

## Appendix 2.

### **A brief description of key government agencies commitment to forest fire management and related matters.**

Extracted from 2018-19 annual reports to Parliament.

#### **1. DEPARTMENT of ENVIRONMENT, WATER and PLANNING. [DELWP]**

*The Department of Environment, Land, Water and Planning (the department) is a Government department of the State of Victoria, established on 1 January 2015 after Machinery of Government changes were implemented by the Victorian Government.*

##### **About DELWP**

*In 2018-19, DELWP received an additional \$383.6 million in government funding, almost a third (\$136.8 million) of which went to protecting communities and the environment through the Fire and Emergency Management output.*

*The fires across the Gippsland, Hume and Port Phillip regions were some of the most significant we have seen in recent years, requiring responses by 1,650 staff, including both on-ground firefighters and incident management personnel.*

*DELWP established the Office of the Conservation Regulator to provide a central point of coordination and oversight for DELWP's regulatory functions including the natural environment, timber harvesting, public land use, fire prevention and biodiversity.*

##### **Reduced impact of major bushfires and other emergencies on people, property and the environment.**

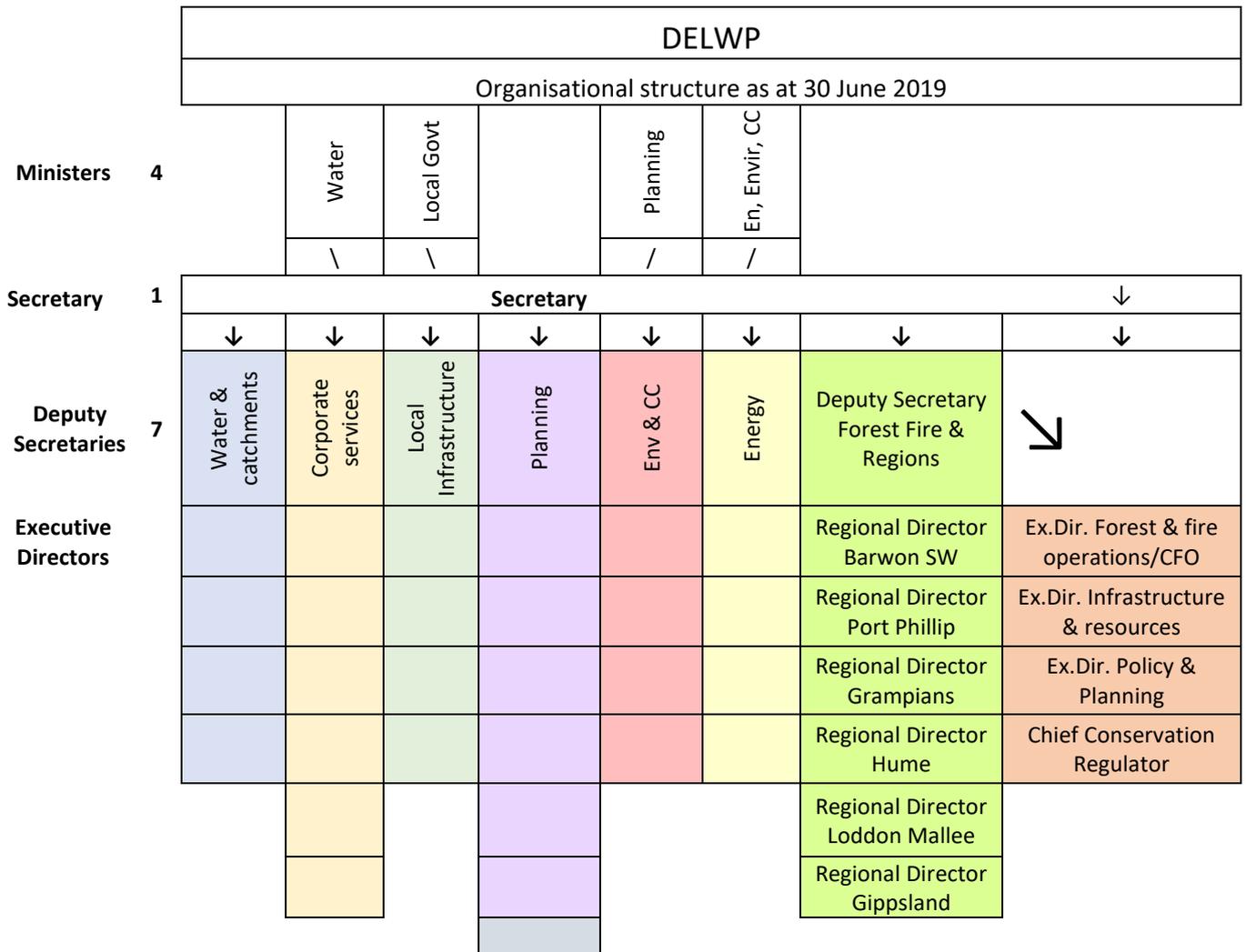
*The past year saw a very active fire season, with Forest Fire Management Victoria (FFMVic) staff responding to approximately 2,083 fires, which collectively burnt 218,502 hectares of land across Victoria; 40% above the average. FFMVic teams and our partner agencies worked tirelessly to contain 94 per cent of these fires to less than five hectares.*

***Fire suppression efforts:** Of the 2,083 fires in the 2018-19 fire season, 94 per cent of fires on public land were contained at less than five hectares in size and 90 per cent of fires were contained 'first attack' or by 8am hours the day after detection. This result can be attributed to the increasing effectiveness of rapid first attack operations and early detection of fires.*

***New fuel management System:** The new Fuel Management System will support the delivery of joint fuel management programs across public and private land. The system was built with the collaboration and input of representatives from FFM Vic and the Country Fire Authority.*

##### **Forest Fire Operations Officer traineeship program:**

*The Forest Fire Operations Officer Traineeship program targets disadvantaged youth from culturally and linguistically diverse backgrounds. DELWP now has eight trainees ... gaining hands-on, practical training to be a Forest and Fire Operations Officer as well a Certificate III in Conservation and Land Management.*



**Forest, Fire and Regions** – manages state forests, coasts and other public land, and delivers integrated, accessible and high-quality programs, projects and services across all DELWP portfolio areas, working collaboratively with local communities and other partners. The group provides high quality advice to Government on forest, fire and emergency management, and has a lead role in preparing for, responding to, and recovering from fire and other emergencies, to reduce impacts on people, property and the environment. As DELWP’s main connection to local communities and environments across the state, the group provides valuable intelligence on how policy and programs can be designed and delivered to better meet the needs of Victorians.

**Organisational structure**

The organisational chart shows the department’s structure and senior executive titles for delivery of fire and emergency management functions as at 30 June 2019

Departmental objectives	Indicators	Outputs
Reduced impact of major bushfires and other emergencies on people, property and the environment	Percentage of bushfires contained at first attack and/or under five hectares to suppress bushfires promptly, keep bushfires small and minimise loss Area treated through planned burning and other treatments to maintain the statewide bushfire risk at or below 70 per cent Percentage of agreed departmental emergency management obligations met on time and to standard The economic impact of fire prevention and preparedness investment	Fire and Emergency Management

**Productive and effective land management**

Our public land estate provides economic benefits for regional communities and supports key ecosystem services and recreational opportunities.

*This includes the management of 3.14 million hectares of state forest, and policy guidance for a further 3.98 million hectares of parks and conservation reserves.*

*On 12 September 2018 the Parks Victoria Act 2018 came into effect, establishing Parks Victoria (PV) as a more independent and autonomous land management agency. The Victorian State Budget 2018-19 delivered over \$70 million over four years to PV, and \$20 million ongoing funding to secure 130 full-time employees in regional Victoria, and to ensure stable and ongoing funding to deliver core park management services in regional Victoria.*

### **Reduced impact of major bushfires and other emergencies on people, property and the environment**

*This objective delivers an integrated approach to reducing the risk of bushfires and other emergencies to protect people, property and the environment.*

*The department works together with land and fire managers and with the community to plan and deliver bushfire management across public and private land, using world leading science to manage fire and ecosystems.*

*Bushfire risk is growing as populations increase and communities multiply in the highest risk areas. This is further complicated by the trends of intensified summer heat, dryness and other associated climate change effects that increase bushfire frequency and severity. ... With increasing severity and frequency come increasing annual costs of disasters, which due to the unpredictable nature of the events, can only be estimated.*

*The key government initiatives to deliver on this outcome include:*

*This season, DELWP and partner agencies responded to 2,083 fires across 218,502 hectares. The hectares burnt was 40 per cent above the 10-year average, and the fires occurred in areas that provide Victorians with services such as clean drinking water, timber, recreation and cultural connection.*

*Victoria experienced the warmest summer season and hottest start to the year on record. Several bushfires and storms commenced in the south-east of the state on 30 January 2019, ... Compounding this, there were lightning strikes across eastern Victoria in late February and early March resulting in more than 290 reported grass, scrub and bush fires, with four major fires in the east. These major fires at Bunyip, Licola, Dargo and Yinnar South significantly impacted surrounding communities. The fires burned for 13 days prior to being controlled on 12 March 2019.*

*Despite the prolonged extreme weather conditions and multiple campaign fires, 90 per cent of bushfires were contained at first attack. This can be attributed to the increasing effectiveness of rapid first attack operations and early detection of fires. Enhanced preparedness activities also ensured that resources were adequately placed to respond to fires in line with seasonal conditions and bushfire risk assessments for the fire season.*

*Campfires still represent a significant bushfire risk on public land and are a primary cause of bushfires... In 2018-19, DELWP and partner agencies responded to 691 unattended campfires, which accounted for 39 per cent of the 2,083 fires responded to.*

*In January 2019, night firebombing tactics were used for the first time in Australia at the Rosedale fire.*

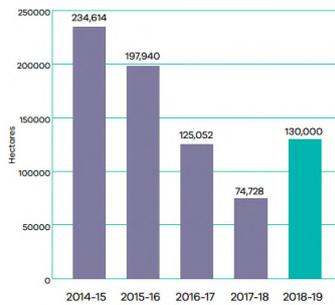
*More than 250 personnel from NSW, SA, QLD, WA and the ACT supported the firefighting effort in Victoria through a range of roles including firefighting, incident management teams, air operations and fire behaviour roles.*

*DELWP and partner agencies completed 31 out of the 76 highest priority burns across the state. This focussed activity meant that residual risk remains below the 70 per cent target. Analysis shows that with no bushfires or planned burning, residual risk would have increased to 70 per cent.*

*The Joint Fuel Management Program is the first ever state-wide program of works to manage fuel on public and private land. It is a significant step in implementing the Safer Together program, working towards an integrated and risk focussed bushfire management approach. It demonstrates DELWP's and its partner agencies commitment to working as one sector, planning and delivering fuel management activities across public and private land.*

*Of the 2,083 fires in 2018-19, 94 per cent of fires on public land were contained at less than five hectares in size (against a target of 80 per cent) and 90 per cent of fires were contained 'first attack' or by 0800 hours the day after detection (against a target of 80 per cent). This result can be attributed to the increasing effectiveness of rapid first attack operations and early detection of fires. Enhanced preparedness activities also ensured that resources were adequately placed to respond to fires in line with seasonal conditions and bushfire risk assessments for the fire season. Importantly there was no loss of human life over the 2018-19 fire season.*

**Indicator: Area treated through planned burning and other treatments to maintain the statewide bushfire risk at or below 70 per cent**



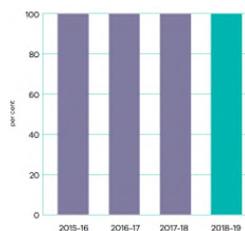
As part of the Victorian Government’s bushfire management strategy *Safer Together*, DELWP has set a statewide target to maintain bushfire residual risk at, or below, 70 per cent. This means the risk of a major fire, like Black Saturday, would be reduced by about a third.

The *Safer Together* approach means that local communities, property holders and land and fire agencies are more involved in decision making about bushfire management all year round. This new approach sees our management moving from a hectare target for planned burns, to a risk reduction target for bushfire management. It means a more integrated approach across public and private land, with fuel management being just one in a range of different management actions we will take to protect lives, homes, jobs and the environment.

The timing of fuel reduction activities is indicative and may change in response to weather conditions.

As at 30 June 2019, DELWP and its partners had treated approximately 130,000 hectares of public land using planned burning and a further 11,000 hectares using mechanical treatment, resulting in a bushfire residual risk of 67 per cent.

**Indicator: Percentage of agreed departmental emergency management obligations met on time and to standard**



**Fire and Emergency Management.**

**Indicator: The economic impact of fire prevention and preparedness investment**

DELWP continues to work on a model that will measure the economic impact of fire prevention and preparedness investment, alongside developing associated methodology for implementation. The project is reviewing current cost-benefit analysis and cost-loss projects and research undertaken in wildfire management in different jurisdictions; an evaluation of different approaches and the types of direct and indirect costs to include, as well as an assessment of data sources and gaps.

**Output performance measures Fire and Emergency Management**

This output plans and delivers integrated bushfire management.

Through this output, the department works with land and fire managers to plan and deliver bushfire management across public and private land; involves local communities in decision making, drawing on local values and insights to promote resilience; ... assesses the impact and effectiveness of fire management operations; ensures its workforce is effectively trained and prepared; and maintains a strategic road network to facilitate fire and emergency related activities and provide access for the community, timber and tourism industries.

The performance measures below compare targets and expected or actual results from the delivery of programs and services as part of this output:

Output performance measures	Unit of measure	2018-19 actual	2018-19 target	Performance variation	Result
Community-based bushfire management plans prepared for high-risk communities	number	5	5	0.0%	✓
Bushfire management engagement plans developed and implemented for high risk communities	number	12	12	0.0%	✓
Length of strategic fire access roads and fuel breaks treated to manage safety risks posed by dangerous trees	km	1,000	1,500	(33.3%)	▪
Performance is below target due to the new delivery model of Reducing Bushfire Risk program, which integrates dangerous tree removal, vegetation management and roading maintenance. This measure has been replaced in 2019-20 by a new measure providing a more complete view of the program (specifically forest access and egress) rather than focusing on one area of performance (dangerous trees).					
Personnel with accreditation in a fire and emergency management role	number	2,278	2,100	8.5%	✓
Performance in above target due to the longer campaign fire season providing increased opportunities for staff to be deployed to fire roles and therefore gain accreditation					
State forests roads (Category 1) and bridges (on Category 1 roads) with documented inspections and/or maintenance programs to meet regulatory obligations	per cent	100	100	0.0%	✓
Statewide bushfire risk is maintained at or below the target	per cent	67 (estimate)	70	5.7%	✓
Performance exceeds the target due to completion of the highest priority planned burns across the state. The amount of area impacted by bushfire also contributed to the result					
<b>Quality</b>					
Fires contained at less than five hectares to suppress fires before they become established, minimizing impact	per cent	94	80	17.5%	✓
Performance is above target due to increase patrolling, detection and reporting of unattended campfires. A total of 2,083 fires were responded to in 2018-19. Unattended campfires represent approximately 39 per cent of the total and highlights the bushfire ignition potential that was successfully prevented. The high result is also due to the increasing effectiveness of rapid attack operations and early detection of fires. Enhanced preparedness activities ensured that resources were adequately placed to respond to fires in line with seasonal conditions and bushfire risk assessment for the fire season.					
Personnel accredited to serve in a senior capacity (level 2 or 3) in a fire and emergency management role	number	402	315	27.6%	✓
Performance is above target due to longer campaign fire season providing increased opportunities for staff to be deployed to fire roles and therefore gain accreditation. An additional role was incorporated. This is a new role under Australasian Inter-service Incident Management System (AIIMS)4					
<b>Timeliness</b>					
Assessment of model of cover completed to assess resource requirements and availability	date	Dec 2018	Dec 2018	0.0%	✓
Fire operation plan completed	date	Sep 2018	Sept 2018	0.0%	✓
Fires contained at first attack to suppress fires before they become established, minimizing impact	per cent	90	80	12.5%	✓
Performance is above target due to increased patrolling and reporting of unattended campfires. A total of 2,083 fires were responded to in 2018-19. Unattended campfires represent approximately 39 per cent of the total and highlight the bushfire ignition potential that was successfully prevented. The high result is also due to the increasing effectiveness of rapid first attack operations and early detection of fires. Enhanced preparedness activities ensured that resources were adequately placed to respond to fires, in line with seasonal conditions and bushfire risk assessments for the fire season.					
Readiness and response plans completed prior to the upcoming fire season	date	Oct 2018	Oct 2018	0.0%	✓
<b>Cost</b>					
<b>Total output cost</b>	\$ million	568.4	400.9	41.8%	▪
The higher than budgeted output cost predominately relates to Treasurer's advances approved for fire suppress and additional aviation resources for Forest Fire Management Victoria					

- ✓ Performance target achieved or exceeded
  - Performance target not achieved – within 5 per cent variance
  - Performance target not achieved – exceed 5 per cent variance
- (i) On 1 January 2019, the Office for suburban Development was transferred from DELWP to the new Department of Jobs, Precincts and Regions as part of MoG changes
- (ii) On 1 January 2019, the administration of Growth Areas Infrastructure Contribution transferred from the Office for Suburban Development to LGV as part of MoG changes.

The expenditure increase of \$634.5 million is primarily represented by an increase in grants and other transfers of \$363.3 million, supplies and services of \$194.8 million and employee expenses of \$73.4 million.

Increase in current year grant expense is predominately due to:

- the Fire and Emergency Management output incurring increased costs of \$84 million, primarily due to an increase in bushfire activities

The rise in employee expenses of \$73.4 million is driven by a number of factors, including:

- the paid FTE for the department increased from 3,660 at the 30 June 2018 to 3,942 at 30 June 2019, an increase of 279. The groups with the most significant increases were: Forest, Fire and Regions, 165 (including field service staff and project fire fighters),...
- increase in bushfire activities
- EBA for VPS staff, 3.2 per cent increase from 1 July 2018 to 30 June 2019

The output makes a significant contribution to the achievement of the departmental objectives of “Reduced impact of major bushfires and other emergencies on people, property and the environment”.

Output for fire and emergency management - \$566,166,000 (20.2%) of department-controlled expenses from transactions by output.

Fire and Emergency Management – total contributions to grant recipients \$29,530,878.

The other expense outputs such as: Management of Public land and forests - \$218,610,000 (7.8%), Parks Victoria - \$150,148,000 (5.4%), Melbourne Water - \$705,000, CFA - \$2,893,670 ... where a proportion (unidentified) of the output would involve additional expenses related to forest fire management.

### **Fire and Emergency Management**

This output plans and delivers integrated bushfire management. Through this output, the department works with land and fire managers to plan and deliver bushfire management across public and private land; involves local communities in decision making, drawing on local values and insights to promote resilience; invests in science and partnerships to build knowledge of the relationship between fire and the environment to better manage risk; monitors and assesses the impact and effectiveness of fire management operations; ensures its workforce is effectively trained and prepared; and maintains a strategic road network to facilitate fire and emergency-related activities and provide access for the community, timber and tourism industries.

<b>Fire and Emergency Management – grant recipient</b>	<b>\$</b>
Parks Victoria	21,317,882
Country Fire Authority	2,893,670
The University of Melbourne	922,803
Department of Justice and Regulation	791,888
Melbourne Water	705,000
Environment Protection Authority	577,000
VicForests	488,616
Department of Premier and Cabinet	350,000
Bureau of Meteorology	199,756
Heytesbury District Landcare Network	187,736
Glenelg-Hopkins Catchment Management Authority	183,864
Cardinia Cultural Centre	81,250
Pyrenees Shire Council	80,000
Macedon Ranges Shire Council	73,920
Cardinia Shire Council	65,909
Southern Alpine Resort Management Board	60,000
Surf Coast Shire	55,000
Corangamite Shire Council	53,445
Yarra Ranges Council	50,000
Wellington Shire Council	45,773
Indigo Shire Council	44,600
City of Greater Bendigo	44,500
Mt Alexander Shire Council	41,008
Southern Grampians Shire Council	41,000
Life Saving Victoria	36,000
City of Wodonga	30,000
Mitchell Shire Council	29,810
Baw Baw Shire Council	26,000
Bushfire and Natural Hazards CRC Ltd	21,350
Warrnambool City Council	20,000
Firestick Alliance Indigenous Corporation	13,049
<b>Total</b>	<b>29,530,878</b>

## 2. PARKS VICTORIA.

On 12 September 2018 the Parks Victoria Act 2018 came into effect, establishing Parks Victoria (PV) as a more independent and autonomous land management agency. The Victorian State Budget 2018-19 delivered over \$70 million over four years to PV, and \$20 million ongoing funding to secure 130 full-time employees in regional Victoria, and to ensure stable and ongoing funding to deliver core park management services in regional Victoria.

### **Providing Benefits Beyond Park Boundaries.**

#### **Enhancing Organisational Excellence.**

#### **Assist in keeping Victorians safe**

#### **New fire model with Department of Environment, Land, Water and Planning**

In December 2018 Parks Victoria and DELWP signed a new Memorandum of Understanding (MOU) for Emergency Management that replaced the 2013 Fire Management Arrangement.

The new agreement outlines respective roles and responsibilities in instances of fire and other emergencies.

All fire and emergencies where DELWP is the control agency are now covered in the MOU ...

The Cooperative Operating Plan for 2018–19 was agreed to as part of the MOU and sets out the activities, funding allocation and Project Fire Fighter arrangements between Parks Victoria and DELWP.

In 2018–19, Parks Victoria contributed to keeping Victorians safe by having:

- provided more than 741 accredited staff to assist in emergencies
- added 213 Project Firefighters over the spring to autumn period
- contributed 122 staff with leadership roles in emergency management
- responded to 2,072 bushfires on public land

### **Melbourne Fire and Emergency Program**

To reduce the risk of bushfires and improve preparedness in Melbourne following the 2009 bushfires, the Melbourne Fire and Emergency Program was initiated.

Much of the program work directly protects houses adjoining parks across Melbourne. Under the 2018–19 program, Parks Victoria:

- upgraded 31km of fuel breaks
- slashed 880km of fuel breaks
- upgraded 25km of roads and tracks to improve access for fire vehicles.

### **Planned burning and mechanical fuel treatment**

In 2018–19, approximately 134,901ha of land was treated to reduce the risk of bushfires in Victoria.

Works undertaken included:

- contributing to the delivery of approximately 130,701ha of planned burning
- approximately 4,200ha of mechanical fuel treatment.

### **Community engagement to reduce bushfire risk and support the delivery of Safer Together**

In 2018–19 Parks Victoria worked alongside DELWP, the

Country Fire Authority (CFA) and State Emergency Service

(SES) to deliver the Safer Together program, including:

- participating in multi-agency bushfire awareness and engagement activities held for local communities and visitors
- carrying out joint exercises with CFA volunteer brigades, and local councils to build capacity, make connections, test equipment and knowledge
- running the All Fired Up Junior Ranger program
- releasing a video series about activities Parks Victoria undertakes to reduce bushfire risk

### **Providing Benefits Beyond Park Boundaries**

KPI	2017-18 target	2017-19 actual	2018-19 target	2018-19 actual	Year end status
Number of staff with accreditation in a fire role	700	721	700	741	✓
Contribution to bushfire preparedness, readiness, response, fuel management and emergency recovery	52,479	57,973	52,479	69,980	✓
This measure and its target are set under the fire Management Agreement with DELWP and was changed in 2017-18 to measure total days contributed, rather than a percentage, to align with this Agreement.					

### **Notes to the financial statements**

For the year ended 30 June 2019

2.2 Income from transactions

Fire suppression costs, recovered from DELWP (note 3.2.1)     **\$16,555,000 (2019)**     \$10,932,000 (2018)

**Fire suppression costs recovered from DELWP** is the income for the reimbursement of labour costs incurred relating to fire fighting activities, and recognised as revenue when invoiced or earned whichever occurs earlier.

**3. COUNTRY FIRE AUTHORITY – CFA**

**CFA performance reporting**

CFA is formally monitored by the Department of Justice and Community Safety, and held to account by quarterly reports on government-set KPIs. Table 7 shows CFA's actual performance together with measures reported in Budget Paper No. 3. CFA adheres to the national requirements for counting rules, which is normal for fire and emergency services organisations.

**Table 7: Emergency management capability (BP3)**

Major outputs/deliverables	Unit of measure	2018-19 Target	2018-19 Actual
<b>Performance measures</b>			
<b>Quantity</b>			
1. Permanent operational staff	number	1,360	1,371
2. Permanent support staff	number	1,026	1,056
3. Volunteers – operational	number	39,400-40,950	34,380
4. Volunteers – support	number	20,500-22,000	20,241
<b>Quality</b>			
5. Road crash rescue accredited brigades/units	number	23	23
6. Level 3 Incident Controller trained staff and volunteers	number	67	57
7. Structural fire confined to room of origin (A23 Type Incident 110-129 where K20 Extent of Flame Damage is (1,2,3)*100)	per cent	70	77
<b>Timelines</b>			
8. Emergency response times meeting benchmarks – structural fires	per cent	90	87
9. Emergency response times meeting benchmarks – road accident rescue	per cent	90	83

## 2018-19 major incidents

**Table 6:** Summary of major incidents 2018-19

Date	Incident location	Incident type	Description
23/08/2018	State Control Centre	Flood/fire	Extensive smoke and water damage through the building.
07/12/2018	Little River	Bushfire	1,270 hectares Losses: 38 properties V/Line services closed
04/01/2019	Rosedale	Bushfire	12,148 hectares \$22 million damage to plantations
16/01/2019	Nunnett/Timbarra River Complex	Bushfire	22,705 hectares
30/01/2019	Walhalla	Bushfire	8,755 hectares Losses: 2 houses and 2 outbuildings.
01/02/2019	Grantville	Bushfire	267 hectares
02/02/2019	Hepburn – Mannings Road	Bushfire	28 hectares
01/03/2019	North-east lightning fires	Bushfire	
01/03/2019	Bunyip State Park (Gembrook – Helmet Track)	Bushfire	15,596 hectares Losses: 29 houses and 67 outbuildings
02/03/2019	Yinnar South	Bushfire	1,913 hectares Losses: 2 houses and 3 outbuildings
03/03/2019	Cambarville Road	Bushfire	2,629 hectares
29/03/2019	Mt Mercer	Bushfire	1,547 hectares Losses: 2,369 sheep
29/03/2019	Bunkers Hill	Bushfire	Losses: 1 house and 16 outbuildings. 2 houses damaged

## 2018-19 total incidents

**Figure 2:** 2018-19 incident response by type

