



Report 13: 2022-23 | 22 December 2022

PERFORMANCE AUDIT

# Funding of Volunteer Emergency and Fire Services



**Office of the Auditor General  
Western Australia**

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***The Office of the Auditor General acknowledges the traditional custodians throughout Western Australia and their continuing connection to the land, waters and community. We pay our respects to all members of the Aboriginal communities and their cultures, and to Elders both past and present.***

## WESTERN AUSTRALIAN AUDITOR GENERAL'S REPORT

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# **Funding of Volunteer Emergency and Fire Services**

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**THE PRESIDENT  
LEGISLATIVE COUNCIL**

**THE SPEAKER  
LEGISLATIVE ASSEMBLY**

### **FUNDING OF VOLUNTEER EMERGENCY AND FIRE SERVICES**

This report has been prepared for submission to Parliament under the provisions of section 25 of the *Auditor General Act 2006*.

Performance audits are an integral part of my Office's overall program of audit and assurance for Parliament. They seek to provide Parliament and the people of WA with assessments of the effectiveness and efficiency of public sector programs and activities, and identify opportunities for improved performance.

The objective of this narrow-scope audit was to assess if the Department of Fire and Emergency Services and local government entities effectively administer funding for their land-based volunteer emergency and fire services.

I wish to acknowledge the entities' staff for their cooperation with this audit.

A handwritten signature in black ink, appearing to read 'C Spencer'.

CAROLINE SPENCER  
AUDITOR GENERAL  
22 December 2022

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## Auditor General's overview

Volunteers are an essential part of the State's emergency and fire response capability. They freely offer their time and experience to respond to a range of incidents including bush fires, natural disasters, and search and rescues in both metropolitan and regional Western Australia (WA). Volunteers work alongside career firefighters, but can also be the only responders at an event. It is vital volunteer services are adequately supported and funded to help reduce the impact of events on the broader community.



Regional communities rely heavily on over 20,000 Bush Fire Service (BFS) and State Emergency Service (SES) volunteers who represent nearly 1% of the State's population. They are supported by the Department of Fire and Emergency Services (DFES) and local government (LG) entities as part of DFES' approach to providing an agile and collaborative State-wide response to incidents, regardless of location.

This report outlines how WA's four land-based volunteer services are funded and should be considered within the broader context of the State's overall emergency and fire response capability. DFES provides funds to equip volunteer services with essential items including protective clothing, communications and first aid equipment, and strategically placed facilities and specialist vehicles. It does this through a combination of direct funding and grants. Since 2003, the BFS brigades and SES units have been partly funded through DFES' Local Government Grants Scheme (Grants Scheme) and LG entities.

Additionally, DFES continues to strengthen the State's broader response and support for regional volunteer services. For example, waterbombing aircraft have been strategically based in high risk grain-growing regions to directly assist volunteer and career firefighters during WA's record-breaking grain harvest. DFES recognises the vital contribution of volunteers to its broad risk to capability response and support network across the State.

Reassuringly for LG entities, DFES' Grants Scheme provides predictable and recurrent funding based on prior expenditure to support their local SES brigades and BFS units. However, an opportunity for improvement exists for DFES to periodically review funding to ensure it remains linked to current and emerging risks to the community.

Pleasingly, the three LG entities we audited and volunteer association representatives we interviewed believed DFES and LG entities together provide enough funding for the volunteer services to continue to respond to emergencies and fires, as they have done for decades. However, more comprehensive strategic planning by LG entities is recommended to determine future facility requirements and the capital to fund them.

As our climate changes, WA is likely to face more frequent and intense bush fires, storms and floods similar to recent widespread flooding and bush fires on the east coast of Australia and the 2021 Cyclone Seroja in our north. These events significantly increase the demands on both career and volunteer emergency and fire services personnel and it is my hope that the findings in this report will further assist DFES to work with LG entities to address these increasing risks.

# Executive summary

## Introduction

This audit assessed if the Department of Fire and Emergency Services (DFES) and three local government (LG) entities effectively administer funding for their land-based volunteer emergency and fire services (volunteer services).

We focused on DFES and LG entities' funding processes and administrative support to volunteer services, and sought feedback from community and government stakeholders involved in supporting them. We did not compare the level of DFES funding provided to each of the four volunteer services as each service has different responsibilities with significant variations in how DFES and LG entities record the costs associated with each service.

## Background

Responding to thousands of fires and emergencies that occur each year throughout the State is challenging and complex work that requires specialist vehicles, equipment, training and personnel. In Western Australia (WA), emergency response is coordinated across multiple State and LG entities and volunteer groups.

In addition to DFES' Career Fire and Rescue Service, who provide firefighting, fire prevention, safety and rescue services, volunteers are an essential part of the State's response capability freely giving their time and experience to respond to a range of incidents. There are four land-based volunteer services<sup>1</sup> (see Supporting data 1 with locations at page 28):

- Volunteer Fire and Rescue Service (VFRS) – established and managed by DFES to undertake functions similar to the Career Fire and Rescue Service
- Volunteer Fire and Emergency Service (VFES) – units approved by the Fire and Emergency Services Commissioner (Commissioner) and managed by DFES
- State Emergency Service (SES) – units authorised by the Commissioner to help the community cope with the impacts of natural disasters and emergencies. DFES and LG entities share management responsibility for the SES
- Bush Fire Service (BFS) – brigades established and managed by LG entities to protect their communities from bush fires. The BFS is the largest group of volunteers with 563 brigades at June 2022, although the numbers do vary.

Each service has different responsibilities and resourcing, though considerable overlap in capabilities and response provides flexibility to meet community needs throughout the State, regardless of the location of incidents (Figure 1). For example, for bush fires, while the Commissioner is the recognised Hazard Management Agency for the State as a whole, control of the initial response to a fire usually depends on where the fire starts:

- Volunteer and career services run by DFES typically coordinate the response to fires in gazetted fire districts, which include population centres and critical infrastructure, covering 88.5% of the State's population and 0.1% of its area.
- LG entities, through their BFS brigades, typically coordinate initial response to bush fires in their LG areas that are outside gazetted fire districts and lands owned or in the

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<sup>1</sup> The Career Fire and Rescue Service and Volunteer Marine Rescue Service were not included in this audit, which focused on land-based volunteer emergency and fire services.



care of other entities. This is the largest responsibility by area, covering 91.8% of the State and 11.5% of its population.

- The Department of Biodiversity, Conservation and Attractions (DBCA) responds to bush fires in or near DBCA's managed lands.<sup>2</sup> These lands can occur within or adjacent to populated areas, but are generally largely unpopulated.

The complex nature of incident response means the coordination role moves between entities when required. It can also involve cross entity support to manage logistics and assistance from specialist services, such as the aerial firefighting fleet (see Supporting data 2 for entities responsible for initial fire response by LG area at page 34).

Volunteer services		 VFRS	 VFES	 SES	 BFS
	Administered by	DFES	DFES	DFES/LG	LG
	Funded by	DFES	DFES	DFES/LG	DFES/LG
	Brigades/units	94	37	64	563
	Volunteers	2,468	930	1,985	19,579
	Bush fire/other fire	✓	✓*	—	✓
	Structural fire	✓	✓*	—	✓ <sup>#</sup>
	Hazardous material response (HAZMAT)	✓	✓*	—	—
	Road crash rescue	✓	✓*	✓*	—
	Natural hazards (storms, earthquakes)	—	✓*	✓	—
	Search and rescue	—	✓*	✓	—
	Assistance operations	—	✓*	✓	—

Source: OAG based on DFES information

✓ Approved      ✓\* Approved for certain units      ✓<sup>#</sup> Conditionally approved

*Note: volunteers registered across multiple services will be counted multiple times.*

*<sup>#</sup> BFS only authorised to undertake defensive firefighting to stabilise or isolate incidents.*

**Figure 1: Four volunteer emergency and fire services at June 2022**

<sup>2</sup> Managed lands can include area of land under the *Conservation and Land Management Act 1984* and the *Swan and Canning Rivers Management Act 2006*.

Neither DFES nor the Commissioner have control over the number or location of BFS brigades, which operate with more independence than the other volunteer services. Responsibility for their creation and management is distributed across WA's 137<sup>3</sup> LG entities.

Various legislation outlines DFES and LG entities' responsibilities to operate the volunteer services, including the *Fire and Emergency Services Act 1998*, *Bush Fires Act 1954*, *Fire Brigades Act 1942*, *Emergency Management Act 2005* and the *Emergency Management Regulations 2006*.

DFES must fund emergency and fire services and LG entities must provide DFES with an annual estimate of their expenditure on these services.<sup>4</sup> The volunteer services are funded by DFES from money it receives from the Emergency Services Levy (ESL)<sup>5</sup> and funding appropriation from Parliament.

The VFRS and VFES are directly funded by DFES. Over the three years to 2020-21, these services received a combined average of \$16.7 million a year.

The BFS and SES are jointly funded by DFES and LG entities. DFES provides recurrent funding primarily through its Local Government Grants Scheme (Grants Scheme). This does not cover bush fire mitigation activities funded through the Mitigation Activity Fund.

## Conclusion

DFES and LG entities fund the State's four land-based volunteer emergency and fire services to support response capability across the State. DFES contributed a total of \$55 million to these four volunteer services in 2020-21 in addition to funding and support provided within the broader context of DFES' agile and collaborative approach to State-wide response capability.

DFES wholly funds the VFRS and VFES using clearly defined funding objectives and expected outcomes. DFES partly funds BFS brigades and SES units through the Grants Scheme, but administration of funding by DFES and LG entities could be improved.

Grants Scheme funding has doubled since the scheme began in 2003-04 and, reassuringly, provides predictable and recurrent funding to LG entities for their local volunteer services. However, DFES has not fully documented its Grants Scheme funding decisions and procedures for allocations for the BFS brigades and SES units. DFES also lacks some critical information from LG entities that it needs to more clearly link funding allocations to current and emerging risks to the community. This reflects a 2017 recommendation by the Economic Regulation Authority, outstanding at the time of the audit, to apply robust analytical techniques for allocating funding.

The three LG entities we audited had neither a full understanding of their own costs to support the volunteer services nor fit for purpose strategic asset plans on which to base their Grants Scheme requests. As a result, DFES may not have sufficient information from LG entities to comprehensively assess their Grants Scheme funding requests.

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<sup>3</sup> Excludes the two Indian Ocean Territories and nine regional councils.

<sup>4</sup> *Fire and Emergency Services Act 1998* sections 36A(1) requires LG entities to provide an estimate of their expenditure to DFES and 36A(5) requires the Commissioner to pay for LG entity expenditure on fire and emergency services following the estimate and the Minister's approval.

<sup>5</sup> The ESL is an annual charge on WA property owners that is collected through property rates notices issued by LG entities.

## Key findings

### How the volunteer services are funded

- The ESL accounts for more than 80% of DFES' annual revenue. It has contributed more than \$4.2 billion to the State's emergency services since its introduction in 2003. In 2020-21, DFES provided \$55 million to the four volunteer services.
- DFES directly funds the 131 VFRS and VFES. In 2020-21, DFES provided and administered \$15 million for their capital and operating costs.
- Most LG entities rely on DFES' Grants Scheme to fund their local BFS brigades and SES units. The Grants Scheme has provided more than \$409 million to LG entities for this purpose since it commenced in 2003-04.
  - In 2020-21, 121 LG entities received a total of \$32 million in Grants Scheme allocations made up of recurrent operating grants and capital grants, which provide items such as vehicles and facilities.
  - Capital grants mostly fund vehicle replacement programs. In 2020-21, over \$20 million of the \$21 million available to fund capital items went to the State-wide vehicle replacement program. Capital grant applications have exceeded available funds in 18 of the last 19 years.
  - Recurrent operating grants are based on prior expenditure. DFES provided \$12 million in operating grants to LG entities in 2020-21.

### DFES' administration of its Grants Scheme to the BFS and SES could be improved

- DFES offers predictable recurrent grant funding based on previous expenditure, but funding decisions and procedures could be better documented.
  - The Grants Scheme Manual outlines the basic funding process and, once in the scheme, LG entities receive recurrent annual funding. However, the Grants Scheme Manual does not fully detail the methods DFES uses to allocate funds.
  - Eligible items and expenditure categories are listed in the Grants Scheme Manual, but there is no clear process to have new items added to the list.
- Capital grants could better consider the strategic asset needs of LG entities. The LG entities we audited had not included volunteer facilities in their strategic asset plans. Without this key information DFES cannot be fully effective in planning and funding the maintenance and replacement of volunteer facilities across the State.
- Funding could be more clearly linked to an assessment of risk to ensure volunteer services are funded to capably respond to incidents. A review by the Economic Regulation Authority in 2017 also recommended DFES use analytical techniques to inform its funding allocation decisions.
  - DFES lacks some of the critical information it requires from LG entities to apply a systematic risk based approach to inform its Grants Scheme funding offers. This means there is a risk that better organised and engaged LG entities and their volunteer services may receive more funds than those with greater need.

## **LG entities lack some processes and support to effectively administer Grants Scheme funding**

- The three LG entities we reviewed had limited understanding of the cost and strategic asset priorities of their volunteer services to inform funding needs. They did not each have clearly documented processes to track the spending of their Grants Scheme funding and did not routinely track their own costs to administer the volunteer services.
- Some LG entities can struggle to adequately support their volunteer services to manage key responsibilities. For example, volunteer membership records are not kept up to date and incident response reports are not always completed. DFES partly funds Community Emergency Services Managers to assist LG entities, with the program supporting 34 positions across 56 LG entities in 2020-21.

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## Recommendations

The Department of Fire and Emergency Services should:

1. improve its administration of Grants Scheme funding to volunteer services to better inform decision making by:
  - a. more completely documenting funding decisions and procedures
  - b. defining and communicating the process to update eligible items within the Grants Scheme Manual
  - c. using available volunteer, cost and incident data to periodically review funding allocations to ensure they are clearly linked to the mitigation of key risks to the community
  - d. clearly defining and communicating Grants Scheme objectives and outcomes to LG entities

**Implementation timeframe:** 31 December 2023

**Entity response:** Agreed

2. work with the local government sector to adopt a State-wide strategic approach to Grants Scheme funding based on a more comprehensive understanding of LG entities' longer term operating and capital costs.

**Implementation timeframe:** 31 December 2023

**Entity response:** Agreed

The City of Busselton, Shire of Plantagenet and Shire of Westonia, and other LG entities as relevant, should:

3. improve their administration of funding to volunteer services to better inform decision making and support volunteer services by:
  - a. including facilities and resources of their volunteer services in their strategic asset plans
  - b. documenting internal funding processes to ensure that they have a clear understanding of all material costs associated with supporting volunteer services
  - c. maintaining up to date volunteer membership data and complete incident response forms.

**Implementation timeframe:** 31 December 2023

**City of Busselton response:** Agreed

**Shire of Plantagenet response:** Agreed

**Shire of Westonia response:** Disagreed - additional detail provided in response

## Response the Department of Fire and Emergency Services

The Department of Fire and Emergency Services (the Department) welcomes the Auditor General's report into how effectively the Department and local government entities administer funding for volunteer fire and emergency services.

The Department provides state-wide emergency response capability through a network of career firefighters, emergency service volunteers and support personnel. The focus of this audit was on funding allocations to land-based emergency volunteer services only.

Land-based volunteer services are a significant and important element to the Department's first response capability; however it is important to highlight that this report does not take into account the indirect multi-million-dollar funding model that is provided by the Department to the land-based volunteer services.

Volunteer land-based emergency services are supported before, during and after emergencies through the provision of facilities, equipment, resources, protective clothing, uniforms, vehicles, fleet maintenance and extensive training and professional development opportunities.

The Department provides the additional support through a network of career firefighters, an aerial bushfire suppression fleet and aviation services, bushfire mitigation and risk management planning, state communications centre, state and regional operations centres, mental health and wellbeing training and support services, a volunteer fuel card scheme – just to name a few.

The recommendation resulting from this audit is in relation to one of the funding mechanisms that supports local government volunteer services through the Local Government Grant Scheme. This recommendation will be taken on board to better inform decision making and the Department will endeavour to offer assistance to local government entities to inform a more strategic approach to requests for funding received from local governments.

The Department would like to thank its staff who have provided support and assistance to this audit. The timeframe of the audit has far exceeded what was initially planned by the OAG and was conducted concurrently with the high threat bushfire and cyclone season.

The Department would also like to thank emergency services personnel across the State for the services they provide and their commitment to keeping our State safe, particularly in times of emergency.

## Response from the City of Busselton

The City of Busselton appreciated the opportunity to participate in the audit and provide overall feedback on the OAG report – Funding for Volunteer Emergency and Fire Services. The City has considered the contents of the report and agrees that the findings are reflective of the current contextual environment.

The City is actively making changes to continually progress and evolve management of our volunteer emergency services and believe there are key changes required from the state to support improvements and create consistency in operating standards at a LG level. These are:

- Definition by DFES of the minimum baseline operational standard and servicing requirements that LG BFS and SES units should be managed at. Funding and resourcing should be allocated equitably across brigades, regardless of the entity responsible for management;
- Improved transparency to the decision-making criteria that determines how capital funding requests are measured for identified improvements of upgrades to facilities;
- Review of the current administrative funding model and introduction of a systematic connection that considers the individual circumstances of each local government area that influence emergency services including;
  - operating environment that includes scale of land managed by an LGA and the associated levels of risks of that land;
  - the volume of, varying size and scale of BFB and SES units managed;
  - the scale of assets, membership and annual volume of incidents attended by each unit.
- Development of regional and state-wide strategic asset management planning for current and future brigade locations, to inform the maintenance/replacement or planning for new facilities at a LG level. As LGs rely on ESL funding dispersed through DFES to support these facilities, ensure that the strategic direction and focus at a LG level is aligned with the higher-level strategic planning for these services across the state. This is essential in making sure that future servicing needs and gaps are planned for at a regional level.

## Response from the Shire of Plantagenet

Thank you for the opportunity to provide comments on the Performance Audit of Funding of Volunteer Emergency and Fire Services.

The Shire agrees that there are some improvements that could be made to these arrangements. We are currently developing a more robust and comprehensive buildings asset management plan and feel that this will assist with long term planning of bush fire brigade and SES facilities.

In respect to documenting internal funding processes, we have made some finance system (Synergysoft) improvements to help staff match spending to the respective DFES categories. The CESM also uses a detailed spreadsheet separate to Synergysoft where he tracks the spending. Admittedly, the costs to administer volunteer services are not currently separated from other general emergency services costs.

In regard to supporting volunteer services to maintain up to date membership data, all members are recorded through DFES and a monthly report is received from DFES. This works well and we wouldn't want to duplicate it.

In regard to supporting volunteers to complete incident response forms, the DFES incident response forms need to be completed online. This is quite cumbersome and volunteers need training on the Incident Reporting System. This could be done better, as could the follow up on form completion.

In regard to the comment that DFES's Grants Scheme does not fully consider future demand for capital items, we strongly agree with that. When an application for a new facility at Rocky Gully, the Shire was told that because the brigade only has one appliance then we can only ask for a one bay facility (but they also have a fast fill trailer funded by



the LGGS). Where Rocky Gully is and how it is expected to expand, it would make sense to build a two bay facility now at the time of construction.

While we agree that there are some direct and indirect costs that are not being directly accounted for against Bush Fire Brigade and SES activities, the application of LGGS costs are fully documented in the LGGS Manual.

## **Response from the Shire of Westonia**

The Shire of Westonia believe that whilst there is an absence of actual documented Policy and Procedures for staff responsible for the administration of the Bush Fire Brigade volunteer registers, the Council maintain that the registers are reviewed annually and contain relevant and up to date information for the organisation.

Council add that they have completed an Asset Management Plan since the Audit conducted by the OAG and have included the facilities and physical resources for the Bush Fire Brigade as part of the Plan.

Furthermore the Shire of Westonia feel that they adequately administer their Bush Fire Brigades responsibilities within the constraints of resources available to them.



## Audit focus and scope

The objective of this narrow-scope audit was to assess if the Department of Fire and Emergency Services (DFES) and local government (LG) entities effectively administer funding for their volunteer emergency and fire services. It was narrowly scoped to primarily focus on one of the State's funding mechanisms for land-based volunteer emergency and fire services.

We based our audit on the following criteria:

- Are funding objectives and processes clear?
- Are funding decisions documented and defensible?

We audited DFES and three regional LG entities. We interviewed a further seven LG entities (two metropolitan and five regional) and representatives from each of the four land-based emergency and fire volunteer associations. We also consulted with the Western Australian Local Government Association and Department of Local Government, Sport and Cultural Industries.

In undertaking the audit, we:

- reviewed relevant legislation, policies and procedures and interviewed staff
- conducted site visits to the City of Busselton, Shire of Plantagenet and Shire of Westonia
- analysed funding applications, documented decision-making processes and relevant financial records at DFES and LG entities for a three-year period from 2018-19 to 2020-21, and historic Grants Scheme funding from 2003-04 to 2020-21.

This was an independent performance audit, conducted under Section 18 of the *Auditor General Act 2006*, in accordance with Australian Standard on Assurance Engagements ASAE 3500 *Performance Engagements*. We complied with the independence and other ethical requirements related to assurance engagements. Performance audits focus primarily on the effective management and operations of entity programs and activities. The approximate cost of undertaking the audit and reporting was \$535,000.

# Audit findings

## How the volunteer services are funded

### Emergency Services Levy

The main source of funds for all emergency services in WA is the property-based ESL. Property owners fund the ESL through their rates payments. The State's metropolitan ratepayers contribute around 90% of the ESL. The ESL funds career and volunteer services throughout WA, along with a variety of other emergency and fire expenses such as asset construction and maintenance, communications, training, community awareness, aerial firefighting and emergency response coordination (Appendix 1).

The ESL was introduced on 1 July 2003 following amendments to the *Fire and Emergency Services Act 1998*, replacing all existing funding arrangements for State and LG emergency response services. The ESL was intended to fund all operating costs and capital expenditure of fire and rescue services, emergency management services and their administration, in a more uniform and equitable manner. It did not alter LG entities' statutory obligations to fund and manage a range of fire-related safety and control activities under the *Bush Fires Act 1954* and the *Local Government Act 1995*.

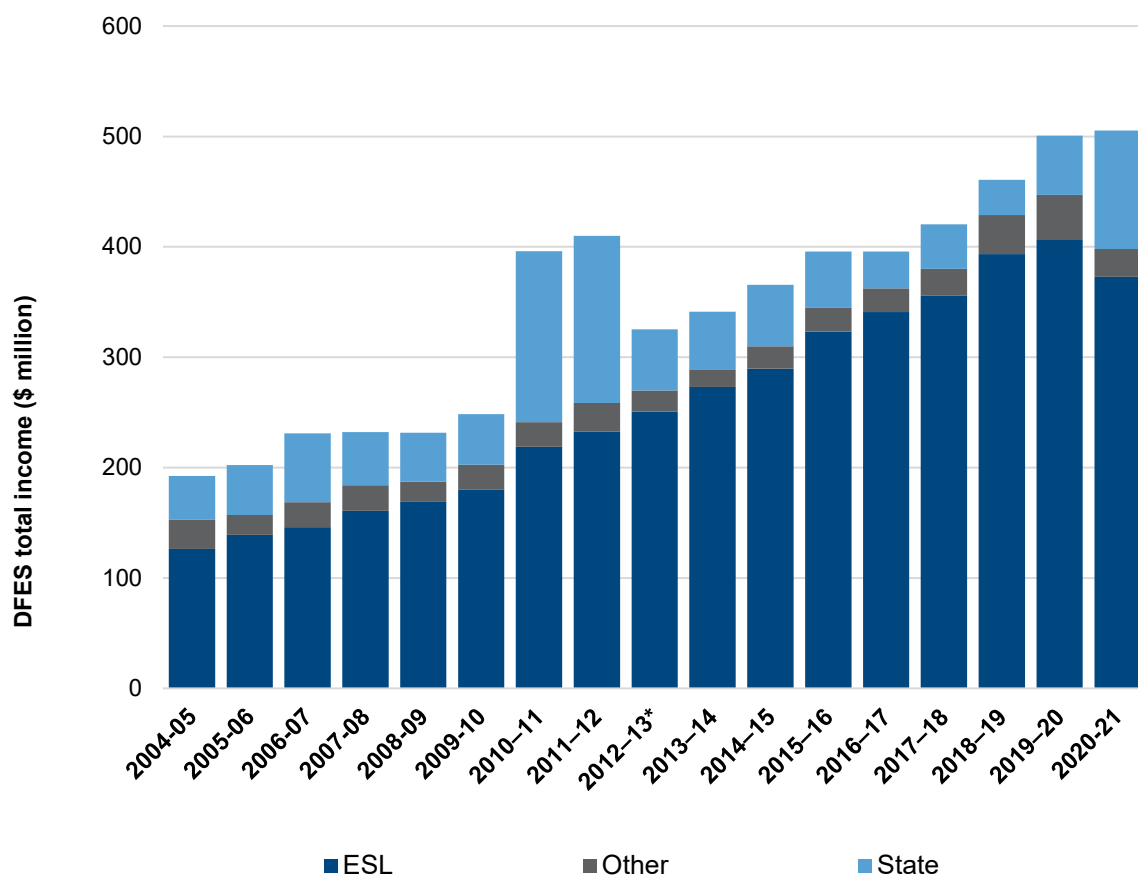
Funds from the ESL are paid into DFES' operating account in line with the *Fire and Emergency Services Act 1998*. The ESL may fund any purposes outlined within the emergency services Acts, which covers funds to volunteer services and also includes the purchase, construction, renewal, maintenance or replacement of land, buildings, vehicles and equipment of DFES, and any other property approved by the Minister.<sup>6</sup> Unspent ESL funds cannot be returned to the State's consolidated revenue and must remain in DFES' operating account.<sup>7</sup> Some activities, such as management of unexploded ordnance and surf lifesaving, cannot be funded by the ESL. Instead, DFES funds these through other revenue, such as service fees, Commonwealth grants and State government funding.

In recent years, the ESL has funded an average of 82% of DFES' operating costs that align with emergency services legislation, compared to an average of 68% when it was introduced. It has contributed more than \$4.2 billion to the operations of the State's emergency services since its first full year of operation in 2004-05 (Figure 2).

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<sup>6</sup> *Fire and Emergency Services Act 1998* section 38(2). DFES' operating account is established under the *Financial Management Act 2006* section 16(1)(a) and does not limit the use of the funds to a specific purpose.

<sup>7</sup> *Fire and Emergency Services Act 1998* section 38(3); ESL funds are not subject to the *Financial Management Act 2006* Section 20(1).



Source: OAG based on DFES information from its annual reports

\*The former Fire and Emergency Services Authority became DFES in 2012.

**Figure 2: DFES income<sup>8</sup>**

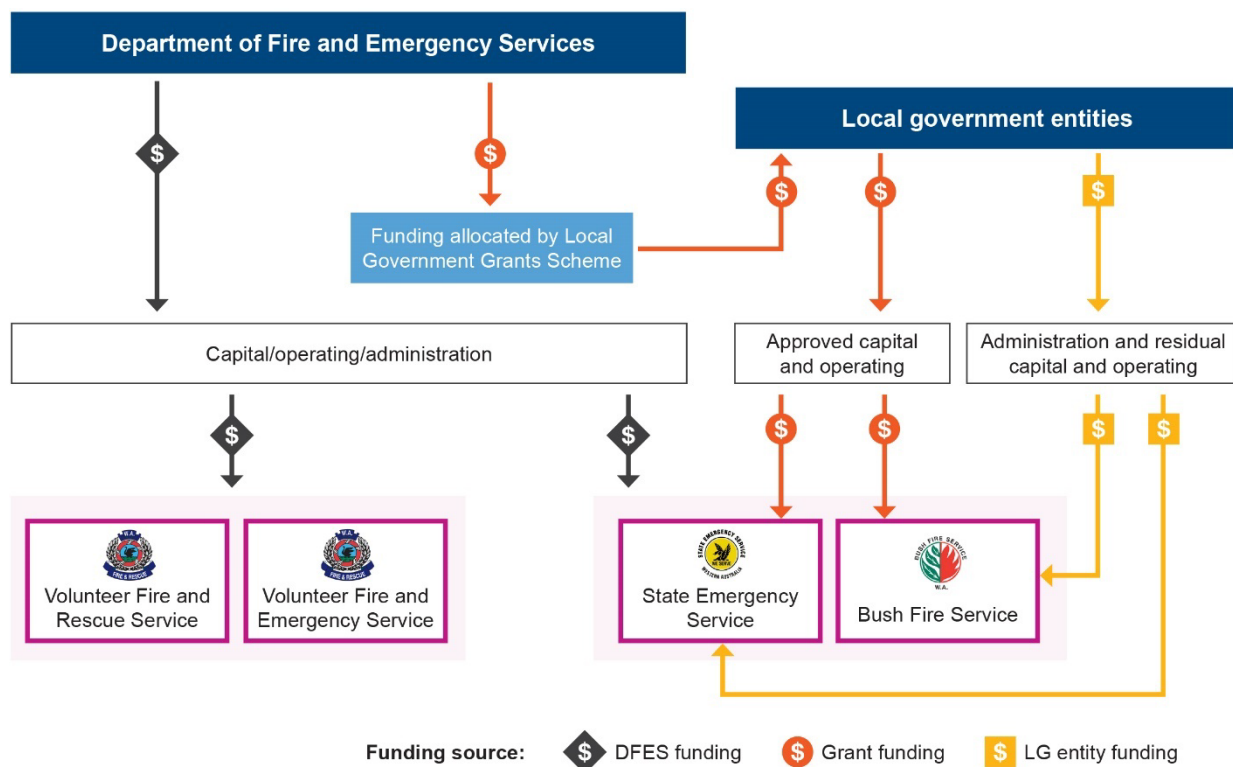
In 2020-21, DFES received \$373 million from the ESL. The four volunteer services we reviewed are predominantly funded by DFES, or a combination of DFES' Grants Scheme and LG entity funding.<sup>9</sup> DFES provided \$55 million from the ESL, which included:

- \$15 million directly to the VFRS and VFES
- \$9 million to the SES, of which \$7.1 million went through the Grants Scheme
- \$31 million to the BFS, of which \$27.9 million went through the Grants Scheme

LG entities fund BFS and SES administration and other costs not funded by DFES (Figure 3).

<sup>8</sup> The ESL was introduced in 2003-04, however as the existing systems were phased out during that year the amount collected was not representative of subsequent years.

<sup>9</sup> Volunteer services can also fundraise and apply for community grants, however these were not assessed in this audit.



Source: OAG based on DFES information

**Figure 3: Funding of the four volunteer emergency and fire services**

DFES provides all career and volunteer services with vehicles through its State-wide vehicle replacement program. Vehicles are replaced in line with their operational life of 10 to 20 years. DFES consults with its district and area officers to determine vehicle needs of the VFRS and VFES. BFS brigades and SES units negotiate with the LG entity and inform DFES via their capital grant applications if their needs change. The 2020-21 program budget aimed to provide the volunteer services with replacement vehicles worth \$27 million. This included \$20 million through the Grants Scheme for BFS and SES vehicles.

DFES refurbishes and retains a number of the replaced vehicles for use as a part of the high fire season fleet, which it can deploy across WA. These vehicles provide LG entities' volunteer services with additional capacity in times of high demand.

DFES also supports a program that partly funds the salaries of Community Emergency Services Managers (CESM) within some LG entities. CESMs provide a link between LG entities, DFES, BFS brigades and SES units, helping LG entities plan, administer, coordinate and support their volunteer services. The program commenced in 2003 and provides around \$2.4 million annually.

### DFES directly funds the VFRS and VFES

DFES directly funds a range of capital and operating costs of the VFRS and VFES.<sup>10</sup> Capital costs generally relate to the construction, restoration and renovation of facilities, and the purchase and replacement of vehicle fleets. Operating costs include telecommunications, facilities maintenance, and water and sewage charges.

<sup>10</sup> DFES also directly funds some SES unit operating costs.

DFES tracks most of these costs to the VFRS or VFES unit that incurred them. However, a range of VFRS and VFES unit costs, such as insurance, vehicle maintenance and administration are only recorded as DFES operating costs.

This funding allows the 131 VFRS and VFES units to respond to fires, emergencies and natural disasters across the State (Supporting data 1). DFES determines annual operating budgets for each VFRS and VFES unit, and monitors and updates them throughout the year.

In 2020-21, DFES' funding to the VFRS and VFES was \$15 million. This included:

- operating funds of \$1.9 million
- capital funds of \$3.3 million for the VFRS and \$4.0 million for the VFES, primarily for vehicle replacement
- \$3.1 million for upgrades and replacement work on VFRS and VFES facilities
- \$2.3 million for land acquisition for VFRS and VFES future developments.

At the time of our audit, the fleets included around 280 fire trucks and over 50 support and rescue trailers.

In addition, DFES gives eligible<sup>11</sup> VFRS and VFES units an annual efficiency payment as an incentive to maintain operational readiness, after all outstanding checks are complete and incident reports have been verified. VFRS units are also entitled to subsidy payments, which can assist members with personal expenses directly related to providing volunteer services, such as the renewal of some heavy vehicle drivers licences and the cost of phone calls. DFES awards about \$700,000 of these supplementary payments annually.<sup>12</sup> In 2020-21, each eligible VFRS and VFES unit received about \$6,700 and \$3,000 respectively to spend as they saw fit. DFES understands most units use the funds for social gatherings.

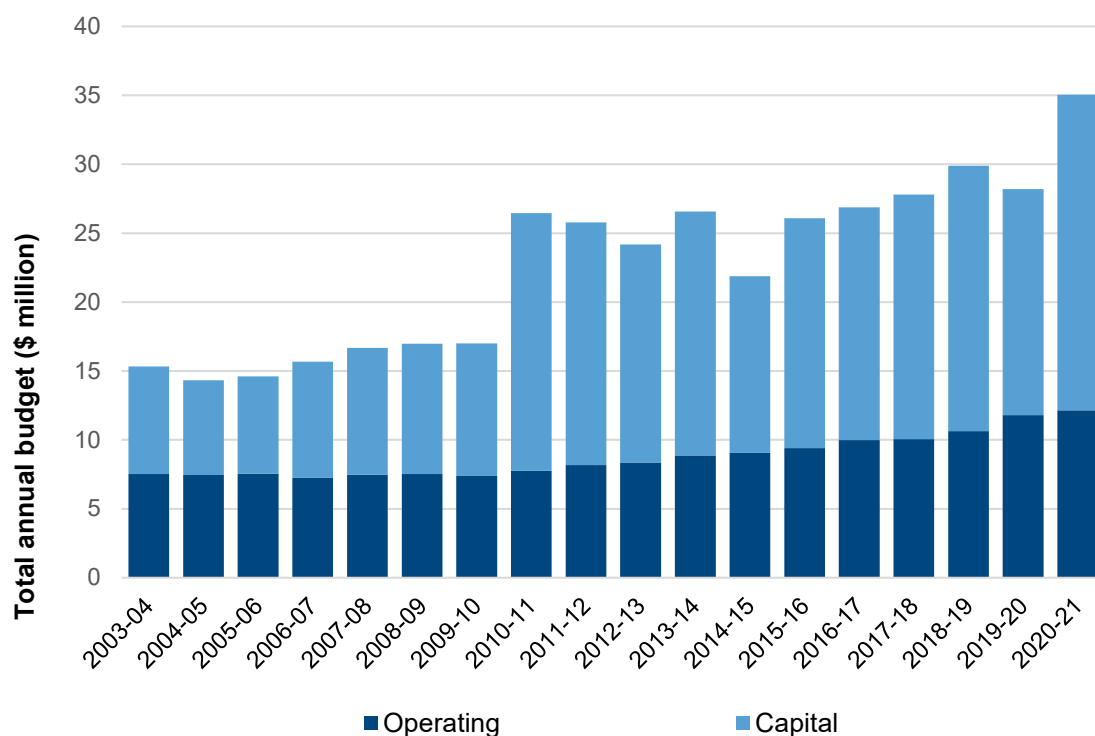
### **Most LG entities rely on the Grants Scheme to help fund their local BFS brigades and SES units**

The Grants Scheme started in 2003-04 to fund costs associated with the emergency and fire response activities of the BFS and SES. It covers approved expenditure categories and a list of eligible items. Remaining costs are covered by LG entities. The Grants Scheme is not intended to cover mitigation or recovery costs. Over 18 years to 2020-21, the Grants Scheme allocated funds and resources valued at \$409 million to LG entities, with the annual amount gradually increasing over time (Figure 4).

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<sup>11</sup> Only operational units are entitled to payments. Specialist support units, such as the VFES Education and Heritage unit and the Virtual Operations Support team are not eligible. Units not funded directly by the ESL, such as VFES units based in the Indian Ocean Territories and the Forest Products Commission VFES unit are also ineligible.

<sup>12</sup> SES units also receive annual operational efficiency payments if they achieve targets set by DFES.



Source: OAG based on DFES information

**Figure 4: Total Grants Scheme budget from 2003-04 to 2020-21**

In 2020-21, 121 of the State's 137<sup>13</sup> LG entities received allocations from the Grants Scheme worth \$35 million. Of the 16 LG entities that did not receive grant funding:

- eight (five metropolitan and three regional) had at least one DFES operated service based in their area (Career Fire and Rescue Service, VFES, VFRS)
- eight (seven metropolitan and one regional) had no volunteer service.

DFES' Manual for Capital and Operating Grants (Grants Scheme Manual) outlines what can be funded from the scheme. Operating grants fund general operating costs and minor purchases. For example, vehicle and facilities maintenance and insurance, volunteer training, personal protective clothing, police checks and the renewal of some heavy vehicle drivers' licences.<sup>14</sup> Capital grants fund significant capital items including vehicle and major equipment purchases, and facilities construction, restoration and renovation.

The amount of capital funding available each year is the balance left in the Grants Scheme after deducting operating grants. In 2020-21, this was \$21 million after \$12 million went to operating grants. LG entities and SES units do not receive payments for capital items, such as vehicles, flood boats or their volunteer facilities. Instead, DFES supplies them with the item (vehicles for example) or provides funds to LG entities directly to cover their invoices. LG entities must fund their own administration costs (for example, staff to support the

<sup>13</sup> Excludes the two Indian Ocean Territories and nine regional councils. Two regional LG entities without an associated volunteer service received operating Grants Scheme funding.

<sup>14</sup> DFES provides funding for some operating costs directly to SES units, such as personal injury insurance and personal protective clothing.

volunteer services) and some minor items (for example, cleaning and lawn mowing around facilities and ineligible items such as chainsaws for BFS brigades).

The Grants Scheme was reviewed by the Economic Regulation Authority in 2017 as part of a broader review of the ESL. The review recommended DFES 'apply robust analytical techniques for its funding allocation decisions'. More recently, in February 2022, DFES reviewed its Grants Scheme processes, including LG entities' funding acquittals. It identified limitations in the way it includes volunteer service facilities in capital asset programs, assesses acquittals and determines funding allocations. The review recommended including volunteer numbers, fleet sizes and incident responses when determining funding allocations and developing models to forecast maintenance and update of capital assets.

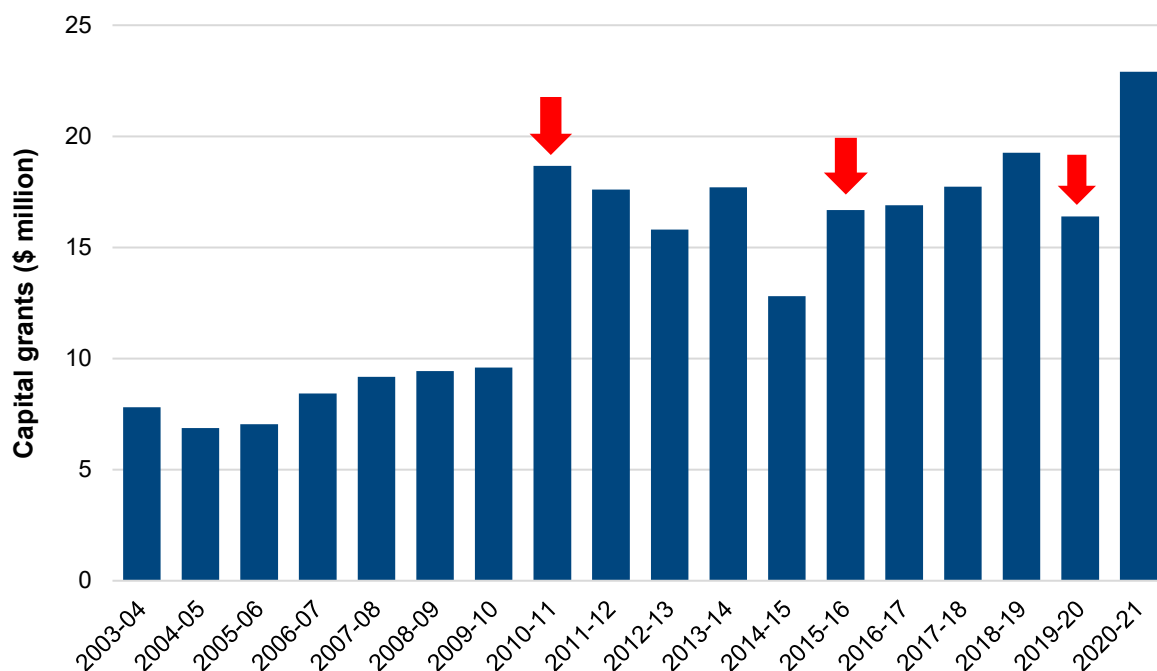
### *Capital Grants mostly fund vehicle replacement programs*

In 2020-21, DFES received capital grant applications for almost \$32 million to fund new capital items and facility upgrades against available funds of \$21 million. Over \$20 million was allocated to DFES' State-wide vehicle fleet replacement program for the BFS and SES, and pre-approved programs, leaving around \$440,000 for the new requests.

Of the \$32 million in new requests, over \$20 million was for additional vehicles that were not covered by the vehicle replacement program or for new or replacement facilities. DFES informed us that LG entity requests for additional vehicles, facilities replacement, renovations or additions have exceeded available funding in 18 of the 19 years since the Grants Scheme commenced in 2003-04.

Since it started, the Grants Scheme has provided LG entities with \$251 million to cover capital costs (Figure 5). At the time of our audit the Grants Scheme supported 978 fleet and 418 facility assets across the BFS and SES. Notable changes in funding levels occurred due to State Government injections, for example:

- \$40 million in 2010-11 over four years to cover emerging risks
- \$5.3 million in 2015-16 for remote Indigenous communities, a vehicle fleet remediation program and particle masks
- \$2.4 million in 2020-21 for the State-wide supply of defibrillators, light fuel tanker refurbishment and training.



Source: OAG based on DFES information

Note: red arrows show significant funding changes.

**Figure 5: Capital grants from 2003-04 to 2020-21**

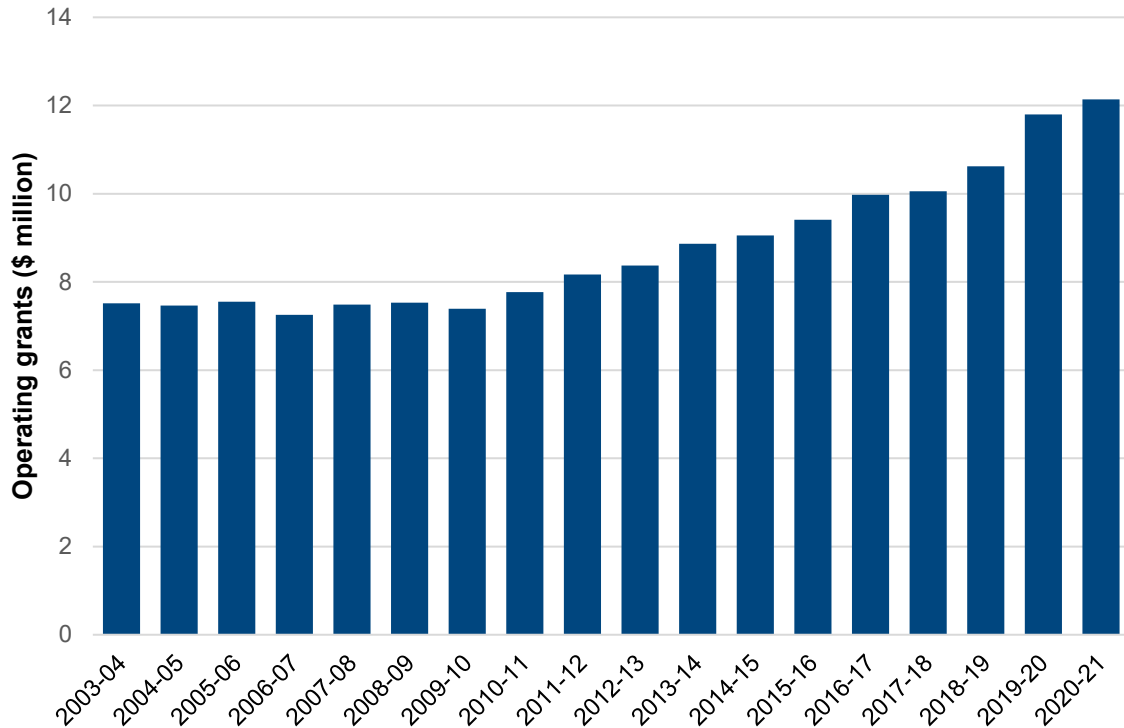
The capital grants are awarded following a merit-based application process. Each year LG entities must submit applications with a supporting business case. Applications are assessed by two grants committees (one for the BFS and another for the SES), in line with the Grants Scheme Manual and a set of guiding principles. The committees consist of three DFES staff, two LG representatives and one volunteer association representative. The Chairperson is appointed by the Commissioner.

#### *Recurrent operating grants are based on a formula using prior expenditure on the BFS and SES*

Since the Grants Scheme started, DFES has offered LG entities a grant equal to the average of their current grant and actual expenditure in the preceding two years, plus some indexation. Typically, once an LG entity receives Grants Scheme funding it automatically receives funding in subsequent years. LG entities can accept DFES' offer or request a different grant amount. Requests that exceed the offer by 10% or less are automatically approved. DFES negotiates those that exceed the offer by 10% or more.

In 2020-21, LG entities requested an additional \$1.3 million in operating grants and DFES approved \$450,000. We reviewed all the 2020-21 applications and found that DFES consistently used the above approach. DFES has provided \$158 million towards BFS and SES operating costs since 2003-04 (Figure 6).



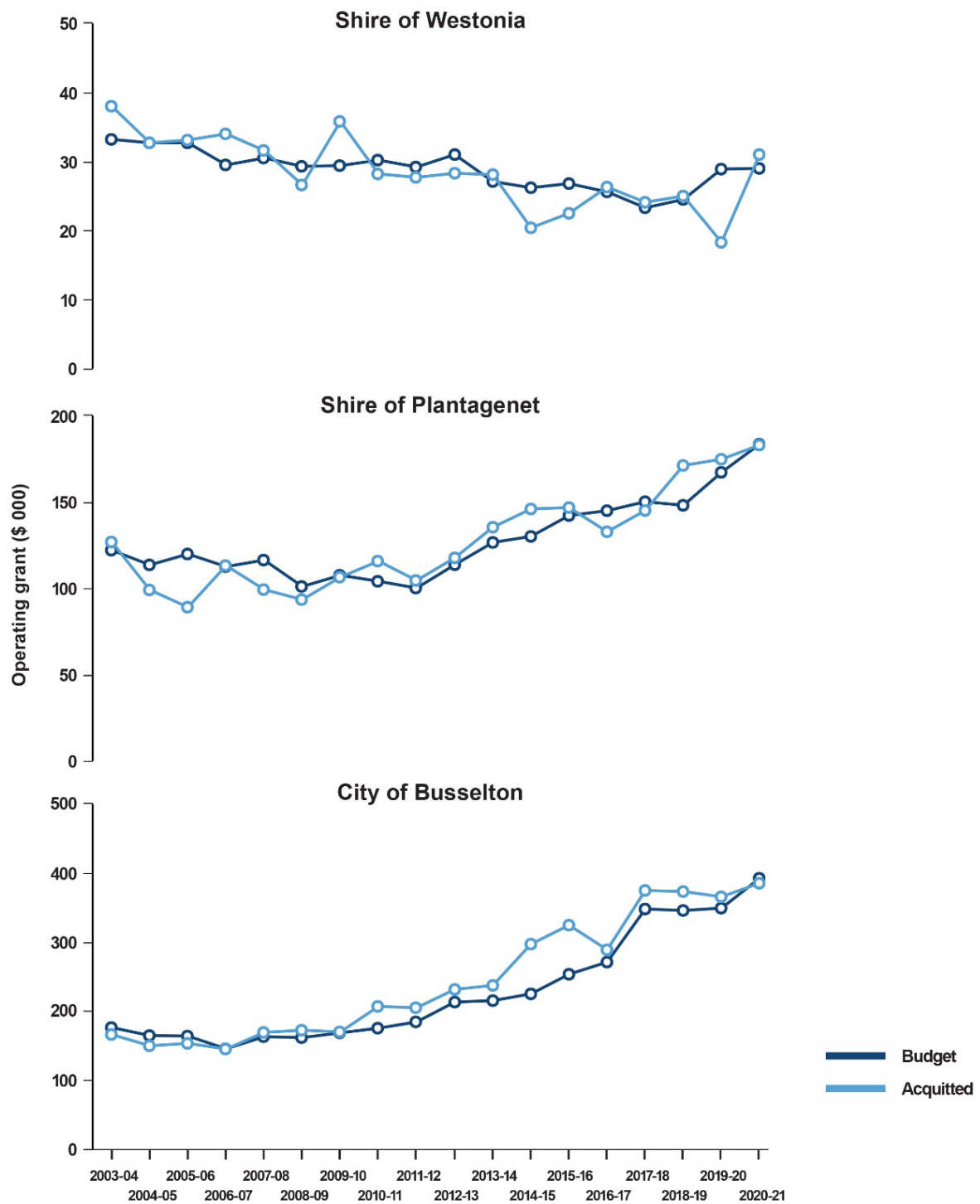


Source: OAG based on DFES information

**Figure 6: Operating grants from 2003-04 to 2020-21**

At the end of each financial year DFES requires LG entities to acquit their operating grants against nine clearly defined spending categories and a list of eligible items that include maintenance, insurance and training. DFES received the required acquittals for the three audited LG entities.

Annual grant funding to LG entities may reduce when they consistently do not spend what they receive. For example, a significant underspend by the Shire of Westonia in 2019-20 could affect its grant funding offer for the next two years (Figure 7). Conversely, annual grant funding may increase when LG entities consistently spend more than they receive. For example, spending and hence funding, for the Shire of Plantagenet has gradually increased since 2012-13 and for the City of Busselton it has doubled in the last 18 years (Figure 7). This is consistent with DFES' calculation method.



Source: OAG based on DFES information

**Figure 7: Operating grants to audited LG entities from 2003-04 to 2020-21**

## **DFES' administration of its Grants Scheme to the BFS and SES could be improved**

### **DFES offers predictable recurrent grant funding based on previous expenditure but funding decisions could be better documented**

DFES' Grants Scheme and accompanying guidance material provides a reliable source of funding to LG entities and their local volunteer services. DFES makes an annual grant offer to LG entities based on their current grant and the previous two years expenditure plus some indexation. The Grants Scheme Manual outlines the basic funding process and, once in the scheme, LG entities receive recurrent annual funding. These annual allocations provide assurance to the volunteer services and their communities that funding is not at risk.

However, the Grants Scheme Manual does not fully detail the methods DFES uses to allocate funds. For example:

- there is no documented procedure or list of criteria to guide how it negotiates operating grants with LG entities
- the Grants Scheme Manual does not guide DFES staff on how to apply funding under or over spends when calculating a LG entity's annual offer. We saw examples of DFES using portions of under and over spends in offer calculations without an explanation of why the full amount had not been used or how the portion had been determined.

In the absence of documented guidance for annual offer calculations, DFES risks making inconsistent and inequitable funding offers.

DFES updates the eligible items list annually, but does not have a clear process for LG entities or volunteer groups to add new items to the list. DFES approves requests from BFS brigades and SES units for new or specialist pieces of equipment not on the eligible items list on a case-by-case basis (see Case study 1). Currently, LG entity funding requests for items not on the eligible list are assessed with:

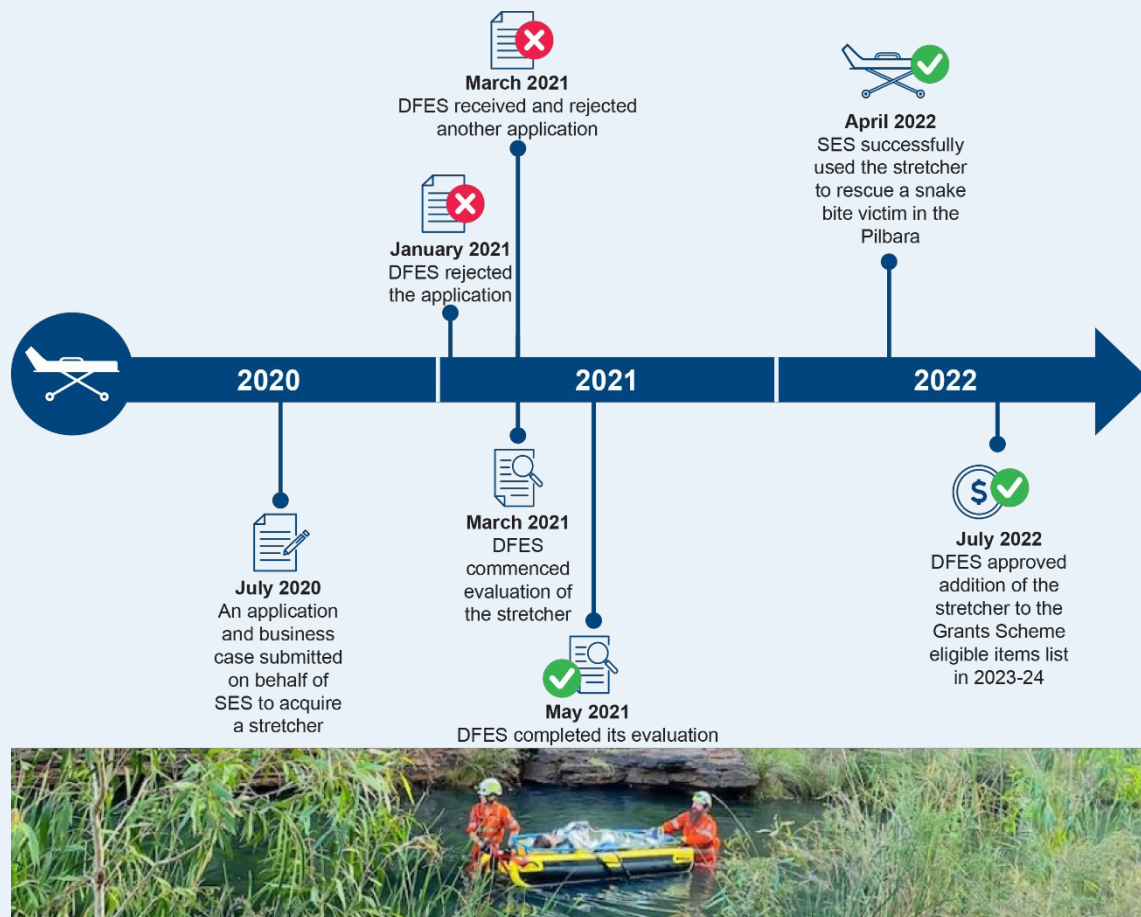
- input from a range of staff across operations, health and safety, research and development, and risk capability analysis
- consideration of BFS and SES requirements and equipment standards, standardisation across brigades and units and if the item is fit for purpose.

However, reasons for outcomes are not always well documented or well communicated to LG entities, and assessments are not required to be completed in set time frames.

During the audit, volunteer associations raised concerns with us that DFES' current approach slowed their ability to adopt new technologies and methods, and that the eligibility of items was unnecessarily restrictive and occasionally changed without consultation. A clearer time frame and criteria to assess equipment is important to ensure volunteer services can adopt new technologies and resources in line with better practice.

### Case study 1: Process to approve new equipment took almost two years

On behalf of an SES unit, two requests were made (initially directly to DFES and then via a Grants Scheme application) to approve the use of an all-terrain inflatable stretcher to transport casualties where boats could not access the rescue location or were unavailable. The approval process took almost two years (Figure 8).



Source: photo DFES, timeline OAG based on DFES information

**Figure 8: Timeline showing the request and approval process for use of an all-terrain inflatable stretcher. Photo shows the stretcher used in a gorge rescue in 2022**

Most of the volunteer associations representing the four volunteer services told us operating funding they received was generally adequate. DFES also advised us it has commenced an internal review of its Grants Scheme processes to identify improvements.

### Capital grants could better consider the strategic asset needs of LG entities

DFES' strategic asset planning does not include up to date information on BFS brigade and SES unit facilities. DFES has a State-wide asset register for BFS and SES facilities that house vehicles funded by the Grants Scheme. However, the register lacks the detail DFES needs from LG entities to fully inform its capital component of the Grants Scheme.

The LG sector's asset management framework provides that LG entities include all major asset classes, such as roads, buildings and infrastructure in their strategic asset plans.<sup>15</sup>

<sup>15</sup> Department of Local Government and Communities, [Integrated Planning and Reporting Asset Management Guidelines](#), DLGC, Perth, 2016.

However, the three LG entities we audited had not included volunteer facilities, which can include sheds, emergency water tanks, concrete slabs, toilets and driveways. These facilities vary significantly in age, condition and size, which may have been fit for purpose at the time of construction but may no longer be adequate (see Case study 2).

DFES also had no oversight of the condition of the facilities used by BFS brigades and SES units. DFES is reliant on LG entities providing information on the condition of these facilities in their Grants Scheme funding requests. Without this key information from LG entities and coordinated planning for facilities, DFES cannot effectively plan and fund the maintenance and replacement of volunteer facilities across the State.

The WA Local Government Association recently proposed developing a Comprehensive Asset Management Plan to help forecast the emergency response requirements of communities across WA over the next 10 years.

### Case study 2: BFS facilities vary greatly and some may no longer be fit for purpose

The age and condition of BFS brigade facilities vary from one brigade to another and some facilities may no longer be fit for purpose or meet the needs of an increasing diversity of volunteers. Without a current understanding of a facility's condition and purpose, DFES and LG entities cannot best plan for maintenance, upgrades and replacement. The Ambergate facility, constructed in 2018 provides its volunteers with a training and meeting area, a dedicated space for logistics support and wash down facilities (Figure 9).



Source: OAG

**Figure 9: Ambergate station in the City of Busselton**

In contrast, the Middle Ward facility, constructed in 2007, was designed to house vehicles only (Figure 10).



Source: OAG

**Figure 10: Middle Ward station in the Shire of Plantagenet**

DFES commenced additional routine monitoring of the condition of VFRS and VFES facilities in 2021. This work commissioned by DFES found that 42 of 126 VFRS and VFES facilities had exceeded their planned operational life. The audit classed 14 of the 42 as very poor or unserviceable. Well maintained facilities are essential to protect vehicles and other assets, and to support and enhance the morale of the volunteers that regularly use the facilities.



LG entities can plan to expand their volunteer facilities but may not receive funding to do so. For example, DFES declined a funding application from one LG entity to construct a larger facility to house an extra vehicle it had yet to purchase, as the facility was in excess of the determined fleet.

One LG entity we spoke with said they were unsure how DFES made their allocation decisions. Without clear, well informed strategic planning, funding may not be sufficient to maintain critical volunteer facilities to the level required.

### **Funding could be more clearly linked to an assessment of risk to ensure volunteer services are funded to capably respond to incidents**

DFES does not routinely collect and use all critical information required to apply a systematic risk based approach to inform and review its Grants Scheme funding offers. For example, DFES does not have a systematic approach to validating and using information on:

- volunteer numbers, capability and turnover (though LG entities may not always maintain up to date volunteer data)
- regional conditions, which affect the type of resources required by volunteer services across the State
- risk assessments by LG entities and incident reports by BFS brigades and SES units to analyse the type and frequency of incidents, which can influence operating costs. The three audited entities had not completed DFES' three-yearly Resource to Risk process, which aims to review if risks to the community are adequately managed and resourced.

Regular review of this information will help support confidence that DFES' grant funding allows volunteer groups to capably respond to incidents.

DFES has not fully defined the objectives of the Grants Scheme or the outcomes the scheme seeks to achieve. The Grants Scheme Manual describes the scheme as funding the 'approved capital and operating costs associated with the provision and maintenance of an effective bush firefighting service' for LG entities. However, DFES has not described what makes up an effective bush firefighting service and the Grants Scheme funds a range of services that extend beyond bush firefighting. For example, the Grants Scheme funds natural hazard response, and search and rescue assistance provided by the SES (Figure 1).<sup>16</sup> With a lack of clarity about what the Grants Scheme intends to achieve, DFES cannot be sure LG entities are appropriately funded to provide an effective response to bush fires and other emergencies.

## **LG entities lack some processes and support to effectively administer Grants Scheme funding**

### **LG entities had limited understanding of the cost of their volunteer services**

The three LG entities we audited did not fully understand how much they spend on the operating costs for their volunteer services. They each provided annual Grants Scheme acquittals to DFES, which detailed a proportion, but not all of their spending. However, none of the LG entities had fully and clearly:

- defined and documented processes to budget for and acquit DFES Grants Scheme funding

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<sup>16</sup> Having a volunteer service is not a requirement for LG entities to request Grants Scheme funding.

- documented what to include in the budget for their volunteer services, relying on existing staff to include what they think is appropriate
- separately recorded all other BFS brigade and SES unit related costs, such as staffing costs to liaise with volunteers, costs to arrange vehicle and facilities maintenance and costed work done by volunteers themselves.

Without a clear understanding of the costs, LG entities might not appropriately plan, budget or fund their volunteer emergency services.

### **Some LG entities struggle to adequately support their volunteer services to manage key responsibilities**

DFES partly funds the salaries of Community Emergency Service Managers (CESM) who provide important and valued support to LG entities in managing their volunteer services. However, many LG entities miss out as CESM funding through DFES is currently limited. Furthermore, some LG entities may not want a CESM or may not want to partly contribute to a CESM's salary. Across WA, in 2020-21:

- Eighty-two LG entities (60%) had no CESM. Thirty-four CESMs supported 55 (40%) LG entities and of these, 12 CESMs supported multiple LG entities.
- LG entities employed 27 CESMs in regional areas and DFES employed seven in the Perth and Peel area.

In the absence of a CESM, it might be challenging for some LG entities and volunteer groups to keep on top of their responsibilities including necessary administrative tasks and strategic planning.

LG entities do not routinely monitor the condition of their volunteer services assets and facilities. Two of the three LG entities we audited told us they did not always have time to visit volunteer facilities to understand things like current and future resourcing needs, despite receiving CESM support. We found:

- Busselton has one CESM who administers an SES unit and 15 BFS brigades with assistance from a full-time bush fire mitigation officer and a part-time administrative support position.
- Plantagenet has one CESM to assist an SES unit and 11 BFS brigades.
- Westonia is not supported by a CESM, relying on its staff who support their three local BFS brigades.

Together the three LG entities coordinate the maintenance of nearly 50 vehicles and the training and personal protective clothing needs for around 800 BFS and SES volunteers.

DFES directly funds 50 to 70% of CESM salaries to support administration of volunteer services, increasing the funding proportion for LG entities with a lower rate base. LG entities provide the balance. DFES also employs a part-time State CESM coordinator and two staff dedicated to Grants Scheme administration.

A 2021 WA Local Government Association survey found that around half of the State's LG entities had less than one full time equivalent employee to manage their emergency and fire management responsibilities. The survey also noted that an additional 24 LG entities provided feedback that they would like access to a CESM. One audited LG entity told us the administration of over 10 volunteer groups in their area 'is beyond the capacity of any single person'.

Lack of administrative support can affect data collection and reporting. In 2021-22, DFES received 94% of reports from incidents attended by SES units, but only 57% of reports from those attended by BFS brigades (Table 1). DFES requires incident reports to be completed. Two of the audited LG entities informed us they are aware that the BFS brigades have not completed all incident reports, but they do not have the resources to follow up with volunteer groups to ensure they are completed. DFES needs this information to inform risk assessments and make evidence-based funding decisions for volunteer services.

Volunteer service	Total incidents	Completed incident reports	% Completed
<b>BFS brigades</b>	5,567	3,172	57%
<b>SES units</b>	3,386	3,175	94%

Source: DFES

**Table 1: Proportion of completed incident reports received by DFES from volunteer groups in 2021-22**

Incident reports detail the type of response, actions taken, likely trigger for the fire or emergency, and the resources and personnel that attended. This information can also be critical for future insurance claims. Incident response forms can be lodged manually or electronically through DFES' Incident Report System.

Volunteer membership records are often inaccurate, which could impact funding decisions. The *Bush Fires Act 1954* requires LG entities maintain a register of their volunteers, but DFES told us this information is not always up to date. In 2021-22, the City of Busselton requested its volunteers confirm their status. As a result, their total number of registered volunteers halved, declining from around 600 to 300. Basic information, such as knowing who the active members are and if they have the correct personal protective clothing, is critical for DFES, LG entities and volunteer services to effectively plan and budget.



## Appendix 1: DFES major services and activities funded by the ESL 2020-21

Area and activity		Funding (\$ million)
	<b>Career Fire and Rescue Services</b> Employed personnel in fire stations across Perth, Albany, Bunbury, Geraldton and Kalgoorlie who are response ready for a variety of emergency situations, 24/7.	122
	<b>Volunteer Fire and Rescue Fire and Emergency Services</b> Committed volunteers in towns and built-up areas who provide an emergency response when most needed.	15
	<b>Bush Fire Service</b> Dedicated volunteers who protect us from bushfires through fire suppression, prevention and risk management services and fire safety education in rural and pastoral areas.	31
	<b>State Emergency Service</b> Steadfast volunteers in orange who provide help to the community in a variety of situations, such as severe weather and search and rescue operations.	9
	<b>Marine Rescue Western Australia</b> Devoted volunteers along our coastline who protect and save lives at sea.	9
	<b>Rural Fire Division</b> Improving rural fire management through increased investment in mitigation, strengthening relationships with volunteers, and greater collaboration between agencies.	14
	<b>Emergency Services Training</b> Providing professional development for volunteers and career personnel to enhance their operational and organisational skills.	28
	<b>Aerial Firefighting and Aviation Services</b> Operation and coordination of the aerial fleet that is deployed rapidly to emergency incidents, protecting lives and property during the bushfire season.	14
	<b>Asset Construction and Maintenance</b> Includes construction of fire stations and other facilities as well as maintenance, improvement and replacement of facilities, response vehicles and equipment.	66
	<b>Volunteer Engagement</b> Working with communities and local governments to strengthen relationships with our volunteers.	2
	<b>Emergency Management, Strategy and Planning</b> Research and planning activities to improve our services and inform decisions on how we allocate our resources.	8
	<b>Health and Wellness</b> Enhancing psychological and physical wellbeing for emergency services employees, volunteers and their families.	3
	<b>Investigation and Compliance</b> Determining the cause of fires and ensuring compliance with relevant standards to reduce the frequency and impact of emergency incidents.	4
	<b>Emergency Response Coordination</b> Includes the running of emergency operations centres and the '000' communications centre to dispatch and coordinate emergency responses.	10
	<b>Technology and Communications</b> Improving and maintaining the technology and communications infrastructure behind all our emergency services.	24
	<b>Special Operations</b> Upskilling personnel and maintaining specialist equipment to enhance our emergency response across a range of events such as hazardous material spills and building collapse.	4
	<b>Community Awareness and Education</b> Providing information and programs to communities to increase awareness and build a more resilient and safer State.	14
Total		377

Note: shaded rows indicate services included in this audit.

Source: DFES Annual Report 2020-21

## Supporting data 1: Land-based emergency and fire services within LG areas

Emergency and fire response services are distributed across the State. Services are typically located to ensure suitable response times to incidents in and around their physical base of operations.

The following table shows the number of land-based emergency and fire services within an LG area<sup>17</sup>. Brigades and units move across LG areas to offer support as required.

	Career Fire & Rescue Service	Volunteer Fire & Rescue Service	Volunteer Fire & Emergency Service	Volunteer State Emergency Service	Volunteer Bush Fire Service
LG entity	(CFRS)	(VFRS)	(VFES)	(SES)	(BFS)
City of Albany	1	1	0	1	16
City of Armadale	1	2	0	1	2
Shire of Ashburton	0	0	1	1	1
Shire of Augusta Margaret River	0	5	0	1	10
Town of Bassendean	0	0	0	1	0
City of Bayswater	0	0	0	1	0
City of Belmont	1	0	1	3	0
Shire of Beverley	0	1	0	0	6
Shire of Boddington	0	0	0	1	4
Shire of Boyup Brook	0	1	0	0	15
Shire of Bridgetown- Greenbushes	0	1	0	1	10
Shire of Brookton	0	1	0	0	3
Shire of Broome	0	1	2	1	1
Shire of Broomehill-Tambellup	0	0	1	0	5
Shire of Bruce Rock	0	0	1	0	3
City of Bunbury	1	1	0	1	1
City of Busselton	0	3	0	1	15
Town of Cambridge	0	0	0	0	0
City of Canning	1	0	0	1	0
Shire of Capel	0	0	0	0	5
Shire of Carnamah	0	0	0	1	2
Shire of Carnarvon	0	1	1	1	1
Shire of Chapman Valley	0	0	0	0	6
Shire of Chittering	0	0	0	0	6
Shire of Christmas Island	0	0	1	0	0
Town of Claremont	1	0	0	0	0
City of Cockburn	1	0	0	1	2
Shire of Cocos Islands	0	0	2	0	0
Shire of Collie	0	1	0	1	6
Shire of Coolgardie	0	2	0	0	2
Shire of Coorow	0	0	0	0	6
Shire of Corrigin	0	1	0	0	5
Town of Cottesloe	0	0	0	0	0
Shire of Cranbrook	0	0	0	0	12
Shire of Cuballing	0	0	0	0	1
Shire of Cue	0	1	0	0	1
Shire of Cunderdin	0	1	0	0	3

<sup>17</sup> BFS and SES counts as reported at December 2021. Counts show units/brigades located in a single LG area and do not show units/brigades that cover multiple LG areas.

	Career Fire & Rescue Service	Volunteer Fire & Rescue Service	Volunteer Fire & Emergency Service	Volunteer State Emergency Service	Volunteer Bush Fire Service
LG entity	(CFRS)	(VFRS)	(VFES)	(SES)	(BFS)
Shire of Dalwallinu	0	1	0	0	5
Shire of Dandaragan	0	1	1	0	4
Shire of Dardanup	0	1	0	0	8
Shire of Denmark	0	1	0	1	16
Shire of Derby/West Kimberley	0	1	1	1	1
Shire of Donnybrook-Balingup	0	1	0	1	12
Shire of Dowerin	0	0	0	0	3
Shire of Dumbleyung	0	1	0	0	4
Shire of Dundas	0	1	1	0	2
Town of East Fremantle	0	0	0	0	0
Shire of East Pilbara	0	1	1	1	2
Shire of Esperance	0	1	0	1	16
Shire of Exmouth	0	1	0	1	1
City of Fremantle	1	0	0	0	0
Shire of Gingin	0	2	0	0	9
Shire of Gnowangerup	0	0	0	1	3
Shire of Goomalling	0	1	0	0	4
City of Gosnells	2	0	0	1	1
City of Greater Geraldton	1	2	0	1	11
Shire of Halls Creek	0	0	1	0	0
Shire of Harvey	0	2	0	2	8
Shire of Irwin	0	1	0	0	2
Shire of Jerramungup	0	0	2	0	4
City of Joondalup	2	0	0	1	0
City of Kalamunda	0	2	0	1	1
City of Kalgoorlie-Boulder	1	1	0	1	0
City of Karratha	0	4	0	2	2
Shire of Katanning	0	1	0	0	4
Shire of Kellerberrin	0	1	0	0	6
Shire of Kent	0	0	0	0	6
Shire of Kojonup	0	1	0	0	12
Shire of Kondinin	0	0	2	0	5
Shire of Koorda	0	0	0	0	2
Shire of Kulin	0	1	0	0	5
City of Kwinana	1	1	0	0	2
Shire of Lake Grace	0	1	0	0	9
Shire of Laverton	0	1	0	0	1
Shire of Leonora	0	1	0	0	0
City of Mandurah	1	2	0	1	1
Shire of Manjimup	0	4	0	2	20
Shire of Meekatharra	0	1	0	1	1
City of Melville	1	0	0	1	0
Shire of Menzies	0	0	0	0	1
Shire of Merredin	0	1	0	1	7
Shire of Mingenew	0	0	0	0	5
Shire of Moora	0	1	0	1	5
Shire of Morawa	0	0	1	0	4
Town of Mosman Park	0	0	0	0	0
Shire of Mount Magnet	0	1	0	0	1
Shire of Mount Marshall	0	0	1	0	6
Shire of Mukinbudin	0	0	1	0	2
Shire of Mundaring	0	1	0	1	9
Shire of Murchison	0	0	0	0	4

	Career Fire & Rescue Service	Volunteer Fire & Rescue Service	Volunteer Fire & Emergency Service	Volunteer State Emergency Service	Volunteer Bush Fire Service
LG entity	(CFRS)	(VFRS)	(VFES)	(SES)	(BFS)
Shire of Murray	0	1	0	1	5
Shire of Nannup	0	1	0	1	9
Shire of Narembeen	0	0	1	0	1
Shire of Narrogin	0	1	0	1	10
City of Nedlands	0	0	0	0	0
Shire of Ngaanyatjaraku	0	0	0	0	0
Shire of Northam	0	2	0	1	10
Shire of Northampton	0	2	0	1	6
Shire of Nungarin	0	0	0	0	6
Shire of Peppermint Grove	0	0	0	0	0
Shire of Perenjori	0	0	0	0	2
City of Perth	1	0	0	0	0
Shire of Pingelly	0	1	0	1	4
Shire of Plantagenet	0	1	0	1	11
Town of Port Hedland	0	2	0	1	1
Shire of Quairading	0	1	0	0	5
Shire of Ravensthorpe	0	1	1	1	9
City of Rockingham	2	2	2	1	0
Shire of Sandstone	0	0	0	0	1
Shire of Serpentine-Jarrahdale	0	0	0	1	7
Shire of Shark Bay	0	1	0	2	1
City of South Perth	0	0	0	0	0
City of Stirling	1	0	0	1	0
City of Subiaco	1	0	0	0	0
City of Swan	4	0	1	1	5
Shire of Tammin	0	0	1	0	1
Shire of Three Springs	0	0	0	0	4
Shire of Toodyay	0	1	0	1	5
Shire of Trayning	0	0	1	0	0
Shire of Upper Gascoyne	0	0	0	0	1
Town of Victoria Park	1	0	0	0	0
Shire of Victoria Plains	0	0	0	0	5
City of Vincent	1	0	0	1	0
Shire of Wagin	0	1	0	1	7
Shire of Wandering	0	0	0	0	4
City of Wanneroo	2	1	0	1	4
Shire of Waroona	0	0	1	0	3
Shire of West Arthur	0	0	0	0	3
Shire of Westonia	0	0	0	0	3
Shire of Wickpin	0	0	0	0	5
Shire of Williams	0	1	0	0	6
Shire of Wiluna	0	0	0	0	1
Shire of Wongan-Ballidu	0	1	1	0	4
Shire of Woodanilling	0	0	0	0	5
Shire of Wyalkatchem	0	1	0	0	3
Shire of Wyndham-East Kimberley	0	1	1	1	5
Shire of Yalgoo	0	0	0	0	2
Shire of Yilgarn	0	1	0	0	8
Shire of York	0	1	1	0	4

	Career Fire & Rescue Service	Volunteer Fire & Rescue Service	Volunteer Fire & Emergency Service	Volunteer State Emergency Service	Volunteer Bush Fire Service
LG entity	(CFRS)	(VFRS)	(VFES)	(SES)	(BFS)
<b>Total</b>	<b>30</b>	<b>94</b>	<b>33*</b>	<b>63<sup>#</sup></b>	<b>563</b>

Source: OAG based on DFES information

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\* There are four VFES units run directly by DFES and not linked to any LG entity.

<sup>#</sup> There is one SES unit run directly by DFES and not linked to any LG entity.

## Supporting data 2: Entity responsible for initial fire response by LG area

Responsibility for responding to fire in WA is shared across multiple State and local government entities and services. Initial response to a fire usually depends on where the fire starts with emergency response services and resources moving across LG areas to offer support and ensure hazards are managed rapidly and effectively. Control of the response effort can also transfer between entities.

The following table shows the population and land area proportions (in brackets) for which each entity is typically responsible for coordinating the initial fire response.

	LG		DFES		DBCA		Total	
	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population
City of Albany	3,840.1 (89.1%)	12,499 (32.3%)	49.3 (1.1%)	26,222 (67.7%)	419.1 (9.7%)	NA	4,308.5	38,721
City of Armadale	99.9 (17.9%)	4,468 (4.7%)	116.6 (20.8%)	89,771 (95.3%)	343.0 (61.3%)	NA	559.5	94,239
Shire of Ashburton	88,288.5 (87.6%)	6,625 (89.5%)	4.0 (0.0%)	781 (10.5%)	12,524.8 (12.4%)	NA	100,817.3	7,406
Shire of Augusta Margaret River	1,014.8 (47.8%)	4,927 (29.5%)	27.9 (1.3%)	11,748 (70.5%)	1,079.7 (50.9%)	NA	2,122.4	16,675
Town of Bassendean	-	-	10.3 (100%)	15,937 (100%)	-	NA	10.3	15,937
City of Bayswater	-	-	34.6 (100%)	69,105 (100%)	-	NA	34.6	69,105
City of Belmont	-	-	39.8 (100%)	42,162 (100%)	-	NA	39.8	42,162
Shire of Beverley	1,744.2 (73.6%)	828 (49.2%)	7.1 (0.3%)	855 (50.8%)	619.2 (26.1%)	NA	2,370.5	1,683
Shire of Boddington	1,022.0 (53.7%)	1,702 (100%)	-	-	882.5 (46.3%)	NA	1,904.5	1,702
Shire of Boyup Brook	2,225.5 (78.7%)	1,279 (70.4%)	3.5 (0.1%)	538 (29.6%)	597.5 (21.1%)	NA	2,826.5	1,817
Shire of Bridgetown-Greenbushes	666.7 (49.9%)	2,384 (45.4%)	21.8 (1.6%)	2,869 (54.6%)	648.9 (48.5%)	NA	1,337.4	5,253

	LG		DFES		DBCA		Total	
	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population
Shire of Brookton	1,432.8 (89.5%)	408 (43.2%)	4.5 (0.3%)	536 (56.8%)	163.9 (10.2%)	NA	1,601.2	944
Shire of Broome	52,555.8 (96.6%)	2,303 (13.6%)	46.1 (0.1%)	14,625 (86.4%)	1,799.9 (3.3%)	NA	54,401.8	16,928
Shire of Broomehill-Tambellup	2,594.1 (99.4%)	1,051 (100%)	-	-	15.6 (0.6%)	NA	2,609.7	1,051
Shire of Bruce Rock	2,665.9 (97.8%)	995 (100%)	-	-	58.8 (2.2%)	NA	2,724.7	995
City of Bunbury	8.4 (12.8%)	3 (0.0%)	57.0 (87.2%)	32,970 (100.0%)	-	NA	65.4	32,973
City of Busselton	928.6 (63.9%)	6,525 (16.1%)	64.5 (4.4%)	33,959 (83.9%)	461.0 (31.7%)	NA	1,454.1	40,484
Town of Cambridge	-	-	22.0 (100%)	29,049 (100%)	-	NA	22.0	29,049
City of Canning	-	-	64.9 (100%)	95,826 (100%)	-	NA	64.9	95,826
Shire of Capel	452.9 (81.2%)	8,418 (46.3%)	11.8 (2.1%)	9,774 (53.7%)	93.2 (16.7%)	NA	557.9	18,192
Shire of Carnamah	2,244.3 (78.2%)	540 (100%)	-	-	626.6 (21.8%)	NA	2,870.9	540
Shire of Carnarvon	44,599.2 (95.8%)	981 (18.7%)	38.7 (0.1%)	4,262 (81.3%)	1,936.8 (4.2%)	NA	46,574.7	5,243
Shire of Chapman Valley	3,405.5 (85.5%)	1,558 (100%)	-	-	575.8 (14.5%)	NA	3,981.3	1,558
Shire of Chittering	1,181.2 (96.8%)	5,957 (100%)	-	-	38.7 (3.2%)	NA	1,219.9	5,957
Shire of Christmas Island	-	-	136.1 (100%)	1,699 (100%)	-	NA	136.1	1,699
Town of Claremont	-	-	5.0 (100%)	11,262 (100%)	-	NA	5.0	11,262
City of Cockburn	18.5 (11.0%)	1,612 (1.4%)	130.3 (77.6%)	116,598 (98.6%)	19.1 (11.4%)	NA	167.9	118,210
Shire of Cocos Islands	-	-	13.7 (100%)	593 (100%)	-	NA	13.7	593

	LG		DFES		DBCA		Total	
	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population
Shire of Collie	328.5 (19.2%)	1,352 (15.3%)	23.6 (1.4%)	7,463 (84.7%)	1,357.7 (79.4%)	NA	1,709.8	8,815
Shire of Coolgardie	28,210.7 (93.1%)	331 (9.6%)	10.7 (0.0%)	3,129 (90.4%)	2,076.3 (6.9%)	NA	30,297.7	3,460
Shire of Coorow	3,469.4 (82.8%)	1,051 (100%)	-	-	720.5 (17.2%)	NA	4,189.9	1,051
Shire of Corrigin	2,647.4 (98.7%)	473 (47.1%)	3.0 (0.1%)	531 (52.9%)	30.9 (1.2%)	NA	2,681.3	1,004
Town of Cottesloe	-	-	3.9 (100%)	8,005 (100%)	-	NA	3.9	8,005
Shire of Cranbrook	2,813.9 (85.9%)	1,101 (100%)	-	-	462.1 (14.1%)	NA	3,276.0	1,101
Shire of Cuballing	1,067.6 (89.3%)	902 (100%)	-	-	127.7 (10.7%)	NA	1,195.3	902
Shire of Cue	13,424.4 (98.8%)	78 (36.6%)	2.3 (0.0%)	135 (63.4%)	155.5 (1.1%)	NA	13,582.2	213
Shire of Cunderdin	1,859.3 (99.8%)	674 (51.7%)	2.7 (0.1%)	630 (48.3%)	0.4 (0.0%)	NA	1,862.4	1,304
Shire of Dalwallinu	6,901.2 (95.5%)	660 (48.3%)	4.2 (0.1%)	707 (51.7%)	319.0 (4.4%)	NA	7,224.4	1,367
Shire of Dandaragan	5,465.2 (81.4%)	1,758 (52.1%)	16.1 (0.2%)	1,617 (47.9%)	1,230.3 (18.3%)	NA	6,711.6	3,375
Shire of Dardanup	278.9 (53.0%)	3,428 (23.4%)	13.8 (2.6%)	11,206 (76.6%)	233.1 (44.3%)	NA	525.8	14,634
Shire of Denmark	690.3 (37.1%)	2,690 (42.7%)	19.9 (1.1%)	3,615 (57.3%)	1,149.6 (61.8%)	NA	1,859.8	6,305
Shire of Derby/West Kimberley	114,654.2 (95.8%)	4,527 (63.7%)	12.8 (0.0%)	2,583 (36.3%)	5,064.0 (4.2%)	NA	119,731.0	7,110
Shire of Donnybrook-Balingup	678.7 (43.5%)	3,269 (53.0%)	12.1 (0.8%)	2,898 (47.0%)	869.1 (55.7%)	NA	1,559.9	6,167
Shire of Dowerin	1,844.2 (99.0%)	698 (100%)	-	-	18.9 (1.0%)	NA	1,863.1	698
Shire of Dumbleyung	2,421.0 (95.3%)	451 (65.2%)	1.4 (0.1%)	241 (34.8%)	116.8 (4.6%)	NA	2,539.2	692



	LG		DFES		DBCA		Total	
	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population
Shire of Dundas	83,804.0 (90.2%)	129 (18.9%)	5.3 (0.0%)	552 (81.1%)	9,077.1 (9.8%)	NA	92,886.4	681
Town of East Fremantle	-	-	3.1 (100%)	7,839 (100%)	-	NA	3.1	7,839
Shire of East Pilbara	358,088.5 (96.2%)	5,570 (57.0%)	7.1 (0.0%)	4,194 (43.0%)	14,200.1 (3.8%)	NA	372,295.7	9,764
Shire of Esperance	34,921.1 (78.0%)	3,939 (28.4%)	20.8 (0.1%)	9,934 (71.6%)	9,855.6 (22.0%)	NA	44,797.5	13,873
Shire of Exmouth	5,355.8 (82.6%)	292 (9.5%)	13.0 (0.2%)	2,795 (90.5%)	1,119.4 (17.3%)	NA	6,488.2	3,087
City of Fremantle	-	-	19.3 (100%)	31,951 (100%)	-	NA	19.3	31,951
Shire of Gingin	2,284.0 (71.2%)	3,452 (61.6%)	122.7 (3.8%)	2,155 (38.4%)	801.7 (25.0%)	NA	3,208.4	5,607
Shire of Gnowangerup	3,867.2 (90.7%)	1,210 (100%)	-	-	397.8 (9.3%)	NA	4,265.0	1,210
Shire of Goomalling	1,828.3 (99.6%)	512 (52.7%)	3.0 (0.2%)	459 (47.3%)	4.1 (0.2%)	NA	1,835.4	971
City of Gosnells	30.7 (24.1%)	1,097 (0.9%)	88.9 (69.8%)	125,298 (99.1%)	7.7 (6.1%)	NA	127.3	126,395
City of Greater Geraldton	9,609.3 (97.0%)	4,884 (12.4%)	62.5 (0.6%)	34,603 (87.6%)	237.2 (2.4%)	NA	9,909.0	39,487
Shire of Halls Creek	124,003.4 (93.2%)	3,573 (100%)	-	-	9,042.6 (6.8%)	NA	133,046.0	3,573
Shire of Harvey	927.7 (53.7%)	9,179 (32.1%)	22.8 (1.3%)	19,432 (67.9%)	777.1 (45.0%)	NA	1,727.6	28,611
Shire of Irwin	2,068.1 (87.3%)	919 (25.0%)	11.2 (0.5%)	2,756 (75.0%)	290.0 (12.2%)	NA	2,369.3	3,675
Shire of Jerramungup	5,119.6 (78.6%)	1,162 (100%)	-	-	1,391.6 (21.4%)	NA	6,511.2	1,162
City of Joondalup	-	-	98.9 (100%)	159,683 (100%)	-	NA	98.9	159,683
City of Kalamunda	44.0 (13.6%)	2,601 (4.4%)	73.9 (22.8%)	56,087 (95.6%)	206.4 (63.6%)	NA	324.3	58,688

	LG		DFES		DBCA		Total	
	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population
City of Kalgoorlie-Boulder	91,828.6 (96.2%)	224 (0.8%)	97.1 (0.1%)	29,117 (99.2%)	3,574.6 (3.7%)	NA	95,500.3	29,341
City of Karratha	14,975.4 (98.3%)	2,555 (11.5%)	91.3 (0.6%)	19,643 (88.5%)	171.6 (1.1%)	NA	15,238.3	22,198
Shire of Katanning	1,455.6 (95.9%)	530 (13.0%)	9.7 (0.6%)	3,535 (87.0%)	52.9 (3.5%)	NA	1,518.2	4,065
Shire of Kellerberrin	1,881.8 (98.3%)	356 (31.5%)	3.4 (0.2%)	774 (68.5%)	30.2 (1.6%)	NA	1,915.4	1,130
Shire of Kent	4,454.7 (79.2%)	495 (100%)	-	-	1,169.9 (20.8%)	NA	5,624.6	495
Shire of Kojonup	2,906.1 (99.2%)	1,047 (55.4%)	4.4 (0.2%)	842 (44.6%)	20.5 (0.7%)	NA	2,931.0	1,889
Shire of Kondinin	7,151.1 (96.1%)	839 (100%)	-	-	289.7 (3.9%)	NA	7,440.8	839
Shire of Koorda	2,767.1 (97.7%)	368 (100%)	-	-	65.2 (2.3%)	NA	2,832.3	368
Shire of Kulin	4,429.5 (93.9%)	480 (62.1%)	1.2 (0.0%)	293 (37.9%)	288.2 (6.1%)	NA	4,718.9	773
City of Kwinana	32.2 (26.8%)	6,307 (13.8%)	85.7 (71.4%)	39,482 (86.2%)	2.1 (1.8%)	NA	120.0	45,789
Shire of Lake Grace	9,867.0 (83.0%)	830 (65.5%)	1.7 (0.0%)	437 (34.5%)	2,017.6 (17.0%)	NA	11,886.3	1,267
Shire of Laverton	168,169.7 (93.4%)	926 (69.6%)	2.2 (0.0%)	404 (30.4%)	11,822.1 (6.6%)	NA	179,994.0	1,330
Shire of Leonora	31,452.3 (98.6%)	1,001 (62.9%)	5.0 (0.0%)	591 (37.1%)	457.8 (1.4%)	NA	31,915.1	1,592
City of Mandurah	36.6 (20.9%)	1,824 (2.1%)	82.2 (47.0%)	86,821 (97.9%)	56.1 (32.1%)	NA	174.9	88,645
Shire of Manjimup	1,331.2 (18.9%)	3,635 (40.0%)	35.4 (0.5%)	5,455 (60.0%)	5,663.0 (80.6%)	NA	7,029.6	9,090
Shire of Meekatharra	97,833.4 (97.7%)	539 (44.9%)	2.9 (0.0%)	661 (55.1%)	2,352.2 (2.4%)	NA	100,188.5	1,200
City of Melville	-	-	52.9 (100%)	103,521 (100%)	-	NA	52.9	103,521

	LG		DFES		DBCA		Total	
	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population
Shire of Menzies	95,602.1 (77.0%)	517 (100%)	-	-	28,513.3 (23.0%)	NA	124,115.4	517
Shire of Merredin	3,204.6 (97.3%)	695 (22.2%)	14.0 (0.4%)	2,441 (77.8%)	75.2 (2.3%)	NA	3,293.8	3,136
Shire of Mingenew	1,917.2 (99.1%)	408 (100%)	-	-	17.7 (0.9%)	NA	1,934.9	408
Shire of Moora	3,622.7 (96.3%)	759 (33.2%)	5.7 (0.2%)	1,524 (66.8%)	134.6 (3.6%)	NA	3,763.0	2,283
Shire of Morawa	3,223.6 (91.8%)	668 (100%)	-	-	287.0 (8.2%)	NA	3,510.6	668
Town of Mosman Park	-	-	4.3 (100%)	9,143 (100%)	-	NA	4.3	9,143
Shire of Mount Magnet	13,698.0 (98.8%)	72 (10.9%)	3.1 (0.0%)	587 (89.1%)	157.0 (1.1%)	NA	13,858.1	659
Shire of Mount Marshall	7,163.6 (70.3%)	452 (100%)	-	-	3,021.0 (29.7%)	NA	10,184.6	452
Shire of Mukinbudin	3,238.8 (94.5%)	592 (100%)	-	-	188.1 (5.5%)	NA	3,426.9	592
Shire of Mundaring	367.6 (57.2%)	18,589 (47.5%)	37.5 (5.8%)	20,529 (52.5%)	238.1 (37.0%)	NA	643.2	39,118
Shire of Murchison	44,952.6 (99.8%)	104 (100%)	-	-	93.5 (0.2%)	NA	45,046.1	104
Shire of Murray	849.5 (49.9%)	13,364 (75.7%)	15.2 (0.9%)	4,301 (24.3%)	838.8 (49.2%)	NA	1,703.5	17,665
Shire of Nannup	625.1 (20.5%)	1,011 (64.7%)	2.5 (0.1%)	551 (35.3%)	2,426.3 (79.5%)	NA	3,053.9	1,562
Shire of Narembeen	3,764.7 (98.8%)	791 (100%)	-	-	44.3 (1.2%)	NA	3,809.0	791
Shire of Narrogin	1,501.0 (92.0%)	833 (17.6%)	14.0 (0.9%)	3,906 (82.4%)	116.3 (7.1%)	NA	1,631.3	4,739
City of Nedlands	-	-	19.6 (100%)	22,160 (100%)	-	NA	19.6	22,160
Shire of Ngaanyatjaraku	141,411.3 (88.5%)	1,363 (100%)	-	-	18,404.7 (11.5%)	NA	159,816.0	1,363

	LG		DFES		DBCA		Total	
	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population
Shire of Northam	1,317.2 (92.0%)	3,810 (33.6%)	31.3 (2.2%)	7,529 (66.4%)	82.7 (5.8%)	NA	1,431.2	11,339
Shire of Northampton	10,616.6 (84.6%)	958 (29.7%)	114.4 (0.9%)	2,265 (70.3%)	1,812.7 (14.5%)	NA	12,543.7	3,223
Shire of Nungarin	1,065.1 (91.4%)	246 (100%)	-	-	100.9 (8.7%)	NA	1,166.0	246
Shire of Peppermint Grove	-	-	1.1 (100%)	1,604 (100%)	-	NA	1.1	1,604
Shire of Perenjori	8,274.8 (99.7%)	633 (100%)	-	-	26.6 (0.3%)	NA	8,301.4	633
City of Perth	-	-	13.7 (100%)	28,537 (100%)	-	NA	13.7	28,537
Shire of Pingelly	1,212.8 (93.7%)	359 (34.7%)	6.0 (0.5%)	677 (65.3%)	75.8 (5.9%)	NA	1,294.6	1,036
Shire of Plantagenet	3,376.2 (69.2%)	3,411 (63.3%)	12.2 (0.3%)	1,976 (36.7%)	1,488.3 (30.5%)	NA	4,876.7	5,387
Town of Port Hedland	18,354.6 (99.7%)	296 (1.9%)	61.3 (0.3%)	15,330 (98.1%)	1.2 (0.0%)	NA	18,417.1	15,626
Shire of Quairading	1,984.4 (98.4%)	382 (39.7%)	6.0 (0.3%)	581 (60.3%)	26.5 (1.3%)	NA	2,016.9	963
Shire of Ravensthorpe	7,914.3 (80.4%)	1,753 (85.3%)	1.9 (0.0%)	302 (14.7%)	1,925.6 (19.6%)	NA	9,841.8	2,055
City of Rockingham	129.0 (50.1%)	35,455 (26.1%)	109.0 (42.3%)	100,235 (73.9%)	19.5 (7.6%)	NA	257.5	135,690
Shire of Sandstone	32,604.8 (100%)	105 (100%)	-	-	0.5 (0.0%)	NA	32,605.3	105
Shire of Serpentine-Jarrahdale	454.0 (50.4%)	31,856 (99.2%)	0.2 (0.0%)	241 (0.8%)	447.0 (49.6%)	NA	901.2	32,097
Shire of Shark Bay	18,249.3 (75.4%)	308 (30.2%)	4.9 (0.0%)	711 (69.8%)	5,947.3 (24.6%)	NA	24,201.5	1,019
City of South Perth	-	-	19.8 (100%)	43,359 (100%)	-	NA	19.8	43,359
City of Stirling	-	-	104.7 (100%)	226,687 (100%)	-	NA	104.7	226,687

	LG		DFES		DBCA		Total	
	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population
City of Subiaco	-	-	5.6 (100%)	17,282 (100%)	-	NA	5.6	17,282
City of Swan	600.7 (57.6%)	9,715 (6.4%)	247.6 (23.7%)	143,075 (93.6%)	194.7 (18.7%)	NA	1,043.0	152,790
Shire of Tammin	1,084.8 (98.5%)	245 (64.0%)	0.9 (0.1%)	138 (36.0%)	16.0 (1.5%)	NA	1,101.7	383
Shire of Three Springs	2,606.5 (98.1%)	577 (100%)	-	-	50.2 (1.9%)	NA	2,656.7	577
Shire of Toodyay	1,291.0 (76.3%)	3,766 (81.7%)	4.1 (0.2%)	841 (18.3%)	396.5 (23.4%)	NA	1,691.6	4,607
Shire of Trayning	1,620.7 (98.2%)	292 (100%)	-	-	30.5 (1.9%)	NA	1,651.2	292
Shire of Upper Gascoyne	56,857.1 (98.4%)	166 (100%)	-	-	952.8 (1.7%)	NA	57,809.9	166
Town of Victoria Park	-	-	17.9 (100%)	37,071 (100%)	-	NA	17.9	37,071
Shire of Victoria Plains	2,540.6 (99.6%)	808 (100%)	-	-	10.4 (0.4%)	NA	2,551.0	808
City of Vincent	-	-	11.4 (100%)	36,374 (100%)	-	NA	11.4	36,374
Shire of Wagin	1,885.0 (96.9%)	500 (28.3%)	7.8 (0.4%)	1,266 (71.7%)	53.4 (2.7%)	NA	1,946.2	1,766
Shire of Wandering	988.6 (51.9%)	550 (100%)	-	-	915.3 (48.1%)	NA	1,903.9	550
City of Wanneroo	175.4 (25.7%)	7,798 (3.7%)	197.0 (28.8%)	201,338 (96.3%)	310.9 (45.5%)	NA	683.3	209,136
Shire of Waroona	410.9 (49.4%)	1,888 (44.8%)	5.1 (0.6%)	2,327 (55.2%)	416.2 (50.0%)	NA	832.2	4,215
Shire of West Arthur	2,528.2 (89.3%)	785 (100%)	-	-	303.6 (10.7%)	NA	2,831.8	785
Shire of Westonia	3,050.8 (91.9%)	267 (100%)	-	-	268.6 (8.1%)	NA	3,319.4	267
Shire of Wickepin	2,000.4 (98.0%)	682 (100%)	-	-	40.5 (2.0%)	NA	2,040.9	682

	LG		DFES		DBCA		Total	
	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population	Area (km <sup>2</sup> )	Population
Shire of Williams	1,872.1 (81.2%)	607 (59.0%)	2.1 (0.1%)	422 (41.0%)	430.5 (18.7%)	NA	2,304.7	1,029
Shire of Wiluna	181,193.3 (99.9%)	530 (100%)	-	-	104.0 (0.1%)	NA	181,297.3	530
Shire of Wongan-Ballidu	3,289.5 (97.8%)	368 (28.6%)	14.6 (0.4%)	918 (71.4%)	61.0 (1.8%)	NA	3,365.1	1,286
Shire of Woodanilling	1,115.5 (98.8%)	452 (100%)	-	-	13.3 (1.2%)	NA	1,128.8	452
Shire of Wyalkatchem	1,577.6 (98.9%)	173 (36.4%)	2.6 (0.2%)	302 (63.6%)	14.3 (0.9%)	NA	1,594.5	475
Shire of Wyndham-East Kimberley	97,354.0 (86.9%)	2,172 (29.0%)	64.0 (0.1%)	5,305 (71.0%)	14,648.3 (13.1%)	NA	112,066.3	7,477
Shire of Yalgoo	26,349.4 (94.3%)	339 (100%)	-	-	1,600.1 (5.7%)	NA	27,949.5	339
Shire of Yilgarn	25,695.1 (84.4%)	1,209 (100%)	-	-	4,733.7 (15.6%)	NA	30,428.8	1,209
Shire of York	1,607.8 (75.4%)	1,126 (32.5%)	15.2 (0.7%)	2,334 (67.5%)	508.6 (23.9%)	NA	2,131.6	3,460
<b>Total</b>	<b>2,318,658 (91.8%)</b>	<b>303,786 (11.5%)</b>	<b>3,262 (0.1%)</b>	<b>2,347,384 (88.5%)</b>	<b>204,862 (8.1%)</b>	<b>NA</b>	<b>2,526,782</b>	<b>2,651,170</b>

Source: OAG based on DFES information and ABS data

### Data caveats

Area calculated after projecting the shape map to GDA2020/Australian Albers Coordinate Reference System:

- coastal buffer removed from area calculations
- area covered by DFES, Department of Biodiversity, Conservation and Attractions (DBCA) and LG entities is rounded to the nearest whole number; proportions were rounded to two decimal places (where proportions were too small values were rounded up to 0.01).

Where DFES and DBCA areas overlap, the DBCA area is included as a DFES area.

Population calculation is based on ABS Mesh Blocks (2021):

- when a Mesh Block is shared between different areas, population is calculated as a proportion of the area that Mesh Block covers
- population living in DBCA areas was added to the area managed by the LG entity.

There are four VFES units and one SES unit run directly by DFES. These units are not linked to any LG entity and are not included in the data extract but are considered for all State-wide statistics.



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## Auditor General's 2022-23 reports

Number	Title	Date tabled
12	Financial Audit Results – State Government 2021-22	22 December 2022
11	Compliance with Mining Environmental Conditions	20 December 2022
10	Regulation for Commercial Fishing	7 December 2022
9	Management of Long Stay Patients in Public Hospitals	16 November 2022
8	Forensic Audit Results 2022	16 November 2022
7	Opinion on Ministerial Notification – Tom Price Hospital Redevelopment and Meekatharra Health Centre Business Cases	2 November 2022
6	Compliance Frameworks for Anti-Money Laundering and Counter-Terrorism Financing Obligations	19 October 2022
5	Financial Audit Results – Local Government 2020-21	17 August 2022
4	Payments to Subcontractors Working on State Government Construction Projects	11 August 2022
3	Public Trustee's Administration of Trusts and Deceased Estates	10 August 2022
2	Financial Audit Results – Universities and TAFEs 2021	21 July 2022
1	Opinion on Ministerial Notification – Wooroloo Bushfire Inquiry	18 July 2022

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