help develop individual and family resilience to bushfire hazards. Its key outcome is to raise students and their family's awareness, perception of risk and shared responsibility around bushfire in the community.	Targeted - South West Land Division
School Aged Education - Emergency Helpers	This program focuses on DFES Emergency Helpers (safe people) and what students can do to keep themselves safe when it comes to emergencies, including the importance of the 000 number. Students are introduced to the uniforms and safety equipment used by DFES career and volunteer emergency service workers and volunteers.	Program available from Perth only
School Aged Education - Home Fire Safety	Students learn about hazards in the home, crawling low under smoke and the importance of a home fire escape plan and safe meeting point. The Year 3 School Visit program is an incursion program in all primary schools in WA for Year 3 students. In the Perth Metropolitan area and in larger regional areas, this program is delivered by career firefighters. In regional areas, it is delivered by volunteer firefighters, if they have the capacity to do so. The visit is one hour (or less) and includes a talk to students about the role of the firefighter, preventing a home fire, safe and unsafe fires, smoke alarms, the importance of a home fire escape plan, crawling low under smoke and calling triple zero.	State
At Risk	The At Risk Communities Program focuses on those at-risk and vulnerable members of the community who may be at greater risk of injury or death due to their inability to receive, understand or act on information during an emergency. The program currently targets Aged in Place, Disability and Family Day Care. DFES's At-Risk People Strategy recognised Service Providers as being the critical link to these members of the community that are often in isolation and considered to be at risk. The program offers a training package (either online or in the workplace) to educate and enable service providers (carers) to support their clients to better prepare for and respond to bushfire emergencies, as well as encourage staff to focus on their own self-care and procedures when working in high bushfire risk areas.	Targeted - high bushfire risk areas
Juvenile and Family Fire Awareness (JAFFA)	The JAFFA Program is a free, confidential early intervention program for young people aged 6 to 16 years who are experimenting with fire. The education session assists young people to understand fire behaviour, fire safety and the legal implications of arson. JAFFA is delivered by specially trained firefighters in the young person's home. The firefighter conducts an interview with the young person and their parents to understand the young person's firelighting behaviour. The education session may include watching short films, viewing photographs that illustrate the consequences of inappropriate fire use, discussing fire safe behaviour and conducting a fire safety audit in the home.	State

Education & Heritage Centre All Hazards Gallery	<p>The DFES Education & Heritage Centre is free for all to visit. The All Hazards Gallery at the Centre provides an interactive facility with information and education on all hazards that are managed by DFES across the state. There are specific focus areas across the gallery on:</p> <ul style="list-style-type: none"> • Bushfire • Home Fire Safety • Flood • Storm • Cyclone • Tsunami • Earthquake <p>The Centre is designed to accommodate all age groups and provides free information for visitors to take away on all the different hazards. The Information Space has public access computers to view the DFES Website and Bushfire Prone Areas Map (Emergency WA to come), an interactive screen to view hazards across the state and hard copy printed information.</p>	Metropolitan area but information provided for the whole state
Education & Heritage Centre Heritage Day	<p>The DFES Education & Heritage Centre is free for all to visit. The annual Heritage Day is run one Sunday each October to showcase heritage buildings throughout Perth. DFES use this event to promote all hazards that are managed by DFES to approximately 2000 visitors each year. The Centre resources and activities are boosted by representatives of every DFES service including representative appliances to assist in education of the visitors.</p>	Metropolitan area but information provided for the whole state

Appendix F Risk and the economic costs of natural disasters

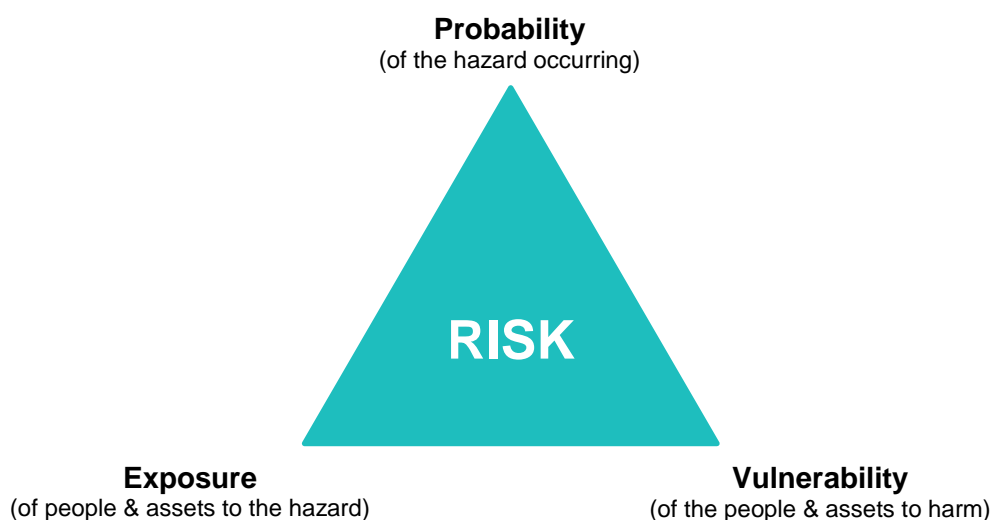
The purpose of Appendix F is to explain the definition of risk, the types of costs arising from natural disasters, and the trade-offs that must be made in managing natural disaster risks. This section is partially adapted from the Productivity Commission's inquiry into *Natural Disaster Funding Arrangements*.

Assessing risk

The level of risk arising from a natural hazard depends on three elements: probability; exposure; and vulnerability.⁹⁷⁶ These are shown in Figure 37.

Effective risk management may involve targeting one or more of these three elements. By investing in the right risk management activities, probability, exposure, and vulnerability can all be reduced.

Figure 37 Risk as a product of probability, exposure, and vulnerability



Source: Productivity Commission, *Natural Disaster Funding Productivity Commission Inquiry Report*, Melbourne, Government of Australia, 2014, Vol. 2, p. 342.

Probability, exposure, and vulnerability are defined as follows:

- *Probability* – this refers to the type of natural hazard (for example, bushfire, flood, tsunami), and the probability of the natural hazard event occurring, including its severity, extent, and frequency.
- *Exposure* – this refers to the number of people and value of assets exposed to the natural hazard, and the activities they support.

⁹⁷⁶ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 342.

- *Vulnerability* – this refers to the susceptibility of the exposed people, assets and activities to the effects of the hazard.⁹⁷⁷

Risk management is used to influence one or more of these three elements, thereby decreasing the overall level of risk. Risk management involves determining who is responsible for managing risks to which assets, understanding the risks faced and the potential consequences, and deciding how best to treat risks.⁹⁷⁸

When risk is assessed and understood, it is then possible to measure the costs of natural disasters, and the costs and benefits of taking prevention and preparedness actions.

The economic costs of natural disasters

The economic costs of a natural disaster include tangible costs and intangible costs.⁹⁷⁹ Tangible costs can be further categorised as direct market costs and indirect market costs (refer to Figure 38).

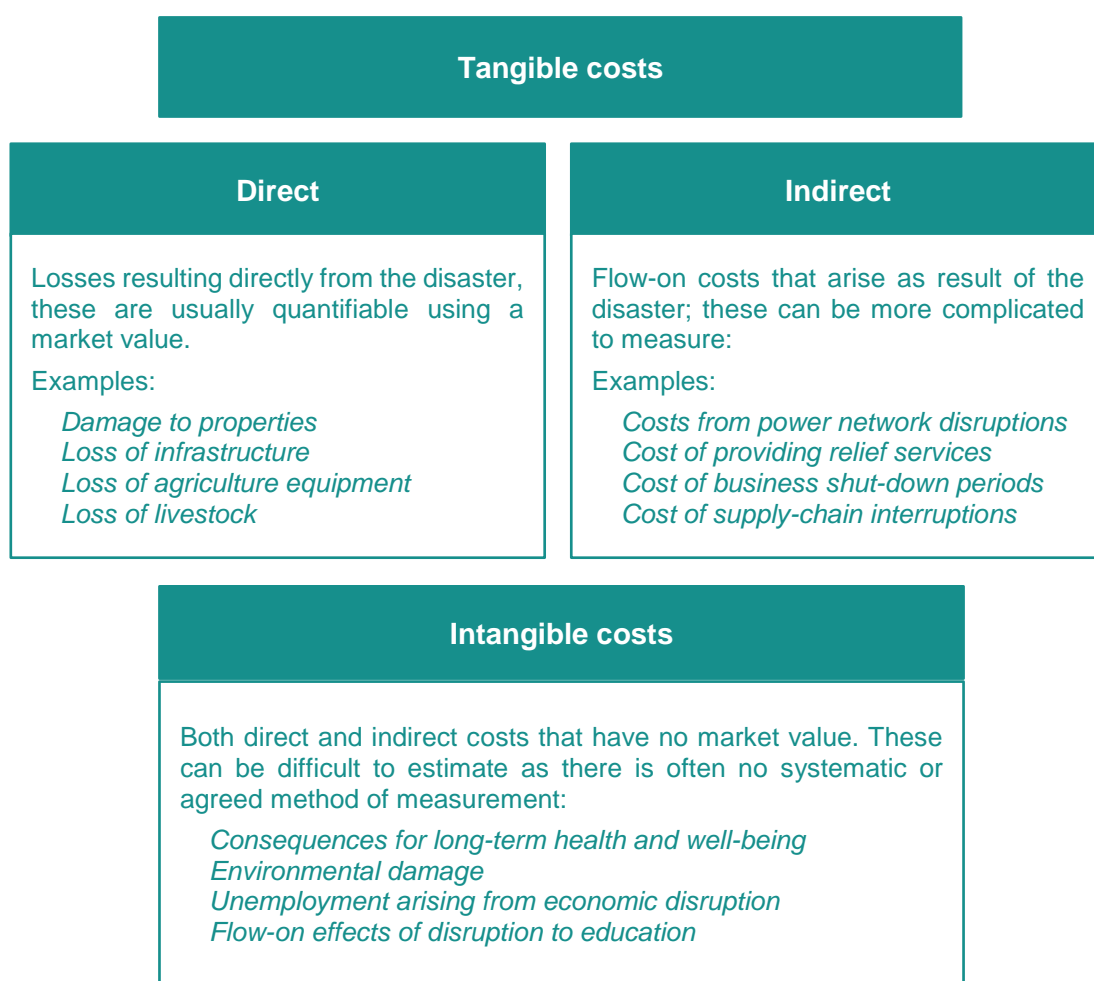
- *Direct market costs* – these are the costs of the immediate impact of a natural disaster on tangible assets. Direct market costs include damage to private property (for example, such as homes and business assets) and public property (for example, such as roads and schools).
- *Indirect market costs* – these are costs that arise as a flow-on consequence of the natural disaster. Indirect market costs include loss of production, disruption to public services, and the costs of responding and recovering from the natural disaster.
- *Intangible costs* – these are costs that arise from damage to assets that cannot be bought and sold. Intangible costs include the costs of stress, injury and loss of life, and the costs of damage to the environment and cultural heritage.⁹⁸⁰

⁹⁷⁷ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 342.

⁹⁷⁸ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 341.

⁹⁷⁹ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 275.

⁹⁸⁰ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, pp. 275-276.

Figure 38 Tangible and intangible costs

Source: Adapted from Deloitte Access Economics, Productivity Commission, and Bureau of Transport Economics.

Costs and benefits of risk management activities

As explained in Chapter 4, the costs that can arise from natural disasters vary greatly and cannot be predicted. Individuals, businesses and governments can undertake emergency management activities before, during, and after natural disasters to reduce risks, and hence potential costs.⁹⁸¹ To reduce disaster risks, one or more of three elements must be reduced: probability of the hazard; exposure to the hazard; or community vulnerability in the face of the hazard.⁹⁸²

Managing risks also has an 'opportunity cost' (that is, if money, time, and effort are used for one purpose, then they are no longer available to be used for another purpose.). As a consequence, individuals, businesses, and governments must make 'trade-offs' between different options when investing in risk management. These trade-offs include:

⁹⁸¹ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 339.

⁹⁸² Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 342.

- *Whether to invest in risk management or pursue other objectives.* For individuals, investment in risk management may come at the expense of time (for example, work or recreation time) or money (for example, the cost of installing a water tank). For governments, investment in risk management may come at the expense of providing other public services (such as health or education), or require a government to raise taxes or increase a budget deficit.
- *Which areas of risk management are to be prioritised* – There are four phases of emergency management (see Chapter 4). These are prevention, preparedness, response, and recovery. Assuming a constant level of funding, investing in activities in one phase may limit the ability to invest in other phases.
- *Which specific projects are to be implemented* – There will be a range of activities that can be undertaken to reduce the risks posed by a natural hazard. Investing in one project may come at the expense of being able to undertake an alternative project. This will mean that it is necessary to prioritise projects.

The benefits of any investment in risk management need to be weighed against the costs of that investment.⁹⁸³ Risk management activities should only be undertaken if the expected benefits of the investment are greater than the costs, as determined through robust analysis.

Quantitative methods for prioritising risk management activities

There are a range of technical methods to help prioritise risk management activities. These include cost-effectiveness and least-cost analysis, multi-criteria analysis, computable general equilibrium modelling, and cost-benefit analysis. The Productivity Commission has examined each of these methods, and considers that, while cost-benefit analysis has its limitations, 'where [cost-benefit analysis] can be used to estimate both tangible and intangible costs and benefits in monetary terms, it is likely to lead to better informed decision methods than other evaluation methods, particularly for the relative assessment of individual projects'.⁹⁸⁴ The Productivity Commission examines and describes each of these methods in its 2014 inquiry into natural disaster funding arrangements, and notes that some of the other methods discussed above – while lacking on their own – serve as useful complements to cost-benefit analysis when prioritising risk management activities.⁹⁸⁵

Academics have also highlighted the usefulness of cost-benefit analysis for assessing the value of natural hazard risk management costs and benefits. For example, the paper *Estimating the value of foresight: aggregate analysis of natural hazard mitigation benefits and costs* states that:

"Benefit-cost analysis (BCA) offers a rigorous, widely applied tool for assessing public policy and public investment proposals. Basically, benefit cost analysis is concerned with efficiency. Public investments are considered to be efficient if their benefits exceed their costs. Given that these investments are intended to last and need to be maintained for many years, they are efficient if the present discounted value of the estimated future stream of positive impacts (benefits from the investment) is greater than the present discounted value of the estimated future stream of negative impacts

⁹⁸³ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 344.

⁹⁸⁴ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 386.

⁹⁸⁵ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, pp. 386-387.

(costs of the investment). Thus, a project is deemed efficient if its benefit/cost ratio is greater than one.

These are indeed valid criticisms of using traditional benefit-cost analysis as the sole evaluative tool for a prospective project. However, in a random sample of a large number of projects, and using a consistent valuation methodology, individual under-estimates and over-estimates tend to be off-setting, yielding useful information on the average efficiency of the planning activity. In addition, when the benefit-cost analysis is augmented by community-based studies, interpretations and implications of the economic numbers are enhanced by setting them within the more comprehensive context where planners actually operate.)”⁹⁸⁶

Notably, this paper also emphasises the importance of using community information and practical context to achieve better results from cost-benefit analysis.

Similarly, the paper *‘Benefit–Cost Analysis’ Of Disaster Mitigation: Application as a Policy and Decision-Making Tool* highlights the usefulness of cost-benefit analysis for risk management policy, stating that:

“Many proponents of disaster mitigation claim that it offers potential benefits in terms of saved lives and property far exceeding its costs. To provide evidence for this, and to justify the use of public funds, agencies involved in mitigation can use benefit–cost analysis (BCA). Such analysis, if well done, offers a testable, defensible means of evaluating and comparing projects, helps decision-makers choose between mitigation projects, and provides a means to assess the way we spend public funds.”⁹⁸⁷

Cost-benefit analysis brings transparency and accountability to the decision making process.⁹⁸⁸ However, it is important to note that there are limitations in all quantitative approaches to assessing the merits of various risk management activities. The Productivity Commission has described some of the limitations of cost-benefit analysis. For example, there are difficulties in estimating non-market value; no clear indication of who benefits and who pays (distributional impacts); lack of method for incorporating uncertainty and irreversibility⁹⁸⁹; subjectivity in choosing the appropriate discount rate⁹⁹⁰; and limitations in comparing across hazards as each disaster has different disaster consequences and uncertainty due to climate change⁹⁹¹.

Measuring psychological and social costs and benefits can be particularly difficult. For example, Ganderton explains that relocating residences from the 100-year flood plain may have clear benefits in terms of reducing loss of life and property damage. However, measuring the social costs is much more difficult – for instance, people may have a cultural or historical connection to their land, and different individuals will have different experiences of the relocation – some positive, some negative.⁹⁹² Measuring environmental costs and

⁹⁸⁶ Godschalk, D.R., Rose, A., Mittler, E., Porter, K. and West, C.T., *Estimating the value of foresight: aggregate analysis of natural hazard mitigation benefits and costs*, Journal of Environmental Planning and Management, 2009, Vol. 52(6), pp.739-756.

⁹⁸⁷ Ganderton, P.T., *Benefit–cost analysis’ of disaster mitigation: application as a policy and decision-making tool*, Mitigation and Adaptation Strategies for Global Change, 2005, Vol. 10(3), pp.445-465.

⁹⁸⁸ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 355.

⁹⁸⁹ Shreve, C. M., 2014, *Does mitigation save? Reviewing cost-benefit analyses of disaster risk reduction*, International Journal of Disaster Risk Reduction, Vol.10, December 2014, pp. 213-235.

⁹⁹⁰ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 386.

⁹⁹¹ Productivity Commission, *Natural Disaster Funding Arrangements*, Inquiry Report No. 74, Melbourne, Government of Australia, 2014, Vol. 2, p. 383.

⁹⁹² Ganderton, P.T., *Benefit–cost analysis’ of disaster mitigation: application as a policy and decision-making tool*, Mitigation and Adaptation Strategies for Global Change, 2005, Vol. 10(3), pp.445-465.

benefits is similarly difficult. The direct costs of prevention or remediation may be straightforward to measure, but the value people place on their environment – both nearby and State-wide – may vary widely. While new approaches continue to emerge for estimating social value and environmental value, these kinds of costs and benefits remain challenging to measure consistently.

Appendix G Reasons states introduced property-based levies to fund emergency services

In the past two decades, a number of states have introduced property-based levies to fund emergency services (and in some cases broader emergency management activities), including South Australia, Western Australia, the ACT, Victoria and New South Wales.

Western Australia,⁹⁹³ Victoria⁹⁹⁴ and New South Wales⁹⁹⁵ each published documents that discussed the rationale for introducing property-based levies. However, the merits of a property-based levy were generally compared to the insurance-based levies that they were replacing. States did not generally compare property-based levies to alternative funding arrangements – in particular, funding emergency services from general government revenue – or identify ‘best practice’ funding arrangements. As such, the rationale given for introducing property-based levies to fund emergency services was:

- Insurance-based levies are inefficient and discourage people taking out insurance;
- Unfair as the ESL is only paid by people with insurance; and
- Out of step with practice in other States.⁹⁹⁶

The Fire and Emergency Service Authority discussed the possibility of continuing to fund the Volunteer Fire and Rescue Service through general government revenue (rather than all emergency services), but this idea was dismissed.

“It could be contended that the current system of funding the VFRS through the Consolidated Fund is a fair and equitable application of the “community rating” principle. However, most other fire services do not benefit from such strong financial commitment by Government, and only those communities that have VFRS brigades actually reap such financial rewards.

In essence, there is no particular reason why this service should be fully funded by the State Government and others not.”⁹⁹⁷

The ERA understands, from discussions with DFES, that the then Western Australian Government did not consider it feasible to fund all emergency services from general government revenue: abolishing the insurance-based levy and funding emergency services from general government revenue would have required increases in other state taxes. The second reading speech for the legislation that introduced the ESL indicates only that:

“FESA has investigated the funding systems in place in other State and viewed very closely the introduction of a broad-based levy in South Australia, which has

⁹⁹³ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002.

⁹⁹⁴ Victorian Department of Treasury and Finance, *Victorian Fire Services Property Levy: options paper*, Melbourne, Government of Victoria, 2011.

⁹⁹⁵ New South Wales Treasury and the Ministry for Police and Emergency Services, *Funding our emergency services: discussion paper*, Sydney, Government of New South Wales, 2012.

⁹⁹⁶ New South Wales Treasury and the Ministry for Police and Emergency Services, *Funding our emergency services: discussion paper*, Sydney, Government of New South Wales, 2012, p.3.

⁹⁹⁷ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 16.

encountered a number of problems. We have learnt from these observations. The Government believes the model that has been developed for Western Australia is fair and equitable and will serve this State well into the twenty-first century.”⁹⁹⁸

The Victorian Department of Treasury and Finance indicated in its options paper that it had considered funding arrangements adopted in other Australian states and New Zealand (including funding from general government revenue as then used by the ACT) and other alternative funding arrangements. Other alternative funding arrangements considered included: enhancing the current insurance-based model; introducing compulsory insurance; and mandating recovering of fire service costs. The Department of Treasury and Finance did not explain why these alternatives were discarded, other than to note “upon analysis, these options were found to be impractical and unlikely to delivery significant improvements in efficiency and simplicity”.⁹⁹⁹

The ACT funded emergency services from general revenue for five years before introducing a property-based levy.¹⁰⁰⁰ The ERA was unable to find a discussion of why the ACT Government considered a property-based levy to be preferable to funding emergency services from general revenue. Discussion in Hansard only indicates that the ACT Government introduced a Fire and Emergency Services levy to meet a large increase in the costs of emergency services.¹⁰⁰¹

The ERA considers that a property-based is a more appropriate means of funding emergency services than insurance-based levies. Key reasons as noted by the NSW Treasury include:

- property owners benefit from the provision of emergency services, whereas insurers are actually in the business of managing risks;
- a property based levy could be fairer and more transparent as all households and businesses in the State would contribute to the cost of emergency services; and
- a property based levy is a more efficient source of revenue, imposing a much lower economic cost than a tax on insurance.¹⁰⁰²

The 2010 Henry taxation review recommended that taxes on insurance, including the fire services levy, be abolished.¹⁰⁰³ Levies on insurance may cause a number of problems.

“Taxing insurance may lead to non-insurance and under-insurance. Insurance helps people deal with the inevitable consequences of fires, floods and other emergencies.

⁹⁹⁸ Kobelke, J.C., Second Reading Speech: Fire and Emergency Services Legislation (Emergency Services Levy) Amendment Bill, *Hansard*, Assembly, 25 September 2002, p.1572b-1573a.

⁹⁹⁹ Victorian Department of Treasury and Finance, *Victorian Fire Services Property Levy: Options Paper*, Melbourne, Government of Victoria, 2011, p. 10.

¹⁰⁰⁰ The ACT used to impose a levy on general insurance companies to contribute to the costs of emergency services. This levy raised a fixed amount of \$10 million a year. The levy was abolished from 1 July 2001. (Source: ACT Department of Treasury, *Annual Report 2000-01*, Canberra, Government of Australian Capital Territory, 2001, Vol. 1, p. 61.)

¹⁰⁰¹ ACT Legislative Assembly, Legislative Assembly for the ACT: 2006 Week 6 (6 June), *Hansard*, Canberra, Government of Australian Capital Territory, p. 1794.

¹⁰⁰² New South Wales Treasury and the Ministry for Police and Emergency Services, *Funding our emergency services: discussion paper*, 2012, Sydney, Government of New South Wales, p. 4.

¹⁰⁰³ Henry, K., *Australia's Future Tax System*, Final Report: Part 2 – Chapter E: Enhancing Social and Market Outcomes, Canberra, Government of Australia, 2010.

The tax system should not discourage people from protecting their assets by adding additional costs to the system.”¹⁰⁰⁴

Notably, rates of insurance increased in Western Australia and South Australia after insurance-based levies to fund emergency services were removed and replaced with property-based levies.¹⁰⁰⁵

¹⁰⁰⁴ New South Wales Treasury and the Ministry for Police and Emergency Services, *Funding our emergency services: discussion paper*, Sydney, Government of New South Wales, 2012, p. 3.

¹⁰⁰⁵ New South Wales Treasury and the Ministry for Police and Emergency Services, *Funding our emergency services: discussion paper*, Sydney, Government of New South Wales, 2012, pp. 14-15.

Appendix H Local governments with a Community Emergency Services Manager¹⁰⁰⁶

DFES employees

City of Cockburn

City of Wanneroo

City of Kalamunda

Shire of Mundaring

City of Swan

Local government employees

City of Albany

Shire of Northam

City of Armadale

Shire of Plantagenet

City of Busselton

Shires of Beverley and York

City of Kwinana

Shires of Carnarvon, Shark Bay and Upper Gascoyne

Shire of Augusta-Margaret River

Shires of Cunderdin and Quairading

Shire of Bridgetown-Greenbushes

Shires of Irwin and Coorow

Shire of Chittering¹⁰⁰⁷

Shires of Jerramungup and Ravensthorpe

Shire of Dandaragan

Shire of Denmark

Shires of Katanning, Broomhill-Tambellup and Woodanilling

Shire of Esperance

Shires of Lake Grace, Kent and Dumbleyung

Shire of Gingin

Shire of Harvey

Shires of Moora and Victoria Plains

Shire of Manjimup

Shires of Murchison, Yalgoo, Morawa and Perenjori

Shire of Murray

Shires of Toodyay and Goomalling

Shire of Nannup

¹⁰⁰⁶ Communication with Department of Fire and Emergency Services, 30 August 2017.

¹⁰⁰⁷ In the process of transferring to a DFES employee

Appendix I Principles on which the ESL was based

The design of the ESL as a replacement funding system for emergency services was based on a number of key principles. These principles reflected a philosophy on the availability of emergency services and principles on how people should pay for these services. However, DFES advised the ERA that some of the original principles have been varied by policy decisions of government. These policy decisions have not been published, but are reflected in the local government grant administration manual.¹⁰⁰⁸

Supply of emergency services was based on two key principles: universality of fire and emergency service protection (which leads to a community rating principle), and an expectation of service principle.

The universality of service principle suggests that access to fire and emergency services are not discretionary in a developed society. Early response to disasters is necessary to minimise the potential risk to life and property – not just that at immediate threat, but any people or property in the vicinity. The ability of disasters to cross property boundaries means that the consequences of disasters are a community problem, not just an individual one. The nature of disaster means that ‘we are each protected only when we are all protected.’¹⁰⁰⁹

The expectation of service principle suggests that if citizens expect to benefit from fire and emergency services in any geographic location, then citizens need to pay for the cost. Most of the cost of emergency services is in having the standby capacity to respond when a disaster occurs. So citizens need to contribute to the base capacity, and not just the additional cost of responding (call out costs).¹⁰¹⁰

It was determined that requiring individuals to pay call out costs could result in considerable hardship and would not be consistent with the community rating principle. Also, requiring individual communities to fund their own services would favour areas with dense or large populations because of the high capital costs of maintaining response capacity.¹⁰¹¹

Reflecting these considerations, a key principle applied is that service delivery and expenditure needs should dictate the allocation of funds and not the local capacity to raise revenue. As such, there was no requirement to ensure the same amount is spent in a geographic location as is raised.¹⁰¹²

Following on from these core principles, there were a number of more specific principles. The ESL was designed, as far as possible, to reflect an individual property owner’s capacity to pay.¹⁰¹³ The capacity to pay principle, in part, informed the decision to use gross rental value as the base for raising the ESL. Gross rental value was considered to ‘have a nexus

¹⁰⁰⁸ Personal communication between Department of Fire and Emergency Services and Economic Regulation Authority.

¹⁰⁰⁹ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 17.

¹⁰¹⁰ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, pp. 17-18.

¹⁰¹¹ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, pp. 17-18.

¹⁰¹² Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 23.

¹⁰¹³ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 2.

with the value of property to the owner and was therefore related to the owner's financial capacity.¹⁰¹⁴ Concessions were made available to pensioners and seniors to ensure fairness and consistency with other government fees and charges.¹⁰¹⁵

The ESL was designed to have few exemptions. All property were to be required to pay the ESL, including: vacant land owners; not for profit organisations and other organisations exempt from state government taxes, fees and charges; public financial and non-financial corporations; local governments; and state government agencies.¹⁰¹⁶

The ESL was not intended to raise any additional money compared to the previous funding arrangements, other than to improve services and to implement the new funding system in the most cost-effective manner.¹⁰¹⁷

All existing state government contributions to emergency services were to be retained, but there would not be a nexus between the state government contribution and any particular service.¹⁰¹⁸

¹⁰¹⁴ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 20.

¹⁰¹⁵ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 32.

¹⁰¹⁶ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 2.

¹⁰¹⁷ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 2.

¹⁰¹⁸ Fire and Emergency Services Authority, *A replacement funding system for emergency services*, Perth, Government of Western Australia, 2002, p. 7.

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Appendix K Glossary

AS/NZS ISO 31000:2009	The Australian and New Zealand Standard for risk management principles and guidelines based on the International Organisation for Standardisation.
Chief Bush Fire Control Officer	Person(s) appointed by the Fire and Emergency Services Commissioner or by local governments under the <i>Bush Fires Act 1954</i> . Such person(s) have authority to carry out duties imposed upon them by any of the provisions in Part III of the Act (<i>Bush Fires Act 1954</i> , section 38 (4)).
Emergency	The occurrence or imminent occurrence of a hazard of such a magnitude that it requires a significant and coordinated response.
Emergency management	The management of adverse effects of an emergency across prevention, preparedness, response and recovery.
Emergency services	Where an organisation provides protection to preserve life and property from harm resulting from an emergency.
Emergency services Acts	Acts referred to under section 11 of the <i>Fire and Emergency Services Act 1998</i> which includes the <i>Fire and Emergency Services Act 1998</i> , <i>Bush Fires Act 1954</i> and <i>Fire Brigades Act 1942</i> .
Fire management	Managing fire related risk through prevention, preparedness, response and recovery.
Freehold land	Land which provides people with the most complete form of ownership of that land, in perpetuity.
Hazard management	Where hazard related risks are owned as a shared responsibility, consequences to the society and environment are known and treated in advance to reduce or eliminate its impact.
Pastoral land	Crown that is leased for pastoral purposes as per section 93 of the <i>Land Administration Act 1997</i> .
Metropolitan region	Refers to the Perth and Peel regions.
Preparedness	Activities that involve ensuring that authorities and the community are ready to act in the event of a disaster.
Prevention	Activities aimed at reducing the probability of a disaster occurring, or reducing the effects of an emergency by limiting the exposure and vulnerability of people and assets to a disaster.
Recovery	Activities that involve restoring a community to normal function after a disaster.
Response	Response involves activities that are taken immediately before, during, or after a disaster to reduce the impact on the community.
Rural fire management	Rural fire management is planning and undertaking activities to prevent, prepare for and respond to fire incidents in rural areas. It may also include incident recovery.