

NATIONAL STATEMENT OF CAPABILITY FOR FIRE AND EMERGENCY SERVICES

2023 EDITION



Australian Government
National Emergency Management Agency



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Cover images (clockwise from top right): Josephine Stirling (NAFC), Gary Hooker (ACT ESA), QFES, Northern Territory Fire and Rescue, Fire Rescue New South Wales, South Australia SES, Fire Rescue New South Wales, John Fowler (Unsplash)

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INTRODUCTION

Across Australia, fire and emergency services are increasingly dealing with a diverse range of consecutive, compounding and complex disasters. Jurisdictions are facing unparalleled numbers of major events and often managing multiple incidents simultaneously, placing resource systems under pressure¹.

Since 2015 the Australian Government has commissioned AFAC, in collaboration with state and territory fire and emergency services, to produce a National Capability Statement that provides a consolidated picture of the capabilities that enable Australia to respond to the challenges posed by the increasing frequency and intensity of disasters.

In Australia, fire and emergency service agencies are structured, funded and resourced to meet the needs of the state or territory in which they are based. Where a state or territory needs additional capability to respond to an event, the National Resource Sharing Centre (NRSC) facilitates the sharing of resources across jurisdictions. In 2022-23 the NRSC activated to support resource sharing for 13 events and was operational for a continuous period of 140 days – the longest period to date.

The demands placed upon fire and emergency service agencies to contribute to mitigating the effects of natural hazards through prevention, preparedness and response activities has increased, and will continue to increase with a changing climate². Disasters don't respect

state and territory borders and a national, cooperative approach is required to deal with the systemic disaster risk we now face.

The National Capability Statement is a snapshot in time of capability and provides an opportunity to ensure that Australia's fire and emergency service resources can be quantified with a view to appropriately directing requests for assistance during large scale or multiple severe to catastrophic disasters. It also provides a platform for state and territory governments and the Australian Government to better plan future capabilities.

Australia's fire and emergency service agencies are a critical component of the nation's disaster risk reduction and emergency management system. They are a major contributor to supporting resilient communities and provide expert advice on a range of hazard-based risks across the built and natural environments.

1 Australian Institute for Disaster Resilience (2023) Major Incidents Report 2022-23
2 Royal Commission into National Natural Disaster Arrangements, 2020

Australia's fire and emergency service capability is provided by a range of agencies as listed:

NEW SOUTH WALES

- Fire and Rescue NSW
- Forestry Corporation of NSW
- NSW National Parks and Wildlife Service
- NSW Rural Fire Service
- NSW State Emergency Service

VICTORIA

- Country Fire Authority
- Forest Fire Management Victoria - Department of Energy, Environment and Climate Action
- Emergency Management Victoria
- Fire Rescue Victoria
- Parks Victoria
- Victoria State Emergency Service

QUEENSLAND

- Queensland Parks and Wildlife Service
- Queensland Fire and Emergency Services

SOUTH AUSTRALIA

- Department for Environment and Water
- South Australian Country Fire Service
- South Australian Metropolitan Fire Service
- South Australian State Emergency Service

AUSTRALIAN CAPITAL TERRITORY

- ACT Emergency Services Agency
- ACT Parks and Conservation Service

NORTHERN TERRITORY

- Bushfires NT
- Northern Territory Fire, Rescue and Emergency Service

WESTERN AUSTRALIA

- Department of Fire and Emergency Services, WA
- Department of Biodiversity, Conservation and Attractions WA

TASMANIA

- Sustainable Timber Tasmania
- Parks and Wildlife Service Tasmania
- Tasmania Fire Service
- Tasmania State Emergency Service

AUSTRALIAN GOVERNMENT

- Airservices Australia
- National Emergency Management Agency
- Parks Australia

CAPABILITY OF FIRE AND EMERGENCY SERVICES

The primary focus of the National Capability Statement is to quantify the capability of state and territory agencies across Australia to deal with emergency events. It does not report on or assess capacity of agencies.

The National Capability Statement does not attempt to report on every capability, function and resource type that exist in fire and emergency service agencies across the country. Rather, it focuses on those capabilities that are to most commonly looked to for interstate mutual aid. Core capabilities are listed in the following areas:

- Firefighting
- Search and rescue
- Severe weather response
- Hazardous materials (HAZMAT)
- Damage and impact assessment
- Incident management
- Aviation

The National Capability Statement is intended as a resource for state and territory agencies to understand the national capability available if they need to request assistance from other jurisdictions during a large event.

It is not designed as a ‘catalogue’ of resources that can be requested. In this 2023 edition jurisdictions have provided an indication of capability that under normal circumstances could be deployed interstate within 48 hours, however an enquiry would still need to be made of relevant organisations to confirm both up to date figures for capability, and the ability of organisations to release these resources.

This edition of the National Capability Statement has sought to further enhance the document by providing an overview of the workforce in each jurisdiction’s capability. It also provides additional analysis of where capability might be significantly increasing or decreasing over time.

Workforce overview

These figures were first published in the Productivty Commission 2023 Report on Government Services, using 2021-22 data.

STATE AND TERRITORY EMERGENCY SERVICE ORGANISATIONS

State and territory emergency service organisations workforce	National Capability	Jurisdiction totals							
		TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Paid staff (FTE)									
Operational	669	0	92	376	13	66	18	NA	96
Support personnel	215	30	129	-	3	37	7	NA	9
Total	884	39	221	376	16	102	25	NA	105
Volunteers									
Operational	24,010	641	3,109	10,710	534	5,850	259	1,272	1,635
Support personnel	863	-	737	-	28	NA	-	98	NA
Total	24,873	641	3,846	10,710	562	5,850	259	1,370	1,635

*National capability totals only include available data and should therefore be interpreted with caution. Paid staff totals may not equal the sum of individual cells due to rounding and/or unpublished data.

FIRE SERVICE ORGANISATIONS

Fire service organisations human resources	National Capability	Jurisdiction totals							
		TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Paid staff (FTE)									
Permanent firefighters	15,157	343	5,032	4,736	380	2,493	214	1,022	938
Part time and other firefighters	1,680	1	636	807	7	192	2	-	36
Other firefighters	877	-	644	16	-	26	22	169	-
Support workforce	5,524	172	2,071	1,615	116	853	21	605	72
Total	23,239	515	8,383	7,174	503	3,563	258	1,796	1,046
Volunteers									
Firefighters	140,151	3,909	29,084	69,845	1,240	11,868	252	12,462	11,491
Support personnel	53,161	849	23,721	7,693	-	16,567	-	2,325	2,006
Total	193,312	4,758	52,805	77,538	1,240	28,435	252	14,787	13,497

Age breakdown of firefighting workforce	National Capability	Jurisdiction totals							
		TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Under 30	1,587	21	187	714	26	494	14	48	83
30-39	5,206	92	1,215	1,798	126	1,208	83	368	316
40-49	5,105	100	1,054	1,893	125	1,178	66	337	352
50-59	4,839	112	816	1,891	81	1,214	45	340	340
60 or older	1,741	19	482	577	42	347	12	101	161
Total	18,478	344	3,754	6,873	400	4,441	220	1,194	1,252

*Caution should be used when comparing data across jurisdictions as data are affected by the reporting scope of each jurisdiction's fire service organisation. VIC firefighting by staff age group doesn not include Department of Environment, Energy and Climate Action data, as data not available. WA Department of Biodiversity, Conservation and Attractions data are not included. SA data are for Metroploitan Fire Service only.

Caution should be used when comparing data across jurisdictions because of differences to the counting rules. NSW and ACT volunteer firefighters include Community Fire Unit (CFU) volunteers who are trained as prelimiary responders and trained to assist with firefighting activities during a fire event.

Part time staff are recorded in FTE, meaning that the actual capacity of individual part time personnel will be higher.

Age breakdown of firefighting workforce only includes paid staff.



Image: CFA



Image: Gary Hooker, ACTESA

Firefighting (bushfire)

Bushfire firefighting is a specialist capability involving a range of technical skills and techniques, including predicting likely fire progression; ensuring any surrounding people or property are protected from exposure to fire or relocated if they can't be protected; containing any further spread of the fire; and ultimately making certain the fire is extinguished.

Fighting bushfires can occur in a range of contexts, including:

- Forest, bush and grass – these are fires in the landscape and involve a variety of different fuel types. Fire behaviour is a product of fuel types, weather conditions and topography which influence incident management strategies and the level of capability fire and meregency services deploy to be prepared and ready to respond.
- Rural-urban interface – these are fires burning in areas where the built environment meets grassland, bushland or other vegetated land. Fires at the rural-urban interface pose particular risks for firefighters and the community. Human resources deployed to incidents at these locations require specific skills.

Bushfire firefighting vehicles are specially designed to be able to operate effectively in rural enviornments, and the training required for bushfire firefighters is specific to the particular hazard. Bushfire is a very significant risk in Australia and national capability and expertise in this area has been developed over many decdes.

FIREFIGHTING (BUSHFIRE)

Function	Function statement	Resource description	National capability	Jurisdiction totals							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Forest, Bush and Grass	Contain and Extinguish Forest, Bush and Grass Fires	Ultralight tankers (4WD ute chassis, approx. 350-800 litres)	3,505	305	833	1,276	13	491	122	344	121
		Light tankers 2WD (approx. 800-1,600 litres)	1	-	1	-	-	-	-	-	-
		Light tankers 4WD (approx. 800-1,600 litres)	2,471	-	170	1,440	-	35	3	741	82
		Medium tankers 2WD (approx. 1,600-3,000 litres)	281	-	233	41	-	-	2	-	5
		Medium tankers 4WD (approx 1,600-3,000 litres)	2,552	148	924	305	19	694	28	345	89
		Heavy tankers 2WD >3,000 litres	2	-	-	-	-	-	-	2	-
		Heavy tankers 4WD >3,000 litres	3,625	170	440	2,027	27	58	17	416	470
		Bulk water carriers >8,000 litres	157	-	3	42	3	2	2	31	74
		Arduous firefighters. Firefighters have met agency medical requirements and have successfully completed an annual arduous level pack hike fitness test.	4,199	174	1,066	1,478	251	66	-	420	744
		Remote area firefighters. Firefighters who are arduous firefighters with specific training to enable them to operate independently on a fireground away from base camp for an extended duration.	2,216	131	-	1,604	251	50	-	80	100
		Firefighters hover exit deployable. Arduous or remote area firefighters who are accredited to perform helicopter hover exit onto a fireground.	2,020	301	-	1,607	82	30	-	-	-
		Firefighters helicopter winch and rappel deployable. Arduous or remote area firefighters who are accredited to winch or rappel from helicopter onto a fireground.	1,466	25	32	1,327	82	-	-	-	-
		Advanced tree faller / Level 3 chainsaw. Qualified and accredited advanced tree faller.	593	26	33	345	8	116	-	57	8
		Bushfire/wildfire firefighter (vehicle-based). Personnel that have been endorsed by their agency to perform suppression activities at a bushfire, attached to a vehicle.	128,211	4,611	34,603	63,863	462	8,490	809	14,403	788

FIREFIGHTING (BUSHFIRE)

Function	Function statement	Resource description	National Capability	Jurisdiction totals							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Forest, Bush and Grass	Mobile basecamps provideaccommodation, catering and sewage facilities.	Number of deployable basecamps	13	-	4	6	-	-	-	2	1
		Number of persons capable of being accommodated in each basecamp.	1,422	-	548	522	-	-	-	112	240
	Multipurpose vehicles	Mobile forward command - light. 4WD vehicle equipped with multiple radios that can access most places on a fireground. May be used to perform a number of roles.	3,556	102	697	2,003	15	166	8	399	166
		Mobile forward command - modular. Modular unit fitted with specialist command equipment. Primary purpose is command and communication.	225	6	4	201	1	2	1	4	6

DEPLOYABLE CAPABILITY

Teams available to deploy interstate within 48 hours.	National Capability	Jurisdiction totals							
		TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Strike team - 20 vehicle based firefighters, 5 tankers and Strike Team Leader	52	3	9	25	3	-	1	3	8

*There are several assumed variables that will impact the accuracy of this data. This number should only be taken as a rough estimate and should not be taken as an accurate representation of resource availability at any one time in the jurisdiction. Member availability, emergency risk and commitments, amongst other variables, will impact this number.

Trends in bushfire firefighting capability

- Medium tankers (4WD) have decreased by 18% since 2021.
- Heavy tankers (2WD) have steadily decreased since 2017, while 4WD heavy tankers have steadily increased in the same period, including a 17% increase since 2021.
- Firefighter capability has been steadily increasing since 2017, with a 44% increase in arduous firefighters and a 31% increase in remote areas firefighters since 2021. Firefighters with additional qualifications (hover exit, winch and rappel) are also increasing nationally.



Image: Fire Rescue New South Wales

Firefighting (other)

All forms of firefighting require a range of technical skills and techniques, including search and rescue where people are in danger; protecting exposures; fire suppression and potentially, salvage of property and environmental protection. Specialist training and equipment is required to allow for management of fire in different contexts, including:

- Aviation – fires on and off airport property that involve aircraft and any other people or property affected.
- Combustible liquids and gases – a range of chemicals, fuels and flammable liquids and gases are used by communities and business in their day to day activities. Such liquids may be found in bulk storage or being transported via road, rail, pipeline and on the water.
- Marine – fires associated with on-water vessels, ports and coastal hazards.
- Structures – ranging from single dwellings to complex and multi-purpose constructions including high-rise towers, very large commercial buildings, and tunnels and underground structures.

FIREFIGHTING (OTHER)

Function	Function statement	Resource description	National capability	Jurisdiction totals							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Aviation	Contain and extinguish fires involving aircraft on airport property	Specialised aviation firefighting vehicles with Class B foam equipment	75	4	10	10	3	25	7	13	3
Combustible liquids	Extinguish combustible liquid fires within fixed and mobile property, i.e. vehicles ranging from large freight carriers	All vehicles with Class B foam generating capability	3,541	2	407	2,505	79	391	-	92	65
		Specialist vehicles specifically constructed or adapted for class B foam operations (including foam support tenders)	1,028	-	4	583	16	394	-	11	20
Compressed air foam systems	Generates compressed air foam for fire suppression operations	All vehicles whose primary purpose is the production of firefighting foam	197	-	37	73	10	74	-	-	3
Marine	Vessels constructed or permanently adapted to contain and extinguish fires involving vessels or fight fires from the water	Firefighting boats – inland/inshore (partially smooth or smooth water operations)	41	-	11	28	-	-	-	1	1
		Firefighting boats – offshore (capable of operating in open sea off the mainland)	55	-	4	-	-	-	-	-	1
Structures	Extinguish fires within structures ranging from single dwellings to large multi-level buildings and special structures, e.g. tunnels	Minor aerial appliance (up to 18m)	17	-	9	-	-	-	1	-	7
		Major aerial appliance (18m to 44m)	74	3	16	29	2	16	1	4	3
		Urban pumper under 2500 LPM	880	-	101	84	-	254	-	4	437
		Urban pumper between 2500-3500 LPM	382	-	61	245	-	51	-	5	20
		Urban pumper between 3500-4500 LPM	603	9	198	174	-	93	6	54	69
		Urban pumper over 4500 LPM	126	18	3	-	16	12	5	72	-
Hose laying vehicles	Lay extended lines of hose for water transfer and delivery purposes	Urban/structural firefighter. Personnel that have been endorsed by their agency to perform offensive operations at a structural fire	24,596	1,245	6,692	6,916	433	4,470	327	2,018	2,495
		Vehicles specifically constructed or adapted as hose layers	4	-	2	1	-	-	-	-	1

FIREFIGHTING (OTHER)

Function	Function statement	Resource description	National capability	Jurisdiction totals							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Command vehicles	Multipurpose vehicles	Mobile forward command - light. 4WD vehicle equipped with multiple radios that can access most places on a fireground. May be used to perform a number of roles.	2,811	154	1,118	504	6	114	18	726	171
		Mobile forward command - light. 2WD	715	108	56	254	5	29	7	253	3
	Dedicated purpose vehicles	Mobile forward command - specialist vehicle. Vehicle fitted with specialist command equipment. Primary purpose is command and communication.	74	2	14	31	-	-	1	25	1
		Mobile forward command - modular. Modular unit fitted with specialist command equipment. Primary purpose is command and communication.	1,359	5	-	1,345	1	-	-	2	6

DEPLOYABLE CAPABILITY

Teams available to deploy interstate within 48 hours.	National Capability	Jurisdiction totals							
		TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Strike team - 20 urban structural firefighters, 5 pumpers and Strike Team Leader	22	1	12	6	-	-	-	2	1

*There are several assumed variables that will impact the accuracy of this data. This number should only be taken as a rough estimate and should not be taken as an accurate representation of resource availability at any one time in the jurisdiction. Member availability, emergency risk and commitments, amongst other variables, will impact this number.

Trends in firefighting (other) capability

- Compressed air foam capability has increased since 2021, with a 47% increase in vehicles whose primary purpose is the production of compressed air foam.
- Minor aerial appliance (up to 18m) capability has steadily decreased since 2017, while 18m to 44m areial appliance capability has increased by 40% since 2021.
- Urban pumpers under 2500 LPM and over 4500 LPM have seen the greatest change in capability since 2021, with increases of 183% and 80% respectively.



Image: South Australia SES

Search and rescue

Search and rescue is a capability designed to detect, locate and rescue people who are trapped, in imminent danger or lost. A range of capabilities exist ranging from front line first responder to United Nations International Search and Rescue Advisory Group (INSARAG) accredited USAR (Urban Search and Rescue) teams.

In this context capabilities exist across the following areas:

- Cliff, cave, mine and confined spaces – locate, access and extricate people from complex and difficult to access spaces.
- Land search – assisting with the location of lost or missing people in all types of terrain, both rural and urban.
- Road accident rescue – stabilise vehicles and sites, undertake extrications of victims.
- Industrial and domestic rescue – undertake a range of rescues and extrications in industrial and domestic environments
- Swift water/flood rescue – use of devices, aircraft and vessels to locate and reach people in distress.
- Urban Search and Rescue (USAR) – location and rescue of people from collapsed structures or other entrapments, using multi-functional personnel and specialised equipment.
- Vertical/high angle rescue – access and extrication of victims from heights or depths.

SEARCH AND RESCUE

Function	Function statement	Resource description	National Capability	Jurisdiction totals							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Confined space	Risk assess, access and extrication of individuals from confined spaces in conjunction with other rescue techniques as required.	Qualified and equipped personnel	1,927	175	388	-	408	330	13	475	138
Cave rescue (non-diving)	Access and extrication of individuals from natural underground complexes.	Qualified and equipped personnel	66	30	20	-	-	-	13	-	3
Mines rescue	Access and extrication of individuals from working mine sites.	Qualified and equipped personnel	26	-	20	-	-	-	-	-	6
Industrial and domestic rescue	Undertake a range of rescues and extrications of entrapped persons in industrial and domestic environments	Specialist rescue vehicles with additional equipment to undertake industrial and domestic rescue (not road rescue).	1,993	4	704	626	-	499	-	15	145
Land Search	Mountainous and alpine search and rescue. Ability to deploy a self-contained search team, equipped with rope and rigging capability, for up to 24 hours.	Qualified and equipped personnel	406	74	79	37	-	28	-	188	-
	Remote area search and rescue. Ability to deploy self-contained search teams for up to 24 hours into areas where logistic support may be limited.	Qualified and equipped personnel	2,131	74	1,179	822	8	28	-	20	-
	Land Search. Search for and locate lost persons and/or items as a member of a land search team	Qualified and equipped personnel	63,742	174	1,534	57,172	626	2,445	31	1,042	718

Function	Function statement	Resource description	State total	Quantity							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
RoadAccident Rescue	Stabilise vehicles and sites, undertake extrications of victims.	Heavy rescue vehicle carrying inventory for heavy vehicle, tram, train incidents	411	4	149	37	-	191	-	26	4
		Standard road crash rescue vehicle carrying inventory for personal and light commercial vehicle incidents (for fire services may include rescue pumper if they carry a RCR inventory)	1,253	73	224	181	18	461	22	128	146
Swift water rescue	Water based swiftwater rescue requiring the need for rescuers to enter a swiftwater environment to facilitate rescue. May include use of inflatable platforms, ropes and rigging.	Qualified and equipped personnel	1,224	-	72	683	-	432	-	-	37
	Swift water rescue boats	Motorised rigid inflatable boats appropriate for deployment into a swift water environment (not flood boat capability)	167	-	38	94	-	34	-	-	1
		Inflatable boats appropriate for swift water rescue	382	-	31	266	-	77	-	-	8
Vertical	Level 2 - perform complex rescue from height or depth with high vertical mobility and advanced riging systems	Qualified and equipped personnel	1,194	40	357	85	64	334	23	188	103
Urban Search and Rescue - Domestic	Deploy USAR personnel and equipment to search for and release people from collapsed structures.	Category 2 qualified and equipped USAR rescue technicians.	1,072	60	193	288	32	276	13	75	135
		Canine and handler	18	-	-	6	-	8	-	4	-
Urban Search and Rescue - International	Deploy an INSARAG classified USAR task force with the capability to be self-sufficient in the field	Light INSARAG classified task force (50 pax)	6	-	-	4	-	2	-	-	-
		Medium INSARAG classified task force (50 pax)	4	-	-	2	-	2	-	-	-
		Heavy INSARAG classified task force (70+ pax)	3	-	-	1	-	2	-	-	-
		Canine and handler	16	-	-	6	-	8	-	-	-

DEPLOYABLE CAPABILITY

Teams available to deploy interstate within 48 hours.	National Capability	Jurisdiction totals							
		TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Swift water rescue team - 4 personnel including boat and equipment	45	-	2	24	-	16	-	-	3
Heavy INSARAG classified task force	3	-	-	2	-	1	-	-	-
USAR strike team - 20 category 2 USAR personnel, heavy rescue vehicle and Strike Team Leader	15	1	1	7	-	4	-	1	1

*There are several assumed variables that will impact the accuracy of this data. This number should only be taken as a rough estimate and should not be taken as an accurate representation of resource availability at any one time in the jurisdiction. Member availability, emergency risk and commitments, amongst other variables, will impact with number.

Trends in search and rescue capability

- Specialist vehicles for industrial and domestic rescue have been steadily increasing since 2017, with a 199% increase in capability from 2021 to 2023. This can be attributed to large increases in capability in VIC, NSW and QLD.
- Remote area search and rescue capability has increased by 58% since 2021, however mountanous and alpine search and rescue capability has decreased by 23% in the same period.
- Level 2 qualified vertical rescue capability has decreased by 36%.
- Capability of water based swiftwater rescue personnel has increased by 56% since 2021.



Image: John Fowler on Unsplash

Severe weather response

Severe weather including high winds, thunderstorms, cyclones, hailstorms and other phenomena can result in the need for a range of specialised responses to protect life and minimise the impact on property, including:

Flood

- Water inundation and flood – involves deployment of mechanisms to contain or divert flood water, create flood barriers, move water in varying volumes to mitigate flooding and use boats, aircraft or other vehicles to move people and property.

Storm and cyclone

- Fallen trees and debris – render safe conditions which may cause accidents and injuries to emergency workers or the public.
- Structural damage and collapse – temporary repair of structures to mitigate against further damage, assist with rescue and support of affected people.

Trends in severe weather capability

Water and flood inundation capability has increased across the board compared to 2021:

- sandbags +112%
- sand bag filling machines +57%
- flood barriers +490%
- flood boats +16%.

SEVERE WEATHER RESPONSE

Function	Function statement	Resource description	National Capability	Quantity							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Water Inundation and Flood	Deploy flood barriers for property protection.	Temporary barriers (lineal meters)	10,567	-	-	-	243	1,300	24	-	9,000
	Capacity to deploy sandbags, sand bagging machines and personnel to contain or divert flood water for property protection.	Sand bag cache	4,088,595	1,000	1,635,004	466,583	1,000	115,000	8	120,000	1,750,000
		Sand bag filling machines	193	3	11	158	-	-	-	7	14
	Boats to move people entrapped by floodwater or resupply isolated areas.	Flood boats (swift water rescue boats are counted separately in the Search and Rescue tables)	782	0	85	412	2	230	16	19	18
Tree operations	Level 3 chainsaw. Qualified and accredited advanced tree faller.	Qualified and equipped personnel	450	26	7	341	14	-	-	58	4
	Trim and cross cut. Qualified in chainsaw operations on felled trees.	Qualified and equipped personnel	13,941	1,081	2,416	6,407	76	1,230	85	584	2,062
Safe working at heights	Agency approved ground based operators for safe working at heights systems.	Qualified and equipped personnel	15,776	250	5,295	7,064	306	1,306	46	1,003	506
	Agency approved on roof operators for safe working at heights systems.	Qualified and equipped personnel	11,643	313	5,600	3,148	306	1,306	-	970	-

DEPLOYABLE CAPABILITY

Teams available to deploy interstate within 48 hours.	National Capability	Jurisdiction totals							
		TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Strike team - 20 storm and water operators, storm equipped vehicle and Strike Team Leader	37	2	5	20	1	5	-	2	2
Flood rescue team - 4 swift flood boat operators including boat and equipment	41	-	7	24	-	8	-	1	1

*There are several assumed variables that will impact the accuracy of this data. This number should only be taken as a rough estimate and should not be taken as an accurate representation of resource availability at any one time in the jurisdiction. Member availability, emergency risk and commitments, amongst other variables, will impact with number.



Image: Northern Territory Fire and Rescue

Hazardous materials (HAZMAT)

Technical specialist advice and response capabilities to detect, identify, contain, decontaminate and render safe dangerous and hazardous substances that may harm people, property or the environment, including land-based or inland waterway spillages of materials such as:

- Chemical – compounds or substances that are toxic or harmful.
- Biological – living things or products of living things that could cause illness and disease.
- Radiological – uncontrolled release of radioactive material that can harm people or damage the environment.
- Nuclear – substances or nuclear-powered items that may harm people, property or the environment.

Trends in HAZMAT capability

- National capability of vehicles carrying specialist detection/monitoring equipment has increased by 81% since 2021.
- Qualified and equipped personnel for field sampling/identification have steadily increased since 2017, with an increase of 12% since 2021.

HAZARDOUS AND DANGEROUS MATERIALS (HAZMAT)

Function	Function statement	Resource description	National Capability	Jurisdiction totals							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Detection/ monitoring	The use of handheld or mobile detection and monitoring equipment to allow presumptive detection results for products encountered at HAZMAT/CBRN incidents.	Vehicles carrying specialist detection/ monitoring equipment	397	18	107	43	1	89	1	8	130
Field Sampling/ Identification	The process of collecting a representative amount of gas, liquid, or solid for analytical purposes. Includes the ability to accurately identify an unknown product(s) at the incident site.	Qualified and equipped personnel	1,662	123	500	254	50	502	2	-	231
		Vehicles carrying specialist field sampling/identification equipment	64	2	7	15	1	17	1	7	14
Research/ Scientific Advice	The ability to provide specialist or scientific advice based on research to provide accurate input into incident objectives and strategies in response to a HAZMAT/CBRN incident.	Qualified specialist scientific personnel	65	-	2	1	-	58	-	1	3
Mitigation	The actions necessary to ensure confinement and containment, which is the first line of defence, in a manner that will minimise risk to both life and the environment in the early, critical stages of a spill or leak.	Qualified advanced response personnel	440	10	4	254	-	152	-	9	11
		Specialist vehicles carrying inventory in support of HAZMAT mitigation operations	273	3	1	43	1	17	1	198	9
Render safe	The ability to take actions that will make the incident site safe for reoccupation and provide a site which may be handed over for recovery to the site owner.	Specialist vehicles carrying advanced inventory in support of render safe operations	81	-	7	43	1	17	1	3	9
Decontamination Services	Ability to fully decontaminate personnel following entry to a contaminated environment with specialist decontamination equipment including wet and dry processes, including mass decontamination following a terrorist event.	Vehicles carrying dedicated decontamination equipment	279	3	10	43	1	17	1	195	9
		Deployable, specialist HAZMAT decontamination equipment	45	2	7	5	4	18	1	2	6



Image: QFES

Damage and impact assessment

Specific skills, techniques and equipment to gather information using standardised terminology and analytical techniques so that the impact of an emergency event can be evaluated and strategies deployed to facilitate relief, recovery and reconstruction. Small, self-contained and multi-disciplined teams are deployed.

Trends in damage and impact assessment capability

Damage and impact assessment capability has increased in all categories compared to 2021:

- remotely piloted aircraft systems (RPAS) +314%
- licesnsed and endorsed personnel to pilot RPAS +278%
- personnel with advanced training in damage assessment methodologies +46%.

DAMAGE AND IMPACT ASSESSMENT

Function	Function statement	Resource description	National capability	Jurisdiction totals							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Damage Assessment	Provide imagery by means of remotely piloted aircraft to contribute to understanding of incident impact and to develop a common operating picture.	Remotely piloted aircraft systems (number of units)	385	15	35	133	-	115	5	54	28
	Personnel to pilot remotely piloted aircraft systems to undertake damage and impact assessments.	Licensed and endorsed personnel	510	15	47	164	-	138	5	96	45
	Personnel to collect sharable property damage and impact assessment data using a standard data collection platform and the AFAC data dictionary.	Personnel with advanced training in damage assessment methodologies and use of standard data collection platforms	1,654	116	148	691	244	276	-	70	110
Burned area assessment teams	Multi-disciplinary teams that undertake assessment of impacted areas following a fire and analyse information gathered to make recommendations on rehabilitation and recovery activities from the short to long-term	Qualified and equipped teams	160	-	10	133	3	1	-	2	11



Image: NSW RFS

Incident Management

A crucial component of national capability, incident management is those processes, decisions and actions taken to resolve an emergency incident and to support recovery that will enable the community to return to normality.

Depending on the scale of the emergency event, incident management may be performed by a skilled and competent individual, or by accredited multi-functional and specialised teams. In all cases, incident management is performed in accordance with the Australasian Inter-service Incident Management System® (AIIMS) or its predecessor, the nation’s Incident Management System adopted by all fire and emergency services and designed for management of all incidents occurring in the natural or built environment.

Incident management requires the effective management of two key aspects:

1. Dealing with and rendering safe the hazard.
2. Managing information so that informed decisions can be made by those dealing with the emergency and the public with confidence and effect.

Nationally recognised training provides competencies across all areas of AIIMS, leading to a consistent assessment of individual and organisational capability to sustain incident management over an extended period if required.

INCIDENT MANAGEMENT

Function	Function statement	Resource description	State total	Quantity							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Incident Control	Incident Controller L2	PUAOPE018 Control a Level 2 Incident or an equivalent qualification and agency endorsement as an Incident Controller L2 plus adequate practical experience	2,719	43	296	1,637	128	359	33	129	94
	Incident Controller L3	PUAOPE019 Control a Level 3 Incident or an equivalent qualification and agency endorsement as an Incident Controller L3 plus adequate practical experience.	297	16	61	146	21	17	-	27	9
Safety	Strategic Safety Advisor (IMT based)	PUAOPE026 Provide strategic safety advice at an incident or an equivalent qualification and agency endorsement as a Strategic Safety Advisor (IMT based) plus adequate practical experience	428	8	93	278	2	-	-	35	12
Planning	Planning Officer L2	PUAOPE025 Manage planning for a complex incident or an equivalent qualification plus qualification and agency endorsement as a Planning Officer plus adequate practical experience	787	17	61	401	32	99	18	79	80
	Planning Officer L3	As above with agency endorsement as a Planning Officer L3	344	4	59	170	32	-	-	59	20
Intelligence	Intelligence Officer	PUAOPE004 Manage the Intelligence Function at an Incident or an equivalent qualification and agency endorsement as an Intelligence Officer plus adequate practical experience	449	7	34	346	4	8	-	20	30
	Intelligence Officer L3	As above and agency endorsement as an Intelligence Officer L3	253	4	25	201	2	-	-	10	11
	Fire Behaviour Analyst	PUAFIR508 - Develop and analyse the behaviour and suppression options for a wildfire or an equivalent qualification and agency endorsement as a Fire Behaviour Analyst plus adequate practical experience	300	8	21	89	5	46	-	115	16

INCIDENT MANAGEMENT

Function	Function statement	Resource description	National capability	Jurisdiction totals							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Intelligence (cont.)	Mapping Officer	Agency endorsement as a Mapping Officer plus adequate practical experience including competence in operating common GIS platforms	483	60	80	196	50	1	1	55	40
	Air Observer	Qualified for the role in accordance with the National Fire Aviation Training and Assessment Framework plus agency endorsement as an Air Observer	579	16	136	112	111	51	6	106	41
Public Information	Public Information Officer L2	PUAOPE003 Manage the public information function at an incident or an equivalent qualification and agency endorsement as a Public Information Officer plus adequate practical experience	171	13	25	61	5	12	2	44	9
	Public Information Officer L3	As above with agency endorsement as a Planning Officer L3	140	1	54	35	3	-	-	42	5
	Media Officer	PUACOM016 - Manage media requirements at major incident or an equivalent qualification or experience working in the media industry plus agency endorsement as a Media Officer plus adequate practical experience.	258	28	38	158	3	-	-	29	2
Operations	Division Commander	PUAOPE023 Manage operations for a level 2 incident or PUAOPE016 Manage a multi-team sector or an equivalent qualification and agency endorsement as a Divisional Commander plus adequate practical experience	2,885	26	416	2,040	37	139	14	117	96
	Operations Officer L2	PUAOPE023 Manage operations for a level 2 incident or an equivalent qualification plus agency endorsement as an Operations Officer L2 and adequate practical experience	3,422	59	381	2,188	178	295	21	151	149
	Operations Officer L3	PUAOPE024 - Manage operations for a Level 3 incident or an equivalent qualification and agency endorsement as an Operations Officer L3 plus adequate practical experience	605	15	130	356	2	-	-	83	19

INCIDENT MANAGEMENT

Function	Function statement	Resource description	National capability	Jurisdiction totals							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Operations (cont.)	Plant Operations Manager (IMT based)	The plant operation manager function includes: <ul style="list-style-type: none">managing the Plant Operations Unit to support the incidentprovision of specialist plant advice to the Incident Management Teampreparation of the Plant Operations input to the Incident Action Plan (IAP)	202	13	42	44	10	-	-	66	27
	Staging Area Manager	The staging area manager function includes: <ul style="list-style-type: none">establishing and managing the Staging Areareceiving and managing resources prior to their deployment at the incidentreceiving and managing resources during changeovers and demobilisation.formal training plus adequate practical experience and agency endorsement as a Staging Area Manager	1,720	103	116	1,416	22	-	-	28	35
	Air Attack Supervisor	Qualified for the role in accordance with the National Fire Aviation Training and Assessment Framework plus agency endorsement as an Air Attack Supervisor	235	7	80	49	21	18	1	42	17
	Air Base Manager	Qualified for the role in accordance with the National Fire Aviation Training and Assessment Framework plus agency endorsement as an Air Base Manager	240	28	82	61	17	4	-	20	28
	Air Operations Manager	Qualified for the role in accordance with the National Fire Aviation Training and Assessment Framework plus agency endorsement as an Air Operations Manager	57	9	13	17	7	-	-	7	4
	Aircraft Officer	Qualified for the role in accordance with the National Fire Aviation Training and Assessment Framework plus agency endorsement as an Aircraft Officer	158	6	64	32	21	-	-	13	22

INCIDENT MANAGEMENT

Function	Function statement	Resource description	National capability	Jurisdiction totals							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Investigations	Investigation Officer (IMT based)	PUAOPE001 - Manage the investigation function at an incident or an equivalent qualification plus agency endorsement as an Investigation Officer (IMT based) and adequate practical experience	111	6	-	103	-	-	-	-	2
	Structural fire investigation	PUAFIR501 - Conduct fire investigation and analysis activities and PUAFIR604 Determine origin and cause of structure fire or an equivalent qualification plus agency endorsement as a Structure fire Investigator and adequate practical experience	619	176	162	91	10	60	15	99	6
	Bushfire investigation	PUAFIR501 - Conduct fire investigation and analysis activities and PUAFIR603 Determine origin and cause of wildfire or an equivalent qualification plus agency endorsement as a Bushfire Fire Investigator and adequate practical experience	543	41	141	149	12	31	4	120	45
	Logistics officer	PUAOPE022 - Manage logistics for a complex incident or an equivalent qualification plus agency endorsement as a Logistics Officer L2 and adequate practical experience	631	5	82	306	37	71	18	50	62
Logistics	Logistics officer L3	As above with agency endorsement as a Logistics Officer L3	274	4	50	175	6	-	-	24	15
Finance	Finance Officer (IMT member)	Hold a professional qualification in finance or PUAOPE002 Manage the finance function at an incident or an equivalent qualification and 22459VIC course in AIIMS or equivalent plus agency endorsement as a Finance Officer (IMT member) and adequate practical experience.	213	13	59	113	4	-	-	24	-

INCIDENT MANAGEMENT

Function	Function statement	Resource description	National capability	Jurisdiction totals							
				TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Command and communications (general and specialist)	Multipurpose vehicles	Mobile forward command - light. 4WD vehicle equipped with multiple radios that can access most places on a incident ground. May be used to perform a number of roles.	3,537	1	951	1,913	31	169	14	399	59
		Mobile forward command - light. 2WD	528	-	43	485	-	-	-	-	-
	Dedicated command and communication facility	Mobile forward command – specialist vehicle. Vehicle fitted with specialist command equipment. Primary purpose is command and communication.	156	2	14	80	1	33	1	25	-
		Mobile forward command – modular. Modular unit fitted with specialist command equipment. Primary purpose is command and communication.	281	2	-	241	13	2	-	2	21

NOTE: An individual will not usually hold more than one qualification. Consequently, the numbers recorded in the table Incident Management represent the numbers available to deliver each individual capability. A person cannot perform more than one role at a time.

DEPLOYABLE CAPABILITY

Teams available to deploy interstate within 48 hours.	National Capability	Jurisdiction totals							
		TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Fully expanded Level 3 Incident Management Team	18	1	7	6	1	1	-	1	1

*There are several assumed variables that will impact the accuracy of this data. This number should only be taken as a rough estimate and should not be taken as an accurate representation of resource availability at any one time in the jurisdiction. Member availability, emergency risk and commitments, amongst other variables, will impact the number.

Trends in incident management capability

- L2 Incident Controller capability increased by 56% compared by 2021, however L3 Incident Controller capability decreased by 13%.
- Planning Officer capability decreased when compared to 2021 across both levels: L2 -29%, L3 -31%. This continues a decreasing trend in national capability since 2017.
- National capability in the Intelligence function increased across all positions: Intelligence Officer +448%, Intelligence Officer L3 +438%, Fire Behaviour Analyst +169%, Mapping Officer +23%, Air Observer +44%.
- National capability in the Public Information function decreased across all positions: Public Information Officer L2 -72%, Public Information Officer L3 -77%, Media Officer -43%.
- In the Operations function, Operations Officer L2 capability increased by 90% and Air Attack Supervisor capability increased by 10% compared to 2021. However, national capability of all other resources decreased: Division Commander -30%, Operations Officer L3 -27%, Plant Operations Manager -57%, Staging Area Manager -39%, Air Base Manager -12%, Air Operations Manager -30%.
- Investigations capability increased across all positions compared to 2021: Investigation Officer +106%, Structural Fire Investigation +47%, Bushfire Investigation +92%.
- Logistics Officer capability decreased in both levels compared to 2021: L2 -35%, L3 -46%.
- Finance Officer capability increased by 64% compared to 2021.



Aviation

The National Aerial Firefighting Fleet is made up of 163 contracted aircraft which are contracted by AFAC through the National Aerial Firefighting Centre (NAFC) on behalf of state and territory governments to provide firefighting services typically for the duration of the local fire season. The total number can change slightly as contract start and end dates vary reflecting local conditions.

The National Aerial Firefighting Fleet ranges from very large air tankers through to light helicopters. Further details on the fleet can be found on the NAFC website at <www.nafc.org.au>.

This fleet is supplemented by more than 35 aircraft that are owned outright or directly contracted by State Government and State fire and emergency service organisations. This number can be increased with contractual resources, not represented in the tables below, brought in to meet peak demands through ‘call when needed’ contracts..

In effect more than 500 aircraft, provided by over 150 operators, are potentially available for fire and emergency aviation across Australia.

Each aircraft has a selection of service functions that it can perform to produce the following effects.

These functions include:

- Aerial detection
- Aerial coordination
- Aerial intelligence gathering
- Aerial attack
- Aerial containment
- Aerial protection
- Aerial transportation
- Aerial ignition
- Aerial search and rescue.

AVIATION - NATIONAL CONTRACTED AIRCRAFT

Aircraft Type		National capability	Quantity							
			TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Fixed Wing	Supervision Reconnaissance	13	1	5	1	-	2	-	1	2
	Fire scanning	4	-	2	1	-	-	-	1	-
	Type 1. Large Air Tanker	7	-	2	2	-	1	-	1	-
	Type 4. Single Engine Air Tanker	60	6	18	8	-	4	6	2	16
Rotary Wing (helicopter)	Type 1. Heavy	15	-	6	1	-	2	-	2	4
	Type 2. Medium	35	5	9	11	2	2	-	6	-
	Type 3. Light	38	3	15	-	1	3	4	3	9
Total aircraft		172	15	57	24	3	14	10	16	31

AVIATION - STATE CONTRACTED AND STATE OWNED AIRCRAFT

Aircraft Type		State contracted	Quantity							
			TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Fixed Wing	Type 1. Large Air Tanker	5	-	2	2	-	1	-	-	-
	Type 4. Single Engine Air Tanker	79	6	14	27	-	4	4	8	16
	Supervision and/or reconnaissance	30	1	7	7	-	2	1	1	11
Rotary Wing (helicopter)	Type 1. Heavy	18	-	6	4	1	1	2	-	4
	Type 2. Medium	74	5	10	55	2	2	-	-	-
	Type 3. Light	87	2	14	67	-	3	-	1	-
Aircraft Type		State owned	Quantity							
			TAS	VIC	NSW	ACT	QLD	NT	WA	SA
Fixed Wing	Type 1. Large Air Tanker	1	-	-	1	-	-	-	-	-
	Type 4. Single Engine Air Tanker	-	-	-	-	-	-	-	-	-
	Supervision and/or reconnaissance	14	-	-	3	-	-	-	10	1
Rotary Wing (helicopter)	Type 1. Heavy	1	-	-	1	-	-	-	-	-
	Type 2. Medium	7	-	-	7	-	-	-	-	-
	Type 3. Light	3	-	-	3	-	-	-	-	-
Total aircraft		319	14	53	177	3	13	7	20	32



Australian Government
National Emergency Management Agency



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