Australian Government
Bureau of Meteorology

Annual Report 2024–25

Trusted, reliable and responsive weather, water, climate, ocean and space weather services for Australia–all day, every day.

Bureau of Meteorology summary

The Bureau of Meteorology

Our vision

To be an organisation of global standing, that is highly valued by the community for our pivotal role in enabling a safe, prosperous, secure and healthy Australia.

Our purpose

To provide trusted, reliable and responsive weather, water, climate, ocean and space weather services for Australia – all day, every day.

Capabilities

- People
- Relationships
- Science
- Data and information
- Information technology
- Observing technology and infrastructure

Key activities

- Community Services
- Business Solutions
- Data and Digital
- Science and Innovation
- Enterprise Services
- The Australian Climate Service

Government, industry and the Australian community

Our outcome

Enabling a safe, prosperous, secure and healthy Australia through the provision of weather, water, climate, ocean and space weather services.

Benefits

- Public safety
- Community wellbeing
- Economic prosperity
- National security
- Environmental health

Our Strategy

Impact and value

Products and services that enhance the wellbeing of all Australians.

Operational excellence

Outstanding people supported by secure, effective and resilient systems, processes and technology.

Insight and innovation

Practical implementation of novel, mission-directed solutions for our customers.

The Bureau way

One enterprise that lives its values through agreed behaviours every day.

Letter of transmittal

Australian Government
Bureau of Meteorology

Office of the CEO

Senator the Hon Murray Watt
Minister for the Environment and Water
Parliament House
CANBERRA ACT 2600

Dear Minister

As the Accountable Authority for the Bureau of Meteorology (the Bureau) and the Australian Climate Service, I am pleased to present the Annual Report of the Bureau of Meteorology, including the report of the Australian Climate Service, for 2024–25. The report details our ongoing efforts to provide trusted, reliable and responsive weather, water, climate, ocean and space weather services for Australia – all day, every day.

The report has been prepared in accordance with Section 46 of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act) which requires that you present the report to the Parliament. It includes the Bureau's audited financial statements as required by Section 43(4) of the PGPA Act.

In accordance with Section 10 of the *Public Governance, Performance and Accountability Rule 2014*, I certify that:

- the Bureau has a fraud and corruption risk assessment and fraud and corruption control plan
- the Bureau has appropriate fraud and corruption prevention, detection, investigation, recording and reporting mechanisms that meet its needs
- that all reasonable measures have been taken to deal appropriately with fraud and corruption relating to the Bureau.

Yours sincerely

Peter Stone

Peter Stone
Acting CEO and Director of Meteorology

24 September 2025

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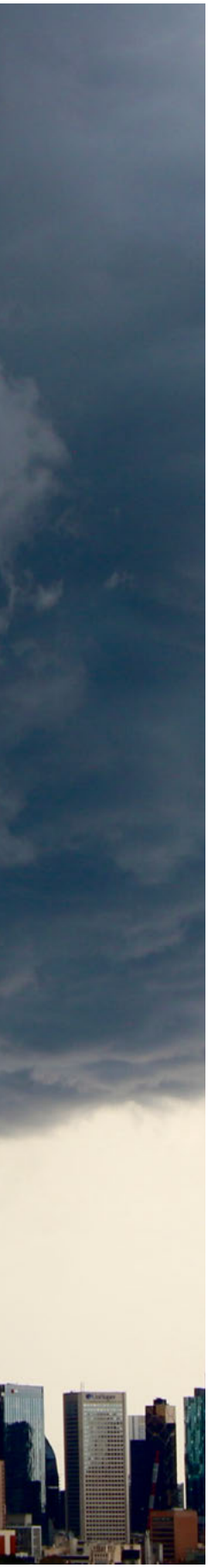
Acknowledgement of Country

The Bureau acknowledges the Traditional Owners and Custodians of Country throughout Australia and acknowledges their continuing connection to land, water, sky, and community.

We pay respects to Elders past and present, acknowledge and celebrate the unique living cultural knowledge and practices of Aboriginal and Torres Strait Islander peoples as essential to connection, protection and caring of Country.

Contents



The Bureau at a glance

Our purpose

Our purpose is defined by our mission:

To provide trusted, reliable and responsive weather, water, climate, ocean and space weather services for Australia – all day, every day.

To achieve our purpose – across the domains of weather, water, climate, oceans and space weather – we:

- monitor and report on current conditions
- provide forecasts, warnings and long-term outlooks
- analyse and explain trends
- foster greater public understanding and use of the information we provide
- continue to extend our understanding of, and ability to forecast, Australian conditions.

Our vision

Our vision is:

To be an organisation of global standing, that is highly valued by the community for our pivotal role in enabling a safe, prosperous, secure and healthy Australia.

Our strategy

Guided by the Bureau's Strategy 2022–2027, our work is focused on 4 pillars of success:

Impact and value

Products and services that enhance the wellbeing of all Australians.

Operational excellence

Outstanding people supported by secure, effective and resilient systems, processes and technology.

Insight and innovation

Practical implementation of novel, mission-directed solutions for our customers.

The Bureau way

One enterprise that lives its values through agreed behaviours every day.

Authority

The Bureau operates under the authority of the *Meteorology Act 1955* and the *Water Act 2007*. The Bureau is an Executive Agency under the *Public Service Act 1999*, and a non-corporate entity under the *Public Governance, Performance and Accountability Act 2013*. The *Meteorology Act 1955* requires the Bureau to fulfil Australia's international obligations under the Convention of the World Meteorological Organization (WMO) and related international treaties and agreements.

Portfolio and ministers

At 30 June 2025, the Bureau operated within the Climate Change, Energy, the Environment and Water Portfolio reporting to the Minister for the Environment and Water, Senator the Hon Murray Watt.

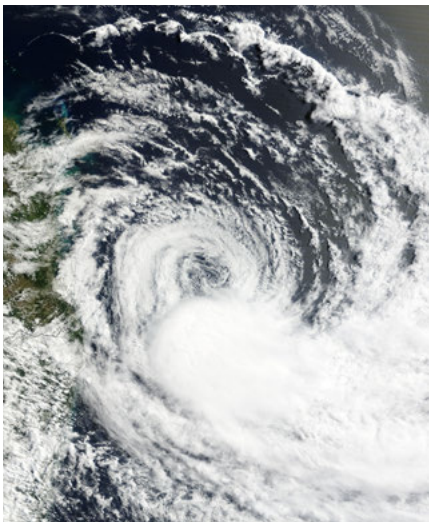
The Hon Josh Wilson MP, Assistant Minister for Climate Change and Energy, was the Minister responsible for the Australian Climate Service.

Funding

The Bureau receives the majority of its funding from the Australian Government ($359.4 million in 2024–25). Additional revenue ($124.3 million in 2024–25) was derived from other sources, including the sale of goods and services. More information is provided in the Financial resource management chapter (p.225) and in the Climate Change, Energy, the Environment and Water Portfolio Budget Statements 2024–25.

Under the Portfolio Budget Statements, the Bureau is responsible to the Australian Government for Program 1.1 – Bureau of Meteorology, and for delivering the following outcome:

Enabling a safe, prosperous, secure and healthy Australia through the provision of weather, water, climate, ocean and space weather services.



Satellite image of tropical cyclone Alfred on 6 March 2025. Image credit: NASA Worldview.

The Giles Weather Station in Western Australia.

Our staff

As at 30 June 2025, the Bureau had 1,979 total staff, including 1,722 ongoing staff, 117 non-ongoing staff, 125 contractors and 15 external persons (students and visiting scientists), as well as over 3,100 volunteer observers who help maintain Australia's climate record. More information can be found in the People management chapter (p.202).

Bureau staff are located across Australia, on remote islands and in Antarctica. We observe and forecast from the Antarctic to north of the equator, and from the Indian Ocean to the Pacific. More information on the location of our staff and services is provided in the Agency overview (p.30).

Our values

The values that guide our behaviours are:

- safety
- integrity
- customer focus
- passion and tenacity
- responsibility
- humility.

More information on the Bureau's values can be found in the Agency overview (p.32).

The impact and value of our work

The Bureau is entirely focused on providing products and services that enhance the wellbeing of all Australians. Here are some of the ways the Bureau contributes to a safe, prosperous, secure and healthy Australia.

Our severe weather forecasts and warnings

- alert Australians to protect themselves and their property from severe weather such as tropical cyclones, thunderstorms and damaging winds
- enable communities to prepare for and respond to the effects of heavy rainfall including flash flooding
- support emergency services agencies to carry out effective emergency and disaster preparation, response and recovery.

Our flood watches and warnings

- alert Australians to protect themselves and their property from riverine flooding
- enable communities to prepare for and respond to the effects of flooding, including making timely evacuations
- support emergency services agencies to carry out effective emergency and disaster preparation, response and recovery.

Our fire weather forecasts and warnings

- alert Australians to weather conditions conducive to the spread of dangerous bushfires
- help state and territory fire agencies predict fire conditions and make decisions about total fire ban days and bushfire warnings
- allow emergency services to pre-position personnel and equipment to minimise fire damage.

Our marine, ocean and Antarctic services

- support safe navigation of Australia's local and coastal waters and high seas
- alert Australians to tsunamis, dangerous winds, waves, tides, currents and surf conditions
- support ports and shipping operations, fishing and aquaculture industries
- support safe and efficient operation of offshore infrastructure such as windfarms and oil and gas platforms
- support the Australian Antarctic Program and safe and efficient aviation, marine and land operations in Antarctica and the Southern Ocean.

Our aviation and defence forecasts and warnings

- facilitate safe and efficient aviation sector operations
- inform flight planning and fuel load decisions
- provide alerts on hazardous weather and atmospheric conditions such as turbulence and volcanic ash
- support Australia's defence operations in Australia and overseas including anticipating global climatic events.

Our UV forecasts and heatwave warnings

- help Australians avoid dangerous UV exposure, to protect against skin cancer
- help protect vulnerable Australians against heat exhaustion and heatstroke
- alert health authorities to periods of heightened demand
- allow energy operators to prepare for increased power demand.

Our climate monitoring, maps and information

- support situational awareness by providing a clear picture of current and antecedent conditions with climate context
- help Australians understand the nation's climate patterns, trends and variations, and climate-related risks
- support natural resource managers to respond to climate risks and opportunities
- inform solar, wind and hydropower installations and production potential
- support insurance claims processes
- support the development of climate-appropriate infrastructure.

Our water and environmental information services

- underpin water planning, efficient water use and water operations
- guide investment in and maintenance of water infrastructure, and aid decision-making in water supply and irrigation activities
- provide transparency to communities and water users around water management and trade
- support ecosystem management.

Our long-range forecasts

- allow emergency managers to tactically prepare themselves and their communities ahead of flood, bushfire and tropical cyclone seasons
- allow the finance sector to price climate risk at seasonal timescales
- help the water sector manage water resources
- help farmers make decisions about crop planting, fertiliser application and stock management
- help retailers and tourist operators to tailor their activities to seasonal variations.

Our everyday weather forecasts

- help Australians plan their everyday activities, from the daily commute, sporting and outdoor activities, to hanging out washing
- support activities in the construction and transport industries
- help tourism operators and event managers optimise their activities and events, and prepare contingencies when required.

Our space weather forecasts

- help defence, aviation, energy, emergency services, and space industries to manage and mitigate the impacts of space weather
- help Australians understand how space weather can significantly disrupt the technology that underpins our energy, transport, communication, navigation and financial systems.

2024–25 snapshot

Eye on the environment

69 weather radars

658 automatic weather stations

13 wind profilers

38 upper air balloon stations

~1,150 flood warning stations

~3,100 volunteer rainfall observers

43 coastal sea level monitoring stations

116 wave and drifting buoys operated by the Bureau and its partners

35 ship-based weather observation systems

6 deep ocean tsunameter stations

7 ozone monitoring sites

4 terrestrial solar radiation monitors

21 space weather observation stations

6 satellite ground stations

30+ satellites operated by international partners

What we delivered

~674,000 routine public forecast products

~179,000 marine safety broadcasts

~22,000 weather and ocean warnings

~3,000 flood watches and warnings

~3,800 incident weather forecasts to support fire-fighting activities

~1.6 million aviation forecast products

215 National Situation Room daily all hazard weather briefings

~500,000 climate graphs and charts

165 peer-reviewed scientific journal articles published

520 long-range forecast, seasonal outlook and climate risk briefings

268 locations in the seasonal streamflow forecasts service

The reach of our services

~1.2 million
Facebook followers

~799,000
X (formerly Twitter) followers

~212,000
Instagram followers

~104,000
YouTube subscribers

~16.9 million
total BOM Weather app downloads (since launch)

~3 million
BOM Weather app downloads (during 2024–25)

4.3 million
monthly active BOM Weather app users (during 2024–25)

7,138
media enquiries

453
media releases issued

~99% of the population covered by a Bureau radar

~92% of the population within 20 km of a Bureau automatic weather station

Our service highlights

98.7% uptime of automatic weather stations

95.6%
weather radar network availability

97.0%
satellite network availability

Top 5 performance of ACCESS among global forecasting models

15.9 minutes
average time from earthquake to tsunami bulletin

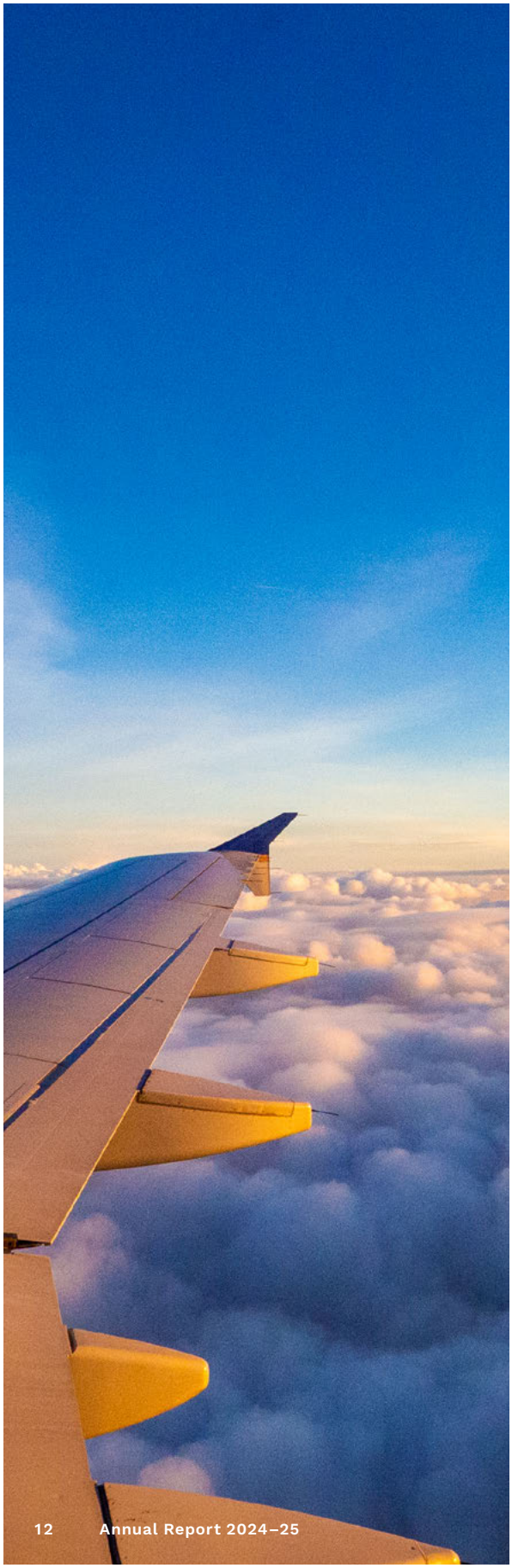
Top ranked
free weather app in Australia in both the Apple and Google Play stores

83.6% of users satisfied with the BOM Weather app

+48 Net Promoter Score for community customers

92% of emergency management customers have a good perception of the Bureau

91% of industry and government customers have a good perception of the Bureau



How we performed

The Bureau's performance is measured against 12 strategic success measures. For each measure, a critical assessment determines whether the Bureau's performance met expectations, partially met expectations or did not meet expectations. For more information see the Annual Performance Statement (p.35).

Strategic success measure	2022–23	2023–24	2024–25
Impact and value			
The financial and social value we deliver to industry, government and the wider community.	Met	Met	Met
The levels of satisfaction and trust customers, partners and stakeholders have in the products and services we provide.	Met	Met	Partially met
The utilisation of our services by new customers and existing customers.	Met	Met	Met
Operational excellence			
Our delivery against agreed customer requirements and commitments.	Met	Met	Met
Capacity utilisation, system reliability, security and resilience benchmarked against best practice.	Partially met	Met	Met
Verification of our products and services.	Met	Met	Met
Insight and innovation			
The depth, breadth and resilience of our external partnerships and collaborations.	Met	Met	Met
The conversion of ideas to opportunities to customer outcomes.	Partially met	Partially met	Met
The quality and application of our research and development, benchmarked internationally.	Met	Met	Met
The Bureau way			
Our performance benchmarked against work health, safety, wellbeing, security and environment best practice.	Met	Met	Met
Individual and team actions demonstrate commitment to enterprise values and behaviours.	Met	Met	Met
A diverse and inclusive workforce, that reflects the communities we serve.	Not met	Not met	Partially met

National weather event summary

July

2-6: A cooler southerly airmass combined with clear skies and light winds brought cooler than average night-time temperatures to large parts of the country. On 4 July, Liawanee in Tasmania's Central Highlands recorded -13.5 °C, the second-coldest temperature ever recorded for the state.

12-17: A low pressure system off the New South Wales coast brought several days of rainfall as it travelled south towards the east coast of Tasmania. Between 15 to 17 July, rainfall totals up to 100 mm were recorded across Victoria's Central and East Gippsland districts and up to 150 mm in southern areas of Tasmania, leading to minor to moderate flood warnings being issued for these areas.

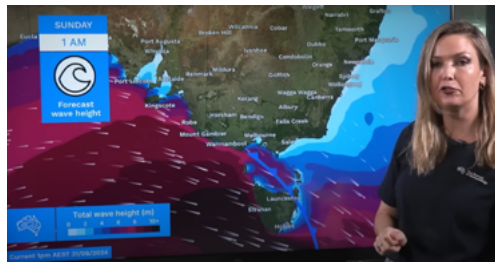
18-20: A cool southerly airmass brought several days of cooler than average night-time temperatures to northern Australia. Many sites across northern Queensland and several sites across the Top End of the Northern Territory observed their lowest July or daily annual minimum temperature on record. Winton Airport in Queensland observed its lowest annual minimum temperature on record at -0.6 °C on 20 July (23 years of data).

August

21-10 Sep: There was major flooding across several catchments in Tasmania, at the Derwent River at Meadowbank Dam and the Meander River at Strathbridge, and moderate flooding occurred along the South Esk River at Llewellyn. This was caused by a succession of cold fronts that brought rainfall to large parts of Tasmania from late August to mid-September with the heaviest rainfall occurring in early September.

22-31: A warm air mass brought unprecedented heat to large parts of the country for several weeks. Many sites across the country had their warmest August and winter maximum or minimum temperature on record. On 26 August, Yampi Sound in Western Australia observed 41.6 °C, the highest August and winter maximum temperature recorded in Australia. On 27 August, Bidyadanga in Western Australia observed 28.5 °C, the highest August and winter minimum temperature recorded in Australia.

24-2 Sep: Damaging to locally destructive wind gusts over 100 km/h impacted South Australia, Victoria, Tasmania and elevated areas of New South Wales over several days as multiple cold fronts and deep low pressure systems moved across south-eastern Australia. The strong winds also generated high seas, including a maximum wave height of 8.4 m recorded at Cape Bridgewater near Portland in south-western Victoria.



September

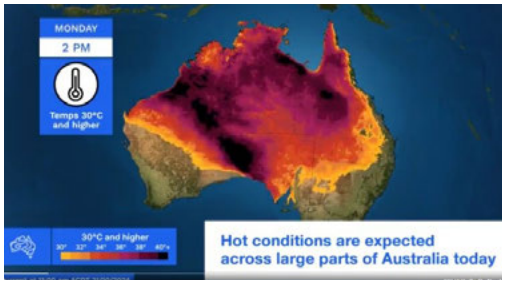
15-17: Minimum temperatures were 2 to 8 °C below average across south-eastern Australia, with many sites recording their coldest September night on record. On 16 September, Canberra Airport recorded -6.9 °C (102 years of composite data) and on 17 September, Adelaide (West Terrace / ngayirdapira) recorded 1.3 °C (100 years of data), the lowest minimum temperature on record for September for both sites.

17-18: Extensive cloud cover across northern parts of the country led to daytime temperatures up to 10 °C below average. Many sites had their lowest September maximum temperature on record on 17 September, including 26.8 °C at Darwin Airport (84 years of data).

27-29: A low pressure system off the east coast brought widespread rainfall to north-eastern New South Wales and south-eastern Queensland. In the 48 hours to 9am on 29 September, widespread falls of 25 to 50 mm were recorded in both states along the coasts and surrounding inland areas, leading to minor flooding in several catchments in north-eastern New South Wales.

October

1-31: Heatwave conditions impacted parts of northern Australia throughout October, with extreme intensity heatwaves in areas south of Darwin at times during the month. At Darwin Airport (85 years of data), daily maximum temperatures were at least 35 °C on 15 days in October, 5 times the October average of 3 days.



16: A supercell thunderstorm impacted the town of Casterton in western Victoria, with 21.0 mm of rain recorded within 30 minutes and reports of large hail (4 cm in diameter) and large accumulations of small hail across the town.

17: A severe thunderstorm brought heavy rainfall and flash flooding to South Australia where 36.0 mm was recorded within one hour at Mintaro, and hail was observed around Whyalla.

November

1: Severe thunderstorms impacted south-eastern Queensland. A cell generated giant hail (6 to 7 cm in diameter) near Boonah and large hail (3 to 4 cm in diameter) around the Brisbane CBD. A confirmed gustnado – a non-supercell tornado – formed on the Brisbane River with reports of trees brought down near the river.

16: Several bushfires started across Vicotria's west, including near Ballarat, as strong northerly winds and warm temperatures affected South Australia and Victoria. There were Extreme Fire Danger conditions for north-western Victoria and southern South Australia and Catastrophic Fire Danger conditions for the eastern Eyre Peninsula in South Australia.

26-27: Moist tropical air from northern Australia extended towards south-eastern Australia leading to unusually high humid conditions across Victoria, New South Wales and northern Tasmania. Indicated by record high dewpoint temperatures for November at many stations, the high humidity generated widespread morning fog across parts of Victoria and Tasmania.

29-1 Dec: A slow-moving trough combined with a low pressure system brought widespread rainfall across most of eastern Australia. In the 48 hours to 9am on 1 December, inland areas of northern New South Wales, parts of southern and central Queensland and northern Tasmania recorded 50 to 100 mm of rainfall. More than 200 mm was recorded in areas of southern Queensland and north-eastern Tasmania. The highest daily rainfall total was 207.4 mm at Gray in north-eastern Tasmania in the 24 hours to 9am on 1 December, the seventh-highest daily rainfall ever recorded in Tasmania in December.

December

1-31: A series of low pressure troughs brought widespread rainfall and severe thunderstorms to south-eastern and central parts of Queensland. This led to riverine flooding across some catchments in southern and central Queensland, including minor to moderate flooding along the Mary, Burnett and Logan rivers.

16: High temperatures combined with strong northerly winds resulted in elevated fire dangers across South Australia, Victoria and New South Wales. Dry lightning started a major bushfire in the Grampians National Park in western Victoria. The bushfire persisted until early January and reportedly burnt through 76,000 hectares, as high temperatures and strong northerly winds frequently affected Victoria.

20–22: Tropical low 06U developed on 20 December along a low pressure trough that stretched across the Cape York Peninsula in Queensland bringing several days of persistent heavy rainfall to the area. Rainfall totals in the 72 hours to 9am on 22 December were greater than 50 mm for large parts of northern Queensland and falls greater than 200 mm in the North Tropical Coast and Tablelands, and Capricornia districts.

21–23: Much of Western Australia was impacted by low to severe intensity heatwave conditions and high to extreme fire dangers. Daytime temperatures were 2 to 12 °C above average and several sites had their highest December daytime temperature on record including 44.7 °C on 23 December at RAAF Base Pearce.

January

12: A humid airmass and inland trough triggered isolated thunderstorms across Victoria, with reports of flash flooding in some areas and heavy rainfall across the Melbourne CBD. The Melbourne Olympic Park weather station recorded 26.4 mm of rainfall within 30 minutes.

17–19: A low pressure system and associated trough off the coastline of northern New South Wales generated several days of rainfall in the Northern Rivers, Mid North Coast and Hunter districts. Some sites had over 200 mm of rainfall in the 24 hours to 9am on 18 January, including 281.0 mm at Careys Peak (Barrington Tops) in the Mid North Coast district. There were reports of flash flooding, and a moderate flood warning was issued for the Williams River.

19–23: Severe tropical cyclone Sean developed on 19 January north of Karratha in Western Australia. Although the system did not make landfall it brought heavy rainfall to the Pilbara coastline. Karratha had 274.4 mm of rainfall in the 24 hours to 9am on 20 January, the highest daily rainfall total ever recorded for the station. Heavy rainfall led to flooding of the De Grey River Catchment and western Kimberley rivers.

20: Large parts of Western Australia experienced low to severe intensity heatwave conditions, with some areas experiencing extreme heatwave conditions. Many sites had their warmest January day on record – Geraldton Airport recorded a maximum temperature of 49.3 °C, the station's highest ever temperature.

27–12 Feb: Two tropical lows (13U and 20U) and an active monsoon trough brought persistent and heavy to intense rainfall to northern Queensland. Rainfall totals throughout the event exceeded 1 m across the Tropical North Coast and Tablelands, and Herbert and Lower Burdekin forecast districts and over 2 m in some areas including 2916.1 mm at Paluma Ivy Cottage. Significant rainfall led to widespread minor to major riverine flooding in several catchments.

February

1–2: Low to severe intensity heatwave conditions impacted large parts of the country, with the nationally-averaged daily maximum temperatures on 1 and 2 February the highest (39.3 °C) and third-highest (38.8 °C) on record for February, respectively.

3: Multiple bushfires were ignited by dry lightning in remote regions across Tasmania's west and central highlands, including several national parks and wilderness areas. Some of these fires continued for up to 2 months and burnt approximately 95,000 hectares of vegetation.

12–15: Severe tropical cyclone Zelia developed on 12 February and made landfall on 14 February as a category 4 system around 50 km north-east of Port Hedland. The system brought several days of heavy rainfall to the broader Pilbara district, with large areas recording over 200 mm. De Grey had its highest daily February and annual daily rainfall in the 24 hours to 9am on 14 February at 261.0 mm (112 years of data). There were reports of flash and riverine flooding, with major flooding of the De Grey River, including at Marble Bar.

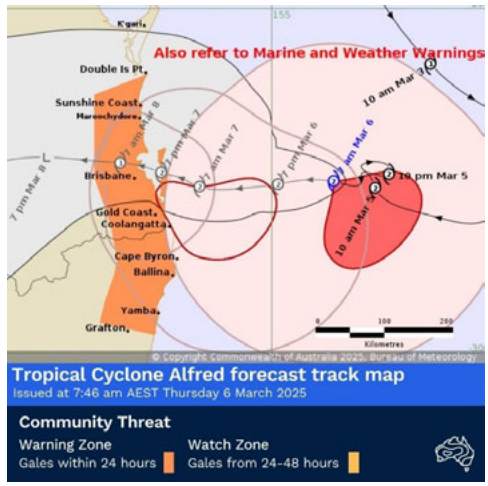
12–13: Low to severe intensity heatwave conditions impacted northern, central and south-eastern parts of the country. On 12 February, several stations in central Australia set records for their highest February daytime temperature, including 48.7 °C at Oodnadatta Airport in South Australia (77 years of data).

19: Thunderstorms with strong wind gusts moved across the Wheatbelt region in Western Australia. There were reports of a microburst around the Perth Hills area in Mount Helena resulting in damage to properties, uprooted trees and power outages.

March

21 Feb–10 Mar: Tropical cyclone Alfred developed in the Coral Sea on 21 February and began tracking towards the south-east Queensland coast on 4 March. The system crossed Moreton Island as a category 1 system at 1:00am AEST on 8 March, weakened below tropical strength later that morning and crossed the mainland coast at 9:00pm AEST. The system was associated with heavy to intense rainfall, including severe thunderstorms, and damaging wind gusts as the system slowly approached and moved inland. The highest recorded wind gust during the event was 120 km/h at Byron Bay in New South Wales. From 6 to 10 March, rainfall totals of 200 mm were recorded from an area extending from the southern Wide Bay and Burnett and Southeast Coast districts in Queensland to the Northern Tablelands and Mid-North Coast districts in New South Wales, with falls greater than 1 m in Queensland's Gold Coast Hinterland.

The highest rainfall total for the event was 1111.0 mm at Upper Springbrook in Queensland. Many sites had their highest daily March or annual rainfall and multi-day rainfall on record, including 275.2 mm at Brisbane in the 24 hours to 9am on 10 March (27 years of data).



13–19: Low pressure troughs and strong south-easterly trade winds generated persistent heavy to intense rainfall across northern Queensland. Weekly rainfall totals exceeded 400 mm across the north-east coast, with falls greater than 500 mm in isolated coastal areas of the North Tropical Coast and Tablelands, and Herbert and Lower Burdekin districts. Townsville Aero received 301.4 mm on 19 March, the station's third-highest daily rainfall on record for March (86 years of data). This rainfall led to minor to moderate flood warnings for catchments across the northern and central coast areas of Queensland.

22–31: Widespread and persistent rainfall fell across much of Queensland. Daily rainfall totals between 50 to 200 mm were recorded across much of the state, with falls greater than 200 mm in central and western parts and falls over 400 mm in the Central West district. Over several days, many sites exceeded their monthly rainfall total and for some sites nearly their annual rainfall total. The highest daily rainfall total was 347.0 mm in the 24 hours to 9am on 27 March at Sunbury in the Central West district and between 22 and 31 March, Sunbury recorded 660.0 mm. This rainfall resulted in widespread minor to major flooding across much of central, western and southern Queensland.

29: Tropical cyclone Dianne made landfall as a category 1 system in the early hours of the morning on 29 March, close to Koolan Islands off the Kimberly Coast in Western Australia. The system rapidly weakened as it moved inland and was downgraded to a tropical low. In the 24 hours to 9am on 29 March the system brought widespread rainfall to the Kimberley, with falls greater than 50 mm around the north-west coast. The highest daily rainfall total was 153.2 mm at Derby Aero, the second-highest March daily rainfall on record for the station (72 years of data).

30: A deep low pressure trough off the New South Wales coast generated strong winds and damaging surf. There were reports of coastal erosion and storm surges inundating homes from high tides combining with large and powerful waves, reportedly reaching 6 m off the coast of Eden and 5 m around Sydney's coast.

April

1-4: Remnants of ex-tropical cyclone Dianne interacted with an inland trough and brought widespread rainfall to central and eastern parts of the mainland. Across southern parts of the Northern Territory and most of Queensland, 4-day rainfall totals were between 10 to 50 mm and several sites had their highest daily rainfall on record for April including 161.5 mm at Tambo Post Office in Queensland (145 years of data) in the 24 hours to 9am on 2 April.

9-19: Tropical low 29U formed in the Arafura Sea on 9 April and was named tropical cyclone Errol on 15 April. The system rapidly strengthened to severe intensity on 16 April and weakened rapidly as it approached the Kimberley coast of Western Australia, before crossing as a tropical low on 18 April south of Kuri Bay. The remnant tropical low brought widespread moderate to heavy rainfall to northern parts of the Kimberley, with 25 to 100 mm of rainfall in the 24 hours to 9am on 19 April. The highest daily rainfall total was 160.8 mm at Kalumburu.

21-23: A low pressure system off the New South Wales coast directed moist airflow inland leading to widespread rainfall across coastal areas of New South Wales and south-eastern Victoria. In the 48 hours to 9am on 23 April, rainfall totals were generally between 30 and 60 mm, and locally over 100 mm. Moderate flood warnings were issued for the Cann and Genoa Rivers in the East Gippsland district of Victoria.

May

1-13: Much of Western Australia had above average temperatures during the first half of May, with maximum temperatures 6 to 12 °C above average between 7 to 12 May. Many sites across Western Australia's south-west and parts of the west coast had their warmest May maximum temperature on record on 9 May.

6: Warm north-westerly winds ahead of a cold front brought warm air from central Australia to south-eastern Australia and led to several sites across Tasmania and Victoria recording their warmest May daytime or night-time temperature on record. On 6 May, Hobart (Ellerslie Road) observed a minimum temperature record of 16.3 °C (139 years of data) and Scoresby Research Institute – Victoria, observed a maximum temperature record of 26.8 °C (59 years of data).

18-20: Large areas of south-eastern Australia had consecutive mornings of minimum temperatures 4 to 10 °C below average and temperatures were sub-zero across large parts of Tasmania, Victoria and south-eastern South Australia leading to widespread frost. Padthaway South in South Australia observed -4.6 °C on 19 May, the station's lowest daily minimum temperature on record (26 years of data)

19-23: Persistent and heavy to intense rainfall impacted central and eastern parts of New South Wales. Multi-day rainfall totals across the Hunter and Mid North Coast were greater than 400 mm and some sites exceeded 500 mm, including 692.2 mm at Yarras (Mount Seaview). This led to flash flooding and

widespread and significant riverine flooding including in the Manning, Hastings, Gloucester, Macleay, Paterson and Williams rivers and Wollombi Brook.

26-27: A large dust cloud stretching from the Mid North district in South Australia towards the Mallee district of Victoria resulted in some areas being blanketed in red dust and reduced visibility. The raised dust travelled into southern and central coastal areas of New South Wales on 27 May, and a dust haze settled over the Illawarra and Sydney Metropolitan districts reducing visibility and impacting upon air quality.

June

3: A slow moving low pressure trough system crossed Western Australia triggering isolated thunderstorms with strong winds. In the Great Southern district, there were reports of large hail (3 to 4 cm in diameter) at Wagin and a cold season tornado at Franklin River.

6-10: Around 50 cm of snow was reported across alpine areas in north-eastern Victoria and southern New South Wales, as several cold fronts and a low pressure system brought below average temperatures to south-eastern Australia.

19-22: Large parts of New South Wales had sub-zero temperatures, with Canberra Airport recording 3 consecutive nights of -7.0 °C or colder between 20 and 22 June, the first instance since July 1971.

Section 1:

Overview

Review by the CEO and Director of Meteorology

Dr Andrew Johnson, PSM FTSE FAICD

This Annual Report presents the Bureau of Meteorology's achievements for 2024–25 as it has continued in pursuit of its mission to provide trusted, reliable and responsive weather, water, climate, ocean and space weather services for Australia – all day, every day.

The Bureau remains committed to applying its unique and important capabilities to serve Australian communities, industries and governments and implementing its Strategy 2022–2027 (the strategy) to deliver products and services that contribute to Australia's prosperity, security and wellbeing.

The Bureau's Annual Performance Statement for 2024–25 (p.35) shows that the Bureau continues to meet these objectives in a material way.

A year of cyclones, floods and persistent heat

During the year, the Bureau provided critical information and support to Australian communities, industries and governments during extreme events, and worked closely with its emergency services partners to keep the community safe as Australia experienced a wide range of significant weather events (see p.14).

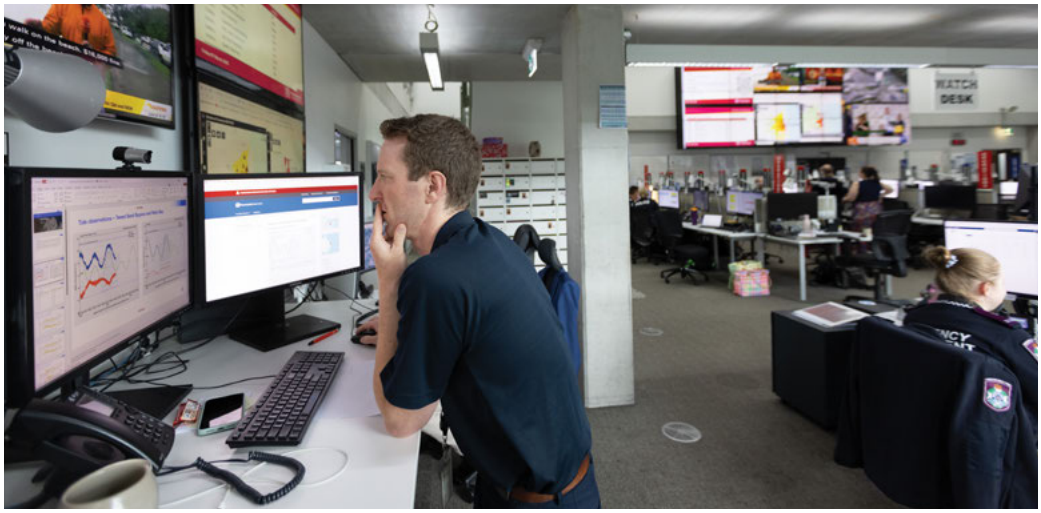
There were 12 tropical cyclones in the Australian region during the 2024–25 tropical cyclone season, the highest for almost 20 years (12 in 2005–06). There were 8 severe tropical cyclones (category 3 or above) and 5 tropical cyclones impacted the Australian coast (see p.80).
Of particular note was tropical cyclone Alfred, which travelled well south of areas where tropical cyclones typically occur and impacted highly populated communities including Brisbane.

Most states were affected by major flood events during the year with significant and widespread flooding impacting parts of New South Wales, Queensland and Western Australia. This included flooding in southern and central Queensland in December, in northern Queensland from late January, in Western Australia following severe tropical cyclone Zelia in February, in Queensland and New South Wales following tropical cyclone Alfred in March, across large parts of Queensland later in March, and in the Mid-North Coast and Hunter regions in May.

For most of the year, both maximum and minimum mean temperatures were warmer than average for most of Australia. The nationally-averaged mean temperature for 2024–25 was 1.68 °C above the 1961–1990 average, the warmest since observations began in 1910–11. Low to severe intensity heatwave conditions persisted from September to mid-March across large parts of the country.

Australia's average rainfall for 2024–25 was 10% above the 1961–1990 average, although not spread evenly across the country. Area-averaged rainfall was 21% above average across northern Australia, while for southern Australia rainfall was 5% below average. For parts of Victoria and South Australia, rainfall was the lowest on record since 1900–01, continuing the prolonged dry conditions.

Beach erosion at Kings Beach in Caloundra caused by tropical cyclone Alfred.



Bureau forecaster David Grant operating in the Queensland Emergency Operations Centre.

Supporting Australians when it matters most

The Bureau is dedicated to delivering the products and services that enable a safe, prosperous, secure and healthy Australia. In 2024–25 the Bureau assisted its customers to navigate a range of challenging weather, water, climate, ocean and space weather events, and introduced several new and enhanced products and services to better deliver impact and value for Australian communities, industry and governments.

Ahead of the higher risk weather season (October to April), the Bureau ran its annual public safety campaign, *Know your weather, Know your risk*, partnered with government and community-based organisations to run preparedness workshops for vulnerable communities and delivered its higher risk weather season outlook (see p.74). The Bureau also supported the emergency management sector with preparedness activities, including the National Emergency Management Agency's (NEMA) National Preparedness Program.

Across the year, the Bureau sought to keep Australians informed of current and future conditions for wherever they are across the nation. In the lead up to and throughout the severe weather events, the Bureau delivered targeted, up-to-date forecasts and warnings through a range of channels, including the Bureau website, the BOM Weather app, and directly to emergency management agencies.

While events such as tropical cyclone Alfred have major impacts on individuals and communities, they often cause flow-on effects across the economy. For these events, the Bureau works across several sectors including energy, aviation, transport, telecommunications and agriculture sectors to support preparedness and response to minimise damage and disruption and to maximise their business continuity and recovery.

Delivering on our commitments

Throughout 2024–25, the Bureau continued to meet its core obligations and deliver on the specific initiatives to which it has been entrusted.

Implementation of the national Flood Warning Infrastructure Network continued through the negotiation, transfer and remediation of sites in Queensland, and site prioritisation in New South Wales (see p.102).

As one of the partners of the Australian Climate Service (ACS), and the host agency, the Bureau continued to support the ACS in fulfilling its responsibilities for providing data, intelligence and expert advice on climate and natural hazard risks. Notable achievements for the ACS during the year included delivering new regional climate projections for Australia, continuing to progress the National Climate Risk Assessment and establishing the National Insurance Dataset (see p.147).

The Bureau continued to fulfill its obligations under the *Water Act 2007*, releasing a Regulatory Statement of Intent outlining its planned actions as a regulator of water data, releasing the Urban Water Utilities 2023–24 performance report (see p.107) and commencing an expansion of water data collection for the Murray-Darling Basin.

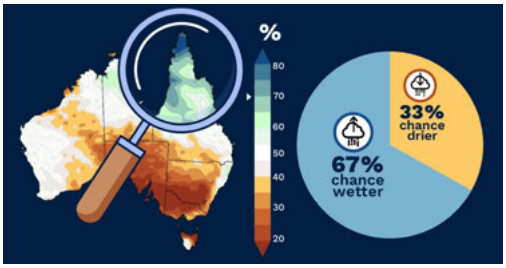
The Bureau delivered the essential suite of Aviation Meteorological Services agreed by industry and government, including the Volcanic Ash Advisory Service and global Aviation Space Weather Advisory Service, and engaged closely with industry on the future Aviation Meteorological Services Plan 2026–2030 (see p.106).

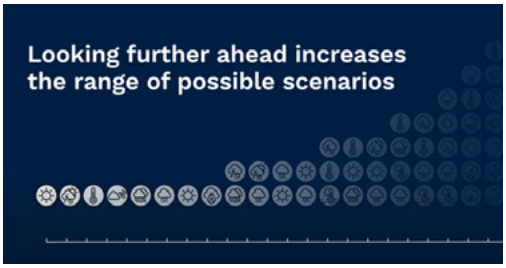
The Bureau continued to deliver meteorological, oceanographic and space weather intelligence and expertise to Defence, including in support of operational deployments, military exercises and military relief efforts (see p.97–98).

Improving our services for greater impact

The Bureau continued to assess the Beta version of its new website, with customer feedback used to inform the addition of a range of features and enhancements throughout the year (see p.114). Ongoing updates and enhancements were made to the BOM Weather app during the year and the Bureau's social media accounts continued to engage more than 2.3 million followers with interesting, timely and informative content.

In December, changes to the Bureau's climate information were implemented to provide clearer messaging and encourage the community to use the long-range forecasts when making climate-sensitive decisions (see p.78 and p.138). The Bureau also completed national coverage of surface water data published through the Water Data Online portal and extended the abnormally high tides service to Victoria.





Images from the campaign to explain the changes and how to understand long-range forecasts.

During the year, the Bureau implemented several initiatives to support the efficient operation of Australia's electricity network and its transition to renewable energy. This included developing a blueprint for electricity network operators to safely adjust power flows through transmission lines to account for weather conditions (see p.95), and deploying solar and wind nowcasting and forecasting technologies to facilitate effective renewable energy planning and operation.

Uplifting and strengthening our operations

The Bureau made several improvements to its operational systems during the year to maximise the quality and effectiveness of its products and services.

In June, the Bureau successfully completed the production cutover to its Australis II supercomputer, including the migration of enhanced numerical weather prediction (NWP) models (see p.116 and p.131). This was an extremely complex and challenging transition involving significant cross-enterprise collaboration.

Transition to the IMPROVER forecasts guidance system was completed, which will result in more accurate and efficient forecast services. A new system was launched to strengthen Australia's tsunami warning capability (see p.78) and flood warning capabilities were uplifted through a new flood warning network data collection system and the expansion of the Bureau's existing HyFS hydrological forecasting system (see p.83).

Important enhancements were made to the Bureau's observing network to strengthen the quality, stability and resilience of the Bureau's observations. New radars were installed at Karratha and Townsville, automatic weather stations (AWS) were installed on several ships contributing to the Australian Voluntary Observer Fleet, and to complete the AWS replacement project (see p.113). Automation of observing systems at Hobart Airport was completed, along with a range of enhancements to observation infrastructure at airports around Australia (see p.110). Restoration of 2 tsunami detection stations in the Tasman Sea was also completed in collaboration with international partners (see p.115).

Construction of the new Karratha radar.

The Bureau continued to mature its asset management capability and committed to actions in response to the Australian National Audit Office (ANAO) audit of the management of observing network assets (see p.120).

New crisis management arrangements were implemented during the year to respond to disruptive events affecting the Bureau's staff, products, services and critical business functions (see p.145).

Applying research and innovation

The Bureau continued to apply its science and research capabilities to enhance outcomes across a range of focus areas, including updating Australia's national hydrological projections for improved flood prediction, developing a national climate attribution capability, applying risk matrices for more effective warnings and developing and trialling new national forecast models.

Exploration and leveraging of artificial intelligence (AI) and machine learning (ML) to improve the Bureau's prediction capabilities was a key focus for the year across several applications (see p.125–126 and p.132).

The Bureau established the Rainfall Intelligence (RI) capability as an ongoing trial as an innovation in seamless and effective flood warning delivery (see p.76). The open-source release of the Bureau-developed operational verification system 'scores' saw the innovative system adopted by other agencies both in Australia and overseas (see p.126).

The Bureau collaborated with a range of international partners for experiments into atmospheric processes in the Southern Ocean (see p.119) and into the formation and movement of hail inside thunderstorms (see p.129).

To strengthen the effective delivery of warning products, the Bureau undertook a range of research activities into community understanding of hazard exposure and risk, current use and comprehension of the Bureau's public warnings, and the communication of uncertainties during flash flood events (see p.87).

Building our partnerships and collaborations

Throughout the year, the Bureau continued to work with its global and regional partners on a range of initiatives including capacity building, infrastructure installations, training and technology transfer.

The Bureau signed a new Memorandum of Understanding with the Department of Defence and CSIRO to support long-term collaboration on the Bluelink ocean forecasting platform, signed an agreement with the Japan Meteorological Agency on access to Japan's Himawari-10 satellite and renewed its Strategic Relationship Agreement with the Australian Energy Market Operator (AEMO).

The Bureau continued to work with partners in the Pacific, including through the Climate and Oceans Support Program in the Pacific (COSPPac) and Weather Ready Pacific initiatives, to improve provision of climate data, aviation safety and food security in the region (see p.187).

The Bureau also engaged and collaborated with peer agencies, including through participation in the PacWave24 tsunami warning exercise, and a range activities on forecasting and warnings for fire and tropical cyclones (see p.86).

Building our workforce and culture

Throughout the year the Bureau continued to implement a range of initiatives to support its people and build its culture.

The Bureau of Meteorology Training Centre continued to facilitate learning programs to support organisational capability, including through the Graduate Diploma in Meteorology course – the initial training program for meteorologists – and delivery of specialised in-service training for meteorologists and technical staff (see p.204).

In June, the Bureau launched its new Innovate Reconciliation Action Plan 2025–2027 which sets out the next steps and commitments in its reconciliation journey. A new Diversity and Inclusion Action Plan was also launched to further promote the diversity of the Bureau's people and to unlock the potential of our different cultures, abilities and backgrounds (see p.142).

The Bureau continued to implement a range of environmental sustainability activities during the year, and released its 2024–25 Emissions Reduction Plan, which outlines the Bureau's planned contribution the Australian Government's APS Net Zero 2030 target (see p.196).

Financial results

The Bureau recorded an operating deficit of $2.1 million which was lower than the approved operating deficit of $15.9 million. The operating deficit was the result of higher than anticipated technology, people and utilities costs, as well as increased security and corporate costs supporting the growing complexity of the Bureau's operations.

Total income for the Bureau for 2024–25 was $483.7 million, compared to $480.9 million in 2023–24. This increase was primarily driven by an increase in own-source revenue related to funding provided to the Bureau to support international development activities.

The Bureau's operating expenditure for 2024–25 was $627.6 million, compared $633.6 million in 2023–24. This decrease was primarily driven by reductions in supplier and contractor expenditure, in addition to non-essential travel.

For more information on the Bureau's financial performance see the Financial resource management (p.225) and Financial statements (p.235) chapters.

Outlook for 2025–26

In 2025–26, the Bureau will seek to build upon what it has achieved in 2024–25, while continuing to navigate a challenging fiscal environment. The Bureau will continue to provide reliable access to weather, climate, water, ocean and space weather information in accordance with the requirements prescribed in the Meteorology and Water Acts, as well as obligations associated with Australia's international treaties and agreements.

To deliver impact and value to its customers, the Bureau will:

- continue to provide high-quality, accessible, timely products and services to Australian communities, industries and governments
- provide customers with simple, intuitive, trusted and reliable digital experiences that deliver Bureau products and services, including through the new Bureau website
- help the nation to understand and respond to a changing climate and develop an improved understanding of the needs of climate risk decision-makers within Australia
- work with the Australian community and emergency management partners to establish future warning enhancements
- continue physical remediation of flood warning infrastructure acquired from local councils and other third parties in Queensland, and commence physical works in New South Wales and detailed planning for works in Victoria
- leverage the insights and data prepared under Australia's first National Climate Risk Assessment to support the Australian Government's medium- to longer-term adaptation response
- deliver water information to underpin national water security and supply services and fulfil the role of Australia's national regulator for water data and information
- work in collaboration with the energy sector to support renewable energy systems and emissions reduction.

Starfish Hill Wind Farm at Cape Jervis, South Australia.

To maintain and enhance its operational excellence, the Bureau will:

- ensure the safety, security, resilience, and relevance of its core operations, including continuing to uplift cyber security monitoring and threat management processes
- continue to focus on the efficient management of its information technology portfolio and apply technologies that enable customer delivery
- continue to uplift its asset and data management capabilities
- continue to strengthen its financial management, accountabilities and assurance controls
- leverage automation and business intelligence to optimise operations
- continue to embed and mature its lifecycle, product, program and project management capabilities.

To develop and apply insight and innovation, the Bureau will:

- leverage emerging technologies and its deep scientific capability to keep pace with the evolving needs of customers, including through continued exploration of artificial intelligence and machine learning
- continue to implement enhancements to its forecasting methods and models, and embed and mature its forecast verification approaches
- invest in partnerships and information exchange with the emergency management sector to support improved operational decision-making and enhance continuous improvement in hazard prevention, preparedness, response and recovery
- continue to strengthen its international and domestic partnerships and collaborations, including with peer meteorological and hydrological agencies and academia.

To enact and embed the Bureau way, the Bureau will:

- maintain an ongoing focus on the health and wellbeing of its people, and further mature its safety culture and work health and safety practices
- ensure the Bureau remains an employer of choice, recognising the needs of its people and equipping them with the tools, skills and opportunities to grow and excel
- retain a strong commitment to the respect of First Nations peoples and cultures and continue work to ensure its workforce reflects the diversity of the community we serve
- continue to build a customer-focused enterprise culture and foster a workplace built on respect, integrity, and stewardship to support a thriving high-performing workforce
- contribute to a safe, secure, productive, and sustainable environment including through continued implementation of its Environmental Sustainability Principles.

Agency Overview

Role and functions

The Bureau of Meteorology (the Bureau) is Australia's national weather, climate, oceans, water and space weather information agency and one of the few organisations in Australia that touches the lives of all Australians every day. Since 1908, the Bureau has proudly provided products and services that contribute to economic prosperity, public safety and community wellbeing. These services include observations, forecasts, warnings, analyses and advice covering Australia's atmosphere, water, ocean and space environments.

This expertise supports governments, emergency services and industry to make informed decisions and assists Australians to live safely and productively within their natural environment.

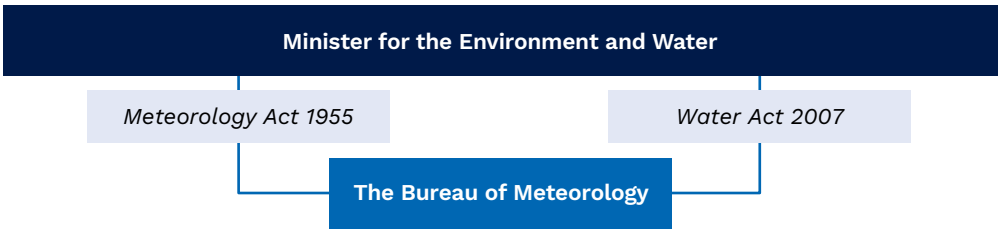
For more information on how the Bureau meets its obligations to the Australian community see the Corporate responsibility chapter (p.179).

Authority

The Bureau operates under the authority of the *Meteorology Act 1955* and the *Water Act 2007*, which together provide the legal basis for its activities. The Bureau must also fulfil Australia's international obligations under the Convention of the World Meteorological Organization (WMO) and related international meteorological treaties and agreements.

The Bureau is an Executive Agency under the *Public Service Act 1999* (Public Service Act) and a non-corporate Commonwealth entity under the *Public Governance, Performance and Accountability Act 2013* (PGPA Act). Under the Public Service Act, the Director of Meteorology has the powers and responsibilities of an Agency Head.

At 30 June 2025, the Director of Meteorology reported to the Minister for the Environment and Water, Senator the Hon Murray Watt. The Australian Climate Service reported to the Assistant Minister for Climate Change and Energy, the Hon Josh Wilson MP.

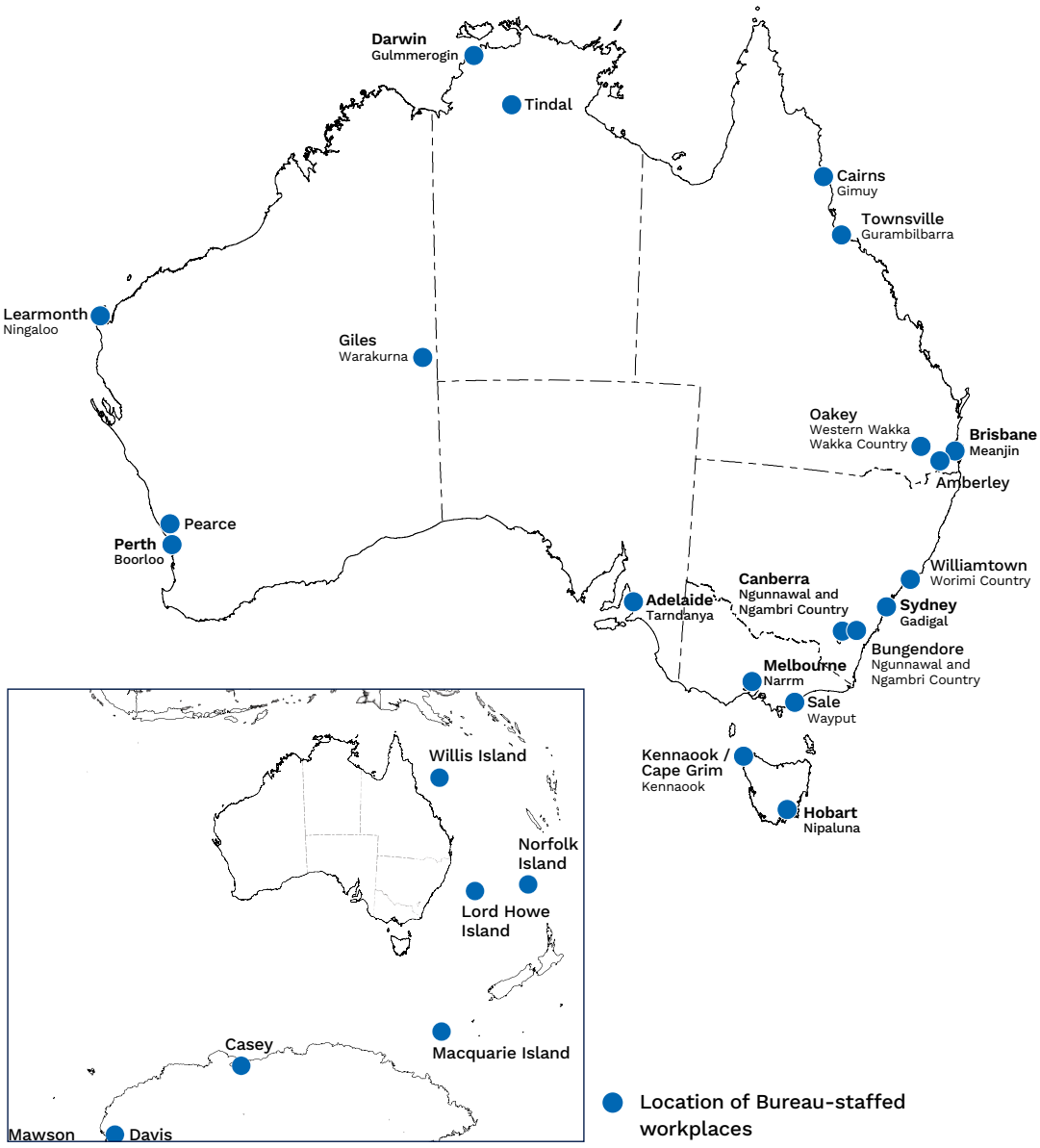


At 30 June 2025, the Bureau operated within the Climate Change, Energy, the Environment and Water Portfolio reporting to the Minister for the Environment and Water.

Location

The Bureau's services span the Australian region encompassing the mainland, Tasmania, Australia's offshore islands and territories (including the Australian Antarctic Territory), and the surrounding oceans and seas. Some Bureau services have greater reach. For example, the Bureau's Volcanic Ash Advisory Centre covers volcanically active regions of Indonesia, Papua New Guinea and the southern Philippines. As a partner in the Joint Australian Tsunami Warning Centre, the Bureau also provides threat information to National Tsunami Warning Centres in Indian Ocean countries.

Bureau staff are located across Australia, on remote islands and in Antarctica. The Bureau's Victorian Office in Docklands, Melbourne, is a centre for administrative and operational activity, and provides overall national strategic planning, management and coordination of the Bureau's services.



Organisational structure

For 2024–25, the Bureau was structured into 5 Groups, each with defined accountabilities and responsibilities. The Bureau's CEO and Director of Meteorology was also the Accountable Authority for the Australian Climate Service. The Corporate governance chapter provides more detail on Bureau governance and an organisational chart (p.160).

Staff

At 30 June 2025, the Bureau had 1,979 total staff, including 1,722 ongoing staff, 117 non-ongoing staff, 125 contractors and 15 external persons (students and visiting scientists). Many staff work around the clock to provide monitoring, forecast and warning services 24 hours a day, every day of the year. Detailed information on the Bureau's staff and the management of human resources is provided in the People management chapter (p.202).

Values

The Australian Public Service values of impartiality, commitment to service, accountability, respectfulness, ethical conduct, and stewardship underpin all our actions and behaviours. These values guide how we treat our customers, our partners and each other. Our Strategy builds on these and describes Bureau-specific values and behaviours.

Safety

We are committed to actively improving the health and wellbeing of our people and strive for zero harm.

Integrity

Our integrity is founded on trust, honesty and reliability.

Customer focus

We listen to our customers, understand their needs and are invested in their success. We strive to provide them with an outstanding experience. We are a pleasure to work with and can be relied upon to deliver.

Passion and tenacity

We are proud of our heritage, who we are, what we do and where we are headed. We deliver in times of crisis. Our deep commitment to our nation's wellbeing drives our success.

Responsibility

We understand and accept our responsibilities. We learn from success and failure. We hold each other to account for our actions and results.

Humility

We are humble in our dealings with each other and our customers. We help each other and operate as one enterprise.

Customers, partners and stakeholders

The Bureau works with a broad range of customers, partners and stakeholders across all sections of the community, and provides special services to an extensive range of Commonwealth, state and local government departments and agencies. These services support emergency management (including prevention, preparedness and response), agriculture, aviation, land and marine transport, energy and resources operations, climate policy, water management, defence and foreign affairs.

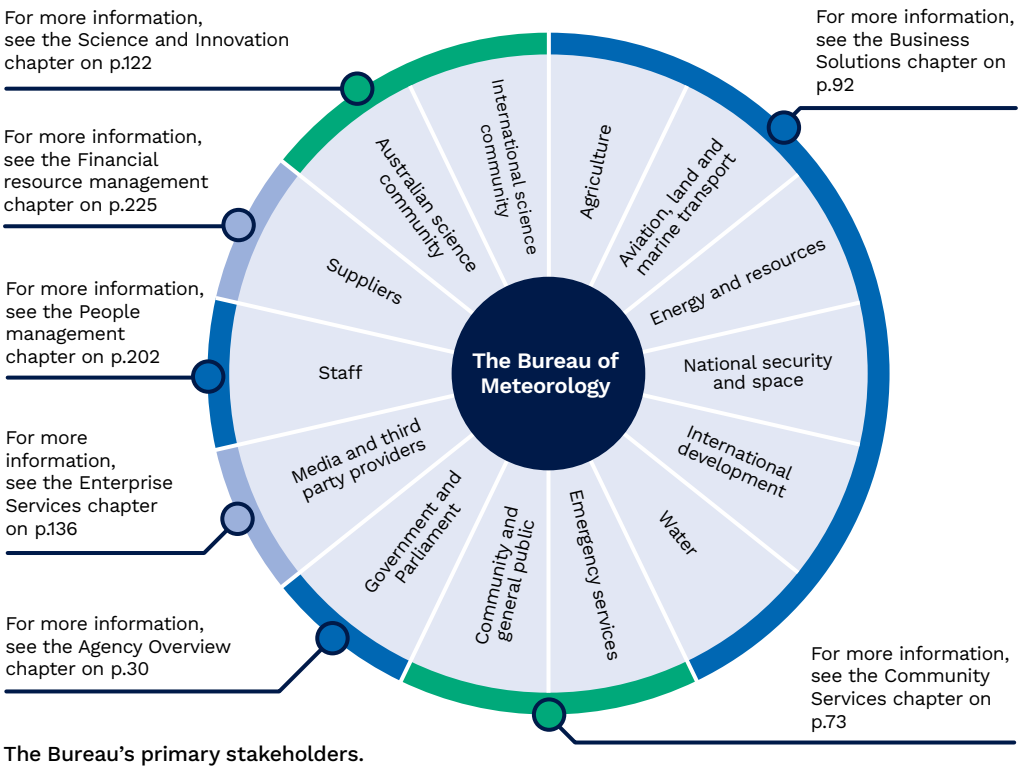
Across almost all sectors of the economy, the Bureau's weather, water, climate, ocean and space weather services support business decisions – from planting to harvesting, excavation to construction, logistics and operational planning. Sector-specific applications of the Bureau's products and services are essential for the safe and efficient operation of many industries (e.g. aviation) that have flow-on benefits for all Australians.

Every day, millions of Australians use the Bureau's information to help make decisions about activities that are affected by the weather. In emergency situations, the Bureau's services enable individuals, families, businesses and communities to make informed decisions about evacuating or preparing themselves for potential or imminent danger.

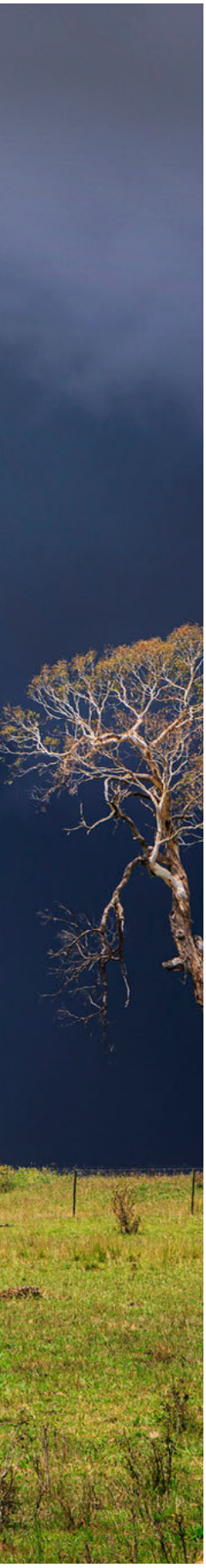
The national and international meteorological and scientific community is another vital partner, as cooperation through sharing global weather observations and research efforts is an essential and integral part of the Bureau's operations.

Other Bureau stakeholders include government ministers and the Parliament, the Australian science community, the media, staff and suppliers.

For information on engagement and outreach activities refer to the Corporate responsibility chapter (p.179).



The Bureau's primary stakeholders.



Section 2:

Annual Performance Statement

Introductory statement

I, Peter Stone, as the Accountable Authority of the Bureau of Meteorology present the Bureau's 2024–25 Annual Performance Statement as required under paragraph 39(1)(a) of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act). In my opinion, the Bureau's Annual Performance Statement accurately reflects the Bureau's performance in achieving its purpose for the year ended 30 June 2025 and complies with subsection 39(2) of the PGPA Act.

Peter Stone

Peter Stone
Acting CEO and Director of Meteorology

2 September 2025

Operating context

The Bureau must respond to the evolving needs of Australian communities, governments and industries to ensure it can remain effective, relevant and viable in the service of Australia's national interests. The following strategic factors are considered to have had a notable effect on the Bureau's work in 2024–25.

Increasing vulnerability to severe weather and weather extremes

Australia's climate is changing. The 2024 State of the climate report found that:

- Australia, on average, has warmed by 1.51 ± 0.23 °C since national records began in 1910, bringing an increase in extreme heat events
- there has been an increase in extreme fire weather, and in the length of the fire season, across large parts of Australia
- there has been a decline of rainfall in Australia's south-east and south-west but an increase of wet season rainfall in northern Australia
- heavy short-term rainfall events are becoming more intense.

These changes present significant social, economic and environmental challenges for Australia. Governments, industry and individuals are looking for information and advice that helps them prepare for and respond to increasingly frequent and intense natural hazards.

While the Bureau's primary role is to enhance the safety and prosperity of all Australians, the Bureau's own operations are impacted by severe weather with prolonged and overlapping events damaging Bureau equipment, providing a reduced window for essential maintenance and impacting staff.

Increasing customer expectations and demand

Customer expectations are changing, with both businesses and individuals requiring more personalised or tailored content that is up-to-date and available 24/7.

Australians are increasingly looking to the Bureau for actionable real-time information that is relevant to their circumstances. Information must be easy to access, regularly updated and easily understandable to allow users to make informed decisions about their activities, especially during hazardous weather events. This requires the Bureau to operate in a constant state of readiness and ensure continuity of service.

Business and governments also have high expectations about the Bureau's products and services. Customer surveys indicate the desire for the Bureau's products and services to be more readily accessible, including providing data in formats that are compatible with customer systems. Customers also want the Bureau to be more innovative and to continue to enhance its products and services, particularly with respect to the usability and timeliness.

Accelerating shift towards renewable energy

To support Australia's continued energy transition and delivery of a secure electricity supply, the Bureau must respond to the growing investment in renewable energy by providing:

- climate information that can inform solar, wind and hydropower installations and production potential
- tailored weather forecasts that support operators to maximise productivity.

Changing global economic structures

Although the Bureau's primary focus is Australia, it:

- has a key role in within the region with respect to volcanic ash, ocean, tsunami warning and Antarctic meteorological services
- supports pacific island nations in developing weather and climate services capability
- supports Defence and national security operations both in Australia and abroad
- is impacted by global supply chains
- is a key player in and beneficiary of international cooperation in meteorology and related services.

The Bureau will continue to monitor shifts in global economic structures and relationships, and potential impacts on the Bureau's critical capabilities, international settings and partnerships. Support for Australia's objective to promote and protect security, resilience and prosperity through international cooperation, particularly in the Indo-Pacific region, will continue to be a priority for the Bureau.

Advances in science and technology

Key improvements in high-performance computing, numerical modelling, artificial intelligence and machine learning are reshaping the way weather, climate and water services are developed and delivered.

Along with these technological advancements, data volumes are increasing. This includes from observing equipment that generates more regular and detailed observations, higher resolution satellites, higher resolution model output delivered more often, increasing system and network analytics.

New technologies are also leading to an increased number of sources offering weather, water and climate information. In this environment, the Bureau must ensure it remains an expert, authoritative and trusted source of weather, water and climate information, as these other sources of this information, including misinformation, grow rapidly.

Evolving cyber security and security threats

Cybersecurity is a fundamental requirement for the Bureau to ensure reliable, uninterrupted and trusted services for Australia as well as protecting the Bureau's customers and partners. Against this requirement is a dynamic and evolving security threat landscape bringing increasing and more sophisticated cyber threats.

In this increasingly uncertain and unpredictable environment the Bureau must maintain and apply effective security controls to protect the Bureau's staff and physical assets.

Evolving policy and regulatory settings

The Australian Government's has commitment to achieving Net Zero in government operations by 2030. Achieving Net Zero means reducing greenhouse gas emissions through a combination of energy efficiency, renewable energy and usage of offsets. This is a significant undertaking for the Bureau given the high electricity use associated with its advanced ICT infrastructure.

The Bureau is also responding to evolving expectations on the Australian Public Service including in stewardship, integrity and evaluation.

Performance Framework

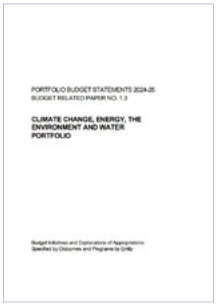
The Bureau operates within the enhanced Commonwealth performance framework in accordance with the PGPA Act.

In 2024–25, resources were provided to the Bureau through the Government Budget as documented in the Portfolio Budget Statements (PBS) for the Climate Change, Energy, the Environment and Water Portfolio. The PBS states the outcome of the Bureau and includes high-level performance requirements. The 2024–25 PBS for the Climate Change, Energy, the Environment and Water Portfolio are available at: www.dcceew.gov.au/about/reporting/budget.

The PGPA Act requires each Commonwealth agency to produce a corporate plan at the beginning of the reporting cycle that sets out its purpose, strategies for achieving its purpose and how success will be measured. The Bureau's Corporate Plan 2024–25 is available online at: beta.bom.gov.au/sites/default/files/2024-08/bureau-of-meteorology-corporate-plan-2024-25.pdf.

At the end of the reporting cycle, agencies are required to produce an annual performance statement and assess the extent to which they have succeeded in achieving their purpose.

This section outlines the Bureau's results for 2024–25 against the purpose and performance criteria published on pages 26-38 of the Bureau's Corporate Plan 2024–25 and on pages 155-156 of the 2024–25 PBS for the Climate Change, Energy, the Environment and Water Portfolio.



2024–25 performance

May 2024

Portfolio Budget Statements 2024–25

1 July 2024

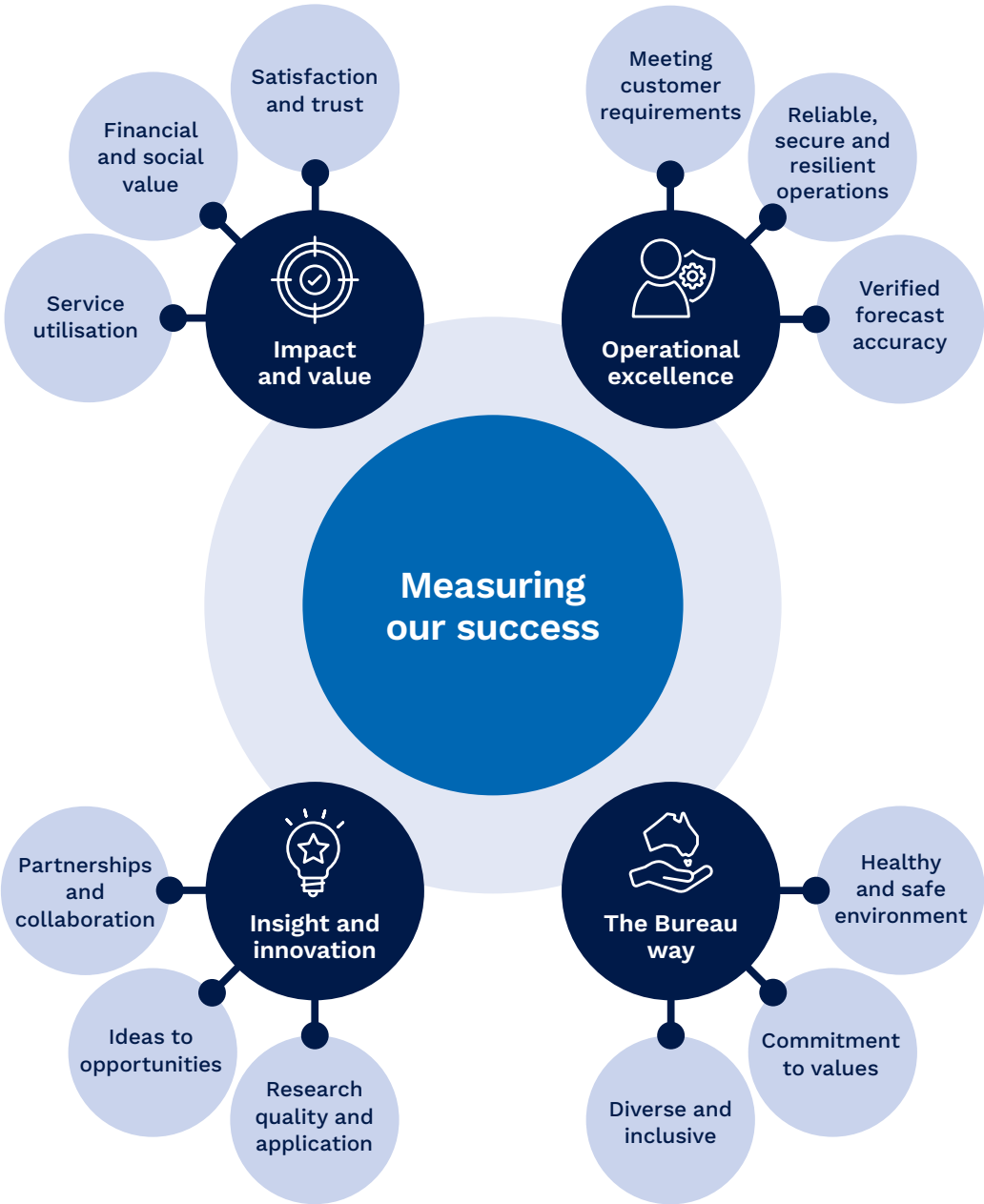
Corporate Plan 2024–25

30 June 2025

Annual Report 2024–25
Annual Performance Statement

Measures of success

The Bureau measures its performance using 12 strategic success measures, summarised below. These measures cover all aspects of the organisation's operations and are structured against the 4 pillars in the Bureau's Strategy 2022–2027.



Performance is reported against these measures, each with a rationale, contributing measures (CMs), targets, linked key activities, methodology and data sources, and any supporting notes or changes from 2023–24. Links to the Bureau's performance criteria contained in the 2024–25 Portfolio Budget Statements are identified within the relevant contributing measures.

This performance information includes a mix of quantitative and qualitative performance measures that provide insight into the Bureau's outputs, efficiency and effectiveness.

The achievement of each contributing measure has been assessed against the following criteria, with deviations from the criteria outlined within the assessment as needed:

Rating	Criteria
Performance met expectations	≥95% of target/s achieved or delivery at or above the expected level of performance
Performance partially met expectations	60% – 94% of target/s achieved or significant progress made towards the expected level of performance, but with shortfalls
Performance did not meet expectations	≤59% of target/s achieved or delivery well below the expected level of performance

The achievement of each strategic success measure has been assessed on the balance of ratings for its contributing measures. Contributing measures are assigned an equal weighting, unless specified in the assessment. For example, if 4 out of 5 contributing measures are rated 'Performance met expectations', the overall rating for the success measure is assessed as 'Performance met expectations'. Further context is provided with the assessment as needed.

Analysis of performance against agency purpose

For 2024–25, the Bureau performed satisfactorily against the performance indicators identified in its Corporate Plan, as detailed in the performance results. The Bureau's performance met expectations for 10 strategic success measures, and partially met expectations for 2 strategic success measures, indicating that the Bureau has been largely successful in delivering its priorities and planned achievements for the year in line with its purpose.

The Bureau's performance results were achieved in the context of a dynamic and complex operating environment (see p.36). This is likely to continue for 2025–26 and the outlook period (2026–27 to 2028–29) as the Bureau continues to amplify and increase the value it provides to Australian communities, industries and governments.

The Bureau made significant progress across each of its 6 key activities that support achievement of its purpose. A summary is provided below with more detail provided in Section 3: Group performance (see p.73).

Key activity	2024–25 achievements
Community Services For more detail see p.73	• providing high-quality weather, water, climate and ocean forecasts and warnings based on a deep understanding of customer needs and their decision-making processes • supplying specialist expertise and local insights to support customers, partners and stakeholders prepare for and respond to severe weather events • preparing and equipping vulnerable communities for high risk weather and working with the community to establish future warning enhancements • introducing new products and services and strengthening existing forecast and warning products to increase the value of Bureau services • providing resilient, customer-focused and sustainable operations including through prolonged and extreme events • collaborating with the emergency management sector to support improved decision-making and enhance Australia's hazard prevention, preparedness, response and recovery
Business Solutions For more detail see p.92	• enabling aviation, land and maritime transport customers to understand weather risks and opportunities to enable them to operate safely and economically • commencing physical remediation of flood warning infrastructure in Queensland to enhance flood forecasts and warnings • responding to Australia's growing investment in renewable energy and the energy sector's reliance on weather forecasts to operate safely and maximise productivity • delivering capability to the water sector to underpin national water security and world-class water supply services • enhancing the agriculture sector's capacity to foresee and manage weather and climate-related opportunities and risks, for greater productivity • delivering tactical, planning and strategic services that support Australia's national security and prosperity and supporting Australia's space industry by delivering space weather and space flight advice • coordinating and delivering products and services that support Australia's foreign policy, security, and international development goals in the Asia-Pacific region
Digital and Data For more detail see p.108	• efficiently managing the Bureau's information technology portfolio for reliable and secure operation, particularly during severe weather events • providing customers with simple, intuitive, trusted and reliable digital experiences that deliver the Bureau products and services • delivering operational systems that allow the Bureau's forecasters and other specialists to produce and deliver the Bureau's products and services • strengthening the Bureau's interconnected network of observing technology to meet the needs of the Bureau, its partners and customers

Key activity	2024–25 achievements
	• further building and embedding capabilities to leverage technology to increase value for the Bureau • uplifting the Bureau's data practices to ensure data and information is easily accessible • uplifting cyber security monitoring and threat management processes
Science and Innovation For more detail see p.122	• developing new techniques and approaches to strengthen the Bureau's impact-based forecast and warning capability, including through the application of artificial intelligence • enhancing the Bureau's Earth system numerical prediction capability of fully integrated atmosphere, ocean, sea-ice and hydrology models • providing seamless weather and climate insights based on historical observations and predictions, from minutes to decades • enhancing probabilistic forecasting methods to provide greater insight into forecast uncertainty for improved decision-making • collaborating with national and international partners to create and deliver practical advancements in meteorological science and related fields • migrating the Bureau's high-performance computing Earth system models to the Bureau's new supercomputer
Enterprise Services For more detail see p.136	• communicating in ways that ensures the Bureau remains an expert, authoritative and trusted source of weather, water, climate, ocean and space weather information • optimising the Bureau's product set and distribution approach to balance customer needs and expectations with rising costs and budget constraints • progressing the Bureau's diversity and inclusion ambition • contributing to a safe, secure, productive, and sustainable work environment • supporting effective governance of the Bureau
Australian Climate Service For more detail see p.146	• bringing together climate and hazard insights relevant to conditions across Australia and how they are changing over time • facilitating improved access to consistent and quality climate data and information • delivering the evidence base and expert advice for the National Climate Risk Assessment • providing expert advice and climate information to support the Hazard Insurance Partnership and Australian Government disaster risk reduction activities • engaging and collaborating across the Commonwealth, with state, territory and local governments, the private sector and experts to build Australia's capability for disaster management and climate adaptation

2024–25 performance results

The Bureau's performance against the 12 strategic success measures (SSMs), planned contributing measures (CMs) and intended targets outlined in its Corporate Plan 2024–25 is outlined below.

Impact and value

Products and services that enhance the wellbeing of all Australians.

SSM01: The financial and social value we deliver to industry, government and the wider community.	Met expectations
Rationale and measure type	The Bureau plays a critical role in helping to protect life and property through hazard preparedness and response during severe weather events and supporting key industries to operate safely and productively. This measure aims to demonstrate the Bureau's effectiveness in meeting its Outcome of supporting a safe, prosperous, secure and healthy Australia.
Overall result and rating	Performance was measured across 5 contributing measures, with all 5 assessed as having met expectations. Performance met expectations overall for this success measure 2024–25, as it did for comparable measures in 2023–24.
Note	The impact of the Bureau's work to protect Australians, mitigate property damage and enhance economic prosperity varies from year-to-year given the annual variations in severe weather activity. CM1.2, CM1.3, CM1.4 and CM1.5 are included as a combined performance measure in the Bureau's Portfolio Budget Statements.

CM1.1: Mitigation of property damage and reduced long-term trend in fatalities from extreme weather events	Met expectations
Key activity	Community Services
Target	Annual estimated value of damage mitigated and reduction in long-term trend in fatalities from bushfires, floods, tropical cyclones and severe thunderstorms.
Results and rating	Performance met expectations. The Bureau provided customers with information, including forecasts and warnings, to help protect life and property during severe weather events, contributing to the long-term downward trend in the annual number of fatalities per capita in Australia from bushfires, tropical cyclones and severe thunderstorms. The annual number of flood-related fatalities per capita since 1992 has remained steady. Data showing fatalities attributed to heatwaves is not yet sufficiently robust to compare over time.

	The Bureau's services are estimated to have helped mitigate around $46 million in damage from severe weather events in 2024 based on Insurance Council of Australia estimates of $585 million in insured losses from floods.
Previous results	Performance met expectations in 2023–24. Bureau services contributed to the long-term downward trend in the number of fatalities per capita in Australia from bushfires, tropical cyclones and severe thunderstorms and were estimated to have helped mitigate around $175 million in damage.
Methodology and data sources	Estimated value of damage mitigated is calculated from third-party data on annual insured losses from extreme weather events and the estimated level of mitigation by Bureau services. Fatality trends from extreme weather events are calculated from third-party data as 20-year rolling averages per 100,000 population.

CM1.2: Economic value added to Australia's water sector	Met expectations
Key Activity	Business Solutions
Target	>$100 million
Results and rating	Performance met expectations. The Bureau contributed an estimated $410 million in economic value to Australia's water sector in 2024–25. This has been achieved via provision of water information including the National Water Account and the Urban National Performance Report, and by providing new information to support the Murray–Darling Basin Authority review of the sustainability of the Murray Darling Basin.
Previous results	Performance met expectations in 2023–24. The Bureau contributed an estimated $410 million in economic value to Australia's water sector.
Methodology and data sources	Internal analysis and assessment of the annual value of the Bureau's water information to the sector and the Bureau's contributions to Australian water reform.

CM1.3: Economic value added to Australia's aviation sector	Met expectations
Key Activity	Business Solutions
Target	>$80 million
Results and rating	Performance met expectations. The Bureau contributed to the delivery of an estimated $109 million of economic value to Australia's aviation sector in 2024–25 based on estimated fuel savings and contractual aviation services at new locations.
Previous results	Performance met expectations in 2023–24. The Bureau contributed an estimated $194 million of economic value to Australia's aviation sector.
Methodology and data sources	Internal analysis and assessment of third-party data on annual fuel savings and contractual service agreements to the sector.

CM1.4: Economic value added to Australia's energy and resources sectors	Met expectations
Key Activity	Business Solutions
Target	>$80 million
Results and rating	Performance met expectations. The Bureau contributed an estimated minimum $80-120 million of economic value to Australia's energy, resources and telecommunications sectors in 2024–25 by providing specialised services to help mitigate the impacts of severe weather, optimise production, enable the transition towards net zero and keep a highly-exposed workforces safe.
Previous results	Performance met expectations in 2023–24. The Bureau contributed an estimated minimum $80-120 million of economic value to resource sector customers and an estimated $50-100 million of economic value to energy sector customers.
Methodology and data sources	Internal analysis and assessment of avoided costs and contractual service agreements to the sectors.

CM1.5: Economic value added to Australia's agriculture sector	Met expectations
Key Activity	Business Solutions
Target	>$50 million
Results and rating	Performance met expectations. The Bureau contributed an estimated $136 million of economic value to Australia's agriculture sector in 2024–25. This has been achieved via continued uplift of the sector's forecast interpretation skills and targeted extreme weather services amongst other activities.
Previous results	Performance met expectations in 2023–24. The Bureau contributed an estimated $154 million of economic value to Australia's agriculture sector.
Methodology and data sources	Internal analysis and assessment of the annual value of the Bureau's seasonal forecasts to the sector.

SSM02: The levels of satisfaction and trust our customers, partners and stakeholders have in the products and services we provide.	Partially met expectations
Rationale and measure type	The Bureau produces essential products and services that are used by the community, industry and government to inform decision-making. This measure aims to gauge the effectiveness of these products and services as assessed by those that use them, and ensure they are meeting their intended purpose.
Overall result and rating	Performance was measured across 4 contributing measures: • 2 contributing measures met expectations • 2 contributing measures partially met expectations.

	On balance, performance was assessed as partially meeting expectations overall for 2024–25, after meeting expectations for comparable measures in 2023–24.
Note	CM2.1 and CM2.3 are included as a combined performance measure in the Bureau's Portfolio Budget Statements.

CM2.1: Proportion of community, partner and emergency services customers that report an overall positive experience with Bureau services	**Partially met expectations**
Key activity	Community Services
Target	90%
Results and rating	Surveys found that an average of 82% of community customers rated their recent experience with using Bureau products or services as 'very easy' (a rating of 8-10 out of 10) in 2025, a slight improvement from the previous period. Surveys of emergency management customers (see 'Changes from 2023–24' below) found that an average of 89% reported that they trust the Bureau, 92% have good perception of the Bureau and 81% are satisfied with the Bureau products and services they receive. Although there were some strong results in the emergency management customer surveys, overall is it assessed that performance partially met expectations.
Previous results	Performance partially met expectations in 2023–24. 80% of community customers and 66% of partner and emergency management customers reported an overall positive customer experience.
Methodology and data sources	Quarterly customer satisfaction surveys of the Australian community were conducted by an external provider with expertise in designing and conducting customer surveys. 1,511 responses were received in total, with annual results calculated as an average across the 4 survey rounds in 2024–25. Customer satisfaction surveys of emergency services customers were conducted through the Bureau's Customer Relationship Management system. 48 responses were received in total, with annual results calculated as an average for the 2025 survey.
Changes from 2023–24	The Bureau implemented a new approach to measuring the customer experience of its emergency services, industry, and government customers in 2024–25. Due to changes in the methodology, results for emergency services customers cannot be directly compared with previous years.

CM2.2: Net promoter score for Bureau forecast and warning services	**Partially met expectations**
Key Activity	Community Services
Target	+55 for community customers

Results and rating	Performance partially met expectations. Surveys of community customers reported an average Net Promoter Score (see 'Methodology and data sources' below) of +48, a notable improvement from the previous period but below the target. Noting that possible scores range from -100 to +100, the Bureau's positive scores indicate customer satisfaction and loyalty continues to be strong despite not achieving the annual targets for 2024–25.
Previous results	Performance did not meet expectations in 2023–24. A Net Promoter Score of +43 was reported for community customers.
Methodology and data sources	Surveys were undertaken as per CM 2.1. The Net Promotor Score measures the likelihood that respondents would recommend the Bureau's weather forecasting and severe weather warnings services.

CM2.3: Proportion of industry and government customers that report they are satisfied or very satisfied with Bureau services	**Met expectations**
Key Activity	Business Solutions, Australian Climate Service
Target	Year-on-year maintenance or increase
Results and rating	Performance met expectations overall. Surveys of industry and government customers found that an average of 91% reported that they trust the Bureau, 83% have good perception of the Bureau and 75% are satisfied with the Bureau products and services they receive. Government customers provided positive feedback on the delivery of key Australian Climate Services activities, including finalising climate indices data and support materials, delivering briefings on the National Climate Risk Assessment insights, and delivering data insights for flood projections and insurance to the National Emergency Management Agency (NEMA) and the Hazards Insurance Partnership.
Previous results	Performance met expectations in 2023–24. Positive feedback was received from key customers in the water, agriculture, energy, resources and national security sectors and from customers of the Meteorological Authority Office.
Methodology and data sources	Customer satisfaction surveys of industry and government customers were conducted through the Bureau's Customer Relationship Management system. 147 responses were received in total, with annual results calculated as an average for 2025. 2024–25 results set the baseline for future reporting. Feedback was gathered from key ACS stakeholders during the year.
Changes from 2023–24	CM2.3 adjusted for 2024–25 to provide a more quantitative focus. The Bureau implemented a new approach to measuring the customer experience of its emergency services, industry and government customers in 2024–25. Due to changes in the methodology results for industry and governments customers cannot be directly compared with previous years.

CM2.4: Overall customer satisfaction across Bureau digital channels	Met expectations
Key Activity	Data and Digital, Enterprise Services
Target	Year-on-year maintenance or increase
Results and rating	Performance met expectations overall. The BOM Weather app continued to be Australia's top-ranked free weather app, with a customer experience (CSAT) score of 83.6%, exceeding the target of 70%. The app recorded an average rating of 4.6 in the Google Play Store and 4.7 in the Apple App Store, unchanged from the previous year.
Previous results	Performance met expectations in 2023–24. The BOM Weather app reported a CSAT score of 85%. The app recorded an average rating of 4.6 in the Google Play Store and 4.7 in the Apple App Store.
Methodology and data sources	Internal analysis of customer satisfaction and app store data for the BOM Weather App. Annual results are calculated averages from 1 July 2024 to 30 June 2025.

SSM03: The utilisation of our services by new customers and existing customers.	Met expectations
Rationale and measure type	The value of the Bureau's products and services is realised when they are used by customers to achieve a positive outcome. This measure aims to ensure the Bureau is maximising the value of its work by maintaining engagement with existing customers while expanding the reach of its work to new users.
Overall result and rating	Performance was measured across 3 contributing measures: • 2 contributing measures met expectations • 1 contributing measure partially met expectations. Performance met expectations overall for 2024–25, as it did for comparable measures in 2023–24.

CM3.1: Proportion of community customers that nominate Bureau services as a primary source to enable decision-making	Partially met expectations
Key Activity	Community Services
Target	35%
Results and rating	Performance partially met expectations. Surveys found that an average of 31% of community customers nominated a Bureau source as their most used source for accessing forecasts or warnings, below the target of 35%.
Previous results	Performance partially met expectations in 2023–24. 30% of general community customers nominated a Bureau source as their most used source.
Methodology and data sources	Surveys undertaken as per CM 2.1.

CM3.2: Proportion of emergency services, industry and government customers and partners that nominate Bureau services as a primary source to support their decision-making	Met expectations
Key Activity	Community Services, Business Solutions
Target	75%
Results and rating	Performance met expectations. Surveys found that 88% of emergency management customers and 85% of industry and government customers used Bureau products as a primary information source to support their decision-making.
Previous results	Performance met expectations in 2023–24. 88% of partner and emergency management customers surveyed nominated a Bureau source as their most used source.
Methodology and data sources	Customer satisfaction surveys of emergency management, industry and government customers were conducted through the Bureau's Customer Relationship Management system. 195 responses were received, with annual results calculated as an average for the 2025 survey.
Changes from 2023–24	As per CM 2.1 and CM 2.3.

CM3.3: Usage of and engagement with Bureau digital channels	Met expectations
Key Activity	Enterprise Services, Data and Digital, Australian Climate Service
Target	Year-on-year maintenance or increase
Results and rating	Performance met expectations. Usage of the BOM Weather app continued to increase in 2024–25 with: • 3 million total downloads during the year and 16.9 million total downloads since launch • an average of 4.3 million monthly active users • 1.2 billion total visits. Growth in engagement across the Bureau's social media platforms continued in 2024–25, with followers increasing across all platforms. At 30 June 2025, the Bureau had over 2.36 million total followers, an increase of more than 10% from the previous year. Products such as My Climate View showed continued engagement during 2024–25. Usage of the Australian Climate Service website steadily increased during 2024–25. The ACS also enhanced its data explorer webpages, providing improved access to integrated climate and hazard data for government agencies, businesses, and the community.
Previous results	Performance met expectations in 2023–24. The BOM Weather app had 2.5 million total downloads during the year, and the Bureau had over 2.14 million total followers across its social media platforms.
Methodology and data sources	Internal analysis of usage data for the BOM Weather App, the Bureau's social media channels, the My Climate View website and the Australian Climate Service website. Annual results are calculated as totals or averages from 1 July 2024 to 30 June 2025.

Operational excellence

Outstanding people supported by secure, effective and resilient systems, processes and technology.

SSM04: Our delivery against agreed customer requirements and commitments.	Met expectations
Rationale and measure type	Customers use the Bureau's products and services to plan, make decisions, optimise their activities and manage risks. This measure aims to ensure the Bureau is effectively delivering the specific outputs to which it has committed, and that its customers need.
Overall result and rating	Performance was measured across 5 contributing measures with all 5 assessed as having met expectations. Performance met expectations overall for 2024–25, as it did for comparable measures in 2023–24.

CM4.1: Delivery against the requirements of the Intergovernmental Agreement on the Provision of Bureau of Meteorology Hazard Services to the States and Territories and delivery of agreed Hazards Services Forum recommendations	Met expectations
Key Activity	Community Services
Target	Requirements met
Results and rating	Performance met expectations. The Bureau delivered services to state and territory emergency services agencies in line with the Intergovernmental Agreement (IGA) during 2024–25. The Hazards Services Forum provided in-principal endorsement for revised IGA terms of reference and service schedules, and new service request methodology principles. Development also commenced on validation reports for flash flooding and aerial intelligence, and on a proposal for Pyrocumulonimbus model operationalisation.
Previous results	Performance met expectations in 2023–24. The Bureau delivered services to state and territory emergency services agencies in line with the IGA.
Methodology and data sources	Internal analysis and assessment of delivery, including engagement and feedback from Hazards Services Forum members.

CM4.2: Proportion of community customers report that the Bureau's information enables their decision-making	Met expectations
Key Activity	Community Services
Target	60%
Results and rating	Surveys found that an average of 68% of general community customers reported that the Bureau's information enabled their decision-making in 2024–25, exceeding the target of 60%.
Previous results	Performance met expectations in 2023–24. 65% of general community customers reported that the Bureau's information enabled their decision-making.
Methodology and data sources	As per CM 2.1.

CM4.3: Proportion of emergency services, industry and government customers and partners that report the Bureau's information enables their decision-making	Met expectations
Key Activity	Community Services, Business Solutions
Target	80%
Results and rating	Performance met expectations overall. Surveys of emergency services customers found that: • 83% reported a positive response for 'Bureau products and services are relevant to my/our needs.' • 88% reported a positive response for 'Bureau products and services deliver value to me/my organisation.' • 79% reported a positive response for 'Bureau products help me/my organisation achieve my/our objectives.' Surveys of industry and government customers found that: • 84% reported a positive response for 'Bureau products and services are relevant to my/our needs.' • 83% reported a positive response for 'Bureau products and services deliver value to me/my organisation.' • 76% reported a positive response for 'Bureau products help me/my organisation achieve my/our objectives.'.
Previous results	Performance met expectations in 2023–24. 79% of emergency management customers reported that the Bureau's information enabled their decision-making.
Methodology and data sources	As per CM 2.1 and CM 2.3. Result calculated as the average across the 6 survey questions.
Changes from 2023–24	As per CM 2.1 and CM 2.3.

CM4.4: Delivery of Defence meteorological services meets or exceeds agreed service levels in support of tactical, planning and strategic activities	Met expectations
Key Activity	Business Solutions
Target	Requirements met
Results and rating	Performance met expectations. The Bureau's Defence meteorological services were delivered as per the requirements of the Meteorological Service Agreement. Feedback received for Defence Weather Services indicates that customers value the embedded relationships and are satisfied with the quality, timeliness, accuracy and responsiveness of the service delivered. Feedback also shows a high level of satisfaction with the support provided for individual military exercises.
Previous results	Performance met expectations in 2023–24. The Bureau's Defence meteorological services met or exceeded agreed service levels as per the Meteorological Service Agreement.
Methodology and data sources	Internal analysis and assessment of service delivery, including engagement and feedback from Defence customer representatives.
CM4.5: Delivery of aviation meteorological services meets or exceeds International Civil Aviation Organization standards and recommended practices for Australia's area of responsibility and aviation industry standards	**Met expectations**
Key Activity	Business Solutions
Target	Requirements met
Results and rating	Performance met expectations. The Bureau's aviation meteorological services continued to meet the requirements of the International Civil Aviation Organization and the needs of industry in 2024–25.
Previous results	Performance met expectations in 2023–24. The Bureau's aviation meteorological services met the requirements of the International Civil Aviation Organization and the needs of the aviation industry.
Methodology and data sources	Internal analysis and assessment of service delivery, including audit outcomes and engagement and feedback from aviation sector representatives.

SSM05: Capacity utilisation, system reliability, security and resilience benchmarked against best practice.	Met expectations
Rationale and measure type	The work of the Bureau is underpinned by a complex array of technologies and systems located across Australia, its surrounding oceans and islands, and in Antarctica. These systems operate around the clock and are particularly critical during severe weather events. This measure aims to provide assurance about the reliability, efficiency, quality and security of these systems in providing uninterrupted access to Bureau services.
Overall result and rating	Performance was measured across 6 contributing measures: • 5 contributing measures met expectations • 1 contributing measure partially met expectations. Performance met expectations overall for 2024–25, as it did for comparable measures in 2023–24.

CM5.1: Observing networks and high-performance computing systems meet agreed performance targets for uptime and capacity utilisation	Met expectations
Key Activity	Data and Digital
Target	Agreed performance targets met
Results and rating	Performance met expectations overall. Average performance across all observing networks was 95.1%, exceeding the 95% target. The Bureau's critical observing networks and high-performance computing systems operated at levels necessary to maintain current services. Individual network performance (against the 95% target) was as follows: • Satellite network availability was 97.0%. • Tsunami network availability was 95.7%. • Radar network availability was 95.6%. • Wind profiler availability was 95.5%. • Automatic Weather Station (AWS) uptime was 98.7%. • Upper air network availability was 94.2%. Availability was impacted by a long-term outage. • Space weather network availability was 81.0%. Availability was impacted by long-term magnetometer outages and ionosonde upgrades progressing slower than planned. • Coastal sea level network availability was 87.8%. Availability was impacted by long-term outages requiring host wharf infrastructure repair and return to service activities by Bureau staff. • Marine network availability was 73.5%. Availability was impacted with wave buoys offline due to vandalism and communications issues and ongoing restoration of ship-borne AWS. Performance of the Bureau observing networks – especially for those networks that performed below the 95% target – is expected to improve as future network enhancements are implemented over a multi-year timeframe.

	Average production availability of the Bureau's Australis supercomputer was 99.9%, exceeding the 99.5% target. Average production capacity utilisation of the Bureau's Australis supercomputer was 65.5%, exceeding the 30% target.
Previous results	Performance partially met expectations in 2023–24. The Bureau's critical observing networks and high-performance computing systems operated at levels necessary to maintain current services.
Methodology and data sources	Internal analysis of availability and utilisation of the Bureau's observing networks and high performance computing systems. Annual results are calculated as averages for the period 1 July 2024 to 30 June 2025. 'All observing networks' availability is calculated as a weighted average based on the number of assets in each network.
Changes from 2023–24	Observing network availability targets were revised for 2024–25 from a range of targets across the networks to a common target of 95% average availability.

CM5.2: Compliance of staff with 'required for role' competencies	**Met expectations**
Key Activity	Enterprise Services, Community Services
Target	>95%
Results and rating	Performance met expectations. At 30 June 2025, overall compliance with 'Required for Role' competencies was 98%, with the following service levels: • National water and flood operations: 100% • Tropical cyclone warning lead: 100% • Fire weather: 97% • Tsunami: 100% • Marine (high seas) forecasting: 100% • Thunderstorm forecasting: 97% • Graphical Forecast Editor (GFE) foundation skills: 100% • GFE advanced skills: 94%.
Previous results	Performance met expectations in 2023–24. Of the Bureau's 294 operational meteorological forecasters, 292 had meteorological qualifications that met or exceeded the international standard, as defined by the World Meteorological Organization.
Methodology and data sources	Internal analysis on levels of operational capability across competency types at 30 June 2025.
Changes from 2023–24	CM5.2 was revised for 2024–25 to focus on the proportion of competency compliance to provide a better assessment of operational capabilities.

CM5.3: Compliance of identified quality management systems with ISO 9001	Met expectations
Key Activity	Enterprise Services
Target	Certification achieved or maintained
Results and rating	Performance met expectations. Six certified Quality Management Systems (QMS) maintained their existing certification of compliance to ISO 9001: • Aviation Meteorological Services • the Meteorological Authority Office • Defence Weather Services • Energy and Resources Program • Tsunami Warning Services • Operational Technology and Engineering.
Previous results	Performance met expectations in 2023–24. Six certified QMS maintained their existing certification of compliance to ISO 9001.
Methodology and data sources	External audits on the Bureau's quality management systems completed by third-party providers.

CM5.4: Data information management maturity score	Met expectations
Key Activity	Data and Digital
Target	Improvement in data maturity score from National Archives of Australia (NAA) Check-up PLUS questionnaire
Results and rating	Performance met expectations. The Bureau's 2024 Check-up PLUS data maturity score was 3.76, improving from the previous period and exceeding the average for Australian Government agencies (3.70).
Previous results	Performance met expectations in 2023–24. The Bureau’s 2023 Check-up PLUS data maturity score was 3.67.
Methodology and data sources	2024 self-assessment of the Bureau's data and information management maturity completed by the Bureau using the NAA Check-up PLUS questionnaire.

CM5.5: Protective security maturity score	Partially met expectations
Key Activity	Enterprise Services
Target	Improvement in Protective Security Policy Framework (PSPF) maturity towards Level 3 for the majority of policy indicators by June 2025
Results and rating	Performance expectations were partially met. The Bureau implemented improvements in a range of security domains during 2024–25, particularly related to security procedures and a revised Bureau Protective Security Plan, however the Bureau's overall maturity improvement progressed slower than planned. The Bureau's next PSPF maturity assessment will be completed in early 2025–26.
Previous results	Performance partially met expectations in 2023–24. The Bureau implemented improvements in a range of security domains, albeit slower than planned. Maturity assessments demonstrated material improvement in relevant technical domains of security measured against Government policy standards.
Methodology and data sources	Internal analysis of security maturity activities. The PSPF maturity assessment is overseen by the Department of Home Affairs.
CM5.6: Risk and business continuity maturity scores	**Met expectations**
Key Activity	Enterprise Services
Target	Improvement in risk and business continuity maturity scores from external surveys and assessment
Results and rating	Performance met expectations. The Bureau's 2025 Comcover Risk Benchmarking Survey results showed increased maturity across all key areas of focus. The Bureau's Overall maturity level increased from 'Defined' (3 out of 5) to 'Embedded' (4 out of 5). Assessment of the Bureau's business continuity maturity 2024–25 showed an increased maturity level from 'Standards Compliant' (3 out of 5) to 'Integrated' (4 out of 5).
Previous results	Performance met expectations in 2023–24. The Bureau delivered several initiatives to improve its risk management maturity, and a self-assessed business continuity maturity maintained the 'Level 3 – Standards Compliant'.
Methodology and data sources	Assessment of risk maturity through the 2025 Comcover Risk Benchmarking Survey. Self-assessment of business continuity maturity against the British Standards Institute business continuity maturity model.

SSM06: Verification of our products and services.	Met expectations
Rationale and measure type	The Bureau routinely measures the accuracy and timeliness of its forecast and warning products using a range of recognised verification techniques. This measure aims to present this information so that customers, and the Australian community more generally, can have confidence in the Bureau's products and services and their improvements over time.
Overall result and rating	Performance was measured across 6 contributing measures, with all 6 assessed as having met expectations. Performance met expectations overall for 2024–25, as it did for comparable measures in 2023–24.
Changes from 2023–24	For 2024–25, the existing contributing measure on the verification of Bureau products and services was separated into 6 contributing measures to improve the visibility of key products and services.

CM6.1: Accuracy, lead time and timeliness of flood forecasts	Met expectations
Key Activity	Community Services
Target	• Accuracy (within Service Level Specifications (SLS)): 70% • Lead time (within SLS): 70% • Timeliness: 97%
Results and rating	Performance met expectations overall and showed improvements compared to the previous year. In 2024–25: • 69% of flood forecast lead times met SLS targets, just below the target of 70% • 80% of flood forecast peak height predictions met SLS targets, exceeding the target of 70% • timeliness of flood warnings and flood watches was 98%, exceeding the target of 97%.
Previous results	In 2023–24: • 69% of flood forecast lead times met SLS targets • 74% of flood forecast peak height predictions met SLS targets • Timeliness of flood warnings and flood watches was 97%.
Methodology and data sources	Flood forecast and warning data from the Bureau's verification systems is compared with observed conditions. Results are calculated as averages for the period 1 July 2024 to 30 June 2025.

CM6.2: Accuracy of fire weather forecasts	Met expectations
Key Activity	Community Services
Target	Average accuracy of Fire Behaviour Indices: 75%
Results and rating	Performance met expectations and showed improvements compared to the previous year. In 2024–25 the accuracy of the primary fire behaviour index was 96% and the secondary fire behaviour index was 94%, both exceeding the target of 75%.
Previous results	In 2023–24 the average accuracy of the primary and secondary fire behaviour indices was 95% and 92% respectively.
Methodology and data sources	Fire weather forecast and warning data from the Bureau's verification systems is compared with observed conditions. Results are calculated as averages for the period 1 July 2024 to 30 June 2025.

CM6.3: Accuracy of tropical cyclone forecasts	Met expectations
Key Activity	Community Services
Target	• Position error: consistent with 5-year average • Intensity error: consistent with 5-year average
Results and rating	Performance met expectations overall and was consistent with the previous year. In 2024–25: • forecast track location errors were better than the 5-year average for all lead times greater than 48 hours. • intensity errors were comparable to the 5-year average for lead times of 0-48 hours but were slightly worse than the 5-year average for lead times of 72–120 hours.
Previous results	In 2023–24: • position errors were better than the 5-year average for all lead times • intensity errors were better than the 5-year average for lead times of 0–72 hours but were worse than the 5-year average for lead times of 96–120 hours.
Methodology and data sources	Tropical cyclone forecast data from the Bureau's verification systems is compared with observed conditions. Annual results are calculated as averages for the period 1 July 2024 to 30 June 2025.

CM6.4: Timeliness of severe weather warnings	Met expectations
Key Activity	Community Services
Target	Timeliness of: • Severe weather warnings: 87% • Regional severe thunderstorm warnings: 96% • Detailed severe thunderstorm warnings: 93%

Results and rating	Performance met expectations overall and showed some improvements compared to the previous year. In 2024–25: • timeliness of severe weather warnings was 91%, exceeding the target of 87% • timeliness of regional severe thunderstorm warnings was 99%, exceeding the target of 96% • timeliness of detailed severe thunderstorm warnings was 92%, slightly below the target of 93%.
Previous results	In 2023–24: • timeliness of severe weather warnings was 88% • timeliness of regional severe thunderstorm warnings was 98% • timeliness of detailed severe thunderstorm warnings was 96%.
Methodology and data sources	Severe weather warning data from the Bureau's verification systems is compared with observed conditions. A warning is on time if the issue time is before or at the previously stated next issue time. Annual results are calculated as averages for the period 1 July 2024 to 30 June 2025.

CM6.5: Timeliness of tsunami warnings	Met expectations
Key Activity	Community Services
Target	Response time for 'No Threat' and 'Watch' bulletins: within 30 minutes of an alert regarding a potentially dangerous earthquake
Results and rating	Performance met expectations and was consistent with the previous year. In 2024–25 the average response time for the Australian Tsunami Warning System (ATWS) was 15.9 minutes, within the target response time of 30 minutes.
Previous results	In 2023–24 the average response time for the ATWS was 16.0 minutes.
Methodology and data sources	Tsunami warning data from the Bureau's operational systems. Annual results are calculated as averages for the period 1 July 2024 to 30 June 2025.

CM6.6: Accuracy of wind and temperature forecasts	Met expectations
Key Activity	Community Services
Target	• Wind accuracy (within 5 knots): 85% • Maximum temperature (within 2°C): 90% • Minimum temperature (within 2°C): 85%

Results and rating	Performance met expectations overall and was largely consistent with the previous year. In 2024–25: • 90.4% of next-day wind speed forecasts were within 5 knots of the observed wind speed, exceeding the target of 85% • 91.3% of next-day maximum temperature forecasts were within 2°C of the observed temperature, exceeding the target of 90% • 82.8% of next-day minimum temperature forecasts were within 2°C of the observed temperature, slightly below the target of 85%.
Previous results	In 2023–24: • 91.0% of next-day wind speed forecasts were within 5 knots of the observed wind speed • 90.9% of next-day maximum temperature forecasts were within 2°C of the observed temperature • 82.4% of next-day minimum temperature forecasts were within 2°C of the observed temperature.
Methodology and data sources	Wind and temperature forecast data from the Bureau's verification systems is compared with observed conditions. Annual results are calculated as averages for the period 1 July 2024 to 30 June 2025.

Insight and innovation

Practical implementation of novel, mission-directed solutions for our customers.

SSM07: The depth, breadth and resilience of our external partnerships and collaborations.	Met expectations
Rationale and measure type	Working with other organisations – both nationally and internationally – is an integral part of the Bureau's operations. Whether it's in science, technology, data sharing or delivering services, strong collaboration is essential for achieving the Bureau's purpose. This measure seeks to ensure the Bureau is effectively building and maintaining these critical relationships.
Overall result and rating	Performance was measured across 2 contributing measures, both of which were assessed as having met expectations.

CM7.1: Value and effectiveness of partnerships and collaborations, assessed by the Bureau and its partners	Met expectations
Key Activity	All
Target	Year-on-year maintenance or increase
Results and rating	Performance met expectations. Relationships were renewed and established with a wide range of customers, partners and stakeholders – nationally and internationally – in 2024–25. The Hazards Services Forum continued to demonstrate the productive collaboration between the Bureau and its federal, state and territory emergency management partners. All existing contracts for embedded meteorologists were renewed or continued in 2024–25, with 10 embedded meteorologists and 2 hydrologists in State Operational Centres in Queensland, New South Wales, Victoria, South Australia and Western Australia. The Bureau also provided embedded services to the National Situation Room in Canberra. The Bureau continued to expand existing relationships and establish new partnerships in the energy and national security sectors, including through the renewal of the Strategic Relationship Agreement with the Australian Energy Market Operator (AEMO) and a new Memorandum of Understanding to support long-term collaboration on the Bluelink ocean forecasting platform with the Department of Defence and CSIRO. The Bureau also undertook considerable stakeholder engagement activities with councils in Queensland and New South Wales as implementation of the 10-year national Flood Warning Infrastructure Network (FWIN) Program continued. The rate of return for industry customers was 88% in 2024–25. Revenue from industry customers grew by 4.1% and the number of contracts increased by 23% compared to 2023–24.

	The Australian Climate Services partnership grew in strength to work together to provide enhanced national climate and weather hazard and climate risk intelligence capability. The Bureau's scientific partnerships and collaborations continued to expand in 2024–25 as the Bureau is recognised as a valued stakeholder. International and domestic partners continue to look for mutually beneficial opportunities to collaborate on and engage with Bureau services. This is evident with the establishment of additional projects under the MOMENTUM Partnership and the Strategic Relationship Arrangement with the Singapore National Environment Agency, and as well as with several domestic partners.
Previous results	Performance met expectations in 2023–24. Strong relationships were renewed and established with a wide range of customers, partners and stakeholders.
Methodology and data sources	Internal analysis and assessment of the Bureau's partnerships and collaborations, including drawing on stakeholder feedback and formal agreements.

CM7.2: Achievement of the Bureau's performance standards as a regulator under the *Water Act 2007* demonstrates collaboration and engagement	**Met expectations**
Key Activity	Business Solutions
Target	Standards met
Results and rating	Performance met expectations. The Statement of Expectations and Statement of Intent on the Bureau's functions as a regulator under the *Water Act 2007* (the Water Act) were developed collaboratively with the Department of Climate Change, Energy, the Environment and Water (DCCEEW) and the Minister for Water to align focus and policy direction. Documentation met performance reporting and publishing requirements, supporting transparency and compliance with mandated deliverables.
Previous results	Performance met expectations in 2023–24. The Bureau commenced implementation of key recommendations of the National Performance Report Indicator Review and supported key government water reforms, noting that interim arrangements for the Bureau's delivery of functions as a regulator were in place during 2023–24.
Methodology and data sources	Internal assessment and analysis of delivery of the Bureau's functions as a regulator, including drawing on stakeholder feedback and internal records of stakeholder interactions.
Changes from 2023–24	The Ministerial Statement of Expectations outlining the regulatory functions administered by the Bureau under the Water Act was issued on 17 January 2025. The Bureau's Statement of Intent in response to the outlined expectations was issued on 6 March 2025.

SSM08: The conversion of ideas to opportunities to customer outcomes.	Met expectations
Rationale and measure type	Meeting increasing customer expectations and demands of the Bureau's products and services requires innovation and new solutions. This measure seeks to demonstrate that the Bureau is effective in translating ideas, innovations and enhancements into tangible improvements for customers.
Overall result and rating	Performance was measured across 2 contributing measures, both of which were assessed as having met expectations. Performance met expectations overall for 2024–25, after partially meeting expectations for comparable measures in 2023–24.
CM8.1: Customer outcomes delivered from ideas and opportunities	**Met expectations**
Key Activity	Business Solutions, Community Services, Australian Climate Service, Science and Innovation
Target	Outcomes demonstrate impact and value for customers
Results and rating	Performance met expectations. During 2024–25, project reporting showed the Bureau contributed to customer benefits in the areas of public safety, economic prosperity and national security across several sectors, including for emergency management, energy and Defence customers. • The operationalisation of improved hydraulic modelling for the Hawkesbury-Nepean Valley supported emergency services operations, with positive feedback from a range of New South Wales government agencies. • The Bureau's energy capability uplift received positive feedback from a key energy sector customer for enabling its energy operations team to make better use of existing solar farms. • The Bureau's specialist meteorologists and equipment were successfully deployed to assist operations carried out by the Royal Australian Air Force (RAAF) during the year. The Australian Climate Service (ACS) focused on ensuring that customers were at the centre of its work by engaging with target users and facilitating the delivery of projects to service their needs. For example, feedback from Aboriginal and Torres Strait Islander peoples and organisations informed development of Australia's first-ever assessment of the risks posed by climate change across the country and the plan for how Australia can adapt in response.
Previous results	Performance partially met expectations in 2023–24. The Bureau implemented a range of product and service enhancements for customers, although comprehensive reporting on the conversion of customer ideas and opportunities was an area for development.
Methodology and data sources	Internal analysis and assessment of the Bureau delivery, including drawing on case studies and internal records on opportunity management, project and benefits delivery governance mechanisms.

CM8.2: Proportion of major and moderate initiatives that successfully pass through the Research to Operations gateway as planned	Met expectations
Key Activity	Science and Innovation
Target	90%
Results and rating	Performance met expectations. In 2024–25, 100% (28 in total) of major and moderate initiatives successfully passed through the Bureau's the Research to Operations gateway as planned, exceeding the target.
Previous results	Performance met expectations in 2023–24. 100% of initiatives successfully passed through the Bureau's Research to Operations gateway.
Methodology and data sources	Internal assessment from the Bureau's Gateway to Operations Reference Group.
Changes from 2023–24	Minor adjustment to CM8.2 for 2024–25 to focus on completion of initiatives 'as planned' for clarity.

SSM09: The quality and application of our research and development, benchmarked internationally.	Met expectations
Rationale and measure type	The Bureau undertakes and applies world-class scientific research and development to ensure it can provide the best products and services for its customers. This measure aims to demonstrate the quality of the Bureau's scientific research activities, and the flow-on effect to customers.
Overall result and rating	Performance was measured across 3 contributing measures: • 2 contributing measures met expectations • 1 contributing measure partially met expectations. Performance met expectations overall for 2024–25, as it did for comparable measures in 2023–24.

CM9.1: Performance of the Bureau's global Numerical Weather Prediction model in comparison to other meteorological agencies	Met expectations
Key Activity	Science and Innovation
Target	In the top 5 global models
Results and rating	Performance met expectations. The Bureau's global weather models ranked within the top 5 global models based on World Meteorological Organization scores. Using the Continuous Ranked Probability Score Index, the Bureau's ACCESS-GE was ranked the third best model among all available global models for key upper air variables for the Southern Hemisphere.

Previous results	Performance met expectations in 2023–24. The Bureau's global weather models ranked within the top 5 global models based on World Meteorological Organization scores.
Methodology and data sources	Results are drawn from World Meteorological Organization comparisons with peer meteorological agencies.

CM9.2: Forecast models demonstrate improvements in prediction skill, accuracy and lead time	**Met expectations**
Key Activity	Science and Innovation
Target	Improvement against agreed baselines
Results and rating	Performance met expectations overall. • The accuracy of seasonal forecasts indicated an ongoing long-term positive trend in the performance of the Bureau's seasonal outlooks for temperature and rainfall over Australia. • The Bureau's regional models demonstrate an improvement in performance relative to past average performance using a blended error score average of surface variables. Recent upgrades to regional ACCESS models have resulted in noticeable improvements in ACCESS-CE4 compared to ACCESS-CE3. • STEPS3 rainfall nowcasts consistently outperformed ACCESS-C3 rainfall forecasts during 2024–25, exhibiting lower error scores and higher correlation values for all lead times and across all regions. • The accuracy of automated and official forecasts measured as 12-month means against the 2016–2020 reference period exceeded the target for 2024–25. • Performance of ocean and marine forecasts continued to mature, with temperature and sea surface temperature variables for 3-day lead-time during the reference period 2022–present for the global region comparing well for OceanMAPS (Australia) and the Forecast Ocean Assimilation Model (UK), despite showing some sampling error from month to month. • Verification of improvements associated with gridded historical analyses and the number of observations and observation types assimilated by models remained under development in 2024–25 pending capability developments.
Previous results	Performance partially met expectations in 2023–24. The Bureau's seasonal and rainfall forecasts showed improvement, the volume of observations assimilated was steady, and the accuracy of automated and official forecasts were slightly below target. Verification metrics for ocean and marine forecast models, gridded historical analyses and Australian regional models were under development.
Methodology and data sources	Internal analyses of Bureau model performance.

CM9.3: Proportion of Bureau scientific publications in peer-reviewed journals that have an Impact Factor of 3.0 or above	Partially met expectations
Key Activity	Science and Innovation
Target	≥70%
Results and rating	Performance partially met expectations. In 2024–25, 97 (58.8%) of the 165 Bureau scientific publications were published in journals with an Impact Factor of 3.0 or above. The Impact Factor of the Bureau-sponsored Journal of Southern Hemisphere Earth Systems Science (JSHESS) fell below 3.0 during the year, contributing to the lower result.
Previous results	Performance met expectations in 2023–24. 70% of Bureau scientific publications published in peer-reviewed journals had an Impact Factor of 3.0 or above.
Methodology and data sources	The annual result is calculated from the number of citations of scientific publications published by the Bureau between the period 1 July 2024 to 30 June 2025.

The Bureau way

One enterprise that lives its values through agreed behaviours every day.

SSM10: Our performance benchmarked against work health, safety, wellbeing, security and environment best practice	Met expectations
Rationale and measure type	The Bureau's critical, complex and highly distributed operations expose staff to a range of work health, safety and wellbeing risks and can impact the environment of the thousands of sites where Bureau equipment and facilities are located. This measure seeks to demonstrate that the Bureau's effectiveness in managing these risks to ensure positive safety, security and environmental outcomes.
Overall result and rating	Performance was measured across 3 contributing measures, with all 3 assessed as having met expectations. Performance met expectations overall for 2024–25, as it did for comparable measures in 2023–24.

CM10.1: Compliance with legislation, government policy and mandatory governance requirements	Met expectations
Key Activity	Enterprise Services
Target	Requirements met
Results and rating	Performance met expectations overall. Zero non-compliances of the work health and safety legislation or standards were reported in 2024–25, including through Comcare proactive monitoring and compliance inspections and an internal audit regarding psychosocial risk management. The Bureau was rated as compliant in the Comcare proactive regulatory inspection on its Hazard and Incident Management system. The Bureau's finance and procurement processes complied with relevant legislation and were audited as per requirements, including through the publication of its 2023–24 Financial Statements. The Bureau complied with requirements in Annex 3 of the Convention on International Civil Aviation. The Bureau's environmental sustainability management arrangements complied with legislation and standards.
Previous results	Performance met expectations in 2023–24. The Bureau's complied with relevant legislation, requirements and standards.
Methodology and data sources	Results are drawn from internal and external audits and assessments of the Bureau's work health and safety, financial, governance and environmental sustainability functions during the period 1 July 2024 to 30 June 2025.

CM10.2: Lost time injury frequency rate	Met expectations
Key Activity	Enterprise Services
Target	At or better than industry benchmark
Results and rating	Performance met expectations. The Bureau's overall lost time injury frequency rate (LTIFR) for incidents during 2024–25 resulting in an accepted workers' compensation claim was 1.1, better than the Australian industry benchmark of 11.9 for Public Administration and Safety organisations and 1.4 for Professional, Scientific and Technical Services.
Previous results	Performance partially met expectations in 2023–24. The Bureau's overall LTIFR for all incidents during 2023–24 was 3.64 and for workers' compensation claims during 2023–24 was 0.36.
Methodology and data sources	Results are calculated using the Safe Work Australia LTIFR tool with Bureau staff summary data for the period 1 July 2024 to 30 June 2025.

CM10.3: Staff wellbeing index as measured by organisational surveys	Met expectations
Key Activity	Enterprise Services
Target	≥70%
Results and rating	Performance met expectations. The Bureau's 2025 APS Census Wellbeing Index was 70%, meeting the target of 70%.
Previous results	Performance met expectations in 2023–24. The Bureau's 2024 APS Census Wellbeing Index was 70%.
Methodology and data sources	Results are drawn directly from the Bureau's 2025 APS Employee Census results.

SSM11: Individual and team actions demonstrate commitment to enterprise values and behaviours	Met expectations
Rationale and measure type	Strong values and behaviours drive the way the Bureau operates, connect staff, and most importantly, underpin public trust and confidence in the Bureau's products and services. This measure seeks to ensure the Bureau's workforce is engaged and its leadership is effectively demonstrating these values.
Overall result and rating	Performance was measured across 3 contributing measures: • 2 contributing measures met expectations • 1 contributing measure partially met expectations. Performance met expectations overall for 2024–25, as it did for comparable measures in 2023–24.

CM11.1: Positive perception of leadership effectiveness as measured by organisational surveys	Met expectations
Key Activity	Enterprise Services
Target	≥65%
Results and rating	Performance met expectations. The Bureau's 2025 APS Census 'immediate supervisor leadership' index was 77% and 'SES manager leadership' index was 66%, both meeting the target of 65% and consistent with previous years.
Previous results	Performance met expectations in 2023–24. The Bureau's 2024 APS Census 'Immediate supervisor leadership' index was 78% and 'SES manager leadership' index was 67%.
Methodology and data sources	Results are drawn directly from the Bureau's 2025 APS Employee Census results.

CM11.2: Positive perception of employee connection to the Bureau's Strategy 2022–2027 as measured by organisational surveys	Partially met expectations
Key Activity	Enterprise Services
Target	≥60%
Results and rating	Performance expectations were partially met overall. The Bureau's 2025 APS Census showed a positive workforce response of: • 49% for 'I feel connected to the Bureau's Strategy 2022–2027' However, employees still indicated strong commitment to the Bureau and it purpose, with positive workforce responses of: • 87% for 'I believe strongly in the purpose and objectives of my agency' • 80% for 'Customer focus will continue to guide our strategy and operations. I understand what this means in my day-to-day role.' • 70% for 'I feel a strong personal attachment to my agency'.
Previous results	Performance partially met expectations in 2023–24. The Bureau's 2024 APS Census showed a positive workforce response rate of 52% for 'I feel connected to the Bureau's Strategy 2022–2027'.
Methodology and data sources	Results are drawn directly from the Bureau's 2025 APS Employee Census results.

CM11.3: Positive employee engagement as measured by organisational surveys	Met expectations
Key Activity	Enterprise Services
Target	≥75%
Results and rating	Performance met expectations. The Bureau's 2025 APS Census Employee Engagement Index was 73%, consistent with previous years albeit slightly below the target of 75%.

Previous results	Performance met expectations in 2023–24. The Bureau's 2024 APS Census Employee Engagement Index was 74%.
Methodology and data sources	Results are drawn directly from the Bureau's 2025 APS Employee Census results.

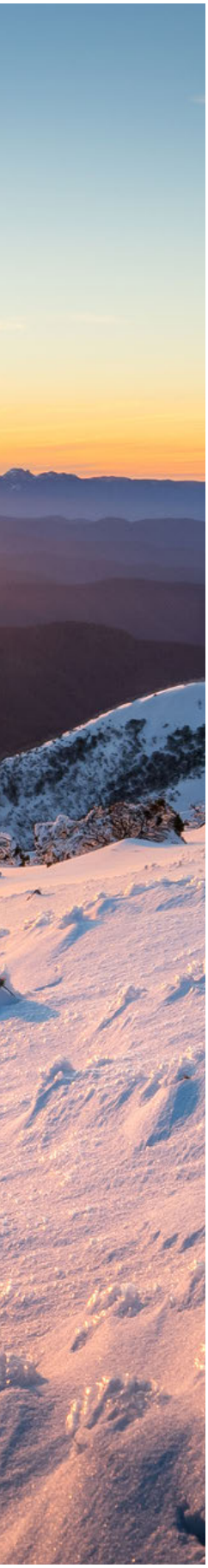
SSM12: A diverse and inclusive workforce, that reflects the communities we serve	**Partially met expectations**
Rationale and measure type	Diverse backgrounds, experiences, talents, and perspectives enhance both the development of services and their delivery to all Australians. This measure seeks to demonstrate that the Bureau is building and maintaining a workforce that reflects the Australian community it serves.
Overall result and rating	Performance was measured across 3 contributing measures: • 1 contributing measure met expectations • 2 contributing measures partially met expectations. Performance partially met expectations overall for 2024–25, after not meeting expectations in 2023–24. Diversity and inclusion metrics showed improvements compared with the previous year, albeit with smaller increases than expected.
Changes from 2023–24	For 2024–25, the existing single contributing measure on diversity and inclusion was separated into 3 contributing measures to improve visibility on: • employees that identify as a woman or female • employees that identify as a person with a disability • employees that identify as an Aboriginal and Torres Strait Islander person. Based on a review of 10-year workforce data, targets for these contributing measures were updated for 2024–25 to align with trends and anticipated activities to be delivered under the Bureau's new Diversity and Inclusion Action Plan and employment and workforce strategies.

CM12.1: Proportion of employees that identify as a woman or female	**Partially met expectations**
Key Activity	Enterprise Services
Target	38.5% by 30 June 2025, with consistent incremental improvement to reach 45% by 30 June 2028
Results and rating	Performance partially met expectations. In 2024–25 employees that identify as a woman or female comprised 38.1% of the Bureau's workforce, below the target of 38.5%. This measure has been assessed with a lower tolerance against the performance criteria given the small margin for improvement.

Previous results	Updated measure for 2024–25. In 2023–24 employees that identify as a woman or female comprised 37.5% of the Bureau's workforce.
Methodology and data sources	Results are calculated using Bureau employee data at 30 June 2025.

CM12.2: Proportion of employees that identify as a person with a disability	**Met expectations**
Key Activity	Enterprise Services
Target	3.0% by 30 June 2025, with consistent incremental improvement to reach 5.0% by 30 June 2028
Results and rating	Performance met expectations. In 2024–25 employees that identify as a person with a disability comprised 3.6% of the Bureau's workforce, exceeding the target of 3.0%.
Previous results	Updated measure for 2024–25. In 2023–24 employees that identify as person with a disability comprised 2.8% of the Bureau's workforce.
Methodology and data sources	Results are calculated using Bureau employee data at 30 June 2025. Disclosure of personal aspects of identity or background is voluntary and therefore not reflected in the Bureau's HR system. This can result in discrepancies between the HR system and Census data.

CM12.3: Proportion of employees that identify as an Aboriginal or Torres Strait Islander person	**Partially met expectations**
Key Activity	Enterprise Services
Target	1.5% by 30 June 2025, with consistent incremental improvement to reach 3.0% by 30 June 2028
Results and rating	Performance expectations were partially met. In 2024–25 employees that identify as an Aboriginal and Torres Strait Islander person comprised 1.3% of the Bureau workforce. While slightly below the target of 1.5% and an improvement from the previous year, this has not increased to the level expected.
Previous results	Updated measure for 2024–25. In 2023–24 employees that identify as an Aboriginal and Torres Strait Islander person comprised 1.2% of the Bureau's workforce.
Methodology and data sources	Results are calculated using Bureau employee data at 30 June 2025. Disclosure of personal aspects of identity or background is voluntary and therefore not reflected in the Bureau's human resources (HR) system. This can result in discrepancies between the HR system and Census data.



Section 3:

Group performance

Community Services

Goal: Deliver trusted, reliable and responsive weather, water, climate and ocean analyses and forecasts, contributing to the social and financial value we deliver to Government, industry and the Australian community.

The Community Services Group is responsible for providing high quality weather, water, climate and ocean services to the Australian community and emergency management sector. These services are aimed at preventing loss of life and reducing the social and economic impacts of natural hazards.

The group's services span the breadth of Australia, its territories and oceans. These services are delivered with national context typically derived centrally and tailored locally to meet customer needs.

The group's focus is to do this in a resilient, efficient and sustainable way that enables the Bureau to deploy its capabilities when and where they are needed most. The group does this by:

- delivering customer-focused services all day, every day – including during prolonged and extreme events
- implementing projects to increase the value of Bureau services to customers

- undertaking verification of Bureau forecasts and warnings, performance reporting and service monitoring
- managing continuous improvement processes
- building a valued, safe and inclusive workforce with a clear sense of purpose through a focus on the health, wellbeing, capability and empowerment of staff.

For 2024–25, the group consisted of 3 programs:

Program	Responsibilities
National Production Services	• Produce and coordinate 24/7 national forecast and warning services • Incident management including assessing warning potential and service escalation • Undertake actions that leverage automation and business intelligence to optimise operations.
Environmental Prediction Services	• Provide high-quality analyses, forecasts, warnings and long-term projections for flood, thunderstorms, severe weather, fire, heatwaves, cyclones, tsunami, oceans, water and climate • Support the Australian Climate Service • Deliver specialist forecast services to the Australian Antarctic Division.
Decision Support Services	• Supply specialist expertise and local insights to customers, partners and stakeholders to support their activities • Invest in partnerships and information exchange with the emergency management sector at both strategic and operational levels • Embed customer engagement and opportunity management processes to continually inform sector plans and deliver on opportunities.

Throughout 2024–25, the group focused on delivering 3 outcomes that support the achievement of the Bureau's strategy and purpose. The group's achievement in delivering each of these outcomes is outlined below.

Outcome 1: Our customers' decisions are informed by the delivery of routine and high impact weather, water, climate and marine services, that are robust and reliable.

Achieving the outcome

Helping emergency managers prepare for high risk weather

While severe weather happens year-round in Australia, during October to April, there is a higher occurrence of severe thunderstorms, floods, heatwaves and bushfires, as well as being tropical cyclone season.

Each year, ahead of this period, the Bureau supports the emergency management sector's preparedness activities. The Bureau supports national coordination by delivering its higher risk weather season outlook – including the likelihood of specific events across all regions of Australia – and fostering a shared understanding of the seasonal forecast and its potential impacts.

Left to Right: Brendan Moon (Coordinator General, NEMA), Senator the Hon Jenny McAllister (then Minister for Emergency Management), Dr Karl Braganza (the Bureau's National Manager Climate Services) at the National Preparedness Summit.

In 2024–25, to support the National Emergency Management Agency's (NEMA) National Preparedness Program, the Bureau:

- co-designed and facilitated the weather aspects of a multi-hazard national exercise scenario for the National Preparedness Summit
- delivered sector specific briefings to over 2,500 people across all levels of government, industry and the not-for-profit sector
- briefed Members of Parliament.

Strengthening community readiness for high-impact weather

The Bureau's annual public safety campaign, *Know your weather, Know your risk* (see p.137), aims to inform communities about severe weather risks and provide them with the knowledge needed to prepare and respond effectively. To extend the campaign's reach, the Bureau's Community Engagement Team delivered a community preparedness program in partnership with more than 60 government and community-based organisations, including the Melaleuca Refugee Centre, the New South Wales Primary Health Network, the Australian Migrant Resource Centre, and the Northern Territory Aboriginal Interpreter Services. The team conducted both in-person and online presentations to explain how to prepare for and respond to hazards when they arise.

The program focused on communities at greater risk, such as older Australians, those living with a disability, culturally and linguistically diverse and First Nations peoples. Reaching over 1,000 people, the program helped at-risk communities understand what hazards to expect where they live, how to access warnings and where to get further information.

In an example from just one event, the Bureau worked with the Yolngu Radio Station, which broadcasts in the Yolngu Matha language to 10,000 speakers across the Northern Territory. The Bureau explained targeted severe weather and warning information, and facilitated practical exercises, including the translation of Bureau warnings into Yolngu Matha. Bureau staff gained an understanding of cultural weather knowledge and challenges the broadcasters face in delivering timely information to their community.

Ian Shepherd, Nigel Mules, Josie Matthiesson from the Bureau's Decision Support Services Program with the Yolngu Radio team in Darwin in October.

Extending the abnormally high tides service to Victoria

In June 2024, the Bureau completed the nationalisation of its Coastal Hazard Warning for Abnormally High Tides service with the final extension into Victorian coastal areas. The nationalisation is part of several recent improvements to the Bureau's coastal hazard services, including changes to enable customers to better differentiate hazards.

Less than a month after the service was extended to Victoria, it was put into action following severe weather events across southern states in July and August that led to sea water flooding of low-lying areas in Victoria. During 2024–25, the Bureau provided over 60 Coastal Hazard Warnings for Victoria that included abnormally high tides, making up a significant portion of the 311 Coastal Hazard Warnings issued for the mainland.

The impacts of abnormally high tides range from low-level flooding to significant damage. This can be a concern for a range of stakeholders, including emergency management, roads and transport authorities, ports, councils, marine safety organisations and the Australian community. The value and timeliness of the extended service to Victoria was appreciated by stakeholders and decision-makers, many of whom had been consulted in the development of the warning thresholds.

Building our rainfall intelligence capability to enhance flood services

Rainfall forecasts are a critical input to the Bureau's flood watch and warning services, particularly ahead of, and during, flooding events.

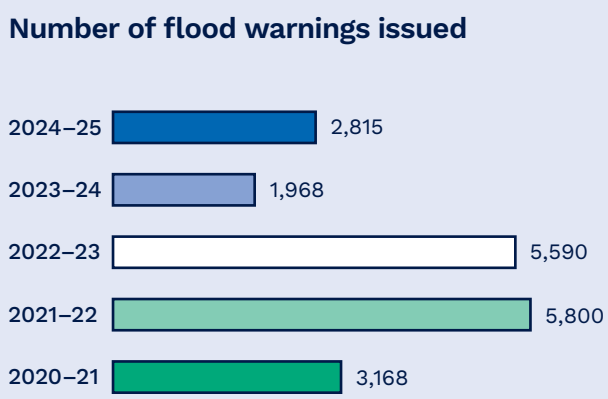
In December, the Community Services Group established the Rainfall Intelligence (RI) capability as an ongoing trial. The RI capability involves experienced meteorologists analysing current and future rainfall trends to deliver the best possible rainfall information to flood hydrologists and decision support officers through tailored products and advice, to inform flood watches, warnings and customer briefing services.

The RI capability enabled more seamless operations, and ultimately more accurate and timely flood warnings and advice to the emergency management sector and the Australian community. This capability was valuable in ensuring communities had reliable, accurate information for their decision-making during the many recent extreme rainfall events, including tropical cyclone Alfred. While the RI capability is currently small, the Bureau hopes to expand it through research, verification, training and process development to improve its heavy rainfall forecasting.

Over

2,800

flood warnings issued



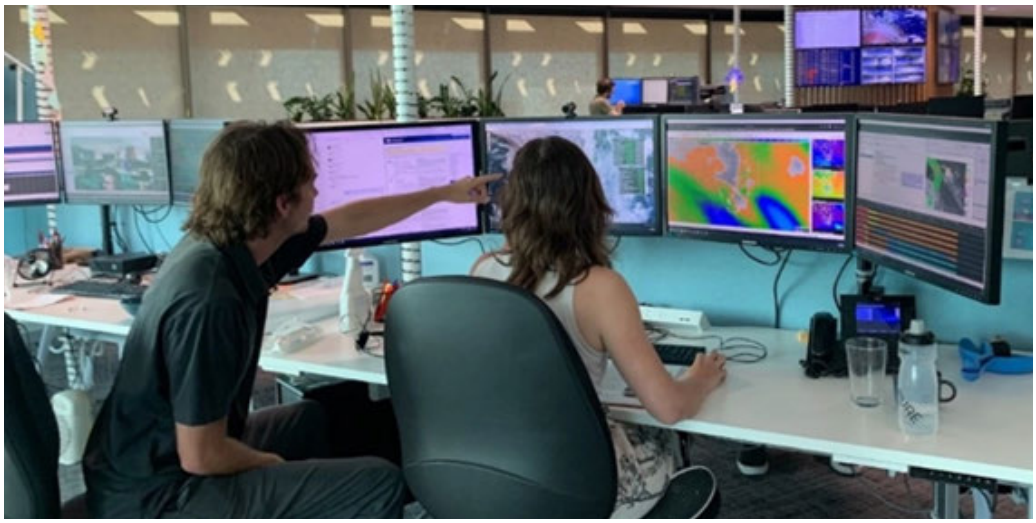
Boosting forecast accuracy with a new forecast guidance system

In April, the Bureau achieved a significant milestone in its forecast improvement journey with the seamless transition to a new foundational guidance system for public weather forecasts and warnings, including those on the BOM Weather app.

The Integrated Model post-PROcessing and VERification (IMPROVER) system replaces the Bureau's long-standing Gridded Objective Consensus Forecast system. IMPROVER is a modern, ensemble-based post-processing system developed through international collaboration with the UK Met Office. Since 2019, the Bureau has worked with the UK and other global partners to adapt and operationalise IMPROVER for Australian conditions.

The seamless transition to IMPROVER reinforces the Bureau's commitment to providing trusted, reliable and responsive weather services for Australia, with:

- improved routine forecast accuracy
- a shift towards probabilistic, scenario-based guidance
- a reduction in the manual editing workloads of Bureau meteorologists
- support for more informed decision-making during high-impact weather events.



Bureau meteorologists from the National Production Services Program using IMPROVER.

Strengthening Australia's tsunami warning capability

As part of the Bureau's commitment to deliver secure, resilient, future-ready systems that support timely and accurate hazard warnings, this year, the Bureau successfully launched the Tsunami Observation and Simulation Terminal (TOAST), a purpose-built, internationally recognised software solution for tsunami detection, assessment, simulation, and product generation.

TOAST was developed through a collaboration between Bureau tsunami experts and the software provider. It delivers improved system stability and a modern, customisable interface that supports faster, more informed decision-making.

The new software enhances the Bureau's ability to deliver tsunami warnings through the Joint Australian Tsunami Warning Centre (JATWC). As a partnership between the Bureau and Geoscience Australia, the JATWC plays a critical role as Australia's national tsunami warning centre and the Indian Ocean region's Tsunami Service Provider.

Delivering specialised training to keep Australians safe in Antarctica

The Bureau has been an active and fully integrated member of Australia's Antarctic Program for decades. The Bureau has a 17-member team of Antarctic weather forecasters, observers and technicians embedded in the program who, with support from mainland Bureau colleagues, monitor the climate and deliver thousands of forecasts, ice analyses and in-person briefings for every weather-sensitive planning and tactical decision made by the Australian expedition.

To ensure its forecasters can meet the unique needs of Antarctic customers, the Bureau provides specialised training each year. In 2024–25, the Bureau delivered training to 6 forecasters from the Bureau and one from the Royal Australian Navy. After completion of their training, the forecasters voyaged to Macquarie Island station for ship-based resupply before being deployed into the Casey and Davis summer expeditions.

Australia's flagship icebreaker RSV Nuyina conducting the annual resupply of Macquarie Island in cold stormy seas.

Putting our long-range climate forecasts in the spotlight

In December, the Bureau made changes to the climate information on its website and in emails to subscribers to encourage the Australian community to follow the Bureau's long-range forecasts when making climate-sensitive decisions. Changes include:

- emphasising the Bureau's long-range forecasts as the most reliable source of information
- ceasing issue of La Niña and El Niño Watch and Alert statements

- discontinuing issue of Climate Driver Updates to subscribers
- introducing the Southern Hemisphere Monitoring and Southern Hemisphere Outlook pages on the Bureau website to report on conditions in the Pacific and Indian oceans and high southern latitudes.

These changes aim to guide the Australian community to information that reflects the complexity of Australia's climate system, rather than a reliance on La Niña and El Niño events to infer conditions ahead. The Bureau's climate model, which is used to generate long-range forecasts, incorporates all influences from the oceans, land and atmosphere, and provides the best guidance on rainfall and temperature patterns for the weeks, months and seasons ahead. The changes were supported by a significant communications campaign (see p.138)

Enhancing Pacific data to better understand climate extremes

In March, the Bureau delivered a regional training workshop in Fiji focused on enhancing the quality and application of historical climate data to better understand and manage climate extremes across the Pacific. The workshop was delivered through the Australian Government's Climate and Oceans Support Program in the Pacific (COSPPac).

Thirteen National Meteorological and Hydrological Services (NMHSs) from across the Pacific participated, with representatives from Palau, Federated States of Micronesia, Republic of the Marshall Islands, Papua New Guinea, Solomon Islands, Vanuatu, Fiji, Tonga, Niue, Samoa, Cook Islands, Kiribati and Tuvalu.

The workshop supported NMHSs to identify and quality control their longest and most reliable station records and generate internationally recognised climate indices. These indices translate historical climate data into actionable information and are valuable for national planning and decision-making in climate-sensitive sectors such as health, agriculture and water management. For example, in the Solomon Islands, rainfall-related indices can help identify periods when there may be greater risk of mosquito-borne diseases, while for other countries, heatwave and drought indices can inform public health and emergency services.

This capability allows the Pacific NMHSs to meet local, regional and global reporting needs and enhances the credibility and visibility of Pacific data in global climate assessments.

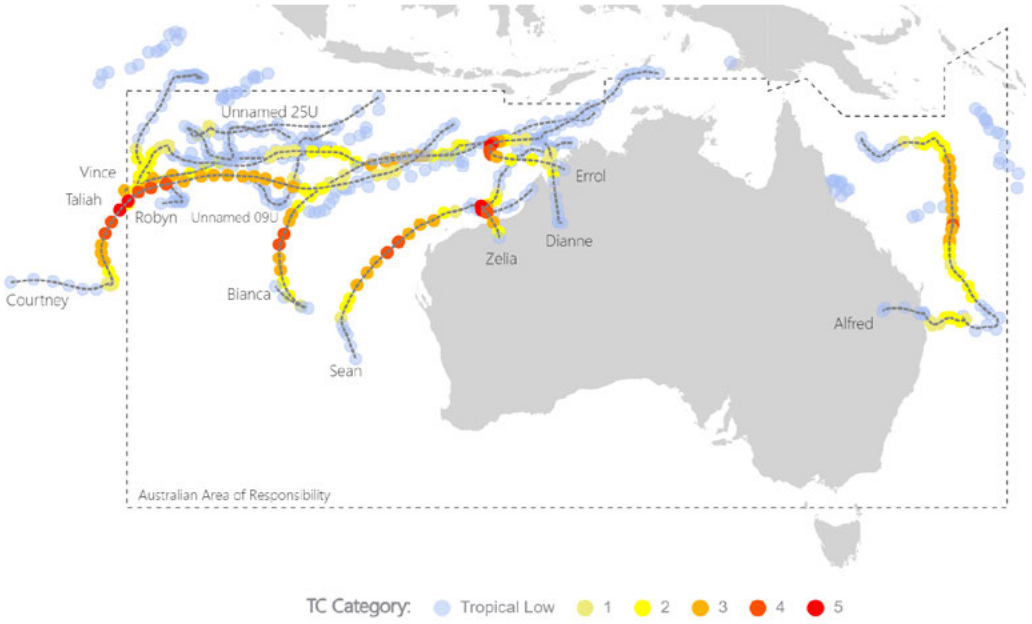
From left: Amy McGowan (Fiji), Bouchard Solomona (Cook Islands), Simon McGree (Bureau), Boyd Mackenzie (Chuuk State – Federated States of Micronesia), Kikuko Mochimaru (Palau).

The 2024–25 tropical cyclone season

There were 12 tropical cyclones in the Australian region during the 2024–25 tropical cyclone season, one above the long-term average of 11. 2024–25 was the most active season since 2005–06 which also recorded 12 cyclones. Eight tropical cyclones – Sean, Taliah, Vince, Zelia, Alfred, Bianca, Courtney and Errol – reached Category 3 or above (severe tropical cyclone) while in the Australian region, again the highest number since the 2005–06 season.

Of the 12 cyclones, 11 were located in the Indian Ocean, off Australia's north-west coast, with just one – tropical cyclone Alfred – affecting eastern Australia and having the greatest impact on Australian communities (see p.81). Five tropical cyclones impacted the west coast of Australia, however, only Zelia crossed the coast as a severe tropical cyclone. Severe tropical cyclone Zelia crossed the coast as a Category 4 system in a sparsely populated area east of Port Hedland.

For the 2024–25 tropical cyclone season, the position accuracy (where the tropical cyclone travelled) of Bureau forecasts was comparable to, or better than, the 5-year average for all forecast lead times, indicating continued incremental improvement in position forecasting. The intensity forecast accuracy (how intense the tropical cyclone is likely to be) was comparable to the 5-year average for lead times up to 48 hours, but slightly worse than the 5-year average for longer lead times. This reflects the high proportion of severe tropical cyclones, the intensity of which are more challenging to forecast.



Map showing tropical cyclones in the Australian region during the 2024–25 tropical cyclone season.

Highlights and significant events

Supporting the community during tropical cyclone Alfred

Tropical cyclone Alfred was one of the most significant weather events in recent Australian history. This was, in part, due to its impact – causing damages of around $1.36 billion, one fatality and extensive damage to roads, infrastructure and agriculture – but also due to its path being well south of typical areas where tropical cyclones make landfall, impacting communities, including Brisbane, which were not familiar with action to take during a cyclone.

Between late February and early March, a large area from south-eastern Queensland through to north-eastern New South Wales braced for the impact of a tropical cyclone. While Alfred was downgraded to a category 1 system and then to a sub-tropical system as it crossed the coast, the broader region was significantly impacted by damaging wind gusts, heavy rainfall, flooding and severe coastal erosion. More than 500,000 customers were without power, with many remaining without electricity for several days. Wind damage, power outages and flooding caused significant losses to agriculture and other industries.

In the lead up to and throughout the event and the subsequent flooding, the Bureau delivered targeted, up-to-date forecasts and warnings through a range of channels, including the Bureau website, the BOM Weather app, and directly to emergency management agencies. These included:

- 49 tropical cyclone advices
- 52 severe weather warnings
- 38 coastal hazard warnings
- 10 flood watches
- 102 flood warnings
- 331 briefings to the emergency management sector via the Queensland Disaster Management Arrangements.

The Bureau also stood up additional briefing capability to support emergency management decision-making and keep the community informed. This included positioning Bureau experts from around the country into Brisbane, Sydney and Canberra to ensure there was consistent on-the-ground support for the duration of the event's impacts. The Bureau also deployed additional non-operational staff into operations to bolster its ability to sustainably deliver critical services.

Matt Collopy, General Manager of the Bureau's Environmental Prediction Services supporting community preparedness at a press conference during tropical cyclone Alfred.

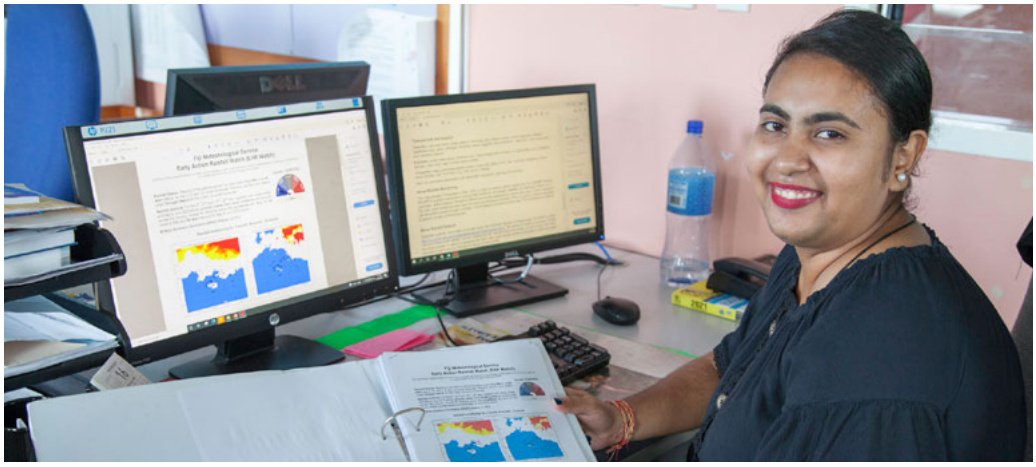
Strengthening climate resilience in the Pacific with ACCESS-S

Through the Climate and Oceans Support Program in the Pacific (COSPPac), the Bureau continues to support Pacific Island countries to strengthen their resilience to climate extremes by delivering tailored forecasts using the Bureau's ACCESS-S climate prediction model. Developed in response to stakeholder demand and co-designed with regional input, the services include weekly to seasonal outlooks for rainfall, temperature, sea surface temperature, sea level, and tropical cyclones.

National Meteorological and Hydrological Services in 15 Pacific Island countries now routinely use ACCESS-S to inform early warnings and planning across critical sectors such as agriculture, water management, and disaster preparedness. COSPPac works with partners to provide data, tools, training, and user support, helping to build local capacity and ensure forecasts are applied in meaningful ways.

Forecast products are delivered through the Bureau's Pacific climate portal and embedded in services across the region. In Fiji, ACCESS-S supports a co-produced sugarcane bulletin guiding planting, fertiliser application, and harvest timing. In Niue and the Cook Islands, ACCESS-S forecasts underpin monthly food security and water resource bulletins, enabling early action in remote and outer island communities.

The growing use of ACCESS-S reflects a shift from reactive to proactive climate risk management, ensuring high-quality, locally relevant climate services are reaching those who need them.



Shweta Shiwangni, a Federated States of Micronesia participant in COSPPac's monthly Online Climate Outlook Forum.

Next steps

In 2025–26 the group intends to:

- deliver improved forecast production processes, including an increase in frequency of routine production from 2 to 4 times per day through the completion of Forecast Improvement Delivery Stream
- further uplift the Bureau's Rainfall Intelligence capability by enhancing the 'post-processing' output of the numerical models to improve flood forecasts
- extend lean methodology across all priority operational services.

Outcome 2: A deep and evolving understanding of the Australian community and emergency management sectors, that leads to targeted, high-impact products and services.

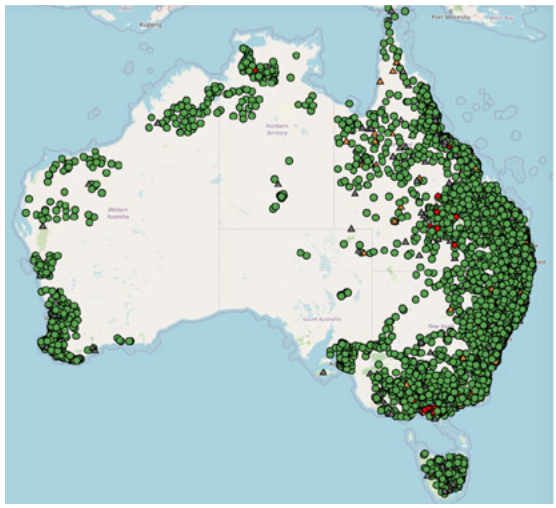
Achieving the outcome

Enhancing the Bureau's flood warning systems

The Bureau's national flood warning service is underpinned by systems and data that support preparedness, response, and recovery for the community and partners in flood-risk areas. This year, the Bureau completed the Flood Remediation project and reached a major milestone in its journey of uplifting the security, stability and resilience of its flood systems.

Through this project the Bureau:

- replaced the flood warning network data collection system, Enviromon, with the Australian Rain and River Observation (ARRO) solution
- re-platformed and expanded the Hydrological Forecasting System (HyFS), which is used for flood forecasting and warning, data management, and product creation and dissemination.



Screenshot of the Australian Rain and River Observation (ARRO) system showing the status of sites in the flood warning network.

These changes improved efficiency and reduced duplication in the Bureau's flood systems. Bureau meteorologists and hydrologists will experience improved functionality through a simplified interface, minimising the need to access multiple systems. Completion of the Flood Remediation project furthers the Bureau's commitment to work towards nationally consistent products for the emergency management sector.

Uplifting the Hazards Services Forum for more responsive delivery

The Bureau of Meteorology Hazards Services Forum (HSF) is a national advisory group that brings together Australia's emergency service agencies to guide strategic development of the Bureau's hazard services. The HSF was established in 2017 under the *Intergovernmental Agreement on the provision of Bureau of Meteorology Hazard Services to the States and Territories* (the IGA), along with agreed schedules of services that the Bureau provides to the Australian community and emergency services sector.

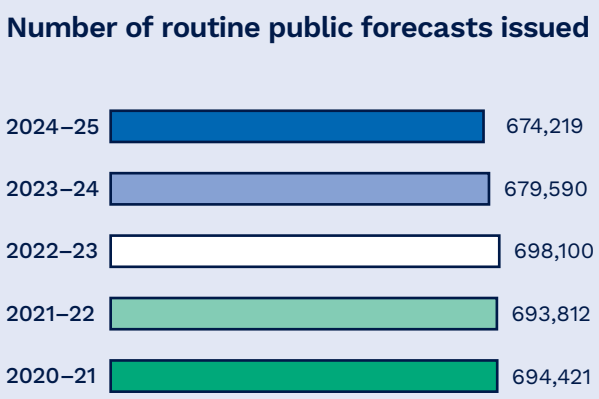
In 2024–25, the Bureau updated the IGA service schedules to provide emergency management agencies with a current and accurate understanding of the Bureau's nationwide services to the sector. IGA terms of reference were also updated with a requirement for a biennial review to ensure the schedule is current and accurate.

During the year, the HSF also endorsed a new process for the management of service requests from the emergency services sector to the Bureau. The Bureau commenced engagement activities in response to 2 service requests from the HSF that will inform future updates to the weather

intelligence provided to state and territory agencies for flash flood warnings and emergency aerial operations.

The HSF also continues to explore options for national consultation and technical advice on weather services for flood, severe weather and marine weather which will complement existing consultation arrangements.

Over
674,000
routine public forecasts issued



Note that the method used to calculate routine public forecast products delivered was revised in 2023–24 resulting in a lower number of products compared to previous years.

Providing decision support services to the National Emergency Management Agency

Bureau Decision Support Services (DSS) staff deliver custom briefings and products to the National Emergency Management Agency (NEMA) to support its coordinating role during natural disasters. The Bureau's support includes:

- embedding DSS staff in the National Situation Room (NSR), deepening our understanding of the Australian Government's needs
- delivering briefings and advice routinely and on request to staff within the NSR
- co-developing situational awareness intelligence
- delivering briefings at NEMA's National Coordination Mechanism meetings, where representatives from federal and state governments and the private sector convene for crisis management during severe weather events.

In 2024–25, the Bureau delivered over 1,000 products to NEMA, including 18 briefings to NEMA's National Coordination Mechanism meetings across the following events:

- tropical low 04U impacts on Cocos (Keeling) Islands and its potential to develop into a tropical cyclone in December
- North Queensland floods in January and February
- tropical cyclone Alfred in March
- NSW flooding in May.

Together with NEMA, the Bureau also delivered 13 briefings to government, including to the Prime Minister, the Governor-General, ministers and members of parliament.

Gathering insights for future warnings

In 2024–25, the Bureau received funding through the Commonwealth-funded Disaster Risk Reduction Package (DRRP) to undertake engagement activities with the Australian community and emergency management sector to inform ways in which the Bureau's warnings communication could improve. This included conducting surveys to help understand communities' hazard exposure, understanding of risk, and current use and comprehension of the Bureau's public warnings. This work contributed to the objectives of the DRRP to reduce current and future natural disaster risk and give decision-makers better risk-reduction tools and information.

The outcomes of this activity will ensure the Bureau's future warnings services meet the needs of all Australians and provide a sound evidence base for future investments in Bureau warning services. Survey findings informed the preliminary design of a consistent, accessible, contemporary product set with information across the long, intermediate and short (warning) timescales to support timely warnings for hazardous events.

Supporting the UN Early Warnings for All initiative

The Early Warnings for All initiative (EW4All) – launched by the UN Secretary-General in 2022 – calls for every person across the globe to be protected by early warning systems by 2027. To support this goal, the World Meteorological Organization's World Weather Research Program established the PEOPLE project (Progressing EW4All Oriented to Partnerships and Local Engagement) to ensure that early warning systems are people-centred, inclusive, and effective at the local level.

The second Steering Group meeting of the PEOPLE project, to which the Bureau contributed, was held in Geneva from 10 to 12 June. The focus of the meeting was to refine the activities for the coming year around improving the design, reach and response to early warning systems. The Steering Group comprises representatives from the UK, Mexico, South Africa, Uganda, Japan, Philippines, Bangladesh, Australia and New Zealand, with diverse experience across meteorological and disaster response agencies, universities and research institutions.

Participation in the project helps the Bureau keep up to date with warning service innovation, influence future research agendas, contribute to the achievement of the EW4All initiative and strengthen collaboration across the weather research community.

The PEOPLE Steering Group at the WMO, including Bureau member Carla Mooney.

Exercising Australia's tsunami preparedness

The Bureau and its partners continue to enhance tsunami warning systems, processes and procedures through regular exercises and shared learnings. These efforts ensure Australia remains tsunami-ready, empowering emergency responders and the Australian community to act swiftly and appropriately to protect lives and build resilience in coastal communities.

In October, Australia participated in PacWave24, a biennial Pacific tsunami exercise coordinated by UNESCO's Intergovernmental Oceanographic Commission. The Bureau led the exercise, which tested the end-to-end Australian tsunami warning and emergency response system.

The scenario for the exercise was a magnitude 9.1 earthquake in the Puysegur Trench in the seabed of the Tasman Sea, south-west of New Zealand, that triggered simulated tsunami warnings for Australia's east coast and offshore islands. The Bureau's new Tsunami Observation and Simulation Terminal (TOAST) was deployed to assess threats and disseminate warnings (see p.78).

During the exercise, emergency services in Queensland, New South Wales, Victoria and Tasmania activated response plans, issued mock evacuation orders, and tested public messaging workflows. These coordinated actions during the exercise tested and confirmed the effectiveness of Australia's tsunami warning system, with only minor opportunities for improvement identified.

This capability and collaboration reflects the significant progress made by the Bureau and its partners since the devastating 2004 Indian Ocean tsunami claimed over 230,000 lives, which marked its 20th anniversary in December.

Partnering with the Victorian SES through highs and lows

The Bureau has a strong and enduring relationships with its State Emergency Service (SES) partners. The Bureau's role is to ensure each SES has the weather and flood intelligence needed to make important decisions that keep their staff, volunteers and the communities they serve safe.

This year, the Victorian SES celebrated 50 years of operations. The Bureau has worked alongside the Victorian SES over the decades, including 16 years with a Bureau meteorologist embedded within the SES operations centres to provide emergency managers with analysis and insights into weather systems capable of producing severe weather, including localised severe thunderstorms and heavy rain events that lead to flooding.

Victorian SES volunteers clear debris after a storm.

With severe weather systems being dynamic in their evolution, a critical aspect of the embedded staff's role is to communicate time sensitive updates to the SES so they can prepare and respond. The SES values this direct relationship and the support the Bureau provides with up-to-date weather intelligence 24 hours a day, 7 days a week.

Understanding customers' needs during flash flooding

The Bureau now has a better understanding of the use and flow of information during flash flooding events and community comprehension of that information, following the outcomes of a project funded by Natural Hazards Research Australia. Flash flood warnings are issued by state, territory and local governments. Their warnings and response strategies are informed by the Bureau's forecasts and severe weather warnings.

The project gauged emergency management and public understanding of predictions and the communication of uncertainties during flash flood events through:

- case-studies on the operation of the end-to-end warning service
- a survey of public and emergency management practitioner understanding, including comprehension of uncertainty terms and rainfall language.

The survey revealed that flash flooding is not well understood and that the current terminology used in forecasts and warnings is confusing. A consistent finding across the case-studies was the need to improve the flow of information to improve community safety.

The results of the project will help the Bureau and its partners in future warnings enhancements for flash flooding and support the design of educational campaigns.

Highlights and significant events

Strengthening tropical cyclone collaboration and knowledge-sharing

The 22nd Session of the World Meteorological Organization (WMO) Region V Tropical Cyclone Committee was hosted by the Bureau in Brisbane during July and August. Held annually, the meetings focus on cross-border coordination, real-time data sharing and updates to tropical cyclone name lists (a critical element with cyclones moving across areas of responsibility).

Bureau meteorologist David Grant with participants at the Region V Tropical Cyclone Committee meeting in Brisbane.

Representatives from 19 countries across the South Pacific and southeast Indian Ocean shared seasonal reports, discussed cyclone impacts, exchanged lessons learned from the past few tropical cyclone seasons, and outlined planned service improvements. These contributions foster a deeper understanding of regional challenges and opportunities.

The Bureau's participation in this international forum ensures its services remain responsive to the diverse needs of communities, and the evolving demands of emergency management, across Australia and the broader region. It also enables the Bureau to offer targeted support to other nations in the region, such as tropical cyclone analysis and forecast information for the Solomon Islands Meteorological Service, to assist them to provide timely and accurate warnings for their communities.

Partnering with the outdoor sector to strengthen weather readiness

In April, the Bureau partnered with the National Centre for Outdoor Risk and Readiness (NatCORR) to deliver 5 workshops aimed at strengthening weather related decision-making in the outdoor sector. Outdoor practitioners such as outdoor education teachers and tourism operators frequently take groups of people into high risk outdoor environments, so the value of their decision-making is high.

This initiative was informed by a survey undertaken by NatCORR in February 2024 developed with support from the Bureau's Social Science team, which identified how outdoor practitioners use weather information, highlighted capability gaps and revealed a clear demand for practical, tailored training in weather decision support, particularly in the face of increasingly extreme and unpredictable weather events.

The workshop content drew on diverse expertise from across the Bureau to address the real-world needs of the sector that were identified through contributions from NatCORR. A key feature of the workshops was the inclusion of state-specific case studies and scenarios to simulate real-life weather scenarios and encourage applied learnings from the day.

Participants from the outdoor sector were guided in:

- making weather observations
- accessing weather related information
- interpreting thresholds and warnings
- understanding natural hazards they may encounter.

Senior meteorologist Jonathan How presents at the Melbourne workshop.

The workshops were held in Brisbane, Melbourne, Canberra, Hobart and Perth, and were in high demand with most sessions at capacity. Feedback was overwhelmingly positive – 92% of attendees reported feeling greater confidence in using weather information to support safer decision-making and being more likely to use and recommend Bureau products and services.

Next steps

In 2025–26 the group intends to:

- uplift flood warning services by supporting the Flood Warning Infrastructure Network (FWIN) Program and the delivery of new and/or improved flood warning services, including the Melbourne Water flood service transition, supplementary flood services in New South Wales and Victoria and the southeast Queensland probabilistic flood forecasting service
- deliver the full capability of Australian Smoke Dispersion System to all states and territories, including the new national fire spread modelling capability
- further developing the Future Warnings Framework to support the delivery of a nationally consistent, multi-hazard, impact-based warning and alerting system for the Australian community.

Outcome 3: A valued, safe and inclusive workforce with a clear sense of purpose.

Achieving the outcome

Supporting the wellbeing of our frontline staff

Ahead of the 2024–25 higher risk weather season (October to April), the Bureau delivered a comprehensive, months-long program to support the wellbeing of frontline operations staff by providing education and fostering personal resilience strategies.

The program was delivered by the Bureau's Employee Assistance Program provider, Converge International, through 2 webinars and 3 workshops that focused on strategies for supporting mental wellbeing. This was supplemented with onsite support, where counsellors and psychologists were available in 9 Bureau offices across the country for face-to-face consultation. The onsite support involved 239 individual or small group sessions.

The program equipped staff with strategies to enhance their capacity during high stress events, and to shorten their recovery time after an event.

Delivering enhanced services through a new operating model

In late-2024 a project to refine the Decision Support Services (DSS) operating model was launched with the aim of enhancing role clarity and ensuring the program is well equipped to meet current and future customer needs. Over a 6-month period, opportunities to uplift duties, operations, processes and training were identified and potential solutions co-designed in collaboration with impacted staff. In May, a formal consultation process was carried out and proposed changes to rosters and roles were presented for staff and union feedback.

During the consultation period many unique pieces of feedback were received, each of which was considered and responded to. The collated input will help to shape the future direction of the project and ensure the success of the new operating model. The Bureau was thanked by staff and the union for the genuine approach it has taken to consultation and codesign in this change process.

Highlights and significant events

Inter-disciplinary collaboration towards reconciliation

In 2024–25, the Bureau's Decision Support Services team in Western Australia provided expert guidance to the Art Gallery of Western Australia's interactive exhibition FORECAST. FORECAST invited audiences to engage with climate instability through immersive and contemplative experiences. The innovative exhibition combined art with Indigenous and scientific perspectives on the environment to foster community connection – with one another and the environment – and encourage reflection on the complexities of environmental and climatic change.

The exhibition featured large-scale photo-montage works by artists Dianne Jones, a Ballardong Noongar woman, and Eva Fernandez, who is of Spanish heritage. Drawing on their personal family histories, the artists depicted intergenerational connections and forest landscapes, enabling gallery visitors to gain a deep understanding of environmental interdependence.

This collaboration was a great opportunity to explore creative avenues for engagement the Australian community and share scientific insights that complemented the exhibition's artistic and cultural narratives.

Bureau and Art Gallery of Western Australia staff at the launch of the FORECAST exhibition in May. The featured image in the background is 'When you pass through' the waters by Dianne Jones and Eva Fernandez as presented in FORECAST. Image credit: The Art Gallery of Western Australia, photo by Rift Photography.

Collaborating with the US National Weather Service on fire forecasting

In January, the Bureau hosted Heath Hockenberry and Julie Malingowski from the US National Weather Service (NWS) Fire Forecasting Hub in Boise, Idaho. The 2 Fire Program Managers oversee coordination and training of NWS Incident Meteorologists who attend wildfire control centres to produce detailed on-site forecasts.

Knowledge exchange across the week-long visit included a demonstration of the Bureau's fire services, verification practices, forecasting techniques and recent advances in fire-related research. Heath and Julie explained the NWS fire services, including insights on the recent catastrophic Los Angeles Fires and the NWS's tiered warning approach.

The visit was a great opportunity to discuss and promote NWS and Bureau collaboration and support, future fire weather services, and research. In particular, plans were instigated to collaborate with the NWS on the Bureau's ground-breaking work on the Pyrocumulonimbus Firepower Threshold, which quantifies the intensity a large fire requires before generating a fire-induced thunderstorm.

The Bureau is currently finalising plans for the first cohort of Australian meteorologist secondments to the US who will support the NWS's Boise and Reno offices during their peak season for 5 to 6 weeks, commencing August 2025. Initial planning is also underway for reciprocal support from the US for Australian operations in early 2026.

The Bureau's Fire weather program leads Bradley Santos (left) and Evan Morgan (third from left) with US National Weather Service representatives Heath Hockenberry and Julie Malingowski in Melbourne in January.

Next steps

In 2025–26 the group intends to:

- continue to foster a proactive safety culture and processes that focus on all aspects of fatigue, wellbeing and psychological safety of staff
- progress strategic leadership capabilities of our emerging leaders
- continue to enhance the group's diversity and inclusion and use of flexible working arrangements.

Business Solutions

Goal: To enable customers in the Bureau's focus sectors to achieve their missions by supporting strategic decision-making and contributing to the prosperity, safety and security of those sectors and Australia.

The Business Solutions Group builds deeper, more focused, and systematic engagement with the Bureau's customers and partners. Its goal is to deliver greater impact, innovation, quality and value in critical sectors including agriculture, aviation, land and maritime transport, energy, resources, national security, space, water and international development. The group is also responsible for activities to uplift Australia's flood warning network infrastructure and for delivering the Bureau's regulatory functions under the *Water Act 2007*.

For 2024–25, the group comprised 6 programs:

Program	Responsibilities
Agriculture and Water	• Deepening the Bureau's relationships • Developing an in-depth understanding of each sector and needs • Delivering responsive, coordinated, world-class services.
Aviation, Land and Maritime Transport	
Energy and Resources	
Flood Warning Infrastructure Network	
International Development	
National Security and Space	

Throughout 2024–25, the group focused on delivering 3 outcomes in support of the Bureau's strategy and purpose. The group's achievement against these outcomes is outlined below.

Outcome 1: Sustained delivery of existing essential services and growth in our capacity to mobilise the Bureau's capability to create impact and value by meeting customer needs.

Achieving the outcome

Delivering essential Aviation Meteorological Services

Throughout 2024–25, the Bureau delivered the essential suite of Aviation Meteorological Services agreed by industry and government.

The Bureau's goal is to support safe, efficient and resilient aviation operations by providing accurate, timely and relevant observations, forecasts, warnings and insights. Its aviation services are delivered across 4 streams:

- low-level aviation services (below 10,000 feet)

- hazardous weather services for enroute aviation including thunderstorms, volcanic ash, space weather and tropical cyclones
- Air Traffic Management
- airport operations.

The Bureau delivers this service by providing aviation-focused meteorological observations, meteorological forecasts and warnings, hazardous weather advisories, and climatological observations and forecasts.

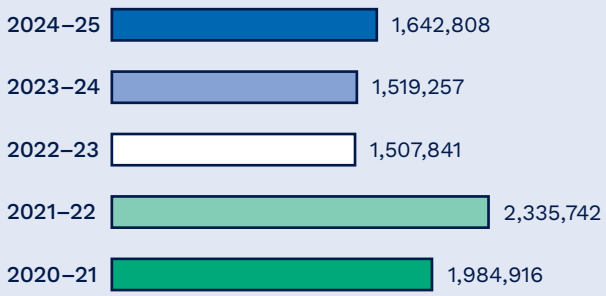
The Bureau also provides research and development to strengthen its aviation services. It supports investigations into aviation weather-related incidents and accidents, delivers and enacts policy and standards pertaining to aviation meteorological services, and provides education, competency and training programs.

Over

1.6 million

aviation forecasts delivered

Aviation forecast products delivered



Note that the method used to calculate forecast products delivered was revised in 2022–23 resulting in a lower number of products compared to previous years.

Advancing renewable energy capabilities for Australia's resources sector

During 2024–25, the Bureau made significant advancements in translating research insights into practical and operational applications for the resources sector. The primary focus was to develop world-leading solar and wind nowcasting and forecasting technologies that are critical to supporting the sector's net zero ambitions. Informed by industry insights, research was undertaken to tackle the major emerging scientific challenges facing the resources sector as it moves towards green energy sources and ambitious net zero goals.

The Bureau worked in partnership with leading sector organisations to support them in addressing their energy transition challenges through operational deployment of world-leading forecast technologies. A signature initiative was the development of a Solar Sensitivity Study which was designed to enhance the accuracy of solar nowcasting and satellite observations.

The Bureau will continue to actively explore further opportunities to expand and optimise solar observation networks, while also investigating the integration of machine learning and artificial intelligence into weather systems.

Supporting Australia's first controlled re-entry of spacecraft

The Australian Spaceflight Weather Service (ASWS) supported multiple controlled spacecraft re-entries during the year. These missions successfully returned spacecraft from low earth orbit to Earth, in a joint venture between Varda Space Industries, Rocket Lab and Southern Launch.

The first re-entry occurred on 28 February 2025, marking Australia's first commercial re-entry event. On 14 May 2025, Southern Launch successfully executed the second planned commercial re-entry of a spacecraft. Both capsules executed a safe, controlled landing at Southern Launch's Koonibba Test Range near Ceduna, South Australia.

The ASWS provided bespoke weather products to support Southern Launch's operations. With critical input from the Bureau, Southern Launch later confirmed it could estimate the touchdown point to within 3 km of the GPS location. The Bureau also facilitated an additional weather balloon launch from Ceduna, providing Southern Launch with important atmospheric data for post-flight reconstruction and validation of the re-entry trajectory.

The Winnebago-3 (W-3) capsule at Southern Launch's Koonibba Test Range on 14 May 2025. Image Credit: Southern Launch.

Supporting NBN Co through significant events

The Bureau played a pivotal role in NBN Co's emergency response to significant weather events during year. In March, the Bureau's flexible support and direct engagement enabled NBN Co's timely decision-making to inform field safety and enabled timely communications for communities affected by tropical cyclone Alfred. By tailoring briefings to operational needs, the Bureau enabled NBN Co's Emergency Management Team to focus on key impact areas, making a significant difference in the overall response effort.

During the NSW Mid North Coast Flooding in May, the Bureau provided timely forecasts and clear briefings that shaped NBN Co's emergency response. Close collaboration enabled informed decisions on safety warnings, resource deployment and planning. Flexible delivery of updates at short-notice was critical to managing rapidly changing conditions. NBN Co acknowledged the Bureau's professionalism and support during the event.

Supporting Australia's energy sector through tropical cyclone Alfred

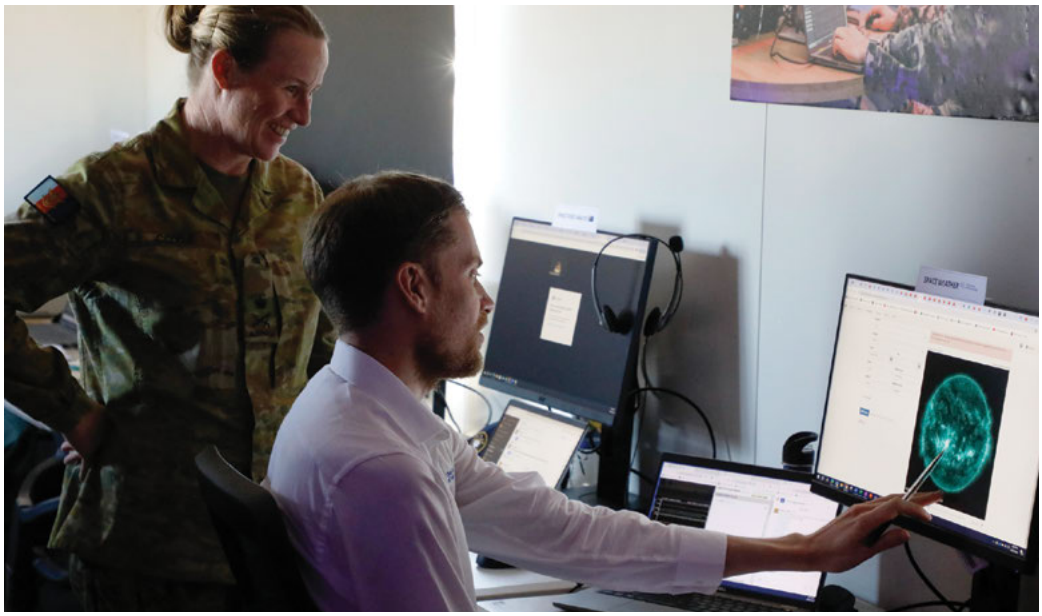
In February and March, the Bureau's Energy and Resources Decision Support Specialists worked closely with the Australian Energy Market Operator's (AEMO) operational forecasting team before, during and after tropical cyclone Alfred's crossing of the southeast Queensland coast. AEMO were concerned that strong winds could damage power lines and that flooding might make it difficult for their crews to access repair sites or even reach their operations centre in Brisbane. The Bureau shared the latest observations, forecasts and warnings with AEMO throughout the event, including providing advance notice of expected changes to official forecasts. The Bureau's interpretation and synthesis of relevant information enabled AEMO to make timely decisions with increased confidence.

Optimising Australia's electricity network

Dynamic Line Rating (DLR) is an operational practice used by electricity network businesses to adjust power flows through transmission lines to account for weather conditions. During 2024–25, the Bureau collaborated with Transmission Network Service Providers and key market bodies to understand their current capabilities and to develop a blueprint to implement DLR nationally. This project identified an opportunity to safely increase network capacity, which can lead to reduced network congestion, increased utilisation of the lowest cost power, and deferred investment in new transmission development. The Blueprint was completed in June.

Supporting Exercise Pitch Black

In July, the Australian Spaceflight Weather Service (ASWS) supported the Joint Commercial Operations (JCO) Pacific Cell by embedding a space weather forecaster directly into the operations floor in Darwin for Defence Exercise Pitch Black 2024. This integration enabled real-time delivery



Space Weather Forecaster Andrew Jackling explains details of solar activity to Australian Defence Force Chief of Joint Capabilities, Lieutenant General Susan Coyle, AM, CSC, DSM during her visit to the Air Force Space Command Operations Centre at RAAF Base Darwin during Exercise Pitch Black 24. Image Credit: Department of Defence.

of space weather information, enhancing the cell's ability to monitor and interpret satellite behaviour, orbital shifts, and potential space-based threats.

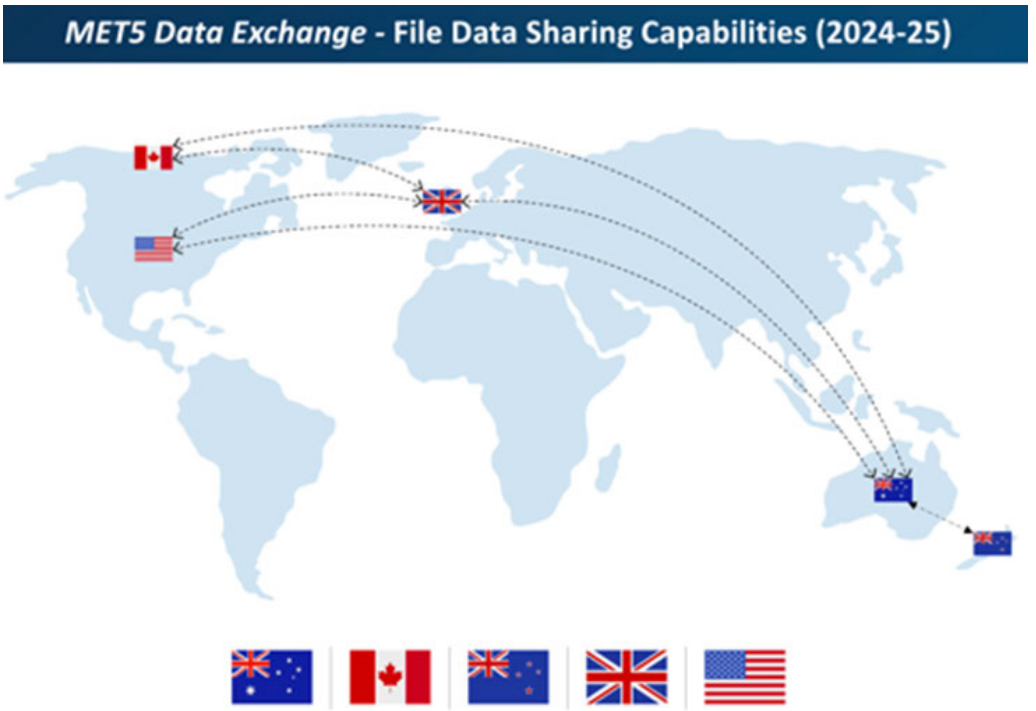
As part of the U.S. Space Force-led JCO initiative, the Pacific Cell operates under a 'follow-the-Sun' model, leveraging Australia's geographic advantage to maintain continuous space domain awareness (SDA). ASWS's on-site presence ensured that environmental space weather conditions – such as solar activity and geomagnetic disturbances – were factored into SDA assessments and JCO's operational decisions during the exercise.

The ASWS maintains an ongoing service into the JCO, providing space weather intelligence to support its global network of space situational awareness and SDA activities.

Expanding the data exchange capabilities of the MET5

The Bureau's work with the Meteorological Five Eyes (MET5) partnership highlights its global standing in the exchange of meteorological and oceanographic data to support Australia's national security and defence activities, together with the Five Eyes nation partners of Canada, New Zealand, the United Kingdom and United States. In 2024–25, the Bureau led the development of the data exchange platform with its partners to significantly expand data sharing capabilities.

Australia and its Five Eyes partners used the data exchange to support their contributions to the world's largest military maritime exercise, Rim of the Pacific, in early 2024–25. Bureau modelling data were used by Defence partners in forecasting environmental conditions to optimise the use of tactical radar systems, and by the US Air Force to trial new concepts in targeted local weather modelling for their field operations.



MET5 Sharing of Meteorological and Oceanographic Data.

Continuing to support Defence through Bluelink

In May, the Bureau, the Department of Defence and CSIRO signed a new Memorandum of Understanding to support long-term collaboration on the Bluelink ocean forecasting platform.

Bluelink is a significant and long-standing joint effort to better understand and predict ocean conditions and provide real-time ocean forecasts to support Defence operations. This collaboration has led to the development of the world's most accurate global ocean forecast system, predicting sea level and three-dimensional temperature, salinity and ocean currents.

In addition to servicing Defence, Bluelink forecasts are also available to other marine users, including maritime transport providers, the fishing industry and tourism operators, creating broader economic and social benefit to the community.

Bluelink is truly world-leading, with a next-generation data assimilation method that no other forecasting centre in the world has implemented. The Bluelink Global Ocean Science Team was recognised with the prestigious 2024 Department of Defence Eureka Prize for Outstanding Science in Safeguarding Australia.

Delivering products and services to support Defence aviation

The Bureau has a long history delivering meteorological, oceanographic and space weather intelligence to Defence. This support enables Defence's operational effectiveness and efficiency and reduces the risk to personnel and platforms posed by severe weather events.

The Bureau's Defence Weather Service (DWS) provides forecasting services and face-to-face briefings at 5 Royal Australian Air Force and 2 Army Aviation-managed bases. This face-to-face service enhances the ability of these units to achieve training and meet preparedness objectives, while operating safely.

The Bureau's DWS meteorologists form close relationships with the units they support, developing a deep understanding of their location, business needs and risks, to ensure their expertise is utilised to optimise Defence operations.

During 2024–25, the Bureau's DWS issued a total of 23,848 Aerodrome Forecasts, Route Forecasts, Military Area Forecasts and Aerodrome Warnings. Additionally, DWS conducted 3,272 military briefings and answered 2,076 military enquiries.

The Bureau's Urshla Connor briefing aircrew at RAAF Base Amberley.

Deploying weather and space weather expertise on military exercises

The National Security and Space Program's partnership with the Australian Defence Force (ADF) is underpinned at the tactical and operational level through the Bureau's Defence Weather Service and the Australian Space Weather Forecasting Centre. By providing critical environmental and space weather intelligence, the Bureau helps the ADF achieve an operational edge.

An important service to Defence is the Bureau's participation in exercises where environmental and space weather intelligence is injected into exercises to simulate real-world events and challenges. The exercises practice planning and military operations, improving combat readiness and interoperability between Australian forces and their partners.

During 2024–25, the Bureau supported 14 military exercises, including several public events such as the Gold Coast Airshow, Avalon Airshow, Warbirds Downunder Airshow (Temora), and Riverfire (Brisbane). The team also supported military relief efforts during the floods in Townsville in February and tropical cyclone Alfred in March.

Two Australian Army CH-47F Chinook helicopters from 5th Aviation Regiment provide assistance during the North Queensland floods in 2025. Image credit: Department of Defence.

Supporting Western Queensland producers during severe weather

In late March, the Bureau's Agriculture team provided timely support to primary producers in western Queensland ahead of forecast severe weather. The team issued targeted email alerts to contacts across producer and advisory organisations detailing expected rainfall and flood conditions. Recipients forwarded the advice to producers in their networks. These alerts enabled producers to take early action, including relocating livestock and implementing other risk mitigation measures. The Bureau also contributed to the recovery effort by briefing the Queensland Agriculture Recovery Taskforce. Bureau forecasts supported the coordination of aerial fodder drops for stranded livestock. Feedback from the sector was positive, highlighting the value of targeted, timely and accurate information.

Highlights and significant events

Supporting Australian aviation during tropical cyclone Alfred

In addition to the provision of routine services supporting the aviation industry, the Bureau provides emergency support to the aviation industry during major events. This support ranges from providing emergency forecasts to support search and rescue activities and aerial evacuations, to the provision of expert advice in relation to critical infrastructure across airport and airline operations.

Embedded in Airservices Australia's National Operations Management Centre, the Bureau's aviation meteorologists provide bespoke analysis and forecasts to enhance the efficiency of aircraft movements both in the sky and on the ground. Our meteorologists provided decision support services for Airservices Australia during major events such as tropical cyclone Alfred.

The embedded meteorologists played a key role in enabling Airservices Australia and the wider aviation industry to maintain situational awareness and assess potential impacts to national aviation operations. This information fed into assessments of the impacts of tropical cyclone Alfred on aviation-related infrastructure, and the ability to provide ongoing aviation services to the community. The decision support function provided by the Bureau enabled Airservices to effectively engage with their customers including airline and airport operators throughout the event. Impacts to services were minimised through the ability to scale decision support services to meet the dynamic needs of the event.

Gold Coast Airport terminal during tropical cyclone Alfred. Image credit: Australian Federal Police.

Protecting aircraft, passengers and crew from volcanic ash impacts

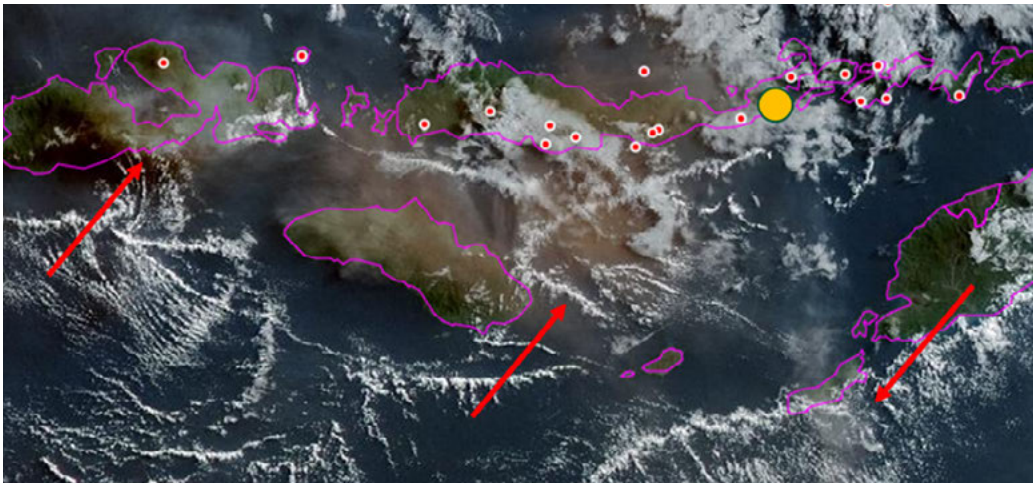
The Bureau's Volcanic Ash Advisory Centre (VAAC Darwin) provides advice to the aviation industry about the location and movement of potentially hazardous volcanic ash. Operating from Melbourne, VAAC Darwin is staffed by meteorologists who are specially trained to detect and forecast the movement of volcanic ash, which is a known aviation hazard.

The VAAC Darwin is responsible for the area that covers the active volcanic regions of Indonesia, Papua New Guinea and the southern Philippines, and extends southwards to the pole.

During the year, 15 different volcanoes produced volcanic ash eruptions, compared to eruptions at 21 different volcanoes during 2023–24. In 2024–25, VAAC Darwin issued 6,139 volcanic ash advisories (compared to the annual average across 2015–2025 of 3,180 advisories).

This included advisories for multiple high impact events, which generally have discernible or visible ash that is impacting or expected to impact aircraft at cruising levels or international aerodromes.

High impact events on 4 November 2024, 21 March and 17 June 2025 were associated with Lewotobi Laki-laki located on the island of Flores in Indonesia. The events impacted Indonesia's island of Bali and Denpasar International airport, which is approximately 830km west of the volcano.



Himawari-8 visible satellite imagery at 17 June at 2330 UTC (18 June at 09:30am AEST) of the Lewotobi Laki-laki eruption where the orange dot is the volcano location and red arrows are pointing to volcanic ash. Imagery courtesy of the Japan Meteorological Agency.

Supporting the future of Pacific food security

Pacific Island Countries (PICs) are on the front line of climate-driven food insecurity. Food systems in larger PICs such as Fiji, already shaped by geographic isolation, are increasingly reliant on cheap imported food due to population increase and urbanisation. Smaller PICs battle sea level rise, increased soil salinity and other climate challenges which make growing food domestically more challenging and less reliable, all of which leads to micro-nutrient deficiencies, malnutrition, and a range of preventable non-communicable diseases. Amid these disruptions, there are calls for communities to return to local crops and smallholder farming as sources of strength and resilience.

During the year, the Bureau's Agriculture team worked with the Department of Foreign Affairs and Trade, CSIRO, local organisations and the Pacific Community (SPC) on the Pacific vison for Adapted Crops and Soils, a program that forms part of a worldwide movement to help improve food security through research and support for neglected and underutilised crops such as breadfruit, cassava and pandanus.

In April, members of the Bureau's Agriculture team travelled to Fiji for a inception workshop with SPC to chart a way forward for the program over the next 2 years, starting with a review of existing research and mapping of complimentary programs across the region. This work will continue in 2025–26.

Building farm business resilience through the Climate Services for Agriculture project

During late 2024, significant progress was made in partnership with CSIRO to enhance climate resilience and engagement across northern Australia. The Bureau collaborated with Tropical North Queensland Drought Hub, the Farm Business Resilience Program, and the CSIRO social science team to develop a training program for Farm Business Resilience Program facilitators. These facilitators work closely with farmers and are well placed to use My Climate View to support long term farm business planning.

A demonstration video for My Climate View was produced to support national outreach, while a successful pilot First Nations co-design workshop occurred in Darwin. This marked the beginning of a series of ongoing climate workshops with First Nations communities across the region.

Key governance processes, including First Nations engagement ethics and Indigenous Cultural and Intellectual Property protocols, were further refined. A comprehensive communications and engagement plan, including detailed stakeholder mapping, was submitted to the Department of Agriculture, Fisheries and Forestry. Additionally, a First Nations engagement report and user experience design concepts were developed to guide future engagement and inform potential product development.

Image from the My Climate View summary video.

Next steps

In 2025–26 the group intends to:

- continue to deliver essential suite of aviation meteorological services, including volcanic ash advisory services
- grow sector awareness of space weather risks and impacts
- continue to deliver critical weather and climate services to support Australia's national security and prosperity.

Outcome 2: Flagship projects delivered on time and on budget to achieve planned impact and value.

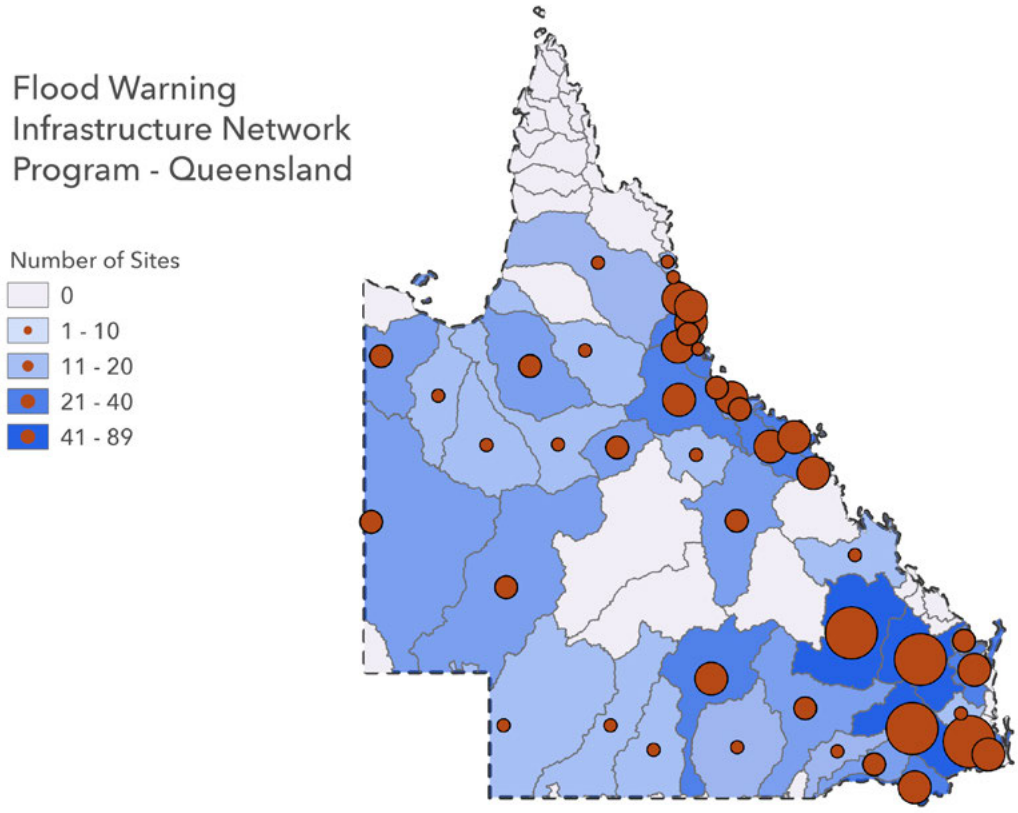
Achieving the outcome

Upgrading Australia's flood warning infrastructure

In 2024–25, the Bureau continued to lead the $236 million national Flood Warning Infrastructure Network (FWIN) Program to upgrade Australia's flood warning infrastructure and improve community access to rain and river level observations. The program also supports improved flood forecasts and warnings to support disaster preparedness, response and recovery. FWIN is on schedule, achieving key milestones on time and within budget.

In Queensland, the Bureau negotiated the inclusion of approximately 830 (of the expected 1,100) flood warning sites with the current owners, with 153 sites being formally transferred to the Bureau. Remediation commenced at 7 sites in the Cairns, Townsville and Bundaberg local government areas. This included piloting an innovative design to retrofit existing rain gauges with contemporary communication systems.

Detailed site prioritisation was completed for New South Wales, with the initial program of work announced in June, identifying 141 of the 258 sites agreed to form part of the program, as well as specifying the first 30 sites for remediation in 2025–26.



Map showing the location of sites in Queensland accepted for the FWIN Program.

Enhancing Pacific climate data and forecast services

The Bureau migrated 12 climate data management systems to fully managed cloud instances to maintain operations for 15 Pacific partner countries. Enhanced quality control visualisations and historic data ingestion were also deployed. Parallel upgrades to Pacific ACCESS-S added real-time forecast verification and inverse-barometer sea-level outlooks. More than 180 people gained new skills through national, regional and virtual training, strengthening the capacity of Pacific national meteorological and hydrological services to turn quality data into actionable climate services.

Supporting our Pacific neighbours to elevate aviation safety

In 2024–25, the Bureau supported 2 of its Pacific neighbours in strengthening their meteorological observation capabilities to enhance the safety and efficiency of air travel in the region. Reliable weather observations are essential for providing accurate weather forecasts, reducing the risk of weather-related incidents and enhancing operational resilience in one of the world's most isolated airspaces.

In a significant leap forward for aviation safety, Tuvalu launched a state-of-the-art aviation weather station in October that is already making skies safer for pilots navigating this remote island nation. The station was built by the Tuvalu Meteorological Service with support from the Bureau under the Australian aid funded Partnerships for Aviation initiative, and is equipped to provide real-time monitoring of cloud cover, wind speed, temperature, humidity, and atmospheric pressure.

The Bureau also provided technical guidance and support to the Vanuatu Meteorology and Geo-Hazards Department to successfully restore the Vanuatu Upper Air Sounding Station in December, after a 10-year pause following significant damage to the station inflicted by tropical cyclone Pam. This station collects pressure, temperature, and wind data at various altitudes using radiosondes attached to balloons.

Tuvalu's new aviation weather station located at Funafuti Aerodrome which includes (from left to right) the thunderstorm sensor, cloud sensor, present weather sensor and rain gauge.

Highlights and significant events

Building community resilience in remote Australia

For many remote communities, airstrips serve as the sole means of transport when flooding cuts off road access for extended periods. With increased heavy rainfall events being experienced and predicted into the future, safe access to remote airstrips is essential. In 2024–25, the Bureau conducted a climate vulnerability assessment of remote airstrips across the Kimberley, Pilbara, Gascoyne and Goldfields regions to support the Aboriginal Community Airstrips Renewal Program, led by the Western Australian Department of Transport.

The focus of the assessment was to provide evidence-based information on the vulnerability of 32 remote airstrips to flooding, so that remote and isolated communities continue to have access to essential goods and services. Given the limited flood observation networks across remote regions in Western Australia, the Bureau used rainfall as a proxy for flood risk by establishing relationships between flooding and trigger rainfall to infer potential future flooding events. The findings give insight into the likely rainfall and potential flooding regime, recognising there are unique challenges and needs specific to each region that need to be considered. The project highlighted the complexity for translating climate science into actionable insights for local decision-making needs.

The Fitzroy Crossing airstrip during the January floods. Image credit: Shoal Air.

Reducing the cost of severe weather in the Pacific

In March, the Australian Government signed an arrangement with the Secretariate of the Pacific Regional Environment Program to support and fund the flagship Weather Ready Pacific Decadal Programme of Investment. A culmination of many years of planning, the arrangement's objective is to reduce the human and economic cost of severe weather events across the Pacific. Importantly, the agreement is Pacific led and owned, representing the new way in which the Bureau will partner and collaborate with Pacific nations.

The Bureau is the Australian Government technical agency and advisor to the Weather Ready Pacific Programme. One of the programme's early successes has been the graduation of 3 staff from the Samoa Meteorological Agency in the Bureau-delivered Graduate Diploma in Meteorology, developing the next generations of forecasters. The Bureau is also supporting the Pacific to establish their own World Meteorological Organization designated training centre and Pacific training capability for long-term sustainability and resilience.

Sepi Gafa (Samoa Meteorological Agency) receiving a Graduate Diploma in Meteorology from Mitzi Wotton, Principal of the Bureau of Meteorology Training Centre.

Applying early warnings to water management in the Cook Islands

The Climate and Oceans Support Program in the Pacific (COSPPac) is helping Pacific Island countries translate seasonal forecasts into sector-specific early action. In the Cook Islands, the COSPPac-developed Early Action Rainfall (EAR) Watch has become a central component of drought preparedness and response planning across several sectors.

In 2024–25, the Cook Islands Meteorological Service (CIMS) worked in partnership with To Tatou Vai (the national water utility) and the Bureau to co-develop and embed EAR Watch as an early warning system for water supply management. This tailored product has transformed the role of CIMS from weather service to operational partner. The EAR Watch is now embedded in the national drought plan and aligned with catchment-specific thresholds to support day-to-day decisions and long-term planning.

The benefits extend beyond government. In partnership with the Cook Islands Red Cross, EAR Watch is also used to inform community-based action plans. Training and workshops supported by the Bureau helped embed drought preparedness into local routines, from installing water tanks

Fine Arnold, Secretary General of the Cook Islands Red Cross Society, and Rebecca McNaught collaborate with Cook Island workshop participants to develop community-based action plans using EAR Watch triggers.

to launching inclusive awareness campaigns.

COSPPac's approach of co-designing locally relevant services ensures that climate information is not just shared, it is used. Through the EAR Watch, communities and agencies across the Cook Islands are better equipped to anticipate drought risks and take proactive steps to safeguard lives and livelihoods.

Next steps

In 2025–26 the group intends to:

- continue flood warning infrastructure upgrades by:
  - acquiring sites in New South Wales and additional sites in Queensland
  - remediating and maintaining sites in Queensland
  - prioritising sites in Victoria
- support the ongoing transition of Weather Ready Pacific strategic leadership to the region
- implement the Bureau's Energy Sector Services plan.

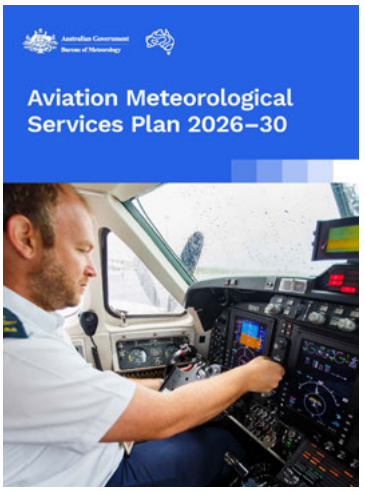
Outcome 3: Secured and expanded our flagship projects to ensure we grow the path to impact and value.

Achieving the outcome

Gaining industry endorsement of the Bureau's future aviation services

The Bureau regularly consults with all levels of the aviation industry to ensure the ongoing value of its essential aviation meteorological services. In 2024–25, the Bureau reviewed and revised its consultation and governance approach with the aviation industry, resulting in the commencement of an Aviation Meteorological Services Strategic Advisory Group.

The advisory group, which comprises senior industry representatives, endorsed the Bureau's Aviation Meteorological Services Plan 2026–2030. The plan defines an investment pathway, in the form of 13 service modernisation initiatives, to meet the changing regulatory environment and the operational needs of all segments within the aviation industry. Implementation of these initiatives over the next 4 years will deliver an uplift in the services provided to all industry users, enhancing the safety, efficiency and resiliency of the air transport ecosystem.



The cover of the Aviation Meteorological Services Plan 2026–30.

Operational excellence in the delivery of aviation services

The Bureau's delivery of essential aviation meteorological services must be certified against ISO9001:2015. The certification requires the Bureau to demonstrate continual improvement activities supporting better outcomes for the aviation industry. The maintenance and enhancement of ISO 9001:2015 certification ensures the Quality Management System not only provides assurance but is leveraged as a driver of value and decision-making.

In 2024–25, the Bureau improved its aviation meteorological service provision by more closely aligning it against requirements outlined by the International Civil Aviation Organisation (ICAO). This enhancement has also focused on embedding risk-based thinking into everyday processes, helping the Bureau better integrate lessons learned and opportunity identification into business-as-usual activities. This governance-focused capability directly supports the sustained delivery of essential services, while also positioning the Bureau to grow its future impact through improved quality, compliance, and customer confidence.

A new partnership with the Solomon Islands

Australia and the Solomon Islands have agreed to collaborate through a meteorological twinning arrangement. The partnership focuses on enhancing weather and climate technical capabilities of the Solomon Islands. Under the partnership the Bureau will be supporting the development and enhancement of meteorological infrastructure, ensuring the Solomon Islands has the physical resources needed for accurate and timely weather forecasting.

The Bureau will also be providing capacity-building opportunities and training programs for meteorological staff. This will help to equip them with the skills and knowledge to effectively utilise the infrastructure and manage weather-related challenges. These efforts will extend to strengthening technological systems and people processes to improve operational resilience.

This targeted approach aims to enhance the Solomon Islands' ability to better forecast, withstand and respond to weather events. Overall, this arrangement represents a significant step forward in international collaboration and strengthening of meteorological capabilities in the region.

Enhancing our National Water Reporting framework and indicators

The Bureau's Urban National Performance Report (NPR) framework provides an annual, independent benchmark of pricing and service quality of Australian urban water and wastewater service providers. It plays a key role in urban water performance. Through a range of indicators, the framework enables comparison between providers and helps identify innovation and improvement opportunities.

Under the guidance of the water industry, the Bureau is progressively expanding the NPR framework to enhance transparency and build public confidence in the performance of water utilities. In 2024–25, the Bureau successfully updated the reporting handbook, upgraded its database to support revised indicators and expanded the framework to include smaller service providers. These changes allow the Bureau to incorporate data from about 300 service providers across the country, up from 86 providers previously.

These changes will strengthen national water data, which can support international reporting obligations, such as those related to the Sustainable Development Goals (see p.191) – and help address water security challenges due to climate change.

Next steps

In 2025–26 the group intends to:

- deliver capability improvement projects in line with the Aviation Meteorological Services Plan 2026–2030
- deliver flagship projects such as Climate Services for Agriculture 2
- support development of a new National Water Agreement.

Data and Digital

Goal: To provide our customers and colleagues an outstanding experience all day, every day.

The Data and Digital Group (DDG) is responsible for the Bureau's data, observation and information technology that underpins the Bureau's core operations through to production and dissemination to customers. The group's focus is to efficiently manage service-focused, secure, resilient and adaptive information and observations technology portfolios that leverage emerging technologies and data, enabling the Bureau to deliver services and products.

For 2024–25 the group consisted of 6 programs:

Program	Responsibilities
Planning and Architecture	• Technology policies and standards • DDG planning uplift • Demand and pipeline management • Enterprise architecture.
Observing Systems and Operations	• Operation of the observing network • Observations planning and delivery • Maintenance and sustainment of the network.
Data	• Data governance, advice and standards • Data management and services • Data requirements and quality • Managing data partnerships.
Digital Channels and Customer Experience Design	• Customer research, user design and prototyping • Digital channel development and operations • Digital customer analytics • Service delivery management.
Application Services	• Delivery and support of ICT applications and platforms • Digital workplace and application lifecycle services • Testing and quality assurance • DevSecOps (Development, Security, and Operations) • Geospatial systems.
Service and Infrastructure Management	• Reliable and secure ICT operations • High-performing computing • ICT support services • Cyber operations.

Throughout 2024–25, the group focused on delivering 4 outcomes that support the achievement of the Bureau's strategy and purpose. The group's achievement in delivering each of these outcomes is discussed below.

Outcome 1: Strengthen our customer focus by working with our colleagues who engage with customers.

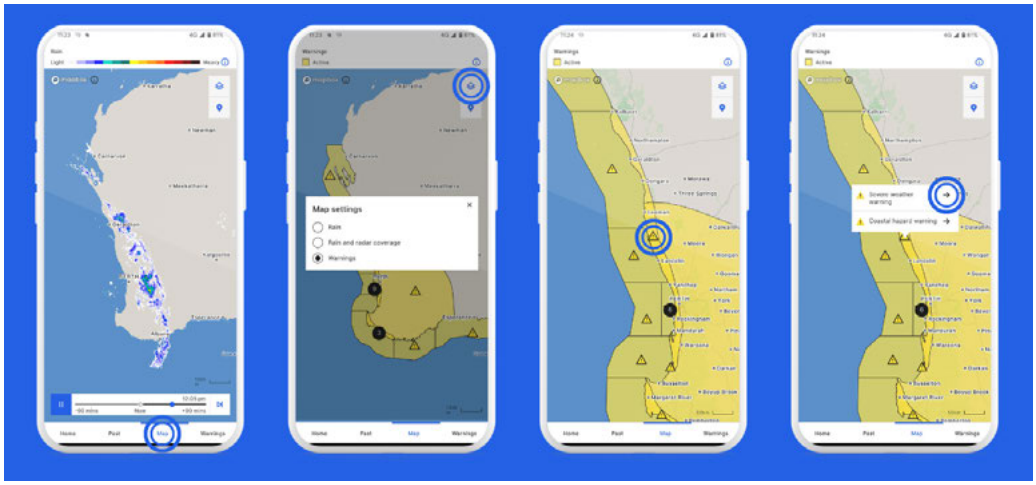
Achieving the outcome

Continuing to enhance the BOM Weather app

In December, 2 significant updates were made to the Bureau's BOM Weather app.

A new feature was added to enable customers to view warnings visually on the map rather than seeking the content via one location.

An acknowledgement of Country feature was also added to the app, aligning with the Bureau's new website and its commitment in the new Reconciliation Action Plan (see p.142).



Screenshots of the steps to enable and view the warnings map layer in the BOM Weather app.

Enhancing our meteorological visualisation and processing systems

In 2024–25, the Bureau completed several upgrades to its Visual Weather systems, which are used by forecasters to display maps of numerical model output and real-time weather data.

In July, over 220 Visual Weather workstations and 27 servers used by the Bureau's Community Services Group were upgraded with the latest software for smooth and efficient forecaster operations. In August, over 40 Visual Weather workstations and 9 servers used across the Bureau's aviation services were upgraded with the latest software, significantly improving operational capabilities.

Boosting weather observation infrastructure for the aviation sector

In 2024–25, the Bureau strengthened aviation safety and resilience by installing back-up automatic weather stations at Hobart and Darwin airports. Additionally, 27 Centralised Automated Weather Information Broadcast units were deployed at regional airports, providing pilots with real-time weather updates specific to the location.

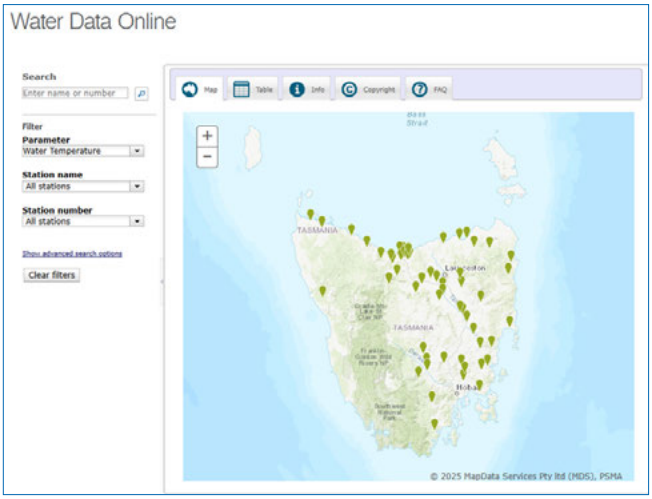
To further improve safety near runways and taxiways, the Bureau began installing frangible (fibreglass) anemometer masts. These structures are designed to break upon impact and therefore reduce risks to aircraft and personnel while offering greater flexibility in site selection, ensuring compliance with aviation safety standards.

The backup automatic weather stations at Darwin airport.

Completing national coverage of surface water data

The Bureau's Data Program fulfills a critical role in collecting, holding, managing and disseminating many categories of Australia's water information. As part of this responsibility, Tasmanian surface water quality data was published in the Water Data Online portal in November, completing national coverage of surface water quality data available on the portal.

Water quality data includes electrical conductivity, water temperature, acidity pH and turbidity. This data supports external water customers and partners to understand what water resources can be used for and how to manage them effectively.



Screenshot of the Water Data Online portal showing water quality data for Tasmania.

Enhancing the discoverability of the Bureau's data

During the year, the Bureau added metadata for 89 records to the Australian Government Data Catalogue, a new centralised, searchable repository that allows users to discover metadata records of data held by various government agencies.

The additions ensure the Bureau's data is more discoverable and has opened up another pathway for Australians to find the Bureau's data and derive value from it.

Enhancing trust in our data with ISO 17025 accreditation

In May, the Bureau achieved ISO/IEC 17025 Accreditation for Electrical Metrology from the National Association of Testing Authorities, following the successful development of an automated calibration system by the Standards and Metrology Laboratory. This system tests automatic weather station data acquisition cards under an exhaustive range of simulated environmental conditions from -30°C to +60°C, ensuring performance under real-world extremes faced across Australia and our territories.

Developed through multiple design iterations, the capability meets stringent customer requirements and delivers consistent and reliable measurement outcomes. It supports the Bureau's commitment to achieving consistent uncertainty in calibration processes, aligned with international standards, and enhances the reliability of national observation systems.

The accreditation strengthens trust in the Bureau's observations and scientific outputs, setting a benchmark for future capability development and reflecting the highest standards in electrical calibration.

Highlights and significant events

Maintaining operations during and after tropical cyclone Alfred

In March, the Bureau's Observing Systems and Operations Program rapidly established a rostered 24/7 flood network monitoring function in response to tropical cyclone Alfred and resulting flooding in southern Queensland and northern New South Wales.

It was an exceptional example of cross-Bureau collaboration, drawing in staff from several teams to ensure forecasters and the emergency services could continue to access reliable flood data. The Bureau's flood warning network maintained reliability despite daily rainfall totals in the region exceeding 100 mm and gale force winds. Post-event, technical staff quickly pivoted to their field work while navigating flooded roads and power outages.

The Application Services Program, in coordination with other teams across the Bureau, mobilised to prepare contingency plans in the event of an impact to the Bureau's infrastructure in Brisbane. Additional support staff were placed on standby to provide critical support including after hours and over the weekend. Fortunately, the Brisbane office remained unaffected, and continuity of all critical functions was maintained.

Flooding closed the road to the Mt Stapylton radar following tropical cyclone Alfred in March.

Next steps

In 2025–26 the group intends to:

- launch and continue to enhance the new website in collaboration with other Bureau groups
- continue to enhance the BOM Weather app based on customer feedback and the Bureau's Digital Channels Roadmap.

Outcome 2: Ensure resilient, trusted and secure services delivered through sustainable and reliable IT, OT and data operations.

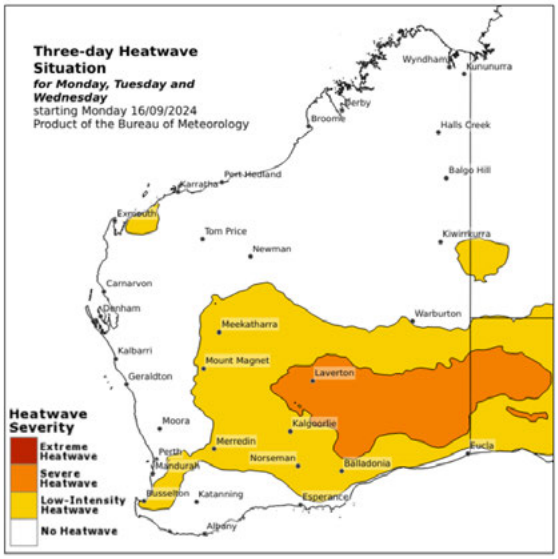
Achieving the outcome

Testing system readiness ahead of the higher risk weather season

Through extensive enterprise collaboration, the Bureau successfully completed the annual end-to-end severe weather testing for its heatwave and tropical cyclone systems in September and October.

These exercises successfully validated critical workflows and system integrations and ensured the Bureau was well-prepared to deliver seamless, efficient, and resilient services to Australian communities ahead of the start of the heatwave and tropical cyclone seasons in October and November respectively. These reliable and well-supported applications were critical in managing extreme events during one of the warmest and most active cyclone seasons on record.

The Bureau also delivered enhancements to the 7-day tropical cyclone outlook based on feedback from the Australian community and emergency services, in preparation for the start of the higher risk weather season.



Comprehensive testing of heatwave products occurs each September, before the start of the warm season. This image was produced for a test Severe Heatwave event in Western Australia.

Enhancing our Enterprise Integration Platform

The Bureau's Enterprise Integration Platform (EIP) is a modern integration solution that was operationalised in November 2023 under the ROBUST Program. As a Category 1 system, EIP is critical to the Bureau's operations and is supported 24/7 by the Bureau and its external delivery partner. The platform is a cornerstone of the Bureau's digital transformation strategy, enabling future asset remediation projects and significantly improving the Bureau's ability to deliver reliable, secure, and high-performing data services.

In February, the Bureau implemented a series of enhancements to the alerting platform, aimed at improving system reliability and reducing unnecessary after-hours escalations. Key improvements included the suppression of non-critical alerts, elimination of false positives, and clearer

visibility into system status during scheduled maintenance windows. These changes form part of the Bureau's ongoing service delivery uplift, focused on strengthening system resilience and addressing technical debt.

Continuing to improve the Bureau's observing systems

The Bureau undertook a range of activities to enhance the security, stability and resilience of its observing network during the year. The new Karratha radar went live in October, replacing the Dampier radar which was significantly damaged by severe tropical cyclone Damien in February 2020. The upgraded radar delivers higher-quality imagery during heavy rain and storms, enhancing image resolution to better differentiate between rain and hail. Installation of the Townsville radar was completed in November.

The new Karratha radar was installed in October.

Automatic weather stations (AWS) were installed on the ships *MV Goliath, CSL Resilience and OOCL Houston* during the year. Shipborne AWS contribute to the Australian Voluntary Observer Fleet and are part of a global network of ship observations that underpin the Bureau's marine forecasts and warning services. These installations provide a significant uplift with observations now transmitted hourly, building on the crews' up to 20-year manual observation record. The installation also improves the quality of various parameters through the addition of high quality sensors for measuring wind speed/direction and sea surface temperature.

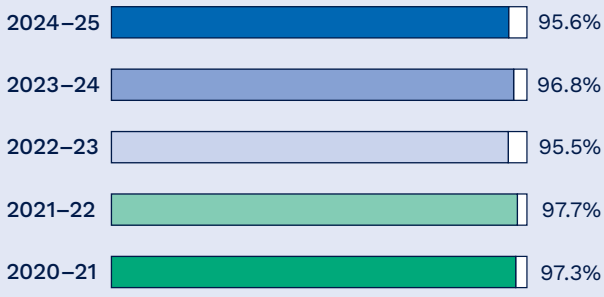
AWS were also successfully installed under the AWS Replacement Project with a critical milestone met in June with all 10 pilot site installations now in place.

Real-time radar data coverage was available for

95.6%

of the year

Uptime of the Bureau's radar network



In October, Hobart Airport became the first of 7 capital city airports to be fully automated under the Bureau's Automation of Capital City Airports (ACCA) project. The ACCA project continues the work of delivering the Bureau's objectives to transition its observing investment and effort through automation.

Streamlining data storage and archival practices

In March, a new Warm Storage and Cold Archive system went live to enhance the Bureau's data management and compliance with the *Archives Act 1983*. This system streamlines how data on the Bureau's new Beta test website is stored, accessed, and archived, improving operational resilience and data discoverability. By leveraging modern cloud-based archival platforms, users benefit from faster, self-service access to data, reduced reliance on advanced retrieval scripts, and more efficient storage and responsiveness to external requests for historical data.

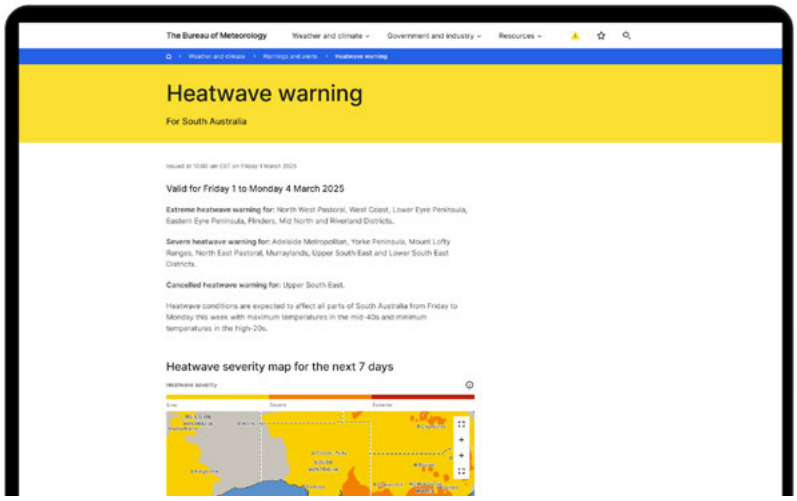
Continuing development of our new website

Development and testing of the Bureau's new website continued during 2024–25. Following the release of the test website beta.bom.gov.au in June 2024, the test website operated in parallel with the Bureau's existing website throughout the year.

Since the release of the Beta test website, the Bureau has received over 13,000 items of community feedback through the website's customer satisfaction (CSAT) survey. The community response to the Beta test website has been very positive, with the CSAT score (the percentage of survey respondents who reported being satisfied or very satisfied with their experience on the test website) continuing its upward trend from 69.6% in July 2024 to 77.3% at 30 June 2025.

In 2024–25, there were 7 incremental releases made to the Beta test website to publish new features, improvements and defect fixes. Significant changes included:

- updates to the rain radar images to provide more detailed radar information and better definition of small but intense rainfall
- updates to warnings, including the addition of heatwave warnings
- addition of new weather map forecast layers
- updates to flood warning products
- addition of tropical cyclone forecast track maps and past weather map layer.



Screenshot a heatwave warning on the Bureau's Beta test website.

The Bureau's new website is expected to be launched for the 2025–26 higher risk weather season once performance testing is completed. The Bureau is committed to delivering a secure, stable and resilient website that meets the needs of 90% of website traffic (visits) and provides essential public safety information.

Improving the security and resilience of our ionosonde network

During the year the Bureau's Ionosondes Upgrade project improved the security and resilience of the ionosonde network which services civil, aviation and defence high frequency radio communications. An ionosonde is a high frequency radar system used to monitor the ionosphere – the part of the Earth's atmosphere that forms a boundary between the lower atmosphere where we live and breathe and the vacuum of space. The new 6A ionosonde at Casey Station went live in September and new battery systems were installed throughout the network at Learmonth, Perth, Darwin, Townsville, Norfolk Island and Niue. The project also completed go live for 6A ionosondes at Norfolk Island and Mawson Station in October and November respectively following successful data comparisons by the Bureau's Space Weather Forecasting team.

Migrating our Central Message Switching System

The Central Message Switching System (CMSS) is the Bureau's primary real-time message switching system, designed to ingest raw meteorological observations, text data, binary data, and file data. Ingested data is decoded and stored into the Bureau's Oracle database. CMSS also switches ingested data to the Bureau's state and territory offices and web servers, as well as to external organisations, both in Australia and internationally.

As part of the Data Centre Consolidation Program, this critical core system was moved to the Bureau's new Eastern Data Centre in November, without causing any disruptions to the day-to-day operations of the Bureau.

Highlights and significant events

Restoring tsunami detection stations in the Tasman Sea

Deep ocean tsunami observation stations within the Australian Tsunami Warning System (ATWS) perform a vital role in the early detection and real-time reporting of tsunamis before reaching land. The ATWS deep ocean network consists of 6 stations deployed as pairs in proximity to tectonic plate subduction zones in the Indian Ocean, Coral Sea and Tasman Sea.

Left: Previous ocean bottom sensor being recovered. Right: New replacement buoy deployed late-May 2025.

In February and May, the Bureau restored 2 tsunami detection stations in close succession to address a dual station outage in the Tasman Sea. In April 2024, 1 of the 2 stations servicing the Tasman Sea zone became adrift and went offline after the mooring prematurely failed, and in late-2024 the data service from the second station became unreliable.

The Bureau worked with Earth Sciences New Zealand to undertake the deployment works at the challenging ocean locations, requiring considerable equipment preparation and logistics to achieve.

Successfully completing our supercomputer mid-term upgrade and migration

In June, the Bureau successfully completed the production cutover to its Australis II supercomputer in the new Eastern Data Centre (EDC) and migrated its numerical weather prediction (NWP) models from the existing Australis I supercomputer in the Main Data Centre (MDC). The move to Australis II as the Bureau's primary production supercomputer represents a significant upgrade to its global NWP capability and another step towards secure, stable and resilient IT infrastructure.

The complex and challenging transition was the result of years of planning and significant cross-enterprise collaboration involving many dedicated team and individuals. More than 500 distinct tasks were undertaken with 100 individuals responsible for actioning them at various stages of implementation.

As part of the transition, the Bureau implemented the fourth iteration of its core NWP model – Australian Parallel Suite (APS4) – which provides significant improvements in model physics and ensemble forecasting compared to earlier iterations (see p.131).

The mid-term upgrade also included:

- relocating 28 model suites from Australis I (MDC) to the new Australis II (EDC)
- updating core suites with model data management system SIMPLER (see p.132)
- completing implementation of the IMPROVER post processing system (see p.77) which provides forecasts for wind, temperature, dew point temperature, rainfall and other variables

The Bureau's Gareth Johnson, Gem Lloyd, Mick Logan and Nichole Brinsmead in the 'Control Room' on cutover day.

- implementing new automation tools for controlled production releases with the DevSecOps build pipeline
- upgrading the workflow functionality of each suite to the Cylc workflow engine
- migrating approximately 300 virtual machines across all business areas with minimal service interruption
- integrating with new and legacy enterprise services for data ingestion and distribution, including interim data storage solutions hosted by the secondary supercomputer for disaster recovery (Sentinel) in the Future Data Centre
- extensive downstream testing and adjustments with both supercomputers operating in a parallel run for verification purposes.

Following the cut-over, a 6-week period of hypercare was instigated to ensure a smooth transition and address any initial issues through enhanced incident monitoring and support. Exit from the Main Data Centre (MDC) and make-good activities will be completed in 2025–26.

Next steps

In 2025–26 the group intends to:

- continue lifecycle management of observing systems and information technology and building of asset management capability, including decommissioning of IT and OT assets
- continue ongoing development and maintenance of business continuity plan and disaster recovery plans
- deliver Data Management Maturity Uplift Roadmap activities.

Outcome 3: Expand and cultivate our partner ecosystem.

Achieving the outcome

Securing our supply of lightning data

In 2024–25, the Bureau secured supply of critical lightning data to support its customers and operations by extending its contract with Weatherzone for both global and Australian lightning data. The Bureau also contracted Metraweather to supply lightning data for internal Bureau use in exchange for the Bureau hosting Metraweather sensors at several Bureau sites across the country.

Lightning data are a critical input to Bureau forecasts of severe weather and thunderstorms for the public, emergency services and many critical sectors such as aviation, national security, energy and resources. Lightning data are also critical for fire weather and are used by the Bureau to provide decision support to fire agencies across the country. The contracts enable the Bureau to continue to add to its national lightning climate record which contributes to climate monitoring activities and supports its Calibrated Thunder product.

Supporting emergency management through portable weather stations

The Bureau onboarded 7 fire agency portable automatic weather stations (PAWS) sites in 2024–25, taking the total number nationally to 99 sites. Observations from PAWS are incorporated into Australian Fire Danger Rating System products which are provided to emergency management agencies to support incident response and planned burns, as well as being shared with the Australian community through the Bureau's website. The Bureau's commitment to onboarding this data and other fire weather services is outlined in the Fire Weather Service Level Specification.

Advancing weather resilience through regional collaboration

In January, the Bureau hosted a meeting of the World Meteorological Organization (WMO) Working Group on Infrastructure involving staff from the Bureau's Data and Digital Group and representatives from Indonesia, Singapore, Fiji, Malaysia, the Philippines and Samoa. The meeting focused on data, observations and IT for enabling key service priorities in the south-west Pacific related to multi-hazard early warning systems, climate, hydrological, aviation and marine weather services. Such events enable and enhance data sharing across the globe for regional, national and local weather service provision.

Members of the World Meteorological Organization (WMO) Working Group on Infrastructure hosted by the Bureau in January 2025.

At the meeting, participants assessed progress and updated plans implementing Regional WMO Integrated Global Observing System (WIGOS) Centres, which routinely monitor the availability and quality of surface and upper-air observations across member countries using the WIGOS Data Quality Monitoring System. This initiative, combined with the ongoing creation of a Regional Basic Observations Network, aims to better predict and respond to key regional hazards including heavy rainfall, tropical cyclones, coastal inundation, marine hazards, severe convection, droughts and heatwaves.

Over the course of the next year, Regional WIGOS Centres will routinely report on data availability and quality issues to improve the quality of critical weather data exchanged internationally. Documentation will also be prepared to guide countries to exchange data that will enhance the prediction and monitoring of the key regional challenges that align with the Early Warnings for All program (see p.85).

Fostering community engagement at Giles Weather Station

In June, the Bureau's first Community Engagement Cadet commenced work at the Giles Weather Station, located in remote Central Australia, near Warakurna (Western Australia) on Ngaanyatjarra Land. Giles Weather Station attracts numerous tourists who visit to observe the daily balloon flights and learn about the station's operations and history. The cadet engages with visitors while they observe the balloon release and tour the station's museum. The Bureau's Observing Systems and Operations Program and its First Nations Office worked together during the year to establish the 12-month position. The position provides an employment opportunity for the local community and it supports the Bureau's Reconciliation Action Plan by supporting indigenous employment opportunities.

Streamlining labour hire arrangements for greater efficiency

During the year, the Bureau's Enterprise Business Systems team – in collaboration with Bureau colleagues and vendor partners – successfully transitioned 28 labour hire agencies to the new internal Cross-Application Time Sheet system (CATS). As part of its Business Systems

Transformation program, this initiative streamlines payment processing by enabling full automation and eliminating the need for managers to confirm invoices separately through multiple external portals. The transition to CATS enables all contractor timesheets to be processed through a single Bureau-managed system, improving accuracy, timeliness, and reducing administrative burden.

Highlights and significant events

Collaborating to better understand atmospheric processes in the Southern Ocean

The Cloud and Precipitation Experiment at Kennaook (CAPE-k) has been operating continuously at Kennaook / Cape Grim (KCG) since April 2024 and is set to conclude in October 2025. This experiment is being led by the US Department of Energy Atmospheric Radiation Measurement (ARM) in partnership with the Bureau's Observing Systems and Operations Program and CSIRO's Aerosols and Reactive Gases team at KCG.

The overarching goal of this campaign was to obtain the first seasonal cycle of detailed, vertically resolved measurements of cloud and precipitation in the marine boundary layer and to discern how these properties co-vary with aerosols and dynamical and thermodynamic factors, in a region of the world known to exhibit the strongest model radiation biases.

CAPE-k involved the deployment of a suite of instrumentation to measure a variety of cloud properties which complemented the station's extensive existing aerosol program. The station also hosted a range of guest instruments from Queensland University Technology, University of Michigan, University of York and Karlsruhe Institute of Technology as part of this global effort to understand the aerosol-cloud-precipitation interactions in pristine Southern Ocean air masses.

Clean Ocean Air Sampling upwind of Tasmania – Kennaook (COAST-k) was a parallel intercomparison study that ran in April and May. Utilising the Marine National Facility's Research Vessel (RV) Investigator scientists from CSIRO, the University of Melbourne, the University of Wollongong, German Weather Service (Deutscher Wetterdienst) and the Bureau's Science and Innovation Group collected ship and KCG observations from the same air masses.

Atmospheric Radiation Measurement (ARM) Technician Tom Day maintaining the Marine Atmospheric Emitted Radiance Interferometer (MAERI) as part of CAPE-k with the RV Investigator around 2 nautical miles offshore. The MAERI is a passive instrument which measures sea surface temperature and other radiative parameters at an above the sea surface. Image credit: Frank Zurek.

The science objectives of this study compliment those of CAPE-k, but also included the first direct comparison between 2 Global Atmospheric Watch stations: the RV Investigator and KCG. Instrument data onboard the RV Investigator, which is the world's first mobile Global Atmospheric Watch station, will be scrutinised alongside KCG observations to validate data quality as well as the regional representativeness of KCG's baseline sector.

CAPE-k and COAST-k data will be disseminated through world data repositories, ensuring global access for the climate science community. Covering around 25% of the Earth's surface, the Southern Ocean is one of the cloudiest and most data-sparse regions on the planet. Accurately characterising these vast regions of the atmosphere is essential to solving known biases in global climate and numerical weather prediction model outputs.

Next steps

In 2025–26 the group intends to:

- commence implementation of radar modernisation
- continue to meet requirements of the water regulations
- work with international partners to enhance the Bureau's rapid scan earth observations capability.

Outcome 4: Maintain a future ready workforce through maturing our core capabilities.

Achieving the outcome

Continuing to mature the Bureau's asset management

Over the last 4 years, the Bureau has matured its asset management capability by implementing an Asset Management Framework to provide a structured approach to managing its observing assets. The framework is designed to improve whole-of-life asset efficiency, reduce risk, and enable better decision-making.

In 2024, the Australian National Audit Office (ANAO) undertook an audit of the Bureau's management of assets in its observing network. The final report was published in January.

The report found the Bureau is partly effective in managing assets in its observing network and outlined 4 key recommendations. The Bureau accepted all 4 recommendations and committed to delivering actions in response by June 2026.

The new and old Townsville radars. The radar replacement occurred in November 2024.

Strengthening knowledge and skills in radioactive particle monitoring

The Bureau has a long-standing (26 years) Memorandum of Understanding with the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) supporting Australia's radionuclide monitoring obligations to the Comprehensive Nuclear-Test-Ban Treaty (CTBT). The Bureau hosts radionuclide monitoring equipment and collects daily radionuclide samples at 4 locations – Darwin Airport, Cocos Island, Perth Airport and Townsville Airport. Darwin also hosts one of 2 Noble Gas stations in Australia. The purpose of radionuclide monitoring is to detect radioactive particles or gases from atmospheric explosions or vented by underground or underwater nuclear explosions. In 2025, Bureau staff attended the inaugural Station Operator Workshop, bringing together CTBT operators from Australia and Pacific Islands to increase awareness and understanding of the CTBT International Monitoring System, discuss the fundamentals of radionuclide monitoring and share station operator perspectives.

Maturing our approach to technician competency training

The Bureau is committed to maintaining a skilled and capable workforce to underpin the reliability and precision of its meteorological infrastructure. Bureau technicians play a critical role in ensuring the Bureau's observing equipment is maintained and operating effectively in support of Bureau operations. The Bureau has applied a structured approach to technician training for several years, with the development of network-specific competency frameworks for Observing Systems and Operations field staff largely complete. During the year, focus shifted to completing scheduled reviews and updates of these competency frameworks, driven by the introduction of new technologies, procedures and operational processes.

The Bureau uses a set of integrated tools to effectively record and quantify competency data to monitor the currency of staff competencies over time, and to respond proactively to emerging training needs. Through continuous development and rigorous competency management, the Bureau ensures its technical teams are equipped to support the evolving demands of our national observation network.

Expanding our business analysis skills and capability

The Bureau's business analysis capability aims to provide all Bureau business analysts (BAs) with a set of guiding frameworks, principles, templates, governance arrangements and tools to perform their role in a consistent, high performing and effective way to help the Bureau achieve its strategic objectives.

In July, the Bureau launched new Business Analysis eLearning modules to build its capability in this practice. Uptake of the learning modules increased throughout the year, with staff choosing to add business analysis skills to their repertoire, adding value to their everyday role and better enabling the Bureau's workforce to support its initiatives.

Next steps

In 2025–26 the group intends to:

- adopt Senior Executive Service data accountabilities and commence implementation
- continue to review its operating model and embed new capabilities.

Science and Innovation

Goal: To use research and innovation, to continually improve our knowledge and systems enabling the Bureau to deliver world class services and insights to our customers and shared value with our partners.

The Science and Innovation Group is responsible for research and innovation supporting Bureau services and delivering shared value for our partners. The group's focus is on world class science and development that enables the Bureau to deliver better weather, water, climate, ocean, space weather and Earth system information and insights. The group also has stewardship of the Bureau's Innovation Framework.

For 2024–25, the group consisted of 2 programs:

Program	Responsibilities
Research	• Earth system modelling • Observations and data science • Applications science • Seamless prediction science • Hydrology science.
Research to Operations	• Transfer of research outputs to operations • Validation and verification of models and model output • Data assimilation and post processing.

Throughout 2024–25, the group focused on delivering 4 outcomes that support the achievement of the Bureau's strategy and purpose. The group's achievement in delivering each of these outcomes is discussed below.

Outcome 1: The application of scientific and technological skills and knowledge uplifts Australia's capability to manage a changing climate and increasing natural hazards, leading to enhanced national resilience.

Achieving the outcome

Providing a consistent view of Australia's climate – past, present and future

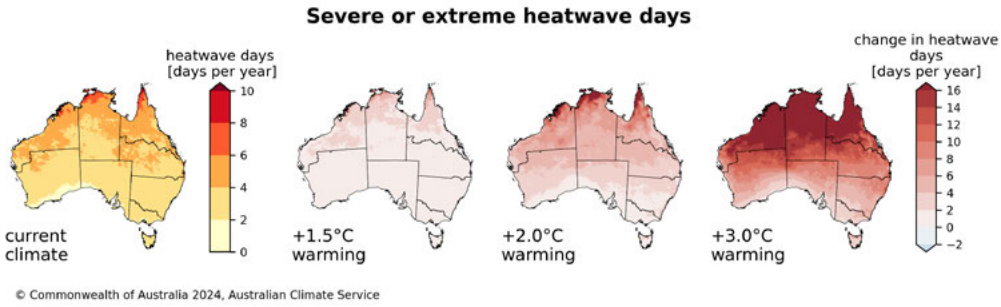
The Australian Climate Service (ACS) relies heavily on climate modelling undertaken by the Bureau in partnership with CSIRO, ensuring Australians benefit from the nation's best science and modelling capability. The Bureau's climate modelling contributions cover both the past and the future, extending from 1979 to the present for the Bureau's historical reanalyses (BARRA), with

climate change projections out to 2100 using the Bureau's Atmospheric Regional Projections for Australia (BARPA) version of the ACCESS forecast system.

The climate change projections from BARPA and the reanalyses from BARRA have now been published to the National Computing Infrastructure and are available on a standard 5 km grid for ease of use by the ACS and Bureau partners including state and territory governments. These models provide the first nationally consistent view of Australia's past, present, and possible future climate with many uses being explored in climate change adaptation across emergency management, energy infrastructure, urban design and agriculture.

Supporting the National Climate Risk Assessment

To support the ACS with its National Climate Risk Assessment (see p.150), the Bureau has extended its inputs beyond the traditional variables which come from climate modelling to the inclusion of hazards that will be important in the future safety and prosperity for Australia. These hazards include heatwaves, bushfire, drought and aridity. To allow objective assessments to be performed, the Bureau has developed hazard indices which provide a measure of how the hazards change through time. Current and future estimates of the hazard are made against different projected Global Warming Levels (GWLs). GWLs indicate the increase in global average surface temperature relative to pre-industrial levels. As such they describe plausible climate futures out to around 2100. For example, this allows the ACS to estimate the likely count of severe and extreme heatwaves under different GWLs.



Change in the number of days experiencing severe or extreme heatwave conditions from current conditions (GWL 1.2 °C) to future conditions (GWL 1.5, 2.0 and 3.0 °C)

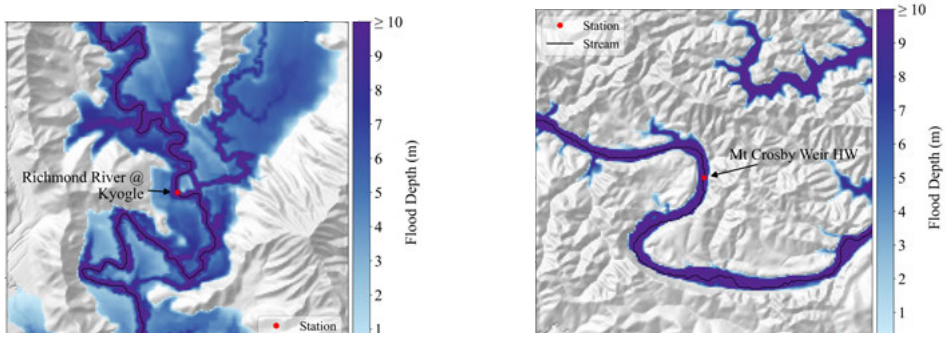
Updating Australia's hydrological projections for improved flood prediction

Scientists have known for a long time that a warmer world will see more hydrological extremes and that the past is not an accurate representation of the future. As such, past events don't provide a reliable basis for future hazard prediction. In response to this challenge and a request from the National Emergency Management Agency with the support of the ACS, the Bureau is developing the first national mapping of future hydrological extremes and flood risk.

The first phase has been delivered using the Bureau's current operational landscape model coupled to the river routing model (CaMa-Flood), to develop flood maps of the 1% annual exceedance probability inundation depth for parts of the Richmond and Brisbane rivers (New South Wales and Queensland respectively) in a cool and wet plausible future scenario at 2 degrees warming.

Known as Next Generation Flood Projections, the project will provide a consistent representation

of flood risk for the coming century, drawing on a range of climate model inputs and future emissions scenarios, with the goal of having the coupled modelling component: land surface and river routing (JULES-ES+CaMa-Flood), implemented within BARRA and BARPA. This mapping is critical for properly designing Australian infrastructure and cities for the future, reducing the impact of extreme events, and assisting with insurance affordability which is a rapidly growing problem as hazardous events increase.



The projected cool and wet scenario's 1% annual exceedance probability inundation depth at 2 °C global warming at (left) the Richmond River at Kyogle and (right) Mt Crosby Weir along the Brisbane River.

Highlights and significant events

Developing a national climate attribution capability

Attribution is the process of explaining why a trend or extreme event has occurred. It can be applied to observations after something has occurred, or before-hand to understand why a forecast or climate outlook might be showing a certain feature. Research in the Bureau has been exploring multiple approaches to the challenge of making accurate and timely attributions, recognising that the best practice approach is to use multiple lines of evidence. While it might seem straightforward to ask how an event has been modified by global warming, for example, there is no accepted single approach to the problem. For Australia, Bureau customers want to know about global warming impacts as well as other causes of extreme events, which can help with improving prediction and projection models.

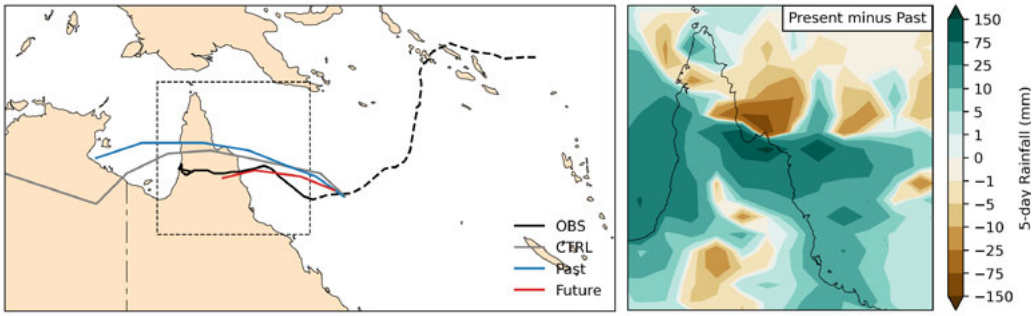
The Bureau has developed 3 distinctly different approaches to attribution which can each give different insights:

- a forecast perturbation approach using the Bureau's models (ACCESS-S initially) to explore how individual events might change if we remove global warming (to produce 'counter factuals') or switch off part of the climate system such as the influence of the El Niño / La Niña
- a distribution shift approach which looks at how the likelihood of an event changes if greenhouse gas increases are removed, for example
- a regression approach which explores how climate influences like El Niño contribute to the extremity of climate events, on time scales of weeks to seasons.

These have been developed through the Victorian Government sponsored Victorian Climate and Water Initiative, the National Environmental Science Program and the ACS, with strong advocacy from priority users for developing this nationally critical capability.

Each of these approaches can also be used to assess how recent events would present in the future, to help better quantify risks from climate hazards. The past year has seen each of these

methods progress further, with applications in near real-time. As an example, the Bureau has explored the flooding rains of tropical cyclone Jasper to see how the tropical cyclone might be affected by climate change to date and into the future. The Bureau also examined how the likelihood of the extensive marine heatwave off the north-west coast was altered by climate change.



Tropical cyclone Jasper stalled over land and the extensive rain had major impacts through Cairns and far north Queensland. Left image – the Bureau's modified initial conditions attribution system (ACCESS-MICAS) shows changes in the track and rainfall amount in different climates (blue is the track in the past, red in the future). Right image – preliminary results suggest increasing rainfall totals to the south of the storm with global warming, but the track is very important.

Next steps

In 2025–26 the group intends to:

- uplift priority hazard data to better meet user needs, focused on flooding, heavy rainfall, tropical cyclones and severe convective storms
- enhance foundational climate and hazard modelling focused on the convective scale (~5 km) and hydrology to support the uplift of critical key hazards
- facilitate an enduring Climate Risk Service including ensuring data availability, documentation, review and accessibility through the ACS platform.

Outcome 2: Research, innovation and collaboration deliver improved forecast, warning, analysis and observing systems that enhance Bureau services providing greater benefits to the Australian government, community and industry.

Achieving the outcome

Predicting floods with artificial intelligence (AI)

To address the challenges of accurate flood prediction, the Bureau has leveraged deep learning using Long Short-Term Memory (LSTM) techniques on high-frequency radar rainfall and river level data. Radar rainfall provides high-resolution spatial and temporal information, making it ideal for capturing the dynamics of intense precipitation which can often lead to hard-to-predict events such as rapidly evolving floods or flooding from tropical cyclones. By employing advanced deep learning architectures such as convolutional neural networks or convolutional LSTMs, the Bureau aimed to extract complex spatial patterns and relationships between rainfall characteristics, terrain, and flood occurrences.

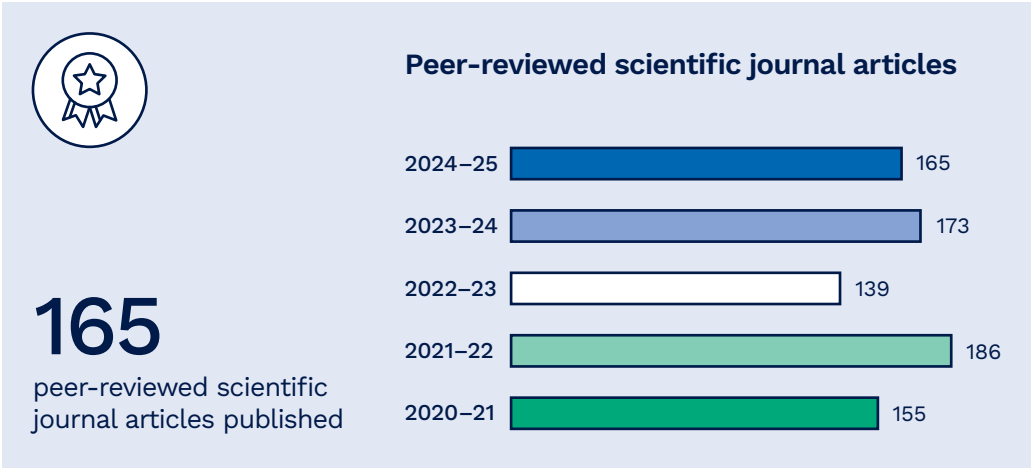
To translate flood level forecasts into actionable information, LSTM outputs were combined with Light Detection and Ranging (LiDAR)-derived digital elevation models to generate inundation maps. These maps showed high agreement with flood extent observed with satellite-based remote sensing (Sentinel-2), achieving over 94% overall accuracy and up to 85% critical success index at 12-hour lead time. The approach has the potential to significantly improve prediction accuracy with more lead time for communities to prepare and respond, offering a powerful tool for Bureau services and disaster management and mitigation.

Blending AI and physics-based models for improved weather forecasts

A model post-processing workflow was developed by the Bureau for the new AI-based weather model (AIFS) from the European Centre for Medium-Range Weather Forecasts (ECMWF). The Bureau's IMPROVER post-processing system was applied to AI forecasts of temperature, dew point temperature, and wind speed. The existing operational physics-based configuration of IMPROVER demonstrated strong performance when applied to AI model data, delivering improvements of several days in forecast skill.

Incorporating AIFS into a blended forecast, together with traditional physics-based weather models, resulted in a notable enhancement in overall forecast accuracy. These findings indicate that integration of AIFS into the Bureau's operational forecasting system is both feasible and beneficial using its existing tools, techniques, and capabilities.

A journal article detailing this research has been submitted for publication, and a poster presentation was delivered at the UK Met Office Seamless Global Modelling Workshop held in Bristol in June. Ongoing work is focused on evaluating techniques for the use and improvement of AIFS precipitation forecasts for Australian conditions.



Scoring forecast accuracy on a global scale

Evaluating and verifying the accuracy of forecasts and warnings is essential for continuous improvement. This year, the Bureau's verification capabilities were significantly enhanced by upgrading the core engine of Jive (the Bureau's primary operational verification system) and releasing it as open source. The resulting package 'scores' enables anyone in the Bureau to apply advanced verification tools across any system. Developed collaboratively by 3 teams from the Bureau's Science and Innovation Group, and with external partners such as CSIRO, the package has empowered teams across the Bureau to assess forecast quality more effectively. Beyond

internal use scores has gained traction nationally and internationally. It has been adopted by private institutions, research agencies, meteorological organisations, and has been downloaded in over 100 countries. It has supported 10 peer-reviewed publications in the past year, demonstrating its value to the broader scientific community.

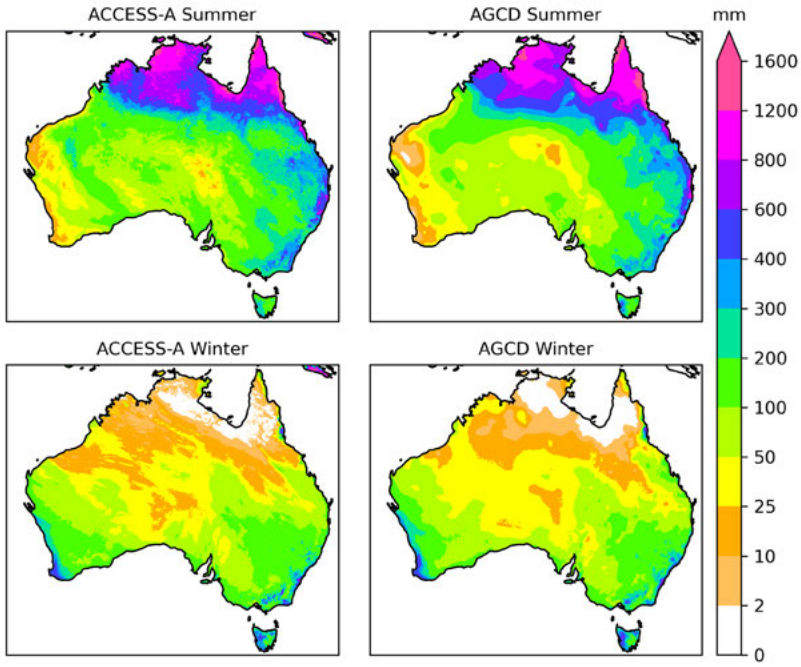
Enabling better decision-making using warnings based on risk matrices

The goal of warning systems is to enable early action to save and protect lives, livelihoods and assets of people at risk. During the year, Bureau researchers developed a framework for issuing and evaluating multi-level warnings using risk matrices. The warning framework accounts for the likelihood and severity of the hazard, as well as the urgency of the response, and is compatible with the Common Alerting Protocol.

The approach addresses key challenges in traditional warning systems by providing information that supports consistent response behaviour backed by objective measurement of warning performance and accuracy. This approach has been demonstrated with examples using data from tropical cyclone Jasper (2023). The approach provides a framework for transparent, reliable and trustworthy meteorological alerts and will help people make better decisions when faced with severe weather.

Trialling national weather forecasting at kilometre scale

The new continental-scale numerical weather prediction system, ACCESS-A, will provide national forecast guidance at high spatial resolution. ACCESS-A has been developed into an hourly cycling system that takes in a wide range of conventional and satellite observations. It has been trialled over 3-month periods in summer and winter to validate and evaluate the skill of the system. These extended trials enabled ACCESS-A to demonstrate its stability over an extended period and



Three-month rainfall accumulations from ACCESS-A trials (left column) and the Australian Gridded Climate Data (AGCD, version 1) (right column) over summer (Dec 2023-Feb 2024) and winter (May-Jul 2024).

generate a large dataset for evaluation. An extensive variety of verification has been conducted on the trial data. It was found that ACCESS-A can represent weather events on large and small scales, with realistic representation of rainfall. Verification against automatic weather stations indicated a good level of skill.

With kilometre-scale resolution across all of Australia, ACCESS-A will replace ACCESS-C that covers 7 of Australia's most populated areas. ACCESS-A uses a new science configuration that includes improved moist physics schemes compared to ACCESS-C and appears to be comparable or better than ACCESS-C in all metrics examined. The conclusion of the trials and verification is that the ACCESS-A system is suitable to be transitioned to operations.

Highlights and significant events

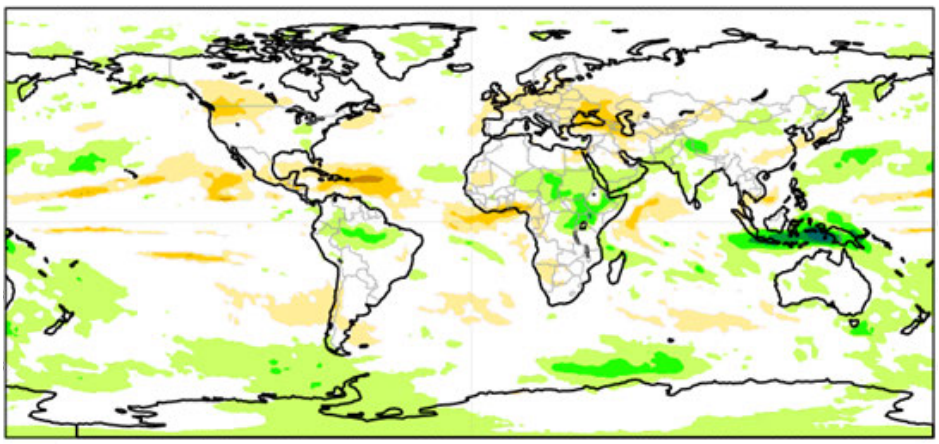
Contributing to the global picture on climate change

In May, the Bureau's operational seasonal forecast model, ACCESS-S2, joined other international models in the Copernicus Climate Change Service (C3S) implemented by the ECMWF.

C3S provides a multi-model ensemble of seasonal atmospheric and ocean forecasts from leading international centres from around the world, including the UK Met Office, Météo-France, the US National Weather Service and the Japan Meteorological Agency. These forecasts extend out to 6-months into the future and are updated on the tenth day of every month. Graphs for a variety of variables such as air temperature, wind speed, precipitation and sea surface temperature are displayed at different lead times on the C3S website. The combined model data is also served publicly through the Copernicus Climate Data Store.

Each model simulates the Earth system processes that influence weather patterns in slightly different ways, leading to different kinds of model error. Combining the output from a range of models enables a more realistic representation of the uncertainties. Using multi-model ensembles can improve forecast skill by averaging results from different models, which helps reduce errors and biases of the individual models.

The Bureau's contribution to C3S will lead to future improvements in weather and climate products and services in Australia. It will also provide new opportunities for climate modelling and joint research for the benefit of European and Australian communities.



Copernicus C3S multi-system seasonal forecast rainfall for July 2025, issued on 1 June 2025. Green indicates an increased chance of wetter than usual, brown/yellow shows an increased chance of drier than usual. Image credit: Copernicus Climate Change Service.

A new global wave hindcast for the Australian Climate Service

In 2024–25, the Bureau developed a new global wave dataset to support the Australian Climate Service (ACS) in its mission to improve data intelligence on climate hazards and risks. Coastal hazards driven by extreme wave activity and high sea levels can lead to erosion and inundation, posing significant risks to critical infrastructure and communities. The Wave Hindcast for ACS (WHACS) dataset provides hourly wave information globally and at high resolution in the Australasian region from 1979 to the near-present.

This work was led by the Bureau's Research Program, in collaboration with CSIRO, and utilises improved winds and ice data from the ECMWF atmospheric Reanalysis v5, aligning with the Bureau's Atmospheric Regional Reanalysis for Australia (BARRA2). WHACS uses a new high-resolution model grid, providing more wave information near coasts and in shelf regions.

WHACS supplies critical inputs to the new ACS Coupled Coastal Hazard Prediction System coastal water level hindcast (produced by CSIRO) and will provide important wave metrics and operational forecast context for Bureau customers via its marine and Antarctic services.

WHACS will be highly valuable in providing wave information for coastal hazard assessments, offshore and coastal engineering design, renewable energy projects, erosion studies, and wave model downscaling work. The new hindcast has been highly anticipated by customers and is expected to have significant uptake across multiple sectors.

Blackmans Bay, Tasmania.

Advancing hailstorm prediction through international cooperation

Hail is consistently the most damaging thunderstorm hazard for both Australia and globally, with events impacting homeowners, business, aviation, agriculture, transportation, energy and resources. To drive significant improvements in the prediction of hailstorms and their impacts, Bureau staff participated in the *In-situ Collaborative Experiment for the Collection of Hail In the Plains* (ICECHIP) project, the first US hail-focused field campaign in more than 40 years.

Bureau scientists collaborated with more than 100 scientists and students from the US, Canada, Switzerland and Germany to collect critical observational data by deploying mobile weather radar, ground instruments, unmanned aerial vehicles and balloon-launched equipment. During a 6-week

period, more than 20 hailstorm events and more than 15,000 individual hailstones were sampled. The Bureau led innovations to directly measure the pathways taken by damaging hailstones using the 'hailsonde' probe and made world-first discoveries of how hail grows and moves inside thunderstorms. This information will be used to evaluate and improve short-term forecasts of thunderstorms to produce more accurate footprints of where large hail is expected to fall, thereby improving guidance for future severe thunderstorm warnings.

Bureau scientist releasing hailsondes into a supercell in western Texas on 25 May that produced 15 cm hailstones.

Next steps

In 2025–26 the group intends to:

- explore new methods for evaluating AI-based weather prediction models
- replace the current Mesoscale Surface Analysis Scheme with the new National Analysis System to produce analysis and short-range forecasts for a wider range of surface and upper-level fields, providing additional information for forecasters and downstream applications
- prepare the ensemble version of ACCESS-A, ACCESS-AE, to run long trials and assess readiness for operational use
- investigate techniques to enhance short- to medium-range extreme rainfall forecasts through improved post-processing and calibration of ensemble model output
- improve seasonal hydrological forecasts using the Land Surface Model (JULES) and the river routing (CaMa-Flood) model.

Outcome 3: Support the development and uplift of the Bureau's HPC numerical modelling, analysis and post processing systems to provide high quality, secure and resilient NWP capability.

Achieving the outcome

Upgrading our forecast models on the Bureau's new supercomputer

The Australian Parallel Suite (APS) is the primary suite of numerical weather prediction (NWP) models used by the Bureau. The APS is a parallel processing system that enables multiple models to be run concurrently, increasing the accuracy and detail of weather forecasts. The APS is comprised of different Australian Community Climate and Earth-System Simulator (ACCESS) models, including ACCESS-G (global deterministic), and ACCESS-GE (global ensemble), ACCESS-C (city deterministic) and ACCESS-CE (city ensemble).

In June, the Bureau's high-performance computing (HPC) Earth system models and post-processing systems were migrated to its new Australis II supercomputer (see p.116). Australis II brings a 150% boost in performance, enabling the Bureau to complete more frequent and complex model runs.

New versions of the Bureau's ACCESS global NWP models became operational in the fourth release of the Australian Parallel Suite (APS4), representing a significant upgrade to the Bureau's global NWP capability. Improvements to the models included:

- improved probabilistic forecasts of temperature, mean sea level pressure, relative humidity and rainfall
- soil and snow temperature analyses in land surface data assimilation
- more accurate representation of extreme sea states
- more frequent ocean model data assimilation, from 3 days to daily.

Model and computer upgrades enable the Bureau to produce more accurate and timely weather information to support public safety and decision-making.

The Bureau's Australis II supercomputer in production.

Improving application management through a new centralised system

SIMPLER is a new piece of software infrastructure that will improve the Bureau's HPC data resilience. It was developed to support the migration of applications to HPC by isolating those applications from changes to the systems that provide input data or consume output data. It does this by providing a standardised and easily configurable method for moving data into and out of HPC applications. This also simplifies operational support of such data movement.

Next steps

In 2025–26 the group intends to:

- implement disaster recovery for HPC applications on the secondary HPC system called Sentinel
- extend accessibility of HPC data through the integration of the HPC data management system (SIMPLER) with the centralised data-stores
- further improve resilience and performance of HPC applications.

Outcome 4: Research and innovation aligned with the Bureau's R&D Plan creates enhanced impact and value for the Bureau's customers.

Achieving the outcome

Ensuring expert review through the Bureau Science Advisory Committee

The Bureau Science Advisory Committee met for the fourth time in December, providing a mechanism for peer review and international benchmarking of the Bureau's scientific progress aligned with delivery of its Research and Development Plan 2020–2030.

The Committee complimented the Bureau's progress over the past year and commended its mission-driven focus to deliver to customers. The Committee noted the significant effort for the migration of modelling systems to the new supercomputer, the delivery of the Bureau's world-class global model ACCESS-G, and the progress in developing an operational version of the regional modelling systems ACCESS-A and ACCESS-AE.

The Committee provided recommendations to the Bureau focused on strengthening its scientific output in completing ACCESS-A/AE, communicating uncertainty to customers and exploring AI models and their downstream impacts.

The Committee meets annually, with the next meeting scheduled for December 2025.

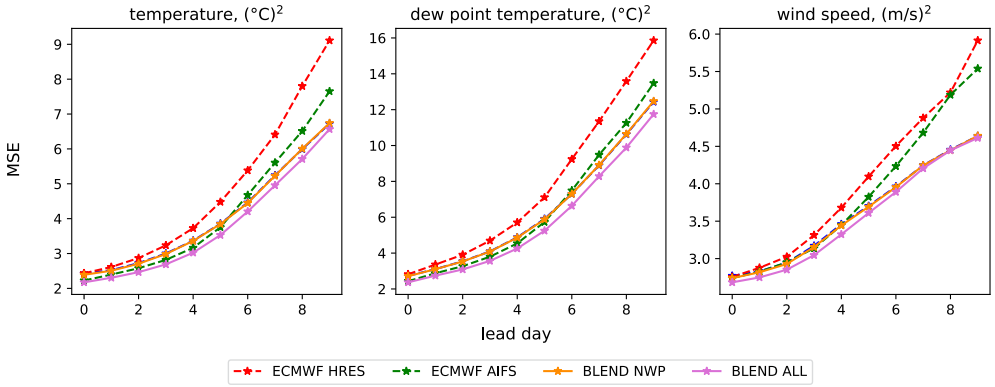
Adopting machine learning: the new frontier of Earth system science

The last year has seen good progress in the Bureau's investigation and uptake of artificial intelligence (AI) and machine learning (ML) to support its core functions. Underlying ML algorithms can now also be applied to scientific models used to predict weather in a 'physically informed' neural network approach.

During the year, Bureau researchers produced multiple publications on the construction and evaluation of ML models, and their integration with traditional numerical models. Investigations show that the most accurate predictions result from integrating ML model outputs with physical model outputs.

Bureau researchers are members of the World Meteorological Organization working groups for machine learning and model verification and are part of many other international collaborations. Bureau researchers on the Machine Learning for Climate and Weather Community Working Group at the ACCESS National Research Infrastructure also collaborate with Australian university researchers.

In 2025–26, the Bureau will trial delivery of integrated model outputs to forecasters for their expert feedback, to fully understand how these models could be used to enhance services for the Australian public.



Skill of ML models, physical models, and a blended approach. Lower scores are better. The diagram shows that ML models contribute an improvement to the blended skill, and that the blending approach remains effective when integrating an ML model input.

Advancing global river routing through MOMENTUM leadership

During 2024–25, the Bureau has continued to make significant contributions to the MOMENTUM Partnership involving operational and research centres from countries across the world to improve forecasts based on a shared seamless modelling framework. Building on its success in integrating a river routing scheme with a land surface model in Australia (see p.123), the Bureau has taken a leadership role in advancing the global implementation of this in collaboration with the UK Met Office. This initiative aims to couple river routing (CaMa-Flood), within the global coupled model (GC) to enhance the representation of streamflow and include human activities such as dam operations. Releasing CaMa-Flood within GC will mark a major milestone as it delivers a coupled model that integrates high-resolution hydrology across weather and climate timescales that will deliver improved hydrological predictions on a global scale.

Highlights and significant events

Engaging future STEM colleagues at Parliament House

During National Science Week in August, Canberra and Sydney-based colleagues joined Australia's Chief Scientist, Dr Cathy Foley, in the Great Hall at Parliament House for the inaugural Government Scientists Group STEM Expo. The Government Scientists Group (GSG) brings together all Australian Public Service (APS) Chief Scientists to drive collaboration across the APS.

This was a great opportunity to showcase the Bureau's work and inspire the next generation of science, technology, engineering and maths students about why they might think about a career in the Bureau. The event showcased the diversity of careers available within the 24 departments,

agencies, and regulators that make up the GSG. More than 1,500 people attended the event, from schools and universities across the ACT and the greater NSW region, along with several VIPs including Government ministers and other members of parliament.

Around 600 people also watched the livestream of the event which included a series of presentations from GCS agencies including Dr Luigi Renzullo, Senior Research Scientist in the Bureau's Hydrological Modelling team. Luigi spoke about how his passion for STEM at school, particularly in mathematics and physics led him to a career in the Bureau, monitoring the Earth through satellites and incorporating this information into our understanding of the hydrological system.

The Bureau's booth at the STEM Expo at Parliament House (Tiffany Day, Luigi Renzullo, Piers Flook, Dr Cathy Foley (Australia's Chief Scientist) and Lucy McGarva).

Engaging the next generation in forecasting futures

In June, the Bureau hosted a second industry immersion day, for 28 year 10 and 11 students from Wheelers Hill Secondary College, Highvale Secondary College and Mount Waverley Secondary College in Melbourne, following the success of the inaugural immersion day held in 2024. The event was facilitated by Monash Tech School, as part of The Education State Tech Schools Initiative to deliver industry sector-specific programs to students from participating schools.

The day provided a platform for students to explore the exciting world of science, technology, engineering, and mathematics (STEM) and shape their thinking around career options. The day involved a series of practical workshops and discussions, through which the students gained invaluable insights into the work of the Bureau in observations, meteorology and climate science.

The 3 rotations, each critical workforce pipelines for the Bureau, were carefully crafted to show the interdependence between these areas and the range of skills that go into weather forecasting, with options for students considering either a vocational qualification or higher degree. Each rotation covered some technical skills and how the interpretation of that information translated into products that were used by different customer sectors such as agriculture, government and aviation, to make decisions.

A particular highlight of the day was the live-cross Q&A with Bureau colleagues in Antarctica, Willis Island and at Giles station in central Australia, which gave the students an appreciation for the variety of locations and types of work they could be involved in. Feedback from students on

Students learning how to identify clouds on an aerological diagram with Tim Smith, Meteorology Trainer, in the Introduction to Meteorology rotation.

the day showed that 100% of students agreed they learnt about industries that use STEM, and 32% more likely to think about a career in STEM following school.

Next steps

In 2025–26 the group intends to:

- continue to pursue opportunities to broaden and strengthen collaboration with academia to support delivery of the Bureau's Research and Development Plan 2020–2030
- continue to leverage the scientific and technical expertise of the Bureau Science Advisory Committee to enhance the Bureau's science delivery in collaboration with national and international partners.

Enterprise Services

Goal: A trusted partner that best positions the Bureau to execute its strategy and deliver for Australia – all day, every day.

The Enterprise Services Group is responsible for designing and delivering integrated enterprise-wide solutions to support the delivery of the Bureau's Strategy 2022–2027. As trusted strategic partners, the group develops the Bureau's strategic, people, change, governance, product management, customer engagement, communications, project, financial, and risk management capabilities including workforce planning and development to enable the Bureau's staff to work in a safe and secure environment.

The group ensures effective controls are in place and that the enterprise services, systems, and processes are accessible, fit for purpose, and enable the Bureau to govern and manage its business well.

For 2024–25, the group consisted of 6 programs:

Program	Responsibilities
Strategy and Performance	• Strategy integration • Strategic policy • Planning and performance.
Portfolio Management	• Enterprise program and project management • Procurement, contract and vendor management • Protective security.
Communications	• External communications • Internal communications • Government relations • Strategic content and media • Creative.
Business Management	• Finance • Customer engagement • Product management • Property services.
Organisational Resilience	• Meteorological Authority Office • Legal services • Freedom of information and privacy • Risk management, internal audit and organisational resilience • Quality management system assurance • Health, safety and environment.

Program	Responsibilities
Organisational Development	• Workforce planning and reporting • Talent management and recruitment • Employee engagement • Workplace relations • Enterprise transformation • Diversity and inclusion • Health and injury case management • Learning and development • Meteorological technical training • Payroll.

Throughout 2024–25, the group focused on delivering 3 outcomes that support the achievement of the Bureau's strategy and purpose. The group's achievement in delivering each of these outcomes is outlined below.

Outcome 1: Integrated enterprise planning and investment ensures the Bureau can sustainably deliver strategic outcomes to its customers and stakeholders.

Achieving the outcome

Applying our communications expertise to support public safety

The Bureau's annual public safety campaign, *Know your weather, Know your risk*, is crucial in preparing the Australian community for the higher risk weather season (October to April). The objective of the campaign is to inform communities about severe weather risks and equip them with information and confidence to act when they need to.

In 2024–25, the Bureau delivered the campaign in September and October, ahead of the start of higher risk weather season for the first time.

The Bureau's campaign message was disseminated through its social media accounts, website and blogs, and was supplemented with links to videos and information on fire weather, flood, severe thunderstorms, heatwaves and tropical cyclones.

The pre-season campaign enabled greater coordination of community preparedness activities and proved successful in terms of several customer metrics. Compared to the 2023 campaign, there was:

- a 45% increase in page views of the Bureau's knowledge centre website
- a 13% increase in engagement and a 6% increase in session times with the Bureau's social media reels.

Planning ahead for smarter product distribution to customers

The Bureau's products and services are distributed across a wide array of platforms, systems and technology. While the Bureau's website and app cater to millions of users daily, there are several

other distribution channels with unique characteristics that provide access to the Bureau's data, information, knowledge, and insights.

The Bureau's Distribution Channel Plan is used to maintain strategic oversight and to support the evolution of its distribution channels to enable greater impact and value. In 2024–25, the Bureau's Customer Engagement team updated the Distribution Channel Plan and supporting documentation to ensure it remains relevant and representative of the Bureau's vast and complex channel landscape.

A dynamic channel catalogue was created to provide staff with visibility and transparency across all Bureau channels so they can be compared, measured, and used consistently to provide customer access to data, information, knowledge, and insights.

A new product distribution framework was developed and has been used to support recent distribution channel transition activities including the retirement of the Bureau's fax service and re-directing customers to more efficient and resilient channels. An enterprise distribution channel management procedure was also developed to describe the roles and responsibilities that are integral to good distribution channel management.

Clarifying the role of long-range forecasts

In late 2024, the Bureau began to make a series of changes to improve how it communicates long-range forecasts (formerly known as climate outlooks), shifting the focus from climate drivers such as La Niña and El Niño to the forecasts that reflect the complexity of Australia's climate system (see p.78). The Bureau undertook extensive communications and targeted engagement activities to deliver clearer messaging and encourage the community to use its long-range forecasts.

The focus on long-range forecasts was positively received by customers, media, and the broader community. Media outlets reported extensively on the changes, underscoring the value of simple, clear messaging and early engagement.

Key elements of this success included:

- the use of trusted voices – expert and credible spokespeople played a vital role in delivering clear, consistent messages across internal presentations and media channels, helping maintain trust in the Bureau's services
- early engagement – proactively involving key customers and media outlets before the release allowed the Bureau to build understanding and address questions early
- supporting staff – effective change management empowered staff to confidently support customers through established relationships and communication channels.

The Bureau used a video series to explain how to use long-range forecasts to plan beyond the next 7 days.

Delivering value through product leadership

The Bureau is committed to delivering relevant, modern, and customer-centric products, supported by strategic leadership and continuous improvement.

This year, the Bureau's Product Management team made substantial progress in developing its product management capability across 4 areas of focus:

- product transition and modernisation
- strategic collaboration and planning
- product testing and innovation
- evaluation and stakeholder engagement.

The team leveraged the Bureau's Customer Relationship Management database to extract customer intelligence to better inform product lifecycles across all the Bureau portfolios. This intelligence provided valuable insights into how customers engage with the Bureau's state and territory forecasts online, helping to guide future enhancements.

Customer feedback was strategically integrated into the Bureau's product management processes, supporting the retirement of low-value or outdated products. In contrast, popular offerings like the Water and the Land rainfall forecasts were revitalised through migration to more robust, modern systems.

Cross-enterprise collaboration was key to the team's delivery, partnering with decision support teams across Australia to finetune their operating model, contributing to the Aviation Meteorological Services Plan 2026–2030 (see p.106), supporting the flood remediation project with product lifecycle expertise (see p.83) and uplifting the long-range forecast suite to better meet community needs (see p.138).

Highlights and significant events

Providing trusted information during tropical cyclone Alfred

During severe weather events, the Bureau significantly increases its efforts to amplify weather information and warnings across a broad range of channels.

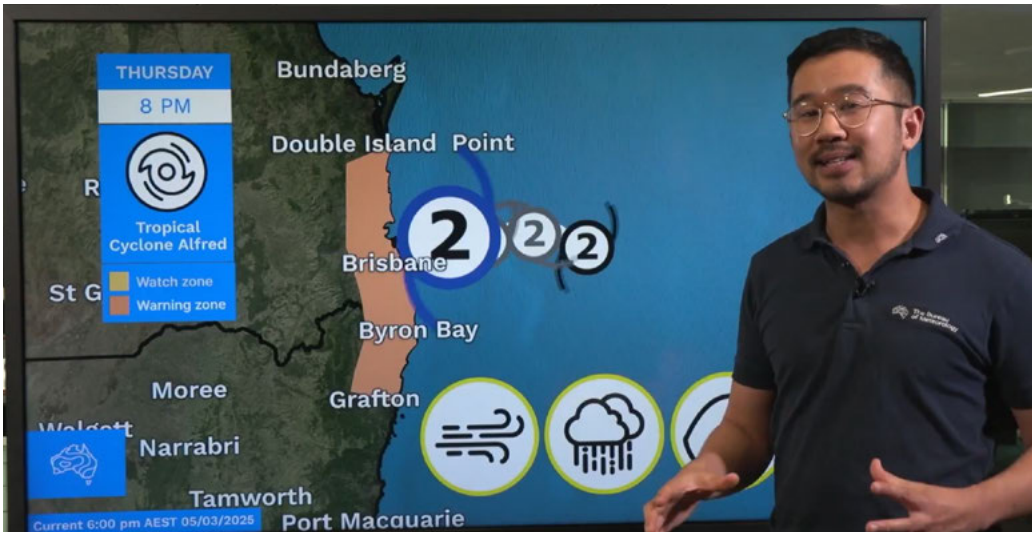
In late February and early March, the Bureau's Communications and Community Information teams found strategic and impactful ways to lead the narrative, counter misinformation and communicate updates as tropical cyclone Alfred tracked towards major population centres impacting areas across southeast Queensland and northeastern New South Wales.

In addition to a strong presence across morning television, hourly ABC Emergency broadcasts and daily joint press conferences with emergency services agencies, Bureau meteorologists posted directly to the ABC News live event blog, providing familiar and trusted expert voices to update readers directly.

The Bureau issued audio news releases to inform the weather narrative at the start of each day – sometimes issuing multiple releases per day – helping to ensure warnings and safety messaging were consistent no matter where or how they were received.

With the long lead time for the event, the Bureau increased the volume of educational and expert analysis focus in its social media content and severe weather videos to help the community better understand influences on the weather system and its likely impacts.

As the system neared the coast, Bureau teams provided extended communications coverage, in conjunction with emergency broadcasting radio crosses. As conditions changed in the early



Senior meteorologist Jonathan How provides a severe weather update on tropical cyclone Alfred.

hours of the morning, real-time updates were issued to address community uncertainty, manage increased demand in media enquiries and immediately explain the change as Alfred's intensity, impacts and path were evolving.

During the event, from 23 February – 11 March, the Bureau delivered:

- 20 press conferences
- 965 social media posts (across Facebook, X, Instagram and YouTube) which resulted in over 120,000 new followers and saw almost 4.3 million page and profile impressions on Facebook and Instagram alone
- 24 severe weather update videos which received over 2.6 million views on YouTube, and resulted in over 15,000 new YouTube subscribers, tipping the Bureau past the 100,000 milestone (see p.157)
- 38 audio news releases and video news releases to media outlets
- 163 ABC Emergency crosses in addition to weekly routine radio crosses.

The Bureau's widespread, timely and authoritative communications also saw 53 million visits to the Bureau website, 78 million visits to the BOM Weather app and 290,000 new downloads of the BOM Weather app.

The community showed strong appreciation of the information and how the Bureau delivered this information during the event, thanking the Bureau for its clear, authoritative and factual approach.

Next steps

In 2025–26 the group intends to:

- maintain accuracy and utility of the Bureau's product catalogue and provide strategic investment advice about product priorities
- provide clear and proactive communication and engagement that supports the delivery of severe weather communications
- measure customer experiences through a consistent approach in its customer experience measures framework.

Outcome 2: The Bureau's people are customer-focused, capable and engaged; contributing to a safe, secure, productive, inclusive and sustainable environment.

Achieving the outcome

Celebrating Harmony Week with a chorus of belonging

In March, the Bureau's offices across Australia were transformed by the gentle power of shared stories, songs, and meals for the 2025 Harmony Week celebration. The week's theme Everyone Belongs became more than a calendar event, it became a movement of connection, purpose, and pride.

In the Melbourne office, a group of employees gathered to form an informal choir to sing a rendition of 'We Are Australian'. What started as a musical experiment became a symbol of courage and unity.

Across the Bureau, staff brought dishes from their cultural backgrounds – sweet, savoury, and deeply personal. Each plate came with a story, each gathering with laughter and reflection. These moments weren't just social – they were acts of inclusion, of saying 'you matter' in the language of everyday kindness.

The Bureau's Multicultural Employee Network's 3-part campaign wove these threads together. From choir performances to photo compilations, from cultural cookbooks to heartfelt reflections, the campaign celebrated not just diversity, but the purpose it brings to the Bureau's commitment to the Australian Community.

The Bureau has a vibrant, multicultural workforce:

- 36% of employees were born overseas from over 70 countries
- 25% of employees speak a language other than English, with over 30 different languages spoken.

This diversity of thought and experience is a rich resource for the Bureau, helping to develop and deliver critical products and services to the Australian public. This wealth of diversity helps to continuously strengthen the Bureau's practices and ways of working, achieving business priorities and ensuring everyone can be successful at work by feeling safe, included, and valued.

Maturing our management of psychosocial risk

In 2023, the Work Health and Safety Regulations 2011 were amended to formally incorporate psychosocial risk management. These changes heightened focus on identifying and addressing hazards that affect workers' psychological and physical safety.

Following the introduction of the Code of Practice on Managing Psychosocial Hazards at Work in October, the Bureau implemented several initiatives to strengthen its psychosocial risk management, including:

- delivering mandatory psychosocial hazard training for all staff
- delivering specific training and guidelines in relation to social media hazards
- completing an internal audit which found no instances of non-compliance with the WHS Regulations or the then-applicable Model Code of Practice

- updating its psychosocial risk assessment to reflect new Code requirements
- developing and implementing a risk assessment in line with the Sexual and Gender-based Harassment Code of Practice.

Fostering a respectful, safe and inclusive workplace

In March, the Bureau launched a centralised Diversity and Inclusion Action Plan, marking a significant milestone in its commitment to fostering a safe, respectful, inclusive, and flexible workplace. Developed through extensive employee engagement, the Action Plan reflects the unique needs of the Bureau's workforce and aligns with organisational priorities. It promotes a culture where all employees feel valued and empowered to contribute meaningfully. By embracing diverse perspectives and ensuring equal access to opportunities, the Bureau aims to strengthen collaboration, encourage innovation, and support the engagement and professional growth of all colleagues.

The Action Plan complements broader organisational efforts to uphold positive duty obligations under recent legislative reforms. These include initiatives that embed clear behavioural standards and promote a culture of accountability and care. Implementation is reinforced through a standalone procedure, mandatory training, robust reporting pathways, statistical tracking, and enterprise risk assessment.

Cover of the Bureau's Diversity and Inclusion Action Plan 2024–2027.

Highlights and significant events

Weathering Change, Walking Together with a new Reconciliation Action Plan

In June, the Bureau launched its Innovate Reconciliation Action Plan (RAP) 2025–2027 during National Reconciliation Week. The RAP is the Bureau's statement of commitment to progress reconciliation initiatives with its people, stakeholders, and communities in a way that further links the Bureau's core business and priorities toward supporting Aboriginal and Torres Strait Islander peoples and communities.

The RAP builds on the significant work already undertaken across the Bureau by seeking to build the organisation's cultural capability and responsiveness through learning and development opportunities, building the Bureau's Aboriginal and Torres Strait Islander workforce, and enhancing its work with communities directly affected by severe weather events and a changing climate.

The RAP was developed to better align with current and future enterprise initiatives, and to ensure its actions are realistic and sustainable. RAP initiatives offer valuable opportunities to strengthen the Bureau's ability to work not only with Aboriginal and Torres Strait Islander communities, but with a broader and more diverse cross-section of the Australian community.

One of the highlights of the new RAP is the inclusion of the *Weathering Change, Walking Together* artwork by Aboriginal Artist and Graphic Designer, Lani Balzan. Lani is a proud Aboriginal woman from the Wiradjuri people of the three-river tribe.

The artwork portrays that long ago, the Ancestors walked this land, reading the skies, winds, and waters as if they were written in song. They understood that every cloud, wave, and gust carried a message—a story of change, renewal, and balance. This sacred knowledge was passed from Elder to child, woven into ceremonies, songs, and painted stories on rock and skin.

Lani says that '*Weathering Change, Walking Together*' reminds us that the wisdom of the past must guide the future.

Weathering Change, Walking Together **artwork by Lani Balzan used in the Bureau's Innovate Reconciliation Action Plan (RAP) 2025–2027.**

Next steps

In 2025–26 the group intends to:

- deliver on its RAP actions and commitments and deliver an Indigenous Employment Plan
- lead implementation of the Diversity and Inclusion Action Plan, including monitoring and reporting on progress of deliverables
- deliver the 2025–2027 enterprise workforce plan.

Outcome 3: The advice and services provided by the Enterprise Services Group are accessible, fit-for-purpose, and enable the Bureau to understand its risks and to govern and manage its business well.

Achieving the outcome

Gaining an independent view on the Bureau's community services

In August, an independent panel of 4 experts undertook a review of the Community Services Group to assess delivery of the group's activities and responsibilities, and the outcomes of the Public Services Transformation.

A series of actions is being implemented in response to the review's 15 recommendations, focusing on enhancing internal collaboration, clearer articulation of roles and competencies, strengthening governance and enterprise support, and improving customer engagement during change. Implementation of the review recommendations and actions will continue to be tracked and reported on every 6 months.

Supporting offshore aviation operations

The Bureau is the designated Meteorological Authority for Australia under the *Convention on International Civil Aviation 1947* (the Chicago Convention) and is required to ensure that aviation meteorological services are provided in accordance with international standards. During 2024–25, the Bureau's Meteorological Authority Office facilitated 2 new approvals for automatic weather stations located on helidecks. The Bureau can approve automatic weather stations at aerodromes for the purpose of Civil Aviation Safety Regulations 1998 which enable safe and efficient aviation operations. These automatic weather stations will support the offshore operations of Shell Australia and Santos located near Broome and Darwin respectively.

The Bureau's Sarah Manning conducting an audit of an automatic weather station on an operational floating liquefied natural gas facility located offshore of Broome, Western Australia.

In facilitating these approvals, the Meteorological Authority Office inspected the siting of each automatic weather station and the applicant's exposition of compliance to confirm compliance with the Bureau's policy.

Implementing new crisis management arrangements

In late 2024, the Bureau implemented a new Crisis Management Procedure for responding to disruptive events affecting the Bureau's staff, products, services and critical business functions.

The Bureau has adopted a 3-tier incident management model – Issue, Incident, Crisis – as outlined in the International Standard for crisis management (ISO 22361). The approach provides appropriate command and control of incidents in the form of the Crisis Management Team, which comprises members of the Bureau's Executive Team, supported by subject-matter experts.

The new approach ensures that the Bureau can respond as efficiently and effectively as possible to these events by providing role clarity, removing administrative overheads and avoiding areas of confusion. The new crisis management arrangements were activated and tested during tropical cyclone Alfred in March.

Refurbishing the Bureau's Melbourne office and operations centre

Lengthy and detailed lease negotiation for the Bureau's premises at 700 Collins Street culminated in May with a favourable outcome for the Bureau.

The suitability of the location and incentives from the lessor presented an opportunity to optimise the Bureau's footprint and update the fit-out. Remaining in-situ was ideal with comparatively less disruption for the more than 1,000 staff that are based in the Bureau's Melbourne office.

The new fit-out is expected to take approximately 2 years to complete and will be designed to suit contemporary ways of working, building a sense of community and connection in the workspace. Design consultation will commence in 2025–26.

Within these premises, construction of the new Melbourne National Operations Centre (MNOC) commenced in May and will provide a critical foundation for the Bureau's national forecasting capability. Considerable effort has gone into the consultation, design and planning of this strategically important facility, with contributions from a broad range of stakeholders.

Planned features include increased and improved situational awareness screens, improved information flow and cross-team collaboration, enhanced flexibility and functionality of the space – sight lines, configurations of teams and improved ergonomics and comfort – furniture, workstation selection, acoustics and design.

Next steps

In 2025–26 the group intends to:

- sustain and consolidate delivery of core enterprise services, including through delivery of expert, co-ordinated and practical advice
- continued development of physical work environments that meet enterprise requirements
- plan for the improvement of business systems, including reviewing process, systems and tools for project and program management.

Australian Climate Service

Goal: Improve access to integrated, authoritative, trusted data, information and expert advice; build and enhance national climate and weather hazard intelligence capability.

The Australian Climate Service (ACS) is responsible for providing data, intelligence and expert advice on climate and natural hazard risks and their impacts to inform decision-making. The ACS vision is to advance information and knowledge that is used to support a safer, adaptive and prosperous Australia that is resilient and prepared for climate challenges and natural hazards.

The ACS is made up of world-leading expertise from the Bureau, CSIRO, the Australian Bureau of Statistics and Geoscience Australia. The partnership draws together the national data, systems and expertise needed to inform climate and natural disaster decision-making. Each of the partners brings knowledge and expertise to the partnership and collectively this knowledge and expertise provides better information for decision-makers.

Bureau of Meteorology	CSIRO
The Bureau of Meteorology is the national weather, climate and water agency. It provides observational, meteorological, hydrological, oceanographic and space weather services.	CSIRO, as Australia's national science agency, brings its world leading research, science and innovation with a focus on climate observations and modelling, projections, resilience, adaption and transformation science and practice.
Australian Bureau of Statistics	**Geoscience Australia**
The Australian Bureau of Statistics brings critical social and economic information to the partnership, enabling an improved picture of the vulnerability of communities and how these are changing across Australia.	Geoscience Australia, a trusted advisor on national geology and geography, brings national hazard and exposure information, and geospatial and location services.

The Australian Climate Service partners.

The ACS is included in this Annual Report as the Bureau hosts the ACS. The Bureau's CEO and Director of Meteorology is the Accountable Authority and Senior Responsible Officer for the ACS.

Responding to the Independent Review of the Australian Climate Service

The ACS was established on 1 July 2021 in response to the Royal Commission into National Natural Disaster Arrangements, with an initial focus on supporting the Australian Government's emergency management functions and investments in disaster recovery and resilience.

In October 2023, the Australian Government announced the appointment of an independent panel to review the performance of the ACS and assess its suitability to meet Australia's current and future climate information needs.

The Independent Review Panel's final report made 11 recommendations to the Australian Government on 30 April 2024.

Following review of the panel's recommendations, the 2024 interim Statement of Expectations refined the focus for the ACS and transferred responsibility for operational support services for emergency management to the National Emergency Management Agency (NEMA). The transfer, effective from 1 July 2024, has been transformative allowing the ACS to focus on medium and longer-term climate impacts. Understanding potential future climates and the changes that natural hazards pose is crucial to being prepared and able to respond and adapt.

On 23 December 2024, the Hon Josh Wilson MP, Assistant Minister for Climate Change and Energy, released the Australian Government's response to the independent review of the ACS. The Government response made a commitment to supporting the ACS to consolidate and strengthen its current operations to deliver on outcomes for the community, including the National Climate Risk Assessment and Hazards Insurance Partnership (HIP).

The Government response indicates further reforms to the ACS will be considered following the finalisation of the National Climate Risk Assessment and National Adaptation Plan.

In line with the Government response, the Assistant Minister for Climate Change and Energy issued a new Statement of Expectations to the ACS on 3 March 2025. The ACS responded with a Statement of Intent outlining the priorities and intended approach to deliver on the Government's vision through the Statement of Expectations 2025. The 2 statements are available at: www.acs.gov.au/pages/about-us.

The ACS seeks to achieve 2 main outcomes. The achievements in delivering these are discussed below.

Outcome 1: Enhanced national climate and weather hazard intelligence capability.

Achieving the outcome

Establishing the National Insurance Dataset

Natural hazard risk is increasing in Australia, driving up the cost of insurance and making it un-affordable for some households and communities.

The ACS is working with the HIP, including the insurance sector, to address these challenges by providing expert advice, data, and other information to inform risk reduction and adaptation options.

A key activity the ACS undertook during 2024–25 was to establish a comprehensive dataset on insurance characteristics including coverage and affordability. The new National Insurance Dataset includes data from the insurance sector to strengthen the understanding of insurance affordability and coverage issues. The ACS through the Australian Bureau of Statistics created bilateral data-sharing agreements with 6 major insurers to gather the data.

Developing the Future Climate Water Scarcity Risk Index

Water is essential for all forms of life – the survival of our natural ecosystems, communities and economies. Rising temperatures and altered rainfall patterns are leading to more frequent and intense droughts, impacting water scarcity.

The Future Climate Water Scarcity Risk Index created by the Bureau as part of the National Climate Risk Assessment (see p.150) aims to provide a national-level comparative assessment of regional water system risks during periods of acute water scarcity under future climate scenarios.

The activity developed and tested the concepts of a water security risk index that integrates hazard, exposure, and vulnerability across multiple water uses. This integrated approach will provide a final risk ranking and severity assessment, helping to prioritise adaptive responses.

The Future Climate Water Scarcity Risk Index provides a detailed assessment of water scarcity risks across Australia, highlighting regional variations in hazard, vulnerability, and loss. The findings can inform policy and decision-making to enhance the resilience of water systems to future climate impacts.

Understanding the link between air quality and disease transmission

Australian cities are frequently affected by bushfire smoke such as the large areas of Australia exposed to dangerous levels of smoke during and after the Black Summer bushfires of 2019–20. The major impact of bushfire smoke on the healthcare system comes from patients seeking care for respiratory symptoms.

ACS partner CSIRO conducted a comprehensive study on the impacts of climate change on air quality and the transmission of communicable diseases. This project, part of the National Climate

Bushfire smoke over Melbourne suburbs, January 2020.

Risk Assessment (see p.150), focused on 2 main workstreams, the effects of bushfires on air quality and health, and the emergence and increased transmission of communicable diseases due to climate change.

This project underscores the critical intersection between climate change, air quality, and public health. The climate risk information is being used to inform and support policy and other decision-making by combining multiple datasets for exposure, vulnerability and response diversity to develop an integrated risk index by Local Government Area.

Understanding the vulnerability of residential buildings in floods

Flooding is one of the deadliest natural hazards in Australia, occurring most commonly from heavy rainfall when watercourses do not have the capacity to carry excess water. As floodwaters rise, properties with lower floor heights are affected first, while properties elevated above the surrounding terrain and above the height of surrounding waterways may escape damage.

The ACS, led by Geoscience Australia, developed observed or modelled floor height data for residential homes for selected high-priority and significantly flood prone regions. This activity will assist the ACS to provide high-quality, nationally consistent data, intelligence, and evidence-based insights.

An integrated view of floor height data is a key piece of intelligence in understanding where those homes most vulnerable to flood are located. This activity aims to develop a scalable pattern that can be applied to other infrastructure types, hazards and geographies.

Homes affected by major floods in Brisbane during 2011.

Highlights and significant events

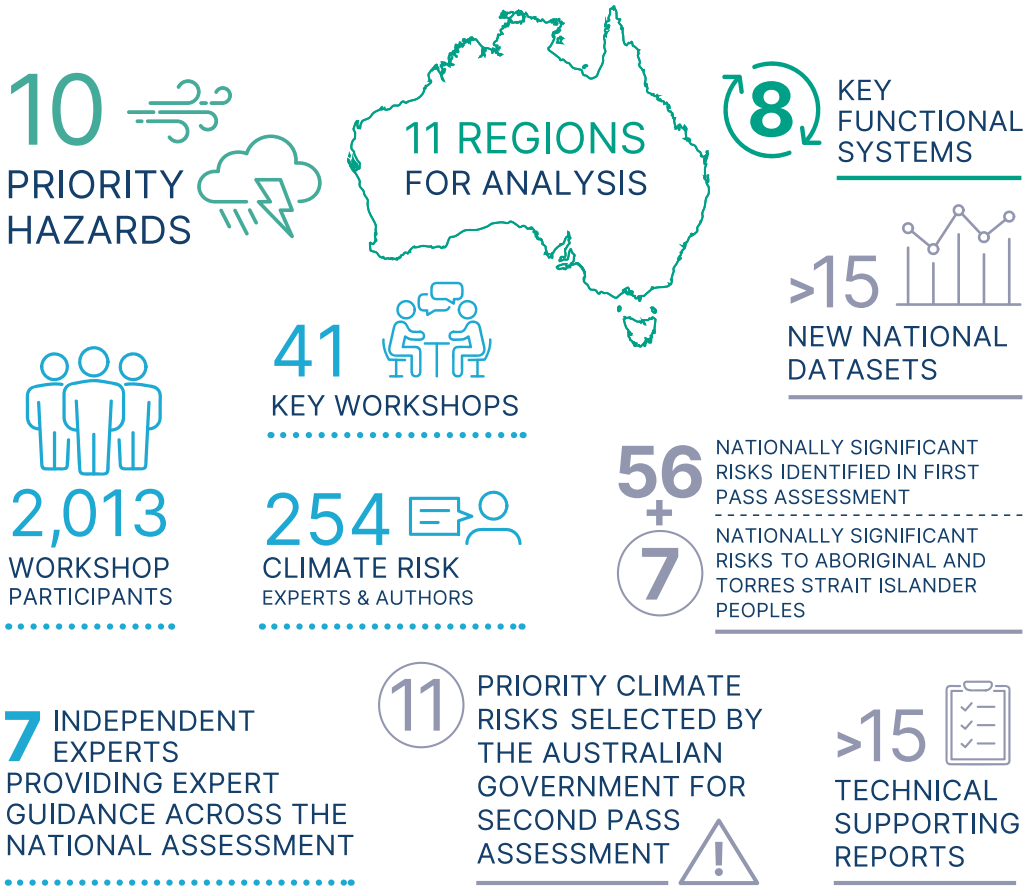
Delivering the National Climate Risk Assessment

Australia is facing a future where the impacts of climate change will increasingly affect our communities, infrastructure, economy, and natural environments.

The National Climate Risk Assessment (National Assessment) provides a comprehensive view of the risks across the entire country – pulling together the best available data, science, and evidence to understand what Australia is up against. Without this broad, science-based understanding, it would be difficult for decision-makers to prioritise what needs to be done to protect Australians and adapt to the changes ahead.

The ACS worked towards delivering Australia's first National Assessment detailing the most significant climate risks facing the nation, identifying how Australia's people, infrastructure, economy, and environment are exposed and vulnerable to climate change this century.

During the year, the ACS analysed 11 priority risks across 8 systems and identified 7 new risks in the Aboriginal and Torres Strait Islander Peoples system to highlight the integrated nature of risk and potential for cascading and compounding impacts identified in the first pass assessment released in March 2024.



Snapshot of National Climate Risk Assessment deliverables.

Between July 2022 and June 2025, the ACS collaborated with a range of experts to deliver different elements of the National Assessment including 41 key workshops with over 2,000 participants. Seven independent experts provided consistent advice across the National Assessment compiled by 254 climate risk experts and contributing authors. The ACS also leveraged the expertise and data from the Bureau, CSIRO, the Australian Bureau of Statistics and Geoscience Australia.

The National Assessment will support decision-making for Australian Government adaptation planning processes, and the assessment of priority risks will be used by many Australian Government agencies, industries and communities.

Next steps

In 2025–26 the ACS intends to:

- leverage the insights and data prepared under Australia's first National Climate Risk Assessment to support the Government's medium- to longer-term adaptation responses
- develop an improved national understanding of climate risk decision-maker and user needs for Australia
- provide assets and intelligence to support the HIP.

Outcome 2: Improved access to integrated, authoritative, trusted data, information and expert advice.

Achieving the outcome

Understanding climate impacts through Aboriginal and Torres Strait Islander perspectives

The ACS values the role Aboriginal and Torres Strait Islander peoples' knowledge and cultural values play in understanding and responding to Australia's climate and natural hazard risk.

During 2024–25, the ACS collaborated with Aboriginal and Torres Strait Islander peoples and organisations to recognise and embed what communities are seeing and experiencing on Country and its different impacts on the climate.

The ACS conducted both one-on-one interviews and focus groups with over 20 different groups and individuals represented and asked questions on climate risk information, gaps and barriers in data and information.

The ACS collated stories to highlight how climate change is affecting Aboriginal and Torres Strait Islander communities and how Aboriginal and Torres Strait Islander knowledge and practices are being used to adapt to climate change.

Assessing the capability needed for building Australia's climate resilience

Australia has a strong history of research and data collection on climate and natural hazards. High-quality observational datasets and advanced climate models are available for many hazards.

In 2024–25, experts from the ACS, predominantly CSIRO and the Bureau, together with external subject matter experts, conducted a Hazard Capability Stocktake assessing the climate hazard projections capability needed to provide a national basis for resilience and adaptation planning, highlighting strengths, weaknesses, and future priorities.

The capability stocktake assessed hazards that significantly impact Australia's built, social, environmental, and economic domains. These include bushfires, coastal flooding, drought, extreme rain, riverine and flash flooding, tropical cyclones, coastal erosion, severe convective storms, extratropical storms, and ocean warming and acidification. The hazards were assessed by ACS experts using data, scientific understanding, and infrastructure maturity categories. This systematic evaluation developed an overall maturity rating for each hazard that will inform future ACS planning in support of resilience activities.

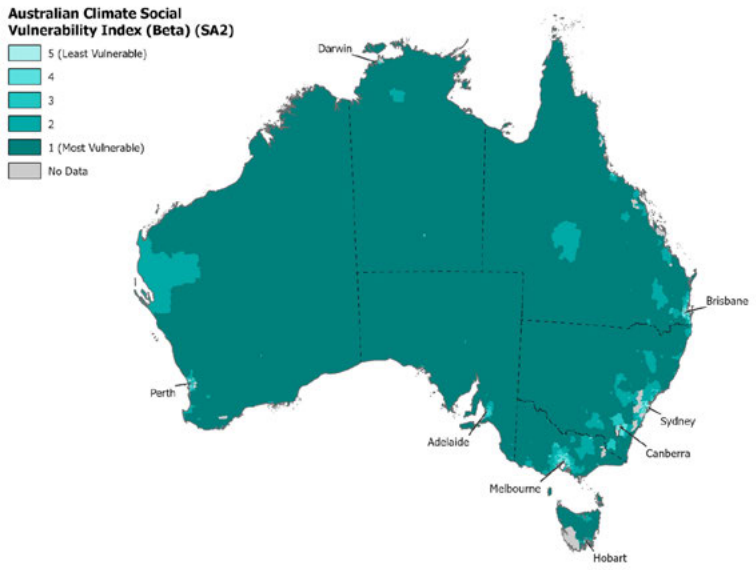
Highlights and significant events

Measuring community vulnerability in Australia

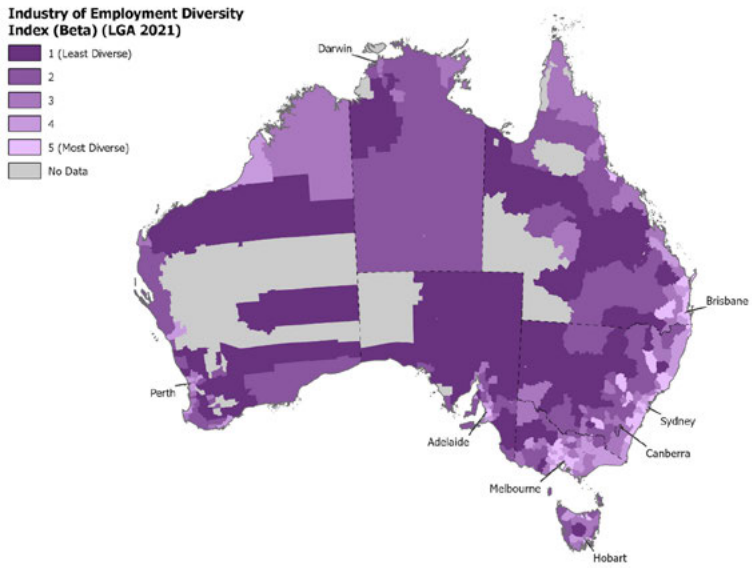
As part of understanding the impacts of climate change and severe weather, the ACS has invested in advancing the nation's understanding of community vulnerability through the development of 2 new indexes, currently in beta (β) version.

The Australian Climate Social Vulnerability Index (ACSVIβ) was developed to better understand the relative social vulnerability of Australian communities, in the context of a changing climate. It uses indicators from multiple vulnerability themes: socioeconomic factors, access to services, social cohesion, health and disability, housing and transport.

The Industry of Employment Diversity Index (IEDIβ) provides a nationally consistent measure of how diverse a Local Government Area's (LGA) industries are, by measuring how concentrated employment is in these industries. An LGA with diverse industries of employment is likely to have a diverse economy that does not rely on a single industry. Reliance on a few industries is considered to make an LGA more vulnerable, as the impacts of climate change and natural hazards on these industries will affect the LGA's economy more significantly than LGAs with more industries that may be able to absorb these shocks.



Map showing the beta (β) version of the Australian Climate Social Vulnerability Index (ACSVIβ).



Map showing the beta (β) version of the Industry of Employment Diversity Index (IEDIβ).

These indexes are nationally consistent measures that have been developed by the ACS to uplift measures of vulnerability of Australian communities to climate change and natural hazards in the social and economic domains. They are key inputs into the National Assessment and will be published on the ACS website.

The indexes allow the ACS to highlight different kinds of vulnerability for decision-makers to gain a better understanding of how climate change and severe weather may impact Australian communities.

Next steps

In 2025–26 the ACS intends to:

- deliver increased and timely access to hazard, exposure, vulnerability and response, climate risk and impacts, data and insights
- further develop the ACS digital platform to be the national, authoritative and trusted source of climate risk information
- continue to engage with Aboriginal and Torres Strait Islander peoples to apply their perspectives on Australia's climate and natural hazard risks.

Recognition of performance

Throughout 2024–25, the Bureau continued to recognise the excellent work of individual staff, volunteers and teams who contribute to the delivery of trusted, reliable and responsive weather, water, climate, ocean and space weather services to all Australians.

Recognising and celebrating the Bureau's people is an important part of the workplace culture. Through the Recognition and Reward Framework, the Bureau recognises staff formally or informally, ranging from 'cause for applause' moments in team meetings to formal awards.

Bureau Excellence Awards

In September, the Bureau recognised and celebrated outstanding achievements by teams and individuals across the organisation at the 2024 Bureau Excellence Awards. Established in 1987, the Awards are an opportunity to highlight excellence across the Bureau through successful projects, initiatives or delivery of services during extreme weather.

Awards were presented across 5 categories: the Director's Choice Award and awards representing achievements aligned with the Bureau's 4 pillars of success – Impact and value, Operational excellence, Insight and innovation and the Bureau way.

2024 award	Recipient(s)
Director's Choice	Bluelink Team For sustained contributions and excellence in leading the development and improvement of ocean forecasting capability ensuring risk-based decision-making.
Impact and value	Probabilistic Flood Forecasting Service Team For leading the delivery of advanced probabilistic weather and flood prediction services that have significantly enhanced community safety outcomes.
Impact and value	Climate Services for Agriculture Program Team For developing My Climate View which has enabled the agricultural sector to confidently contextualise complex future climate trends to better inform decision-making and improve resilience to climate change.
Operational excellence	Enterprise Agreement Negotiations and Implementation Team For leading the delivery of the Bureau's Enterprise Agreement, resulting in overwhelming acceptance of the new agreement, improved automation of related processes, and greater understanding of entitlements.
Operational excellence	Cairns Hub Team For unwavering professionalism and commitment to restoring the Cairns Airport automatic weather station following tropical cyclone Jasper, enabling the continuation of emergency services and aviation operations.

2024 award	Recipient(s)
Insight and innovation	Dr Anja Schubert, Manager, Value and Quality, Science and Innovation Group For outstanding contributions in the fields of model-data systems and improved software practices, and for excellence in leading the development of the SIMPLER High Performance Computing model-data management system.
The Bureau way	Hadley Black, Cyber Operations Lead, Data and Digital Group For leading the development and implementation of the Security Information and Event Management solution, which has significantly uplifted cyber security capability for the Bureau.

Australia Day Achievement Medallion Awards

Every year the Bureau recognises the achievements of its people through the Australia Day Achievement Medallion Awards for outstanding performance on a special project that has made a significant contribution to the nation, or for exceptional performance of duties.

In February, the Bureau's CEO and Director of Meteorology, Dr Andrew Johnson, presented the 2025 Australia Day Achievement Medallion Award to the Digital Channels and Customer Experience Design team.

The Digital Channels and Customer Experience Design team with the Bureau's CEO.

The award recognised the team's sustained excellence in designing, delivering and enhancing the BOM Weather app, providing an outstanding customer experience for millions of Australians every day and enabling profound impact and value for the Australian community from the Bureau's capabilities.

World Meteorological Day – Long Service Awards

In March, the Bureau celebrated World Meteorological Day 2025, which commemorates the Convention establishing the World Meteorological Organization (WMO) coming into force in 1950.

As part of World Meteorological Day celebrations, the Bureau recognised 16 staff members who have contributed more than 30 years of service to the Bureau and its customers.

2025 National Emergency Medal

In February, the Bureau's Queensland embedded meteorologist David Grant was awarded the prestigious National Emergency Medal.

The Bureau supports emergency services in many states and territories by providing dedicated experts to brief on the weather and advise their decisions, as a supplementary, funded service.

David has supported Queensland's emergency services in the embedded role at the Kedron State Disaster Coordination Centre since 2017. He has provided trusted and valued advice throughout many severe weather, flood and coastal events, including providing briefing and analysis to support incident controllers, Commissioners and Premiers.

In awarding the medal, Acting Commissioner of Police, Shane Chelepy, stated: 'David has been an indispensable asset, providing up-to-the-minute weather forecast advice during numerous seasons. His tireless dedication and ability to deliver multiple briefings to diverse audiences is nothing short of remarkable.'

Volunteer Rainfall Observer Excellence Awards

Manual rainfall observations are collected from across Australia and transmitted to the Bureau by around 3,100 volunteers who form an integral part of the Bureau's composite observations systems. The Bureau recognises the dedicated and sustained commitment of its long-serving volunteer rainfall observers by presenting them with excellence awards for 50 and 100 years of service.

In 2024–25, the following awards were presented:

- Noel Cooke for 50 years of continual rainfall observations at Yarra Creek, King Island, Tasmania (station 98023)
- John Newton for 50 years of continual rainfall observations at Doctors Creek (station 41024)
- The Nichols family for 100 years of continual rainfall observations at Richmond (Brookbank) (station 94055).

The Bureau's Brendan Hanigan (far left) and Will Tankard (far right) with Noel, Judith and Mark Cooke with their excellence award for 50 years of service and a rain gauge.

YouTube Silver Creator Award

On 6 April 2025, the Bureau's YouTube channel reached the milestone of 100,000 subscribers. YouTube recognised this accomplishment with the Silver Creator Award, signifying the Bureau's dedication and success in building a thriving community.

The Bureau first published videos on YouTube in 2011 to showcase its services as the platform was beginning to boom in popularity. Now, 14 years on, the Bureau has expanded its video catalogue to include forecasts, severe weather updates, and knowledge building videos explaining key weather and climate concepts.

YouTube has become one of the Bureau's key communication channels and supports the delivery of impact and value to the Australian community.

The Bureau's senior meteorologist Jonathan How with the Silver Creator Award.

The success of the Bureau's YouTube channel is the result of the strong collaboration between multiple Bureau teams in the Community Services Group and the Enterprise Services Group.

Australasian Reporting Awards

The Australasian Reporting Awards acknowledge organisations that produce high quality annual reporting. The Awards provide organisations an opportunity to benchmark their reports against their peers across the Asia-Pacific region.

The Bureau was recognised with its seventh consecutive Gold Award for its Annual Report 2023–24 at the Awards in May. The Award recognises the clarity, transparency and commitment of the Bureau's reporting and confirms that it continues to benchmark well against the annual reports of businesses and governments across Australia, New Zealand and beyond.

The Bureau's Manager, Planning and Performance, Ben Van Doorn, with the Gold Award for the Bureau's Annual Report 2023–24.

Section 4:

Organisational management

Corporate governance

Corporate governance framework

The Bureau's corporate governance framework provides a sound basis for decision-making, defines mechanisms for accountability and stewardship, and supports the Bureau's strategic direction and leadership.

The framework is based on:

- the legislative foundation provided by the *Meteorology Act 1955*, the *Water Act 2007*, the *Public Service Act 1999*, and the *Public Governance, Performance and Accountability Act 2013* (PGPA Act)
- a clearly defined executive and management structure
- a comprehensive planning, performance and reporting framework
- various mechanisms for stakeholder input and review
- detailed financial and asset management policies, procedures and guidelines
- thorough risk management and fraud control strategies
- formal quality management and project management methodologies
- an Audit Committee and internal audit function to provide independent advice and assurance on the Bureau's activities.

Accountable Authority

The Bureau's Accountable Authority during the report period 2024–25 was as follows:

		Period as the Accountable Authority or member within the reporting period	
Name	**Position title/Position held**	**Start date**	**End date**
Dr Andrew Johnson	Chief Executive Officer and Director of Meteorology	1 July 2024	30 June 2025

Executive and management structure

At 30 June, the Bureau comprised:

- the Executive Team (CEO and Director of Meteorology and 6 Group Executives)
- 5 groups, comprising 23 programs, that are collectively responsible for delivering the Bureau's Strategy 2022–2027
- the Australian Climate Service comprising 3 programs
- 8 offices located in each of the state and territory capital cities
- 37 field offices, Defence weather services offices, observing operations hubs, specialist offices and other special purpose sites across Australia, its offshore islands and Antarctica.

In addition to the general group and program structure, several specialist roles are attached to senior positions, including:

- Chief Customer Officer, performed by the Group Executive, Business Solutions
- Chief Operating Officer and Chief Security Officer, performed by the Group Executive, Enterprise Services
- Chief Information and Technology Officer performed by the Group Executive, Data and Digital
- Chief Scientist, performed by the Group Executive, Science and Innovation
- Chief Engineer, performed by the General Manager, Observing Systems and Operations
- Chief Data Officer, performed by the General Manager, Data
- Chief Architect, performed by the General Manager, Planning and Architecture
- General Counsel, Chief Risk Officer and Head of Internal Audit, performed by the General Manager Organisational Resilience
- Chief Financial Officer
- Chief Information Security Officer
- Chief Statistician.

The Executive

The Bureau's Executive Team (the Executive) comprises the CEO and Director of Meteorology (Director) and 6 Group Executives. The role of the Executive is to consider and promulgate decisions on program, policy, financial and people management issues across the Bureau and to provide leadership under the authority of the Director as the Accountable Authority for the agency (under the PGPA Act). The Executive has responsibility for setting the Bureau's strategic policies and priorities and for optimising the use of its resources.

Dr Andrew Johnson

Chief Executive Officer and Director of Meteorology

Andrew was appointed CEO of the Bureau of Meteorology in 2016 and re-appointed for a further 5-year term in 2021. He is Australia's Permanent Representative to the World Meteorological Organization and the Accountable Authority for the Australian Climate Service.

Andrew's career spans multiple sectors and geographies, especially primary industries, energy, water, emergency management, national security and the environment.

Prior to joining the Bureau, Andrew founded Johnson & Associates Consulting to provide environmental and agricultural knowledge services to government and industry. For nearly a decade, he was a member of CSIRO's Executive Team where he led their water, land, climate, marine and urban work. At CSIRO, he held a range of other senior technical and operational leadership roles. Andrew has also held several non-executive director roles across a range of domains in the private, government and not-for-profit sectors, both in Australia and internationally.

Andrew has a PhD from the University of Queensland and a Masters from the Kennedy School at Harvard University. He is a Fellow of the Australian Academy of Technical Sciences & Engineering and the Australian Institute of Company Directors. He was awarded a Public Service Medal in the 2024 Australia Day Honours.

Mr Piero Chessa

Group Executive Community Services

Piero joined the Bureau in March 2020 after spending 13 years at the Boeing Company, where he held senior positions in operations and data science activities.

A physicist, Piero moved from theoretical physics to atmospheric dynamics and accepted the challenge to build a Regional Meteorological Service in Italy. He then moved to the European Centre for Medium-Range Weather Forecasts in the United Kingdom as a Senior Scientist and later joined the Boeing Company where he covered various senior management roles in the Digital Aviation Business division.

Piero combines a strong domain competence and an established experience in public services, with a deep and varied knowledge of operations in multinational corporations. Piero is the Bureau's Multicultural Access and Equity Champion.

Dr Peter Stone

Chief Customer Officer and Group Executive, Business Solutions

Peter joined the Bureau in July 2017. Peter's work in industry and government, in Australia and abroad, has focused on understanding customer needs and creating science-based partnerships and programs that meet them.

Peter has contributed to advances in policy, planning and practice in the fields of infrastructure, regional development, natural resource management and food processing. He has a master's degree in agriculture and a PhD from the University of Melbourne. Peter has a decade-long commitment to Scientists in Schools and is the Bureau's Indigenous Champion.

Ms Nichole Brinsmead

Chief Information and Technology Officer and Group Executive, Data and Digital

Nichole commenced with the Bureau in February 2018 as Group Executive Data and Digital, and Chief Information and Technology Officer. In this position Nichole is accountable for the operations, security and delivery of the data, infrastructure and systems that underpin the Bureau's operations. She also chairs the Bureau's Security, Risk and Business Continuity Committee.

She has had over 20 years' experience in a diverse range of roles across several business and technology domains in the financial services, higher education, professional services, emergency services and government sectors.

Nichole has an outstanding track record of delivery in complex operating environments both in Australia and overseas, including the Bureau's ROBUST Program. She was appointed to the Board of Australia's Integrated Marine Observing System (IMOS) in 2019, is an advisor to the Bureau's partner in the Joint Australian Tsunami Warning Centre, and was appointed as the Australian National Focal Point to UNESCO Intergovernmental Oceanographic Committee in 2020. In 2024 Nichole joined the Board of the National Computational Infrastructure (NCI).

Dr Robert Argent

Chief Scientist and Group Executive, Science and Innovation

Rob was appointed to this role in 2025, after 5 years as General Manager, Research to Operations. In this capacity, he managed the team responsible for turning numerical models and analytical and post-processing systems research into reliable operational systems.

Rob is the Australian representative on the World Meteorological Organization (WMO) Panel on Polar and High-mountain Observations, Research and Services that provides strategic, advocacy and engagement recommendations to the WMO Executive Council. He also chairs the Panel's Antarctic Advisory Group.

Rob joined the Bureau in 2008 to lead development and delivery of the Australian Water Resources Information System. Since then, he has managed the Climate and Water Information Technology Services Branch, directed the Bureau's Water Information Research and Development Alliance partnership with CSIRO, managed the research portfolio for weather and climate, and was General Manager for the Bureau's Water Program.

Ms Astrid Heward

Chief Operating Officer, Chief Security Officer and Group Executive, Enterprise Services

Astrid is responsible for human resources, finance, health and safety, property services, environmental sustainability, government relations, communications and media, legal services, risk management, crisis management and internal audit. Astrid chairs the Bureau's Investment Committee, Crisis Management Team and the Bureau Work Health and Safety Committee.

Astrid joined the Bureau in 2018. Previously she worked across a range of private sector technology, fast-moving consumer goods organisations, and in the not-for-profit sector. These roles focused on legal services, risk management and governance.

Her qualifications include a Bachelor of Laws (Hons), a Bachelor of Economics and she is a graduate of the Australian Institute of Company Directors.

Ms Vicki Manson

Group Executive, Australian Climate Service

Vicki joined the Bureau in 2021 and leads the Australian Climate Service (ACS).

Under Vicki's leadership, the ACS is enhancing national capabilities to understand and manage climate risks, supporting evidence-based decision-making across many sectors.

With a distinguished career in public policy, Vicki brings over 20 years' experience in managing high-impact programs focused on resilience, resource management, and climate adaptation. Her expertise spans government, research, and private sectors, emphasising data-driven solutions and innovative partnerships.

Vicki previously held senior roles at the Murray–Darling Basin Authority, where she led initiatives to support water reforms and community engagement, and at the Rural Industries Research and Development Corporation, advancing climate resilience and industry sustainability.

Vicki is known for building strong, collaborative teams and fostering partnerships that drive lasting change. She has a Bachelor of Applied Science from the Australian National University. Vicki is the Bureau's LGBTQIA+ Champion.

Organisational chart

As at 30 June 2025

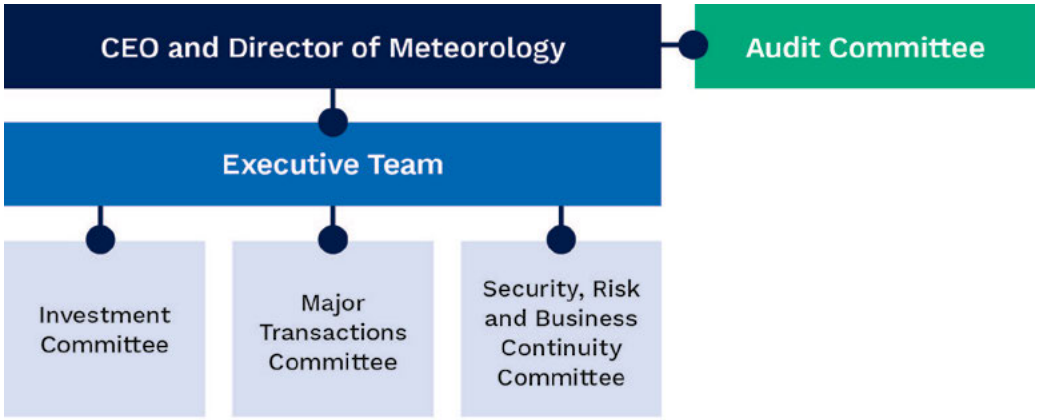

Business Solutions
Peter Stone
Agriculture and Water
Andrew Jones
Aviation, Land and Maritime Transport
James Lannan
Energy and Resources
Stephen Duggan
International Development
Andrew Jones
National Security and Space
Kristen Reeson
Flood Warning Infrastructure Network
Ella Harrison
Community Services
Piero Chessa
Decision Support Services
Chantal Donnelly
Environmental Prediction Services
Matthew Collopy
National Production Services
Michael Logan
CEO and Director of Meteorology
Andrew Johnson
Office of the CEO
Enterprise Services
Astrid Heward
Business Management
Kate Dalton
Communications
Timothy McLean
Organisational Development
Tim Abrahams
Organisational Resilience
Bridie Andriske A/g
Portfolio Management
Ben Haydon
Strategy and Performance
Katie Timmins A/g
Science and Innovation
Robert Argent
Research
Bertrand Timbal
Research to Operations
Anja Schubert A/g

Committees

The Bureau Executive is the highest-level decision-making body within the organisation. Executive meetings are chaired by the Director and held once per month.

The Executive is supported by 3 subcommittees: the Investment Committee, the Major Transactions Committee and the Security, Risk and Business Continuity Committee. Each Committee is governed by a Charter of Responsibilities and is chaired by a member of the Executive. The Bureau's Audit Committee provides independent assurance on the Bureau's risks, controls and compliance.

In addition to the subcommittees, the Bureau's senior managers meet monthly to discuss key issues and progress across projects and operations. These Senior Leadership Team meetings involve the Executive, General Managers, Chief Financial Officer and State and Territory Senior Responsible Officers.



The Investment Committee

The Investment Committee supports the Bureau Executive in the translation of strategic priorities into recommended resource allocations. The Investment Committee makes recommendations to the Bureau Executive on the development of, changes to and performance against group plans, the Bureau's budget, and the Enterprise Portfolio and how these align with the Bureau Strategy 2022–2027, customer needs, statutory responsibilities and/or international and treaty obligations. In 2024–25, the Investment Committee was chaired by the Chief Operating Officer.

The Major Transactions Committee

The Major Transactions Committee supports the Bureau Executive to direct and control the Bureau's involvement in major transactions and related matters to ensure alignment with the Bureau's strategy and that value for money is achieved from Bureau investments. In 2024–25, the Major Transactions Committee was chaired by the Chief Customer Officer.

The Security, Risk and Business Continuity Committee

The Security, Risk and Business Continuity Committee supports the Bureau Executive in the effective management and monitoring of strategic and operational risk, and to advise on the effectiveness of security, business continuity and resilience activities. The committee can also make recommendations to the Bureau Executive on the allocation of resources in support of security and business continuity needs and in response to risk assessments. In 2024–25, the

Security, Risk and Business Continuity Committee was chaired by the Chief Information and Technology Officer.

The Audit Committee

The Director of Meteorology convenes the Bureau of Meteorology's Audit Committee in compliance with section 45 of the PGPA Act. The Audit Committee is governed by its charter (https://beta.bom.gov.au/sites/default/files/2023-10/bureau-of-meteorology-audit-committee-charter-2019-v2.pdf), which requires the committee to review and provide independent assurance on the appropriateness of the Bureau's financial reporting, performance reporting, system of risk oversight and management and system of internal control in accordance with section 17 of the *Public Governance, Performance and Accountability Rule 2014* (PGPA Rule).

Collectively, committee members possess the knowledge, skills and experience required to ensure these functions are appropriately performed. Throughout 2024–25, the committee was chaired by Mr Matt Cahill.

The Audit Committee held 4 meetings in 2024–25. The Audit Committee considered financial and performance statements, provided advice on the Bureau's assurance activities, and reviewed the Bureau's Internal Audit Plan and associated audit reports. During 2024–25, internal audits were completed on the following topics:

- IT incident management
- key financial controls
- Communications Program
- psychosocial hazards and risk management
- research and development planning
- revenue arrangements.

Audit Committee membership and meeting attendance

Member	Qualifications, knowledge, skills and experience	Meetings eligible/ attended	Remuneration (GST inc.)
Matt Cahill Chair	Matt is a former Australian Public Service Deputy Secretary with over 20 years of senior executive experience across multiple Commonwealth portfolios. He has held key leadership roles including Chief Operating Officer and Chief Information Officer, with expertise spanning operations, policy, regulation, finance, and assurance. A Certified Practising Accountant (FCPA) and graduate of the Australian Institute of Company Directors, Matt also holds an MBA and degrees in Economics and Science. He has extensive audit experience, having led the performance audit program at the Australian National Audit Office and currently serving on several Audit and Risk Committees.	4/4	$38,076

Member	Qualifications, knowledge, skills and experience	Meetings eligible/ attended	Remuneration (GST inc.)
Sue Friend Member	Sue is a Chartered Accountant and experienced board director, providing consulting services in business valuation, risk assessment, and financial analysis through Sapere Research Group. She holds board and audit committee roles in the public sector, currently serving as a director of the Melbourne Market Authority and a member of Courts Council, where she chairs the audit and risk committees. Sue is also a graduate of the Australian Institute of Company Directors.	4/4	$28,554
Peter Qui Member	Peter is the Chief Information Officer at the Department of Finance, overseeing whole-of-government ICT systems. With over 30 years of experience, he has led the design, delivery, and risk management of nationally significant programs, including disaster support payments and core systems for Centrelink, Medicare, Child Support, and Aged Care. His leadership has also driven the development of the whole-of-government grants capability.	4/3	$0
Geoff Leeper Member	With extensive experience across the Australian Public Service including policy, ICT, governance, and corporate affairs, Geoff has chaired audit committees in major departments and served on various commercial and non-profit boards. As a consultant, Geoff has delivered governance and leadership support to over 20 agencies and participated in more than 25 Gateway Reviews. He currently contributes to Change and Implementation committees in Department of Employment and Workplace Relations, Health, Services Australia, and Education.	4/3	$21,417

Partnerships

The Bureau partners with Australian Government agencies and other organisations to manage the delivery of common outcomes. At 30 June 2025, these partnership arrangements included:

- the Australian Climate Service, which is a partnership between the Bureau of Meteorology, CSIRO, the Australian Bureau of Statistics, and Geoscience Australia, established through a head agreement between the 4 parties
- an Intergovernmental Agreement between the Bureau and all state and territory emergency services agencies
- a strategic relationship agreement for the provision of meteorological and oceanographic services to support the Department of Defence
- memorandums of understanding with a range of Defence stakeholders, including the Navy, Army and Air Force, Headquarters Joint Operations Command, Defence Estate and Infrastructure Group and the Defence Science and Technology Group
- a memorandum of understanding with the Department of Defence and CSIRO to support long-term collaboration on the Bluelink ocean forecasting platform
- a memorandum of understanding and agency agreement with Airservices Australia
- strategic relationship agreements with keystone energy sector organisations including the Australian Energy Market Operator, Powerlink Queensland and Hydro Tasmania
- a memorandum of understanding with the Australian Antarctic Division
- a memorandum of understanding with CSIRO and the Australian Nuclear Science and Technology Organisation in the context of the Australian Antarctic Program
- a memorandum of understanding with the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) supporting Australia's radionuclide monitoring obligations
- a collaborative relationship understanding with CSIRO
- a collaborative project agreement with Geoscience Australia on the Joint Australian Tsunami Warning Centre
- a strategic relationship agreement with the Queensland Department of Transport and Main Roads
- an unincorporated joint venture with the University of Tasmania as Lead Agent for the Integrated Marine Observing System (IMOS)
- a strategic relationship arrangement with the Japan Meteorological Agency (JMA) on cooperation in the utilisation of meteorological satellites
- a strategic relationship agreement with the European Centre for Medium-Range Weather Forecasts (ECMWF) on collaboration, data sharing and capability exchange programs
- a consortium agreement with partners from the United Kingdom, New Zealand, India and Singapore on a next generation modelling systems program, known as MOMENTUM
- a strategic relationship agreement with Singapore's National Environment Agency on joint weather and climate research and development.

Corporate planning and evaluation

At the highest level, the Bureau is guided by its Strategy 2022–2027. The strategy is a blueprint for the future direction of the Bureau and guides all other planning and performance activities. The strategy outlines the Bureau's strategic objectives, actions and success measures.

The Corporate Plan 2024–25 was published on the Bureau's website in August. Prepared in accordance with requirements of the PGPA Act, the plan sets out the Bureau's priorities, planned achievements and success measures for 2024–25 and the outlook to 2027–28.

Operational planning within the Bureau is undertaken at group and program levels. The evaluation of performance against plans is an important component of the annual planning cycle. Progress against the Bureau's success measures is regularly monitored through reports to the Bureau Executive. Overall performance against the success measures for 2024–25 is presented in the Annual Performance Statement (see p.35).

All corporate planning and evaluation activities are undertaken in accordance with the Bureau's Planning, Performance and Reporting Framework.

Quality, process and portfolio management

The Bureau has adopted formal quality, process and portfolio management approaches to:

- ensure compliance with legal and regulatory obligations
- underpin quality and consistency across all parts of the organisation
- ensure effective project delivery and transformation
- provide assurance to Bureau customers and stakeholders.

Quality management, overseen by the Quality Assurance Unit, is applied to key Bureau service functions. The development and implementation of quality management systems ensures the delivery of high-quality products and services for Bureau customers. Several quality management systems within the Bureau have been independently certified to the international ISO 9001 Standard.

Business processes form a key part of these quality systems. The Bureau applies Business Process Management techniques to identify, design, implement and improve processes on a sustainable basis. Business processes – including Standard Operating Procedures and Work Instructions – guide staff in the effective performance of both administrative and operational tasks.

Portfolio and project management is undertaken in accordance with the Portfolio Management Framework and Bureau Delivery Framework to provide a consistent and controlled approach to managing the Bureau's Enterprise Portfolio and project delivery. The Bureau Delivery Framework outlines the project stages, expected outputs, and assurance activities that all Bureau projects are required to comply with. Portfolio and project management is overseen by the Enterprise Portfolio Management Office.

Enterprise risk management

Effective risk management plays a key role in shaping the Bureau's strategic direction and successfully delivering its purpose. Failure to effectively identify, assess, treat and monitor risk may adversely impact customer experience and outcomes, the safety of staff and the public, the Bureau's reputation and financial position.

The Bureau's Risk Management Framework and Policy sets out the Bureau's consistent, standardised approach to risk assessment and management, supported by policies, procedures and tools. They have been designed in accordance with the requirements of the Commonwealth Risk Management Policy, and are approved by the CEO, as the Accountable Authority, on the advice of the Executive Team.

The framework and policy govern:

- specific roles, responsibilities and competencies for the management of risk
- how risks are identified, assessed, treated, monitored and reported
- how risk information, including in relation to environmental sustainability and climate change risks, is reported to the Bureau's corporate committees and the Accountable Authority.

The Bureau is committed to ensuring that risk-informed planning and decision-making is embedded in strategic and operational activities across all parts of the organisation.

Accountabilities and responsibilities

Accountabilities and responsibilities under the Risk Management Policy are set out below.

Role	Responsibilities and accountabilities
CEO and Director of Meteorology	As the Accountable Authority, is responsible for ensuring the Bureau establishes and maintains an appropriate system of risk oversight and management. Approves the Risk Management Policy and Framework.
Executive Team	Identifies and assesses Enterprise Risks, reviews the management of risks across the Bureau, reviews the application and management of controls and mitigation plans, and assesses the effectiveness of the risk framework. Sets and reviews risk appetite and tolerance.
Security, Risk and Business Continuity Committee (SRBCC)	Supports the Executive Team in ensuring that the Bureau has implemented an effective risk management framework. Supports the Executive Team in the management of risks through oversight of the risks, their controls and treatment plans.
The Bureau of Meteorology Audit Committee (BMAC)	Provides independent advice to the Director of Meteorology on the appropriateness of the Bureau's system of risk oversight and management, and system of internal control.
Chief Risk Officer	Advises the Accountable Authority on the management of risk. Ensures risk management is appropriately implemented and embedded across the Bureau, including ensuring risk is part of corporate planning and reporting processes.
Group Executives	Own and manage extreme risks within their group, ensuring risks are being effectively identified, assessed, and managed.
General Managers	Own and manage high risks within their program, ensuring risks are being effectively identified, assessed, and managed, and their staff comply with all policies and procedures.
Section Heads	Own and manage medium and lower-level risks within their section, ensuring risks are being effectively identified, assessed, and managed within their team, and their staff comply with all policies and procedures.
Risk, Resilience and Audit Team	Leads the design and review of the Bureau's risk management policy and framework. Provides a specialist risk capability, delivering advice on risk management and uplifting risk maturity across the Bureau. Manages risk reporting to Bureau's committees and senior decision-makers.
Health, Safety and Environment Team	Leads the design, implementation and review of the Bureau's environmental management system.

Key risks

The Bureau manages 15 enterprise risks across 8 risk categories. Enterprise risks are owned and managed by the Executive and are defined as those risks with the greatest potential to affect the Bureau's ability to achieve its mission and strategic objectives.

Key Risks by Category	Significant mitigation strategies and controls
Customer impact and value • Quality and reliability of products and services • Product and service innovation	• Quality Management Systems • Continuous improvement programs • Customer, partner and stakeholder engagement • Product Management Strategy
Health and safety • Staff safety	• Health and safety governance, systems, processes and support • Health and safety communications, education and training
Security • Cyber security • Physical security • Personnel security	• Security risk assessments and planning • Security education and training • Incident management processes • Security testing and assurance
Legal and regulatory • Legal and regulatory non-compliance	• Legal governance and services • Compliance management and training
Financial • Corruption and fraud • External budget allocation • Internal budget management	• APS Values and Code of Conduct • Commonwealth Fraud and Corruption Control Framework • Strategic policy development and engagement • Finance governance and financial performance reporting
Reputation • Reputational damage	• Communications governance and planning • Reputational risk assessment • External stakeholder engagement
Systems and assets • Systems and asset disruption • Technological innovation	• Secure and resilient systems and controls • Systems, assets and data governance • IT Strategic planning
Workforce • Workforce availability • Workforce attraction and retention	• APS Employment Framework and Workplace Relations • Workforce planning and reporting • People and culture strategies • Leadership development • Diversity and inclusion strategies • Talent attraction and retention strategies

Oversight of the Bureau's risks, controls and treatment strategies occurs via regular reporting to the Executive and the Security, Risk and Business Continuity Committee. The Bureau of Meteorology Audit Committee provides independent advice to the Director of Meteorology on the appropriateness of the Bureau's system of risk oversight and management, and system of internal control.

Resilience

As part of the Bureau's mission statement – to provide services all day, every day – the organisation must be able to continue to provide critical products and services, and protect its people and assets, in the face of any disruption.

During a business disruption, effective and timely action and communication, both within the Bureau and to external customers, helps to protect lives, service the community and uphold the Bureau's long-term integrity and reputation.

Continuing to strengthen, mature and expand the Bureau's resilience and business continuity capacity is a key focus for the organisation (see p.145). Continued efforts to uplift Bureau business continuity maturity are improving the organisation's overall capability to effectively respond to, and recover from a disruptive incident, regardless of its cause, size, location or complexity. Business continuity and incident management arrangements were updated during the year and have been established to support the Bureau's response to any disruptive event, ensure continual improvement, and embed lessons learned across the organisation.

Climate risk disclosure

Commonwealth Climate Disclosure is the Government's policy for Commonwealth entities to publicly disclose their exposure to climate risks and opportunities, as well as their actions to manage them, delivering transparent and consistent climate disclosures to the Australian public.

The Bureau manages all risks, including those relating to environmental sustainability and climate change, in accordance with the Bureau's Risk Management Policy and Framework. The operation of this framework, including roles, responsibilities, governance and strategy is set out in the Enterprise risk management section above (see p.173).

Climate Risk

In 2024–25, the Bureau conducted an organisation-wide climate risk assessment. This assessment was undertaken according to the established processes in the Bureau's Risk Management Framework, based on the International Standard ISO31000 Risk Management. The Australian Government's Climate Risk and Opportunity Management Program also informed this process.

As Australia's weather, water, climate, ocean and space weather information agency, climate change poses a significant risk to the Bureau's activities, operations and customer needs. Its products and services are impacted by a changing climate and inform our customers' responses to climate change. The Bureau has an extensive network of assets and staff throughout Australia and the region which are at risk of impacts from climate change.

The Bureau's Risk Management Framework sets out the criteria for how the Bureau assesses, evaluates and priorities its risks, including those related to environmental sustainability and climate change.

The Bureau manages the following climate related risks and opportunities:

Type	Risk or opportunity	Description	Mitigation Strategies and Controls	Timeframe[1]
Physical	Risk	Impacts on routine operations and activities as result of operational response to more frequent or more severe weather events	• Operational processes and procedures • Operational Response Teams • Incident Management processes • Crisis Management Procedure	Medium – long term
Physical	Risk	Impacts to the health and safety of staff because of changing climate	• WHS Risk Management Procedure • Fatigue management • High Risk Work procedure • Working Remotely or in Isolation Procedure	Medium – long term
Physical	Risk	Damage or destruction of assets due to more frequent or more severe weather events	• Observational infrastructure site selection process • Enterprise Asset Management Framework • Asset insurance arrangements (Comcover)	Medium – long term
Transitional	Opportunity	Changes in customer requirements and appetite for products and services because of climate change	• Product Management Lifecycle • Customer Engagement Policy	Short – medium term
Transitional	Risk	Impacts of new renewable energy infrastructure (wind farms) on performance of radar network	• Engagement with industry and government on new windfarm location • Examination of technical solutions, including modified radar scanning and data processing.	Medium – long term

1 Short term is defined as within the next 5 years (to 2030). Medium term is between 5 and 25 years (2030 to 2050). Long term is beyond 2050.

The Bureau's risks, including those related to environmental sustainability and climate change, have been considered in the development of the Bureau's Strategy 2022–2027 and Corporate Plan. Applicable risks, including those related to environmental sustainability and climate change, are considered by the Major Transactions Committee when making decisions regarding expenditure.

Metrics and targets

Metrics and targets are provided in the Environmental sustainability section (see p.195).

Fraud and corruption control

The Bureau's Fraud and Corruption Control Framework provides the basis for its fraud prevention, detection and investigation activities in compliance with the Commonwealth Fraud and Corruption Control Framework and section 10 of the PGPA Rule. The Bureau conducts fraud risk assessments to inform appropriate responses.

The Bureau uses various strategies and mechanisms to prevent fraud, including:

- independent assurance from the Bureau of Meteorology Audit Committee to the Director of Meteorology about fraud control
- annual mandatory online training for staff on integrity.
- financial delegations requiring co-authorisation of spending and assurance that spending is within the approved budget
- involvement in Commonwealth fraud prevention and anti-corruption activities including information sharing, education and training through the Commonwealth Fraud Prevention Centre.

The Bureau has several mechanisms in place to detect any potential fraud incidents, including:

- the Bureau's internal audit program undertaking compliance and financial propriety audits to identify and report any control weakness or other concerns
- scrutinising a vendor master listing and ledger and verifying listed or disclosed business registrations with the Australian Taxation Office and the Australian Securities and Investment Commission
- an audit tool within the Bureau's expense management system to highlight outliers and enable the investigation of items of concern
- periodic audits of purchasing cards, expense management and other sources of fraud risk
- regular financial compliance monitoring and reporting.

Where the Bureau determines that an allegation of potentially fraudulent or corrupt activity needs to be investigated, it will:

- follow the Australian Government Investigations Standards 2022 for all fraud investigation activities
- investigate the allegation using an internal (or outsourced) investigation officer or through referral of serious or complex fraud matters to the Australian Federal Police
- maintain a fraud register for the purposes of registering possible fraud incidents. All known incidents are investigated, and any material matters are formally reported to the Bureau's Audit Committee.

External scrutiny

The following matters were dealt with in 2024–25, with the Bureau providing submissions and evidence to the:

- Australian National Audit Office for a Performance Audit of the Bureau of Meteorology's Management of Assets in its Observing Network
- Senate Select Committee on the Impact of Climate Risk on Insurance Premiums and Availability.

The Auditor-General's report on the Bureau of Meteorology's Management of Assets in its Observing Network was released in January. More information on the recommendations and the Bureau's response is on p.120.

Freedom of Information

Entities subject to the *Freedom of Information Act 1982* (FOI Act) are required to publish information to the public as part of the Information Publication Scheme (IPS). Part II of the FOI Act requires each agency to display on its website a plan showing what information it publishes in accordance with the IPS requirements. The information provided by the Bureau in response to the IPS is available at https://beta.bom.gov.au/freedom-of-information

In 2024–25, the Bureau received 32 requests under FOI and carried over 3 requests from 2023–24. Of these, 27 were completed by 30 June 2025, 7 remained in progress and one is under review with the Office of the Australian Information Commissioner (OAIC).

Corrections

In its 2022–23 Annual Report – under Information about remuneration for key management personnel (p.188) – the Bureau listed a termination benefit of $32,068 for Group Executive Australian Climate Service (Vicki Woodburn). The correct figure was $0.

Corporate responsibility

Responsibility to the Australian community

Inherent in its vision and mission, the Bureau has a responsibility to the Australian community to support a safe, prosperous, secure and healthy Australia. The Bureau's focus is on providing trusted, reliable and responsive weather, water, climate, ocean and space weather information services that benefit the Australian community and drive competitive advantage for business and industry.

The Bureau is accountable to the Australian Government for fulfilling its legislative mandate with the resources invested in it but is ultimately answerable to the Australian community. Under the *Meteorology Act 1955*, the Bureau performs its functions largely in the public interest as well as for sectors such as defence, shipping and aviation, and in support of primary production, industry, trade and commerce.

Under the *Water Act 2007*, the Bureau is responsible for collecting, holding, managing, interpreting and disseminating Australia's water information, including water markets information. The Bureau is required to provide advice, forecasts and reports on the status and future availability of Australia's water resources, including through the publication of a National Water Account. The Bureau is also the regulator for Part 7 of the Water Regulations 2008, which requires over 200 organisations to provide their water information to the Bureau.

Throughout 2024–25, the Bureau continued to provide warnings, forecasts, observations, information and advice on which Australians depend – providing round-the-clock services to support informed decision-making by governments, emergency services, industry and the community. The value of these services is expanding as Australians become increasingly vulnerable to a range of severe weather events due to changes in climate, population, settlement patterns and the growth of infrastructure.

The Bureau's services are particularly crucial when conditions are extreme. The organisation continues to assist Australians to better prepare for and respond to the impacts of their natural environment, including floods, fires, storms, tsunamis and tropical cyclones. The Bureau's warnings and advice to emergency services support essential decision-making that further benefits the Australian community when people and property are under threat.

In fulfilling its duties, the Bureau remains committed to:

- providing the best possible information about Australia's weather, climate, water, oceans and space weather
- providing timely information to allow planning and response to impending critical events
- presenting information clearly, using plain English and easy-to-understand graphics, and making it accessible to vulnerable communities
- meeting increasing user expectations by incorporating relevant advances in science and technology, and enhancing its products and services in line with community needs
- identifying any limitations in its products and services, and providing information regarding the source, reliability, completeness and currency of any data supplied
- notifying users of service changes and interruptions at the earliest opportunity.

Northern Territory

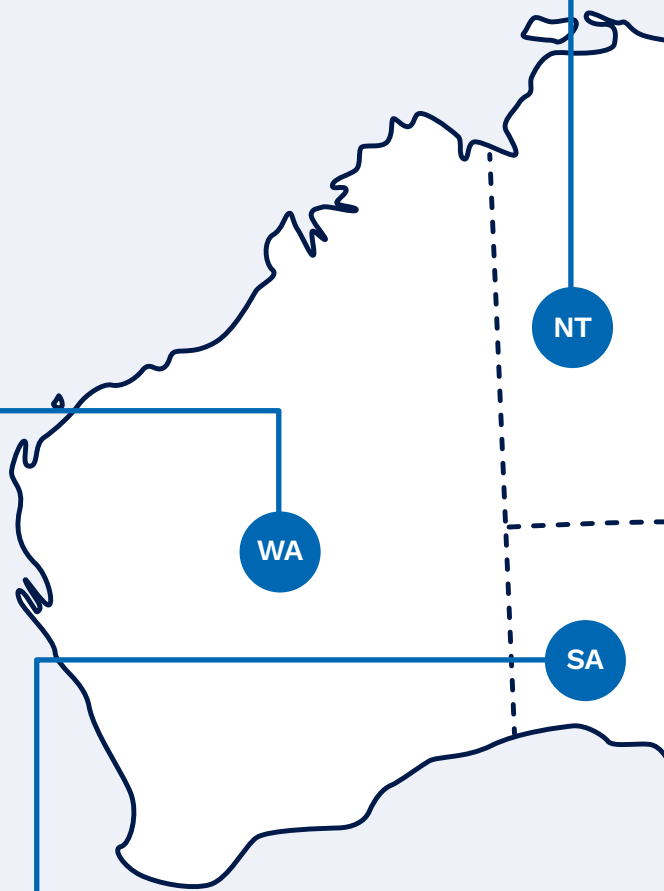
The Top End of Australia has a tropical climate characterised by a wet season from October to April and a dry season from May to September. At different times of the year, parts of the Northern Territory experience severe thunderstorms, wildfires and widespread flooding. All coastal areas are subject to tropical cyclone landfall.

Western Australia

Western Australia is susceptible to a wide range of severe weather events all year round. The warmer months are characterised by heavy rain, tropical lows and cyclones in the north, and extreme heat and bushfires in the south. During the cooler months, bushfires occur in the north while cold fronts with destructive winds and heavy rain are common in the south.

South Australia

South Australia's climate is characterised by relatively hot and dry summers featuring heatwaves, bushfires and thunderstorms with damaging winds, large hail and flash flooding. In the south of the state, cold fronts and low-pressure systems in the winter months bring cold, wet and windy conditions. Across the inland north of the state, winters are mild but often dry. Rainfall in these parts is usually sporadic and can be driven by tropical systems in the summer and northwest cloud bands in the winter.



Tasmania

Tasmania's location in the path of the 'roaring forties' westerly wind belt brings heavy and reliable rain to the western half of the island and much warmer and drier conditions to the sheltered east coast. Snow can fall any time of year in the highlands, but summer heatwaves and windy weather fronts bring dangerous fire conditions to the east and south.

Queensland

The meteorology of Queensland extends from the deep tropics through to temperate and arid regimes, and encompasses coastal waters that include the Great Barrier Reef, the Torres Strait Islands and the eastern Gulf of Carpentaria. The dispersed population is vulnerable to risks posed by tropical cyclones, flooding, severe thunderstorms and bushfires. The state's agricultural sector grapples with the impacts of severe weather and flooding, droughts and other broadscale impacts of climate.

New South Wales

The diversity of New South Wales' weather and climate reflects its many landscapes; from the highest alpine areas in Australia to some of the country's most productive agricultural areas to its offshore islands. New South Wales is often affected by heatwaves, drought, bushfires (and their smoke), intense coastal storm systems, severe thunderstorms and hailstorms. Weather on the coastal strip is influenced by the steep coastal escarpment and ranges, which accentuate heavy rains and bring major flooding to coastal rivers.

Victoria

Victoria is renowned for its very changeable and challenging weather events. These include heatwaves, extreme fire weather, and the effects of bushfire smoke in summer; damaging winds from winter storms; and rain, severe thunderstorms, and floods in all seasons. Victoria is also vulnerable to thunderstorm asthma events, when the right weather conditions and fine grass pollen can combine to cause acute asthma episodes.

National outreach

The Bureau's presence and capability within Australia's states and territories remains vital to how services are delivered, integrating local knowledge into Bureau services and focusing on local and regional needs. This is especially crucial given the variability of climate across Australia (see map on p. 180–181).

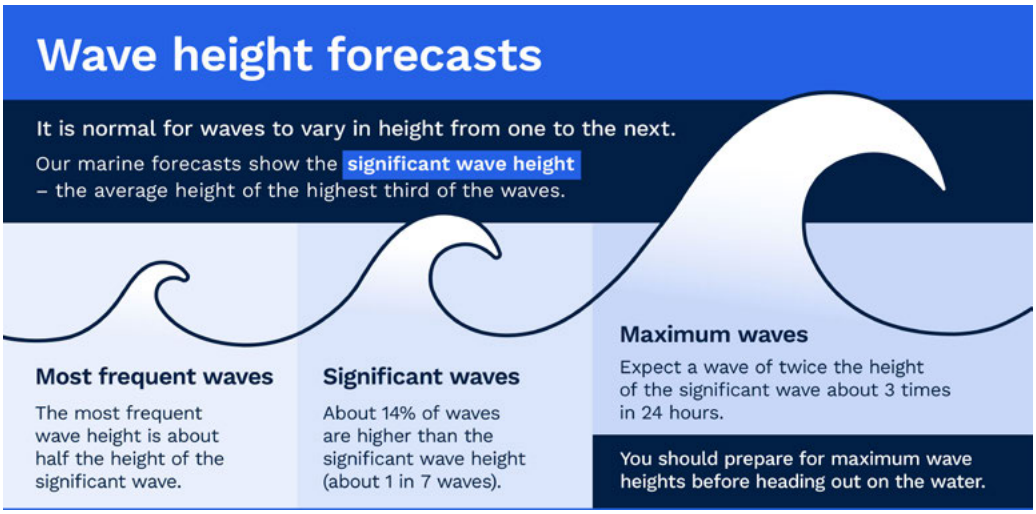
The Bureau's Decision Support Services Program leads national, regional and local engagement to contribute to hazard preparedness and response in the Australian community and in the emergency management sector. The program has staff deployed in all states and territories, as well as a national team (based in Canberra).

Staff work alongside federal, state and local emergency service agencies as part of the emergency management and disaster mitigation networks within their respective jurisdictions. Bureau briefings and intelligence play a key role in supporting emergency management decision-making to prepare for and respond to an event, as well as enabling their role in the Australian Warning System to deliver action-based warnings for the community, complimenting the Bureau's weather warnings. The Bureau's support of the emergency management agencies includes outposted decision support staff within several response agencies and emergency management centres, providing direct access to the Bureau's expertise. Staff within the program also continually inform the Australian community through television, radio and social media channels.

At the national level, the Hazard Preparedness and Response (HPR) National Operations Support unit, embedded in the National Situation Room, delivers tailored services encompassing weather, climate and hydrology to support the National Emergency Management Agency (NEMA) to coordinate Australian Government response in support of the wider community.

Public education and community engagement

Helping Australians understand and use its products and services is one of the Bureau's core responsibilities under the Meteorology Act. The aim is to give Australians timely weather, water, climate, ocean and space weather information, education and updates across a range of channels, particularly when conditions put lives and property in danger.



An example from the Bureau's information and awareness campaigns.

Through a prolonged higher risk weather season, the Bureau's structured and agile approach to communicating with impacted communities across multiple states was clear and timely. During severe weather, the Bureau's public communications point the community to its website and BOM Weather app as the trusted source for forecasts and warnings. In collaboration with governments and key emergency services partners across states and territories, the Bureau's advice was clear, informative and action oriented.

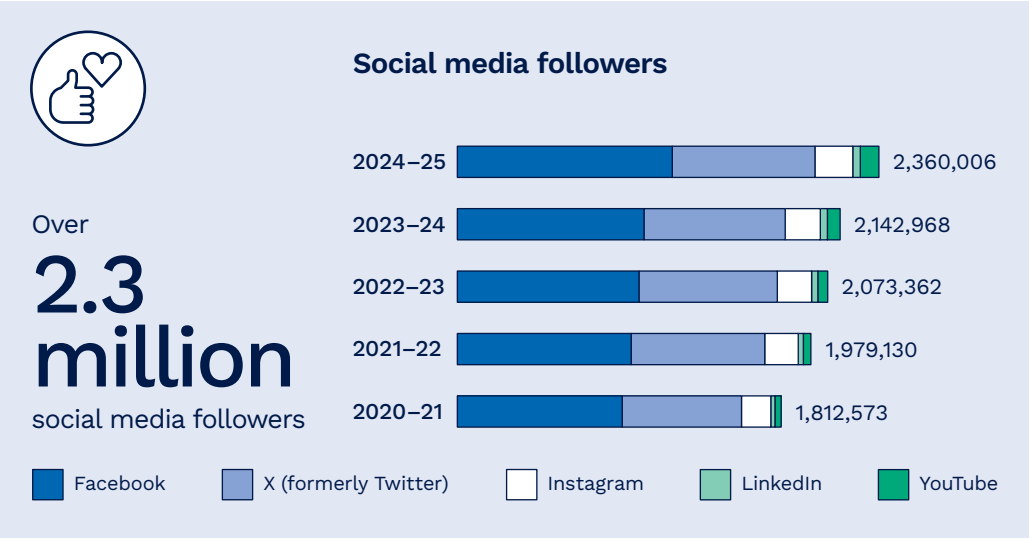
The Bureau works closely with traditional media and emergency partners to ensure that communication with the Australian community is timely and accurate, and that forecasts and warnings are broadcast widely. Bureau staff interact with a broad range of stakeholders and provide a focal point for the delivery of services to local industry and government customers, providing high-quality and clear information.

During 2024–25, the Bureau established a spokesperson framework to better support its media-facing teams and ensure the right expertise is available at the right time to service growing demand for weather and climate information.

The Bureau supported community preparedness for the higher risk weather season, through the *Know Your Weather, Know Your Risk* campaign (see p.137), together with a targeted community engagement campaign with segments of the community considered at greater risk (see p.75). Further partnerships throughout the year included a focus on outdoor adventure practitioners and new migrant communities (see p.88).

Throughout the year, the Bureau's social media channels proved especially effective in promoting public-safety campaigns on the risks and impacts of severe weather as well as building understanding of the Bureau's forecasting and warning services. During tropical cyclone Alfred, the Bureau's authoritative and informative approach to community information saw a substantial increase in social media engagement (see p.139).

Engagement snapshot	2023–24	2024–25	Variance
Traditional media			
Media enquiries	6,681	7,138	+457
Media releases	270	453	+183
Social media			
Total followers	2.14 million	2.36 million	+0.22 million
Total posts	5,591	12,735	+7,144
Average engagement rate	6.7%	4.8%	-1.9%
Direct email			
Subscribers	210,460	241,073	+30,613
Messages delivered	2,470,170	3,436,507	+966,337
Average open rate	55%	56%	+1%
Weather connect			
Weather Connect enquiries	6,484	7,011	+527



The Bureau also supports the community in accessing information about weather and related phenomena through its Weather Connect customer service centre and through direct information emails to customers. In 2024–25, the Bureau responded to over 7,000 public enquiries through this service.

During 2024–25, the Bureau of Meteorology Training Centre continued its public education program in delivering 12 facilitated Introduction to Meteorology courses to members of the public and key stakeholders. In addition, 224 customers enrolled in the Introduction to Meteorology Online course. The courses provide expert insight into weather fundamentals and weather information, helping to inform decision-making.

Stakeholder participation

Third-party participation in the Bureau's policy formulation and service provision is facilitated through:

- the Bureau's Hazards Services Forum and related groups including the Australian Tsunami Advisory Group, the National Flood Risk Advisory Group, the Australian Tropical Cyclone Advisory Group, and the National Heatwave Working Group
- the National Council for Fire and Emergency Services (AFAC) and related groups and committees
- state and territory consultative committees for flood, marine, and climate
- state, territory and local government emergency management and disaster mitigation committees
- consultative meetings with private meteorological service providers, the aviation industry and Defence
- the Jurisdictional Reference Group on Water Information
- intragovernmental forums on water and energy management
- Australian Government and regional international development programs
- national research and science forums and programs.

The Bureau's Hazards Services Forum (HSF) continued to demonstrate the productive collaboration between the Bureau and its federal, state and territory emergency management partners. The HSF is co-chaired by the Bureau and the National Emergency Management Agency and provides the opportunity for senior emergency services representatives to provide forthright feedback on the current and future direction of the Bureau's hazards services (see p.83).

Customer feedback and response

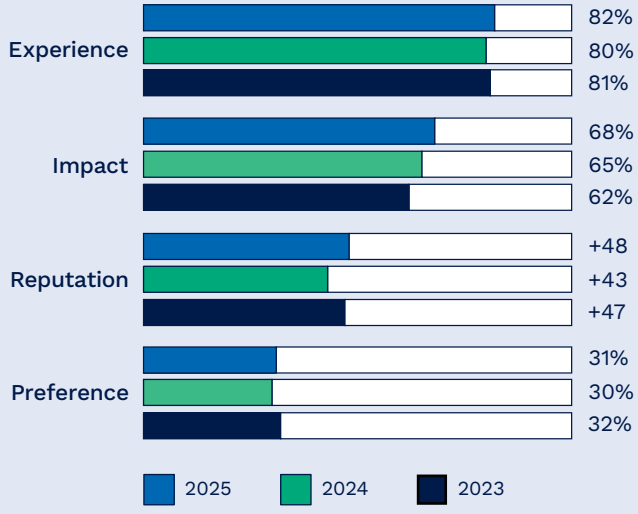
In addition to the direct engagement the Bureau undertakes with its customers and partners, the Bureau uses a range of surveys and feedback mechanisms to ensure its products and services meet the evolving needs of its customers.

Surveys of community customers were undertaken in September, December, March and June, helping to identify areas for improvement and inform service development. Community survey respondents are a representative sample of the Australian community, with a spread of gender, age and location. Surveys assessed customers' preference, experience, impact and reputation. Overall performance was consistent with results from previous years, with the preference and experience scores steady, and the impact and reputation scores showing slight increases in 2025. Community customers continued to report positive experiences and the Bureau's user-friendliness remains consistently high for these users.

In 2024–25, the Bureau implemented a new approach to measure the experience of emergency services, industry and government customers leveraging its Customer Relationship Management (CRM) system. Surveys were undertaken in September and March, assessing customer trust, satisfaction and perception. This compliments the direct intelligence the Bureau collects from its customers and partners that is stored in the CRM and used to inform priority areas where the Bureau can better meet needs. Survey results show trust, satisfaction and perception are strong among the Bureau's emergency management, industry and government customers.

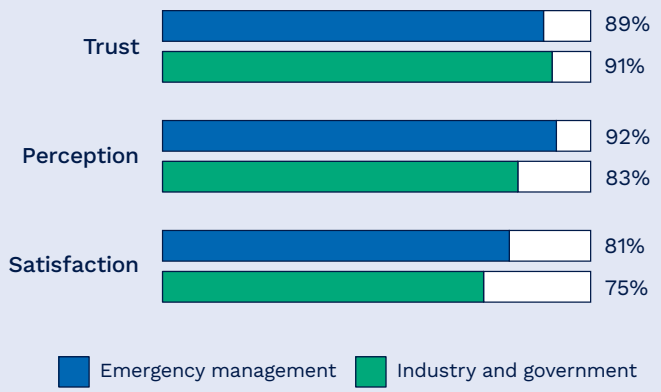
82%

of the community respondents reported the Bureau's services are easy to use



92%

of emergency management customers surveyed have a good perception of the Bureau



Separate trust and experience research was finalised in early 2024–25 aimed at understanding public perceptions and trust in the Bureau and helping the organisation to further tailor its communications to the needs of the Australian community. Qualitative and quantitative methods, including focus groups and an online survey of 1,000 Australians, were used to examine the community's expectations and preferences during times of general weather and severe weather. The research found:

- 84% of people have a high level of interest in weather information, while 89% consider it's very important to be able to access it
- 96% of respondents were aware of at least one Bureau channel, including the website, the BOM Weather app, social media, and TV and radio appearances
- Trust in the information the Bureau provides sits at 86% during general weather and rises to 88% during severe weather events.

More customer experience information is included in the Annual Performance Statement (see p.35).

At 30 June 2025, the BOM Weather app had 16.9 million downloads since its release and was used by over 1.7 million users on average each day between January and June 2025. The app recorded an average rating of 4.6 in the Google Play Store and 4.7 in the Apple App Store (consistent with the ratings of 4.6 and 4.7 respectively in 2023–24).

Over 2.1 million items of feedback on the app were provided to the Bureau during the year across 7 categories:

- customer satisfaction
- data accuracy
- bug / technical
- feature enhancement request
- performance
- user usability request
- location update.

This feedback enabled the Bureau to prioritise enhancements to the app, including the addition of warnings on the map, an acknowledgement of Country, offline mode and dew point (see p.109).

The Bureau continued to enhance its approach to gathering and reporting feedback from its digital channels in 2024–25. At 30 June 2025, the Bureau's online research community had 4,234 registered testers and BOMIdeas was used to invite customers to participate in online surveys and testing to provide feedback on potential service enhancements or ideas.

International engagement

International cooperation is an essential and integral part of the Bureau's operations. Through reciprocal relationships and knowledge-sharing with countries and agencies around the globe the Bureau leverages scientific expertise and technological and operational developments and collects and exchanges information critical for monitoring and predicting the state of the atmosphere and hydrosphere. The Bureau is deeply engaged in international activities that provide direct and indirect benefits to the organisation and to the broader Australian and international community.

In 2024–25, the Bureau continued to lead Australia's multilateral engagement in the World Meteorological Organization (WMO) and UNESCO's Intergovernmental Oceanographic Commission (IOC). Regionally, the Bureau continued to provide peer-advisory services under the Systematic Observations Financing Facility (SOFF) fund to both Kiribati and the Solomon Islands, assisting them to build physical, human and institutional capacity. The Bureau is also providing technical implementation support to Kiribati, under an agreement with the United Nations Environment Programme (UNEP) via SOFF.

As an internationally recognised provider of several specialised WMO products and services, the Bureau is regularly reviewed to ensure compliance with WMO Integrated Processing and Prediction System (WIPPS) obligations. In 2024–25, the Bureau was recognised by the WMO as fully compliant in a review of its status as a Global Producing Centre for Long-Range Forecasting (GPC-LRF), which involves producing and sharing global seasonal forecasts over a one-month or longer time scale.

The Bureau has several bilateral and multilateral agreements with overseas agencies and in 2024–25, actively cooperated with counterpart meteorological and hydrological agencies on a range of mutual and complimentary fields of technical and scientific expertise.

Highlights included:

- signing of a Strategic Relationship Arrangement between the Bureau and the Japan Meteorological Agency (JMA) regarding cooperation in the utilisation of meteorological satellites
- a bilateral visit between the Bureau and the Korea Meteorological Administration (KMA), where collaboration in the areas of meteorological satellite data analysis, climate prediction, marine meteorological services and the Global Atmospheric Watch were all agreed to be continued
- a virtual executive bilateral meeting with UK Met Office (UKMO) colleagues, where closer collaboration on the approach to artificial intelligence, space weather and future service delivery were agreed
- Bureau hosting of separate visits by staff of the US National Weather Service (NWS) and the Meteorological Service of Canada for discussions on our respective national weather services and customer decision support services including fire weather.

Australian aid-funded capacity development programs represent a significant component of

The Bureau's CEO and Director of Meteorology, Dr Andrew Johnson, Director-General of the Japan Meteorological Agency (JMA), Mr Takashi Mori, formalising the new strategic relationship between the Bureau and JMA.

the Bureau's international activities. The Bureau has a long history of supporting counterpart meteorological and hydrological services in the Pacific. These engagements strengthen organisational capabilities and skills and contribute to broader whole-of-government objectives.

In 2024–25 the Bureau:

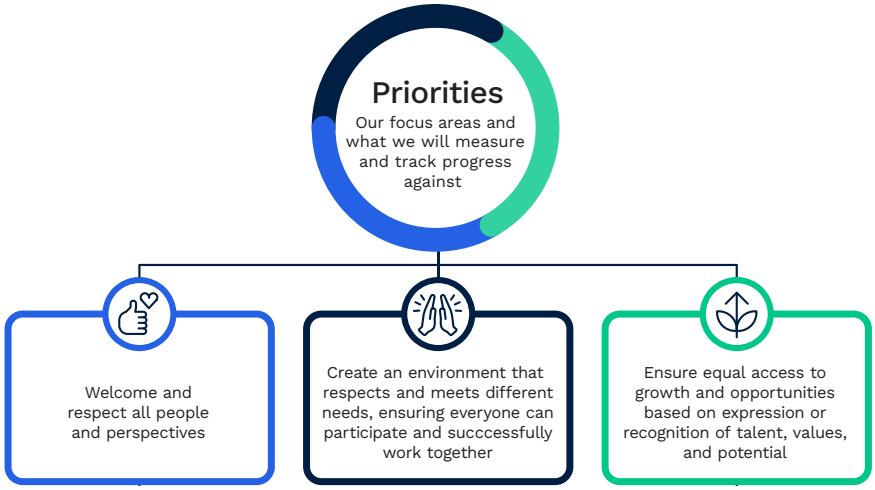
- worked with Pacific National Meteorological Services on all aspects of the Weather Ready Pacific Programme (WRP), including through representation on the Steering Committee and dedicated support to the Program Management Unit in the Secretariat of the Pacific Regional Environment Programme (see p.104)
- continued delivery of the Climate and Oceans Support Program in the Pacific (COSPPac), with a strong focus on transitioning leadership to the Pacific (see p.79, 82, 105)
- expanded support to the Aviation Weather Services across Pacific Island Countries, with the installation of aviation sensors at selected aerodromes and training (see p.103)
- provided targeted observational infrastructure and systems capacity building support to the Papua New Guinea National Weather Service and the Solomon Islands Meteorological Service (see p.107) through twinning arrangements supported by the Australian High Commission in Port Moresby and Honiara respectively
- commenced delivery of the Weather for Energy Transition in Southeast Asia (WETSA) project through building the capacity of the Indonesian Meteorological Service (Badan Meteorologi, Klimatologi, dan Geofisika – BMKG) to deliver tailored weather information to the Indonesian energy sector.

Diversity and inclusion

The Bureau strives to be the model of an inclusive culture where diversity of thought and background is valued to provide better outcomes for staff, customers and the community. Success is based on creating an inclusive environment where people feel respected and valued, share a sense of fairness and of belonging, and are encouraged to make a unique and meaningful contribution.

The Bureau values the diversity of its staff, respecting differences that include – but are not limited to – gender, ethnicity, religion, age, ability or disability, sexual orientation, language, skills, experience, education, industry sector and thinking approaches.

In 2024–25, the Bureau made significant progress to develop and launch its Diversity and



Priorities from the Diversity and Inclusion Action Plan 2024–27.

Inclusion Action Plan 2024–27. A comprehensive analysis of the Bureau's workforce and consultation with staff was undertaken to understand and improve experiences. To support the implementation of the Action Plan, the Bureau established governance structures and delivery partnerships that reinforce its enterprise-wide commitment including a newly established D&I Advisory Group.

The Bureau's Employee Diversity Networks – representing Aboriginal and Torres Strait Islander peoples, culturally and linguistically diverse colleagues, LGBTQIA+ communities, people with disability, and gender equity – continue to play a vital role in amplifying lived experiences, fostering inclusion, and informing practice.

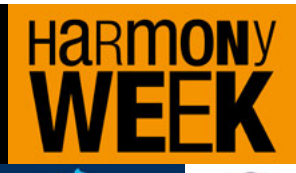
Celebrating diversity with expert insights

The Bureau formally recognised an endorsed list of dates and events during 2024–25. Diversity events broaden understanding by drawing on the lived experience of the Bureau's people and external speakers by sharing different perspectives and showcasing partnerships with community and stakeholder groups. It's a way to engage with the Bureau's people and provide information about work delivering the strategy, recognise achievements, and celebrate diversity.

The events aim to foster a sense of belonging and inclusion and raise awareness about different cultures and backgrounds. They provide an opportunity for learning and reflection and staff are encouraged to have conversations about how the Bureau can individually and collectively progress efforts to deliver improved outcomes for the organisation.

Several staff events were held throughout 2024–25 to celebrate diversity and foster inclusion within the Bureau:

- NAIDOC Week was celebrated from 7–14 July to showcase activities and the role Elders play informing and guiding the Bureau's work
- Wear It Purple Day was celebrated on 30 August with an event hosted by the Storm Pride Network, highlighting LGBTQIA+ inclusion and allyship for young people under the theme 'Your Passion, Your Pride'
- International Day of People with Disability was observed on 3 December, with the Accessibility Network hosting an event aligned to the theme 'Amplifying the leadership of persons with disabilities for an inclusive and sustainable future'
- International Women's Day was marked on 6 March with an engaging event hosted by the Gender Equality Network, themed 'March Forward and Accelerate Action'



- Harmony Week was observed from 17–21 March and celebrated cultural diversity through activities led by the Multicultural Network. Aligned to the theme 'Everyone Belongs', highlights included morning teas across office locations, a choir performance in the Melbourne Office, and reflections from colleagues on bridging cultural and linguistic differences in their work (see p.141)
- International Day Against Homophobia, Biphobia, Interphobia and Transphobia (IDAHOBIT) was marked on 17 May, with the Bureau joining fellow APS STEM agencies in a powerful event hosted by CSIRO. With over 1,000 attendees, the panel discussion—hosted by ABC's Nate Byrne—explored the theme 'The Power of Communities'
- National Reconciliation Week was celebrated on 30 May to support reconciliation, learn about Australia's shared histories, cultures, and achievements, and to help shape the Bureau's collective journey towards reconciliation.

Disability reporting

Australia's Disability Strategy 2021–2031 (the Strategy) is the overarching framework for inclusive policies, programs and infrastructure that will support people with disability to participate in all areas of Australian life. The Strategy sets out where practical changes will be made to improve the lives of people with disability in Australia. It acts to ensure the principles underpinning the United Nations Convention on the Rights of Persons with Disabilities are incorporated into Australia's policies and programs that affect people with disability, their families and carers. All levels of government have committed to deliver more comprehensive and visible reporting under the Strategy. A range of reports on progress of the Strategy's actions and outcome areas will be published and available at www.disabilitygateway.gov.au/ads.

Disability reporting is included the Australian Public Service Commission's State of the Service reports and the APS Statistical Bulletin. These reports are available at www.apsc.gov.au.

Ethical standards

The Bureau supports a safe, inclusive and respectful work culture that reflects the diversity of the community it serves. It operates within the context of Australia being a signatory to the 7 key human rights treaties, with human rights being protected and promoted through domestic legislation, policies, practices and independent bodies. The Bureau undertakes a range of activities to meet this commitment, including:

- promoting APS Values, Code of Conduct and Employment Principles, and awareness of workplace discrimination, through communication with staff, training and induction packages for new employees
- endorsing the Public Interest Disclosure Framework, through communication with staff and supporting policy documents
- supporting the Commonwealth Child Safe Framework which sets the minimum standards for creating and maintaining a child safe culture and practice in Australian Government entities

- providing an online training course entitled APS Values and Code of Conduct at the Bureau, which covers topics such as accountable and ethical decision-making
- providing employees with access to information on ethical standards via the intranet, and through the APS Commission's website
- issuing APS Code of Conduct guidelines for Bureau staff, and providing guidance and policies with respect to duty of care, making public comment, conflicts of interests and the performance of outside work/employment
- consulting staff on a new Prevention of Workplace Sexual Harassment and Related Unlawful Conduct Procedure to complement the existing procedures, including the Unacceptable Behaviours and Complaint Handling Procedure that documents the ethical standards expected of staff
- reviewing the existing internal Harassment Contact Officer network, ensuring that these Officers are appropriately trained with access to relevant support material
- initiating disciplinary processes, including under the Procedure for determining breaches of the APS Code of Conduct (and for determining sanction/s) established in accordance with section 15(3) of the *Public Service Act 1999* making available a review-of-action process, as provided for in section 33 of the *Public Service Act 1999*, to aggrieved employees
- initiating investigation processes into disclosures received under the *Public Interest Disclosure Act 2013*
- implementing actions from the Bureau's Integrity Maturity Action Plan, in support of the Government's integrity agenda and the National Anti-Corruption Commission (NACC).

Privacy

The Bureau has specific responsibilities under the *Privacy Act 1988* (the Privacy Act), including adhering to the Data Breach Notification Scheme and the Australian Government Agencies Privacy Code.

The Bureau's Privacy Policy identifies when, why and how personal information will be collected, stored, used, and disclosed by the Bureau, as well as the types of personal information collected. The policy also describes processes for how individuals can access their own personal information, request the Bureau update and correct their personal information or make complaints to the Bureau about the collection, use, storage and disclosure of personal and sensitive information.

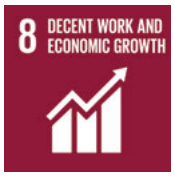
Under the Notifiable Data Breach Scheme established under the Privacy Act, an assessment must be made of suspected privacy data breaches and, in certain circumstances, notification to the Office of the Australian Information Commissioner (OAIC) and affected individuals.

In 2024–25, the Bureau's Privacy team was notified of 4 suspected privacy data breaches. Of these, 3 incidents did not require notification to the OAIC and investigation of one incident was still in progress at 30 June 2025.

Sustainable development

The Bureau recognises the opportunity and privilege it has to support sustainable development in Australia and beyond, contributing to prosperous, fair, healthy and sustainable communities. Both in the way it conducts its operations, and in the vast array of products and services it provides for the community, the Bureau's work supports Australia's commitment to the United Nation's 2030 Agenda for Sustainable Development, and the achievement of the Sustainable Development Goals (SDGs). Throughout 2024–25, the work of the Bureau has contributed to 15 of the 17 goals as follows.

Goal	Bureau contribution
2. Zero hunger 	• help graziers and horticulturalists determine optimum crops, timing around planting and harvesting, fertilisation and chemical spraying • help meat and livestock farmers control stocking rates, and pre-empt health issues in livestock • alert farmers to conditions such as frost, hail, storms and floods • optimise agricultural water use productivity through regional specific information on current and forecast water availability • support government drought assistance programs
3. Good health and well-being 	• help Australians protect themselves, their property and their livelihoods from cyclones, floods, severe storms and bushfires • support authorities in making evacuation decisions to get people at risk to safety • help Australians avoid dangerous ultraviolet (UV) exposure, to protect against skin cancer • help protect vulnerable Australians against heat exhaustion and extreme cold • alert health authorities to periods of heightened demand • help Australians plan their sporting and outdoor activities • support management of biohazards, airborne allergens and diseases
4. Quality education 	• provide quality education in meteorology including capacity building in neighbouring countries • help the community understand Australia's weather, ocean and climate-related risks and how to stay informed during hazard events • contribute to the global knowledge base in the meteorological sciences and contribute to cutting-edge developments • promote ongoing learning and development for Bureau staff
5. Gender equality 	• deliver measurable improvements in workforce gender diversity and inclusive culture through implementation of a new, centralised Diversity and Inclusion Action Plan. • enhance flexible working arrangements to better support employees with family or caring responsibilities. • advance policies and actions that proactively prevent and effectively respond to sexual harassment.
6. Clean water and sanitation 	• coordinate national water information standards, and collection and dissemination of Australia's water information, including water quality information • help governments and water authorities in planning and water management • aid decision-making in water supply and the management of water allocations and rights • support dam management and the protection of water and sanitation infrastructure, particularly during severe weather events • inform the design of new water infrastructure

Goal	Bureau contribution
7. Affordable and clean energy 	• enable the Australian energy market to forecast power demand, particularly during heat and cold extremes • support renewable energy generation by informing production potential and energy output estimates • support operations and efficiency in Australia's offshore oil and gas industry • support improved planning and mitigation of disrupted electricity supply due to severe weather events • invest in energy efficiency and renewable energy projects within the Bureau's property portfolio
8. Decent work and economic growth 	• provide economic benefits in the order of 11.6:1 (for every dollar spent by the Bureau on delivering services, there is a return of $11.60 to the Australian economy) • support economic growth in key sectors (see Goal 9) • provide good employment opportunities for Bureau staff
9. Industry, innovation and infrastructure 	• support safe and efficient air travel in Australian airspace, inform routing and fuel load decisions and help protect aircraft from volcanic ash • help businesses manage the impact of weather on their operations and minimise disruption from severe weather events • provide valuable information to the financial and insurance services sector • support the construction of climate-appropriate infrastructure and help protect infrastructure from weather and climate-related events • provide information products as a basis for innovation and value-adding by industry
10. Reduced inequalities 	• provide consistent, comprehensive services for all Australians, including in rural and remote areas • promote Australian Indigenous culture through the Indigenous Weather Knowledge website and support reconciliation through the Reconciliation Action Plan • implement initiatives that foster workplace diversity and inclusion, ensuring equitable access to opportunities • support capacity building and development of Pacific Island nations to manage severe weather impacts and mitigate climate change • assist Pacific and Indian Ocean countries prepare for and respond to tsunamis

Goal	Bureau contribution
11. Sustainable cities and communities 	• support the emergency services in carrying out effective emergency and disaster preparation, response and recovery • warn communities to prepare for hazardous weather events, to protect housing and community infrastructure, and to make timely evacuations • allow emergency services to pre-position personnel and equipment to minimise infrastructure damage and to restore essential services following an emergency • help individuals and communities organise their activities and daily commute • support management of public and private green spaces
12. Responsible consumption and production 	• maintain the Bureau environmental framework to minimise the effect of operations on the environment • support responsible purchasing policies, efficient use of natural resources, and the management of chemicals and wastes through their lifecycle
13. Climate action 	• help Australians understand the nation's climate patterns, trends and variations in climate, and climate-related risks • provide climate research, modelling and forecasting to support policy decisions and mitigation strategies • help Pacific Island nations measure and respond to climate change impacts
14. Life below water 	• support marine management including sustainable fishing and aquaculture • support safety at sea and inform search and rescue operations • support response to ocean environmental incidents (such as oil spills) • implement changes to the Bureau's balloon program to reduce the likelihood of ingestion by marine birds and turtles
15. Life on land 	• support the management of ecosystems • support bushfire mitigation including controlled burns • maintain ecological protection measures for Bureau operations at environmentally sensitive sites

Goal	Bureau contribution
17. Partnerships for the goals 	• contribute to the activities of the World Meteorological Organization, the Intergovernmental Oceanographic Commission of UNESCO, and the International Civil Aviation Organization • collaborate with counterpart meteorological and hydrological agencies of other countries through bilateral agreements • partner with local, regional, state and territory and national emergency management authorities

Environmental sustainability

The Bureau is committed to leadership in environmentally sustainable practices and managing potentially adverse impact from operations, with the pursuit of a high level of environmental sustainability a success measure of the Bureau's strategy. The Bureau's environmental management system aligns with international standard ISO 14001:2015 and provides the framework for managing environmental risks and optimising opportunities to improve environmental performance.

The Bureau also supports the principles of ecological sustainable development as outlined in the *Environmental Protection and Biodiversity Conservation Act 1999*. The broad range of Bureau products, services and advice empower stakeholders to make informed decisions on matters of ecosystem and biodiversity conservation, both now and for the future.

Management of key impacts

The Bureau's operations are diverse, encompassing land, water, atmosphere and oceans across Australia and its external territories. In 2024–25, Bureau activities addressed a diverse range of impacts associated with its property and operational footprint, including:

- developing and publishing a new biosecurity procedure to ensure Bureau staff – especially those who work in the field, travel or freight equipment to different areas – don't introduce pests, pathogens or weeds into areas that don't have them
- providing guidance for Bureau staff on undertaking environmentally sustainable procurement
- improving management plans for facilities and equipment at sensitive sites such as Maatsuyker Island automatic weather station (AWS), Maria Island AWS, Giles Meteorological Office and Gabo Island Lighthouse AWS
- continuing to improve site induction information for sensitive areas
- uplifting staff awareness through environmental information exchanges and events including a World Environment Day celebration on ending plastic pollution.

Collaborating with Parks Australia to restore Willis Island ecology

The Bureau continued to collaborate with Parks Australia during the year on the environmental management of Willis Island within the Coral Sea Marine Park.

The island is managed by Parks Australia and has hosted a staffed Bureau weather station since 1921. It is one of only 2 coral cays in the marine park with weeds which are attributed to human activity. The island also lies within an International Union for Conservation of Nature (IUCN) Habitat Protection Zone (IUCN IV) that requires effective management to conserve ecosystems, habitats and native species in as natural a state as possible.

Dry composting of weed waste on Willis Island.

Bureau staff stationed on Willis Island assist in weeding and monitoring activities on a routine basis, as well as providing weekly status reports on Highly Pathogenic Avian Influenza (HPAI), marine debris reporting and turtle monitoring.

In July, representatives from Parks Australia and the Bureau conducted a vegetation assessment on the island to evaluate the extent of weed infestation. Further collaboration led to the development of a management strategy for the reduction of weeds, with the ultimate aim of eradication.

The vegetation assessment found that approximately 1 hectare (17%) of the vegetated area was dominated by weeds. Environmental weeds outcompete native plant species and negatively impact the island's ecology, including reducing bird nesting habitat. The recommendation from this study was to remove all non-native plant species from the island.

Parks Australia will visit the island at least annually for comprehensive weed management and assessment activities. In June, Parks Australia and Bureau staff removed 1.03 tonne of weeds and were so successful that at one stage weeding had to be paused because there was too much weed waste to be disposed of. After different disposal methods were trialled, a solution of dry composting was implemented with guidance from Parks Australia's botanists.

The Bureau is committed to the long-term ecological restoration of Willis Island and is dedicated to protecting the environment from risks associated with its operations, implementing best practice land management at its sites, and understanding and planning for its make-good obligations.

Emissions Reduction Plan

The Bureau is responsible for managing and implementing emissions reduction initiatives set by the Australian Government's Net Zero in Government Operations Strategy (the Strategy). The Strategy sets out the Australian Government's approach to achieving net zero greenhouse gas emissions from its operations by 2030 and the reinstatement of public emissions reporting. This Plan complements the Bureau's Climate Risk Disclosure (see p.175)

The Bureau is following the APS Net Zero 2030 target in full. The Bureau's Emission Reduction Plan (ERP) sets out its priorities and actions to reduce emissions by 2030.

A summary of the Bureau's progress against these priorities and actions is provided below.

Renewable energy systems are being implemented with selected large-scale equipment installations, when feasible. The first off-grid automatic balloon launcher was installed in May. This equipment is supported by a 20 kWh solar system and 94.2 kWh battery storage to be fully

off-grid without a back-up diesel generator. Similar solar installations are planned for the 2026–27 financial year during additional automatic balloon launcher installations.

A fleet standardisation working group was created to establish a limited selection of preferred vehicles for operational areas culminating in the selection of a suitable EV for local metropolitan tasks. The Bureau's ability to switch to 100% EV fleet is limited due to the requirement for long distance, multi day remote field work and requirement to safely transport technology and equipment (i.e. not merely passenger vehicles). This limitation will lessen as vehicle options and pricing improves in the future.

All office fit out procurements are undertaken with identified sustainability requirements for contractors and providers to meet. LED lighting with associated motion sensors was installed for the recent office fit-out in Darwin. All new Observing Operations Hub fit-outs include roof-top solar installations.

Where appropriate, dual air conditioning systems are installed in specialised areas such as communications rooms, which run on alternate cycles to prolong the life of the air conditioning units.

Emissions reporting

As part of the Net Zero in Government Operations Strategy, and the reporting requirements under section 516A of the *Environment Protection and Biodiversity Conservation Act 1999*, non-corporate Commonwealth entities, corporate Commonwealth entities and Commonwealth companies are required to report on their operational greenhouse gas emissions.

The Greenhouse Gas Emissions Inventory and Electricity Greenhouse Gas Emissions tables present greenhouse gas emissions over the 2024–25 financial year. The greenhouse gas emissions reported are calculated on the basis of Carbon Dioxide Equivalent (CO2-e) and in line with the Emissions Reporting Framework. This is consistent with a Whole-of-Australian Government approach, outlined in the Net Zero in Government Operations Strategy, and Commonwealth Climate Disclosure requirements.

Not all data sources were available at the time of the report and amendments to data may be required in future reports. Reporting on refrigerants is being phased in over time as emissions reporting matures.

2024–25 Greenhouse Gas Emission Inventory – Location-based method				
Emission Source	**Scope 1 t CO_2-e**	**Scope 2 t CO_2-e**	**Scope 3 t CO_2-e**	**Total t CO_2-e**
Electricity (location-based approach)	N/A	3,875.75	476.24	4,334.00
Natural gas	0.28	N/A	0.02	0.30
Solid waste	N/A	N/A	30.45	30.45
Refrigerants	0.00	N/A	N/A	0.00
Fleet and other vehicles	240.13	N/A	106.98	347.10
Domestic commercial flights	N/A	N/A	595.80	595.80
Domestic hire car	N/A	N/A	30.23	30.23
Domestic travel accommodation	N/A	N/A	275.48	275.48
Other energy	195.10	N/A	48.08	243.18
Total t CO2-e	**435.51**	**3,857.75**	**1,563.27**	**5,856.53**

Note: the table above presents emissions related to electricity usage using the location-based accounting method. CO_2-e = Carbon Dioxide Equivalent.

2024–25 Electricity Greenhouse Gas Emissions				
	Scope 2 t CO_2-e	**Scope 3 t CO_2-e**	**Total t CO_2-e**	**Electricity kWh**
Location-based electricity emissions	3,857.75	476.24	4,334.00	6,313,107.61
Market-based electricity emissions	4,168.17	566.05	4,734.22	5,145,894.23
Total renewable electricity consumed	**N/A**	**N/A**	**N/A**	**1,272,449.07**
Renewable Power Percentage[1]	N/A	N/A	N/A	1,148,669.93
Jurisdictional Renewable Power Percentage[2,3]	N/A	N/A	N/A	18,543.45
GreenPower[2]	N/A	N/A	N/A	-

2024–25 Electricity Greenhouse Gas Emissions				
	Scope 2 t CO_2-e	Scope 3 t CO_2-e	Total t CO_2-e	Electricity kWh
Large-scale generation certificates[2]	N/A	N/A	N/A	-
Behind the meter solar[4]	N/A	N/A	N/A	105,235.69
Total renewable electricity produced	**N/A**	**N/A**	**N/A**	**175,300.11**
Large-scale generation certificates[2]	N/A	N/A	N/A	-
Behind the meter solar[4]	N/A	N/A	N/A	175,300.11

Note: The table above presents emissions related to electricity usage using both the location-based and the market-based accounting methods. CO2-e = Carbon Dioxide Equivalent. Electricity usage is measured in kilowatt hours (kWh).

Due to the billing cycles not aligning with the end of the financial year, some natural gas data was not available during the initial collection process in July-August 2025. Adjustments to the data may be required in future reports.

A portion of electricity and solid waste data was unable to be sourced and has not been included.

The transition of property service providers under the Whole of Australian Government arrangements during the reporting period may result in incomplete property data. Any such incomplete data and resulting changes to emissions calculations will be addressed within the Amendments Process, which is due to take place in the first half of 2026.

A portion of Other Vehicle data was estimated based on actual charter flight data or marine charter data. Emissions from hire cars for 2024–25 may be incomplete due to a lack of robust data. The quality of data is expected to improve over time as emissions reporting matures.

1 Listed as Mandatory renewables in 2023-24 Annual Reports. The renewable power percentage (RPP) accounts for the portion of electricity used, from the grid, that falls within the Renewable Energy Target (RET).
2 Listed as Voluntary renewables in 2023-24 Annual Reports.
3 The Australian Capital Territory is currently the only state with a jurisdictional renewable power percentage (JRPP).
4 Reporting behind the meter solar consumption and/or production is optional. The quality of data is expected to improve over time as emissions reporting matures.

Amendments to prior year emissions

Amendments to the 2023–24 emissions data have been identified and is expected to be addressed through the formal amendments process scheduled to take place in the first half of 2026.

Progress towards the APS Net Zero 2030 target

Emissions data presented here is incomplete due to the transition of the Bureau's Property Service provider during 2024–25. As such, the reported percentage change does not reflect the Bureau's true emissions profile. Missing data is expected to be corrected in early 2026, and baseline emissions will be adjusted to exclude data centres, which are omitted from the 2024–25 figures, causing an artificial decrease. Data centres are covered by the Digital Transformation Agency Data Centre Panel.

APS Net Zero 2030 target emission sources	2022–23* t CO_2-e	2023–24* t CO_2-e	Percentage change since 2022–23
Total Scope 1	**473.95**	**435.51**	**-8.11%**
Natural gas	0.24	0.28	+16.67%
Fleet and other vehicles	278.61	240.13	-13.81%
Refrigerants	0	0	0
Other energy	195.1	195.1	0
Total Scope 2	**13,521.56**	**4,168.17**	**-69.17%**
Electricity (market based)	13,521.56	4,168.17	-69.17%
Total Scope 1 and 2	**13,995.51**	**4,603.68**	**-67.11%**

Note: The table above presents emissions related to electricity usage using the market-based accounting method. CO2-e = Carbon Dioxide Equivalent.

* Emissions reported may differ from previously published emissions due to reconciliation of natural gas and electricity data or updates to emission factors and calculation methods. See 2024–25 Net Zero in Government Operations Annual Progress Report for details regarding emission factors and calculation methods updates.

Heritage

The Bureau has a demonstrated commitment to record and preserve significant parts of its own more than 100-year history in delivering meteorological services to Australia. The heritage values associated with sites owned or controlled by the Bureau is quite broad. Some sites have long-term associations with weather and meteorology, some sites are places of first use of significant technology such as radar, while others were key to major meteorological events. The Bureau continues to manage its heritage obligations in accordance with the Environmental Protection and Biodiversity Conservation Regulations 2000.

Cultural heritage is a key priority for the Bureau with particular focus on Aboriginal and Torres Strait Islander consultation and sensitive site protection.

Returning a cultural artefact to the Yarnangu people on Ngaanyatjarra Country

In 2024–25 the Bureau received correspondence from Angela Ballard, the daughter of Stephen Gordon Ballard, who worked at Giles Weather Station during the 1958–59 season. A tragic event during that time led to the death of Stephen's colleague. Members of the Aboriginal camp near the station came to Stephen, offering him a message stick as a gesture of support during such a profound and tragic moment.

Recently, Stephen passed away with his daughter Angela inheriting the message stick in trust. She reached out to Giles Weather Station with the intention of returning this deeply meaningful artefact to Ngaanyatjarra Country and to the people from which it originated.

On 25 February, a ceremony was held at Giles Weather Station near the Warakurna Community, where a group of 6 local elders gathered to receive the message stick along with a heartfelt message from Angela. It was a deeply emotional occasion and demonstrating the power and symbolism of the enduring connection between past and present, the community and the Bureau, one of the elders remarked that 'this is now one of the most important objects that we have.'

Ngaanyatjarra Country near Giles Weather Station.

People management

Effectiveness in managing and developing employees

The design, development and delivery of enterprise strategies supporting culture, leadership, organisational capability, diversity and inclusion and talent management continued as priorities in 2024–25.

The Bureau completed a leadership learning needs analysis to ensure the focus and continual strategic alignment of leadership capability development activities, including senior leader talent development and succession planning. This resulted in leveraging the Australian Public Service Commission (APSC) Leadership Edge EL2 programs, and a redesign of internal Mentoring and Manager Fundamentals workshop programs.

Facilitated learning experiences and curated self-paced learning options for all employees focused on integrity, team empowerment and psychological safety, cultural competence and communication. Driven by greater internal promotion, 153 employees also accessed 278 courses, modules or learning events through the APSC, continuing to build writing skills, data driven storytelling capability, and financial sustainability knowledge.

The Bureau achieved a completion rate of 96.2% for the second iteration of yearly mandatory training supporting all employees and contractors to understand their core Australian Public Service (APS) obligations. Staff also accessed online learning libraries to support individual development plans and continued to engage with CORE eLearning modules and facilitated Yarning Circles to build and maintain cultural awareness and capability.

The Bureau is committed to building a strong organisational culture that is led and owned by its people. The Bureau's 2024 Agency Action Plan provides visibility on the enterprise response to staff feedback from the 2024 APS Census and outlines priority actions being delivered against each target area for innovation, communication, risk management and change, and activities to support team culture. Progress on the initiatives being delivered under each target area is shared quarterly with staff. Senior leaders were supported to explore the 2024 APS Census data and respond to identified themes and develop team Culture Action Plans through facilitated workshops.

From left to right: the Bureau's Pieter Claassen, Ahrim Lee and Felim Hanniffy.

Workforce snapshot	2023–24	2024–25	Difference
Employment			
Number of employees	1,882	1,839	-43
Total employee expenditure	$244.6m	$276.5m	+$31.9m
Employee separation rate	11.3%	10.2%	-1.1%
The diversity of our workforce*			
Women	37.5%	38.0%	+0.5%
Employees with a disability	2.8%	3.6%	+0.8%
Aboriginal and Torres Strait Islander peoples	1.2%	1.3%	+0.1%
Employees with English as a second language	16.0%	16.1%	+0.1%
Employees with English and another language	9.7%	10.3%	+0.6%
Age profile			
Employees over 55	21.5%	22.7%	+1.2%
Employees under 30	10.5%	10.1%	-0.4%
Employees average age	45.3	45.7	+0.4
Training and education			
Employees undertaking supported studies	1.1%	0.9%	-0.2%

*Calculated as percentages of employee headcount. Note that all diversity measures are voluntary disclosures. Some employees choose not to disclose this information.

The Bureau's participation rate in the 2025 APS Census was 75%, compared to 69% in 2024. Results from the 2025 APS Census indicate that staff:

- continue to strongly believe in the purpose and objectives of the Bureau and the APS
- understand customer focus and what it means to the operations of the Bureau and their day-to-day role
- act with integrity and feel able to raise problems and tough issues
- actively engage in and promote activities that foster an inclusive work environment
- suggest ideas to improve ways of working and actively participate and contribute to team Culture Action Plans.

The Bureau assesses its level of maturity in managing organisational change on a bi-annual basis. The 2024 maturity rating result of 3.5 out of 5.0 reflects the Bureau's significant and ongoing improvement, from a baseline of 1.3 in 2017. A rating of 3.5 places the Bureau in the top quartile for change maturity across the Australian and New Zealand government sectors.

Strategy-in-Action workshops for the Bureau's extended leadership cohort were held virtually in September, December, April and June. The workshops continue to play an important role in building leadership capability and cohesion, sharing learning and experiences, and lifting culture and momentum around implementation and delivery of the Bureau's strategy.

Individual performance management and development also remains critical to the Bureau's strategic objectives. Participation rates for the miPDS performance development scheme continue to be high, with 98% of employees having an agreement in place at the end of June 2025.

Training and development

The Bureau has continued a strong and sustained commitment to developing STEM careers. In 2024–25, the Bureau of Meteorology Training Centre facilitated learning programs to support organisational capability, and licensing and compliance requirements.

The Graduate Diploma in Meteorology course – the initial training program for meteorologists – saw 29 Bureau students graduate from the 2024 intake, as well as students completing the program from the Royal Australian Navy, Samoa, Tonga and Singapore. A total of 25 students commenced the 2025 program, including 15 Bureau staff alongside students from the Royal Australian Navy, Solomon Islands, Papua New Guinea and Singapore.

Continued development and delivery of online material provided all staff with greater access to training opportunities, particularly for those located in regional and remote locations, with over 8,000 online courses completed in the Bureau's learning management system. Courses covering psychosocial hazards and the Bureau essentials suite were compulsory for all employees and contractors, consistent with APS legislative requirements and Bureau learning ambitions.

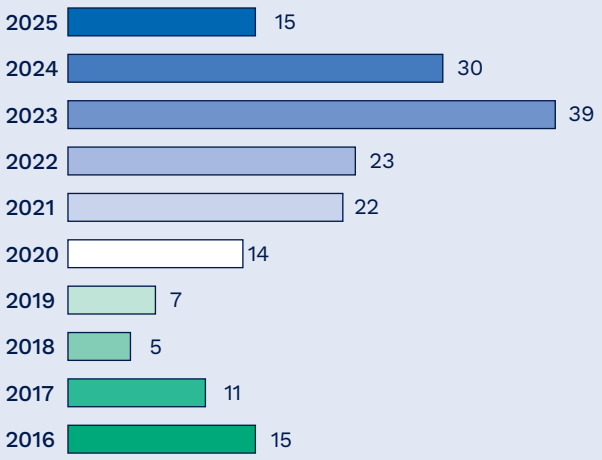
Specialist technical in-service training was also provided, with 566 meteorologist competencies held across fields such as fire weather, severe thunderstorms, tropical cyclones and aviation forecasting specialist classifications. In 2024–25, training and assessment for tsunami warning leads and science officers was reviewed and updated in parallel with the new Tsunami Observation And Simulation Terminal (TOAST) software suite being deployed into operations

A total of

29

employees successfully completed the Graduate Diploma in Meteorology course in the class of 2024 and have joined the ranks of Bureau forecasters across the country.

Number of Bureau trainees undertaking the Graduate Diploma in Meteorology



(see p.78). New training in radar fundamentals and hazardous surf warnings was also deployed to Bureau meteorologists.

The Bureau's Introduction to Meteorology course was delivered to 181 participants in 2024–25 through facilitated courses run by Bureau meteorologist trainers. All participants were external customers from key agencies and partners, predominately from the emergency management sector. An on-demand online version of the course was completed by 224 external customers and 113 internal stakeholders during the year. Training in meteorology and Bureau services remains highly valued by key partners, with 12 courses delivered to agencies including the New South Wales State Emergency Service (SES), Tasmania SES and Emergency Management Victoria.

In support of the Bureau's Observing System and Operations Program, over 1,100 competencies were recognised through formal training and assessment of current competency as part of the ongoing implementation of the Training and Competency Framework. These competencies included radar, automatic weather station, autosonde and hydrogen systems maintenance, and remote first aid. In addition to internal training, aeronautical meteorological observations training was provided to staff from Airservices Australia, Royal Australian Air Force, Royal Australian Navy and Australian Antarctic Division to support aviation operations.

Work health and safety (WHS)

The Bureau is committed to ensuring the health and safety of its staff through effective risk management and a positive safety culture with a focus on embedding health and safety practices in day-to-day operations and activities.

The Bureau's Health Safety and Environment (HSE) team continued to provide health and safety advice to support management and staff to 'know and manage' their risks and respond to and investigate incidents. Highlights from 2024–25 included:

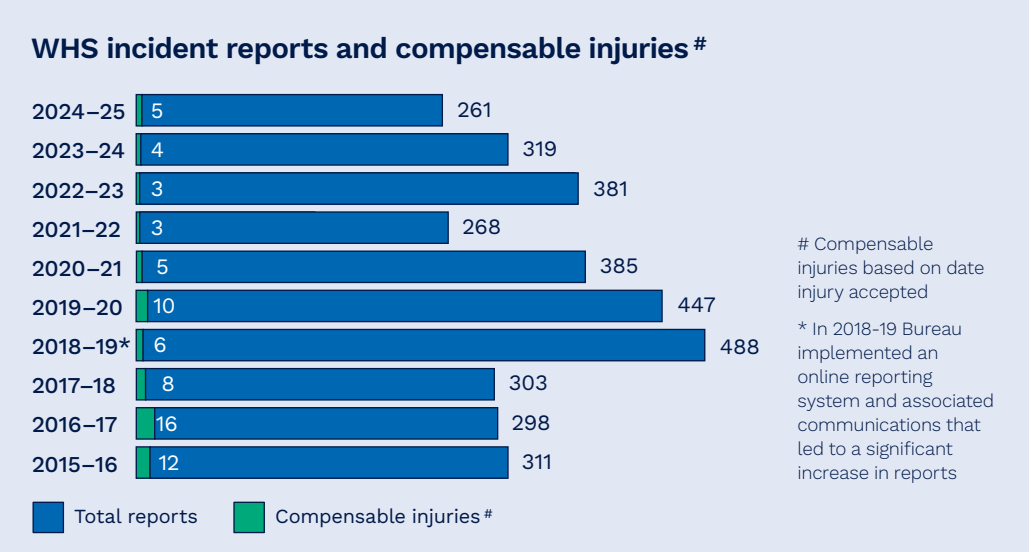
- relaunching systematic WHS Site Inspections across staffed sites, enabling proactive identification and timely rectification of workplace hazards
- restructuring the Health and Safety Representative (HSR) Network to ensure a fit-for-purpose representation model. This included responding to a request for representation from staff located in Meteorological Offices (non-Bureau controlled workplaces) and transitioning the Melbourne Office's representation from floor-based to group-based alignment
- enhancing Psychosocial Risk Management aligned with the Work Health and Safety Regulations (2011) and updated Code of Practice (2024) (see p.141)
- introducing a targeted skin cancer screening program to support staff engaged in regular outdoor work, providing early detection and monitoring to mitigate risks associated with sun exposure
- participating in Comcare's Proactive Monitoring and Compliance Inspection focused on WHS Consultation, Cooperation, and Coordination under the *Work Health and Safety Act 2011* (Cth). The inspection concluded with no findings of non-compliance, affirming the Bureau's adherence to regulatory expectations.

WHS snapshot	2023–24	2024–25	Variance
Incident reporting			
Total hazard and incidents reported	319	261	-58
Hazards	151	143	-8
Incidents (near miss & injury/illness)	168	118	-50
Average time to report (days)	8.1	4.7	-3.4
Lost time indicators			
Lost time injury frequency rate (all reports)	3.64	7.31	+3.67
Lost time injury frequency rate (workers' compensation claims)	0.36	1.1	+0.74
Notifiable incidents			
Incidents notified in accordance with the *Work Health and Safety Act 2011*	2	3	+1
Activities and positive performance indicators			
Safety conversations	369	370	+1
WHS Site inspections (occupied site)	-	50	50
Health and Safety Representatives (HSRs)	24	26	+2
Deputy HSRs	18	19	+1
Workers' compensation			
Workers' compensation claims (accepted during 2024–25)	4	5	+1

The overall reduction in hazard and incident reports during the reporting period is partly attributable to decreased travel and fieldwork activities, driven by ongoing budgetary constraints. Notably, the average time to report hazards and incidents has improved, reflecting the impact of sustained communication efforts by the HSE Team and leadership across multiple levels. These efforts have consistently reinforced the importance of prompt reporting to safeguard individual and team wellbeing, and to enable timely and effective response measures.

While the total number of near misses and reported injuries or illnesses has declined, there has been an increase in injuries resulting in lost time. However, most of these cases have not progressed to workers' compensation claims, largely due to proactive early intervention strategies and individual worker preferences.

During 2024–25, 3 notifiable incidents were recorded: one serious injury and 2 dangerous occurrences. Of the 5 workers' compensation claims lodged, 2 were accepted for injuries sustained in 2023–24.



Consultation

The Bureau recognises that staff engagement and participation improve decision-making for health and safety matters, and help reduce work-related incidents, injuries and illness. The Bureau has formal health and safety consultative arrangements in the form of a network of health and safety representatives (HSRs) and a Work Health Safety Committee. WHS procedures and risk assessments are made available for worker consultation prior to finalisation.

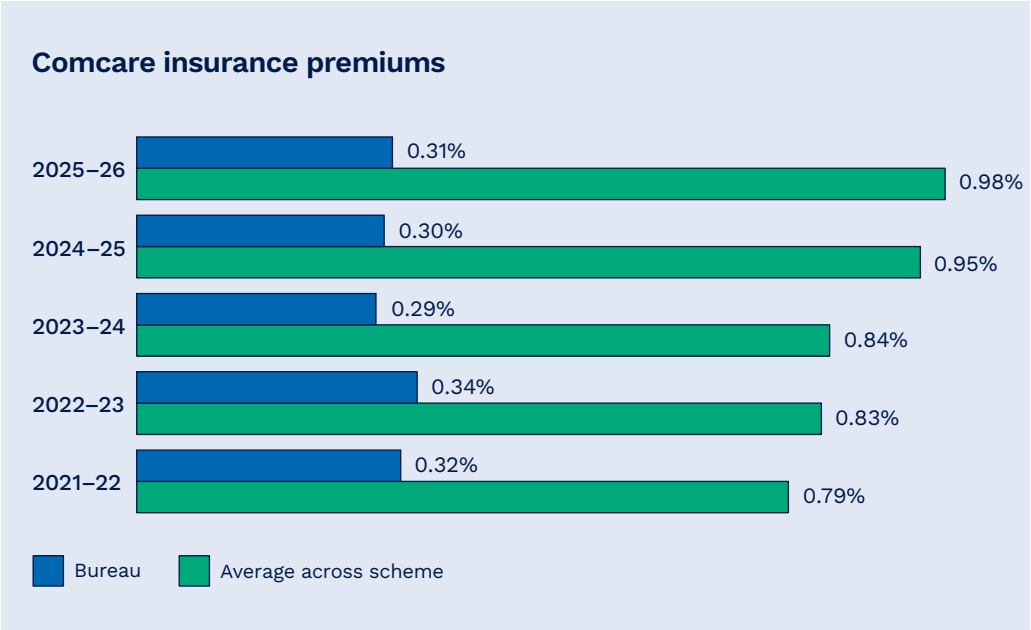
Rehabilitation and compensation

In 2024–25, 7 compensation claims were lodged with Comcare of which 6 were accepted and one remains undetermined. Of the accepted claims, 4 relate to physical injuries and 2 relate to psychosocial factors. The Bureau's incidence rate of accepted claims per 1000 FTE was 3.3 compared to 4.5 for the Commonwealth, with average claim costs below the Commonwealth average. Over the last 24 months, the Bureau achieved a return-to-work rate of 75% for 4 accepted claims.

The Bureau's Comcare premium rate for 2024–25 was 0.30%, for 2025–26 is 0.31% and well below the overall scheme premium rate of 0.98%.

The Wellbeing team continued to work towards positive return to work outcomes for compensable and non-compensable claims through the engagement of effective rehabilitation providers, dedicated managers, the Wellbeing team support, and the positive approach of injured staff. A proactive and early intervention approach for injured or ill employees resulted in minimal lost time for compensable and non-compensable matters. This involved managers and supervisors establishing immediate supportive contact with employees who required further assistance. The Wellbeing team worked with all parties to support the return-to-work process in a collaborative way.

The Bureau's Employee Assistance Program (EAP) utilisation rate for 2024–25 was 19%, compared to the industry average of 9.2%. The Wellbeing team has been actively educating Bureau staff on the services available to maintain awareness and increase use.



Employment arrangements

At 30 June, the Bureau had 1,722 ongoing employees and 116 non-ongoing employees employed under the *Public Service Act 1999*. These figures include 25 Senior Executive Service (SES) and equivalent staff but exclude the Head of Agency. Apart from the SES and the Head of Agency, all staff are covered under the Bureau of Meteorology Enterprise Agreement (EA). The salary bands under the EA and non-salary benefits are outlined below. There were 94 employees with individual flexibility agreements pursuant to the EA – each of these individual flexibility arrangements dealt with matters of remuneration or allowances.

Australian Public Service Act employment arrangements – Current report period (2024–25)

	SES	Non-SES	Total
Bureau of Meteorology Enterprise Agreement 2024	0	1,813	1,813
SES (and equivalent) Employment Contracts	25	0	25
Total	**25**	**1,813**	**1,838**

Note: Includes employees on leave without pay and excludes the Head of Agency.

Australian Public Service Act employment salary ranges by classification level (minimum/maximum) – Current report period (2024–25)

	Minimum Salary $	Maximum Salary $
SES 3	N/A	N/A
SES 2	279,125	311,503
SES 1	231,537	254,120
EL 2*	135,402	208,842
EL 1	115,443	125,832
APS 6	94,563	105,910
APS 5	84,228	91,809
APS 4	75,022	81,775
APS 3#	66,823	77,636
APS 2	59,857	65,602
APS 1	54,516	57,787
Other^	54,516	64,169
Minimum/Maximum range	**54,516**	**311,503**

* Includes Research Scientists
# Includes Technical Officers
^ Includes Graduate, Cadet and Trainee staff

Non-salary benefits

Non-salary benefits for employees include:

- flexible working arrangements, such as flex time, executive-level time off in lieu, part-time and home-based work, compressed hours and negotiable working time within the span of hours
- assistance to employees who are in, have left, or are preparing to leave situations which are affected by family and domestic violence
- provision for leave, including annual leave, long service leave, personal/carer's leave, compassionate leave, war service sick leave, pregnancy leave, maternity leave, adoption leave, supporting partner leave, study leave, ceremonial leave, defence leave, jury service leave, purchased leave and community leave (with and without pay)
- study assistance
- relocation support
- access to an employee assistance program
- access to the flexible remuneration packaging scheme
- provision of business-related equipment
- career guidance and development services.

Performance pay

No Bureau employees received performance pay during 2024–25.

Application of the Strategic Commissioning Framework

The Bureau draws upon a unique and multifaceted set of core and core-enabling capabilities to deliver critical weather, water, climate, ocean and space weather services. In 2024–25, the Bureau applied the principles of the APS Strategic Commissioning Framework to identify opportunities to further strengthen its workforce capability and to reduce outsourcing where appropriate.

The Bureau's targets for reducing outsourcing in 2024–25 aimed to convert 76.5 Average Staffing Level (ASL) from contractors to ongoing APS positions across 11 job families, including ICT and digital solutions; portfolio, program and project management; and accounting and finance.

This target was partially achieved, with an actual conversion of 60 ASL from contractor roles to ongoing APS employees. This conversion equated to a reduction of $13.7 million in relevant supplier expenditure in 2024–25 against a target of $19.4 million.

Executive remuneration

The payment of salary and administration of conditions for the Head of Agency is derived from the relevant Remuneration Tribunal determination. The Bureau has an SES remuneration framework that applies to the SES (and equivalent) staff. At 30 June 2025, there were 25 common law contracts for SES (and equivalent) staff. These contracts also provided for non-salary benefits, such as business equipment (home computing facilities and mobile phone) and airline club membership. The Bureau has no staff on Australian Workplace Agreements and is not subject to any determinations under subsection 24(3) of the Public Service Act.

Information about remuneration for key management personnel

The Bureau's key management personnel include the CEO as its Accountable Authority, and members of the Bureau Executive who report directly to the CEO. Remuneration information for key management personnel is provided below. Remuneration figures for Key Management Personnel, Senior Executives and other highly paid staff are comprised of base salary, other benefits and allowances, long service leave and superannuation contributions, and termination benefits where applicable. The figures include pro-rata amounts for personnel who were not employed at the Bureau for the full financial year.

		Short-term benefits $			Post-employment benefits $	Other long-term benefits $		Termination benefits $	Total remuneration $
Name	Position title	Base salary	Bonuses	Other benefits and allowances	Superannuation contributions	Long service leave	Other long-term benefits		
Andrew Johnson	CEO & Director of Meteorology	549,131	-	-	74,042	12,170	-	-	**635,343**
Robert Argent	Group Executive Science and Innovation (part-year)	137,104	-	12,967	18,749	6,901	-	-	**175,721**
Gilbert Brunet	Group Executive Science and Innovation (part-year)	206,499	-	19,519	32,411	4,452	-	-	**262,881**
Nichole Brinsmead	Group Executive Data and Digital	356,035	-	71,574	60,602	4,621	-	-	**492,832**
Peter Stone	Group Executive Business Solutions	349,866	-	38,174	67,448	7,702	-	-	**463,190**
Piero Chessa	Group Executive Community Services	339,895	-	36,172	53,557	5,391	-	-	**435,015**
Astrid Heward	Group Executive Enterprise Services (part-year)	289,315	-	12,024	36,634	4,141	-	-	**342,114**
Paula Goodwin	Group Executive Enterprise Services (part-year)	41,362	-	2,730	4,397	7,420	-	-	**55,909**
Vicki Manson	Group Executive Australian Climate Service	344,677	-	34,180	66,455	7,702	-	-	**453,014**

Information about remuneration for senior executives

The average total remuneration of senior executives, excluding key management personnel, during the reporting period is provided below. The figures include pro-rata amounts for personnel who were not employed at the Bureau for the full financial year.

		Short-term benefits $			Post-employment benefits $	Other long-term benefits $		Termination benefits $	Total remuneration $
Total remuneration bands	Number of senior executives	Average base salary	Average bonuses	Average other benefits and allowances	Average superannuation contributions	Average long service leave	Average other long term benefits	Average termination benefits	Average total remuneration
$0 - $220,000	4	33,518	-	3,599	5,668	756	-	-	**43,542**
$220,001 - $245,000	-	-	-	-	-	-	-	-	**-**
$245,001 - $270,000	-	-	-	-	-	-	-	-	**-**
$270,001 - $295,000	6	228,929	-	9,553	39,261	10,530	-	-	**288,273**
$295,001 - $320,000	9	245,467	-	9,998	40,306	9,016	-	-	**304,787**
$320,001 - $345,000	2	254,321	-	20,877	44,732	10,758	-	-	**330,687**
$345,001 - $370,000	-	-	-	-	-	-	-	-	**-**
$370,001 - $395,000	-	-	-	-	-	-	-	-	**-**
$395,001 - $420,000	-	-	-	-	-	-	-	-	**-**
$420,001 - $445,000	-	-	-	-	-	-	-	-	**-**
$445,001 - $470,000	-	-	-	-	-	-	-	-	**-**
$470,001 - $495,000	-	-	-	-	-	-	-	-	**-**
$495,001 - $520,000	-	-	-	-	-	-	-	-	**-**

Information about remuneration for other highly paid staff

Remuneration of staff who are neither key management personnel nor senior executives, and whose total remuneration exceeds the threshold amount for the reporting period ($260,000) is also provided below.

		Short-term benefits $			Post-employment benefits $	Other long-term benefits $		Termination benefits $	Total remuneration $
Total remuneration bands	Number of other highly paid staff	Average base salary	Average bonuses	Average other benefits and allowances	Average superannuation contributions	Average long service leave	Average other long term benefits	Average termination benefits	Average total remuneration
$260,000 - $270,000	2	176,036	-	47,751	32,245	5,951	-	-	**261,984**
$270,001 - $295,000	1	168,087	-	70,904	37,092	6,400	-	-	**282,483**
$295,001 - $320,000	-	-	-	-	-	-	-	-	**-**
$320,001 - $345,000	-	-	-	-	-	-	-	-	**-**
$345,001 - $370,000	-	-	-	-	-	-	-	-	**-**
$370,001 - $395,000	-	-	-	-	-	-	-	-	**-**
$395,001 - $420,000	-	-	-	-	-	-	-	-	**-**
$420,001 - $445,000	-	-	-	-	-	-	-	-	**-**
$445,001 - $470,000	-	-	-	-	-	-	-	-	**-**
$470,001 - $495,000	-	-	-	-	-	-	-	-	**-**
$495,001 - $520,000	-	-	-	-	-	-	-	-	**-**

Workforce profile (staffing statistics)

All statistics are at 30 June 2025 unless otherwise stated. External territories include Australian Antarctic Territory, Norfolk Island and Cocos Islands. Macquarie Island is included in Tasmania, Willis Island in Queensland and Lord Howe Island in New South Wales.

All ongoing employees – Current report period (2024–25)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
NSW	68	6	74	29	12	41	0	1	1	1	0	1	0	0	0	**117**
Qld	153	10	163	83	14	97	1	0	1	0	0	0	0	0	0	**261**
SA	47	4	51	23	9	32	1	0	1	0	0	0	0	0	0	**84**
Tas	42	6	48	20	4	24	0	0	0	1	0	1	0	0	0	**73**
Vic	550	38	588	279	73	352	7	0	7	2	2	4	0	0	0	**951**
WA	57	4	61	26	11	37	1	0	1	1	0	1	0	0	0	**100**
ACT	49	1	50	38	8	46	0	0	0	1	0	1	0	0	0	**97**
NT	19	4	23	12	2	14	0	0	0	0	0	0	0	0	0	**37**
External Territories	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Overseas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**987**	**73**	**1,060**	**510**	**133**	**643**	**10**	**1**	**11**	**6**	**2**	**8**	**0**	**0**	**0**	**1,722**

All non-ongoing employees – Current report period (2024–25)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
NSW	3	1	4	4	1	5	0	0	0	0	0	0	0	0	0	**9**
Qld	8	1	9	5	0	5	0	0	0	0	0	0	0	0	0	**14**
SA	1	0	1	2	0	2	0	0	0	0	0	0	0	0	0	**3**
Tas	6	1	7	4	1	5	0	0	0	0	0	0	0	0	0	**12**
Vic	17	9	26	16	7	23	2	0	2	0	0	0	0	0	0	**51**
WA	5	2	7	3	2	5	0	0	0	0	0	0	0	0	0	**12**
ACT	1	0	1	3	2	5	0	0	0	0	0	0	0	0	0	**6**
NT	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	**2**
External Territories	3	0	3	5	0	5	0	0	0	0	0	0	0	0	0	**8**
Overseas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**44**	**15**	**59**	**43**	**13**	**56**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**117**

Note: Includes Head of Agency

All ongoing employees – Previous report period (2023–24)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
NSW	69	4	73	28	10	38	0	0	0	1	0	1	0	0	0	**112**
Qld	152	9	161	75	12	87	0	0	0	0	0	0	2	0	2	**250**
SA	46	5	51	23	8	31	0	0	0	0	0	0	1	0	1	**83**
Tas	47	5	52	17	6	23	0	0	0	0	0	0	0	0	0	**75**
Vic	570	34	604	276	70	346	0	0	0	3	1	4	7	1	8	**962**
WA	54	5	59	28	8	36	0	0	0	0	1	1	1	0	1	**97**
ACT	43	1	44	40	10	50	0	0	0	0	0	0	0	1	1	**95**
NT	19	3	22	10	3	13	0	0	0	0	0	0	0	0	0	**35**
External Territories	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Overseas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**1,002**	**66**	**1,068**	**497**	**127**	**624**	**0**	**0**	**0**	**4**	**2**	**6**	**11**	**2**	**13**	1,711

All non-ongoing employees – Previous report period (2023–24)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
NSW	3	3	6	5	2	7	0	0	0	0	0	0	0	0	0	**13**
Qld	9	1	10	6	2	8	0	0	0	0	0	0	0	0	0	**18**
SA	6	3	9	4	0	4	0	0	0	0	0	0	0	0	0	**13**
Tas	7	2	9	10	0	10	0	0	0	0	0	0	0	0	0	**19**
Vic	26	16	42	30	5	35	0	0	0	0	0	0	3	0	3	**80**
WA	3	1	4	5	0	5	0	0	0	0	0	0	0	0	0	**9**
ACT	1	0	1	7	3	10	0	0	0	0	0	0	0	0	0	**11**
NT	1	1	2	1	1	2	0	0	0	0	0	0	0	0	0	**4**
External Territories	3	0	3	1	0	1	0	0	0	0	0	0	0	0	0	**4**
Overseas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**59**	**27**	**86**	**69**	**13**	**82**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**171**

Australian Public Service Act ongoing employees – Current report period (2024–25)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
SES 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SES 2	3	0	3	3	0	3	0	0	0	0	0	0	0	0	0	**6**
SES 1	14	0	14	4	0	4	0	0	0	0	0	0	0	0	0	**18**
EL 2	187	9	196	107	24	131	0	0	0	1	0	1	2	0	2	**330**
EL 1	380	38	418	178	64	242	0	0	0	1	1	2	2	0	2	**664**
APS 6	225	17	242	125	33	158	0	0	0	4	1	5	4	1	5	**410**
APS 5	91	5	96	39	6	45	0	0	0	0	0	0	0	0	0	**141**
APS 4	39	0	39	41	4	45	0	0	0	0	0	0	2	0	2	**86**
APS 3	38	2	40	9	2	11	0	0	0	0	0	0	0	0	0	**51**
APS 2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
APS 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Other	10	0	10	4	0	4	0	0	0	0	0	0	0	0	0	**14**
Total	**987**	**73**	**1,060**	**510**	**133**	**643**	**0**	**0**	**0**	**6**	**2**	**8**	**10**	**1**	**11**	1,722

Australian Public Service Act non-ongoing employees – Current report period (2024–25)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
SES 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SES 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SES 1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	**1**
EL 2	2	1	3	2	0	2	0	0	0	0	0	0	0	0	0	**5**
EL 1	18	7	25	11	2	13	0	0	0	0	0	0	1	0	1	**39**
APS 6	10	5	15	10	2	12	0	0	0	0	0	0	0	0	0	**27**
APS 5	4	0	4	8	2	10	0	0	0	0	0	0	0	0	0	**14**
APS 4	1	1	2	3	4	7	0	0	0	0	0	0	0	0	0	**9**
APS 3	8	1	9	8	2	10	0	0	0	0	0	0	1	0	1	**20**
APS 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
APS 1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	**1**
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**43**	**15**	**58**	**43**	**13**	**56**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**116**

Note: Excludes Head of Agency

Australian Public Service Act ongoing employees – Previous report period (2023–24)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
SES 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SES 2	3	0	3	3	0	3	0	0	0	0	0	0	0	0	0	**6**
SES 1	14	0	14	5	0	5	0	0	0	0	0	0	0	0	0	**19**
EL 2	196	9	205	113	20	133	0	0	0	0	0	0	1	0	1	**339**
EL 1	371	33	404	166	55	221	0	0	0	2	1	3	1	0	1	**629**
APS 6	221	17	238	108	41	149	0	0	0	1	1	2	3	2	5	**394**
APS 5	92	4	96	38	8	46	0	0	0	0	0	0	0	0	0	**142**
APS 4	58	0	58	51	1	52	0	0	0	1	0	1	5	0	5	**116**
APS 3	22	2	24	7	2	9	0	0	0	0	0	0	0	0	0	**33**
APS 2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
APS 1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Other	24	0	24	6	0	6	0	0	0	0	0	0	1	0	1	**31**
Total	**1,002**	**66**	**1,068**	**497**	**127**	**624**	**0**	**0**	**0**	**4**	**2**	**6**	**11**	**2**	**13**	1,711

Australian Public Service Act non-ongoing employees – Previous report period (2023–24)

	Man/Male			Woman/Female			Non-binary			Prefers not to answer			Uses a different term			Total
	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	Full time	Part time	Total	
SES 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SES 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
SES 1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	**1**
EL 2	2	3	5	2	1	3	0	0	0	0	0	0	0	0	0	**8**
EL 1	23	12	35	23	6	29	0	0	0	0	0	0	1	0	1	**65**
APS 6	13	8	21	18	2	20	0	0	0	0	0	0	1	0	1	**42**
APS 5	5	2	7	9	2	11	0	0	0	0	0	0	0	0	0	**18**
APS 4	1	1	2	7	1	8	0	0	0	0	0	0	0	0	0	**10**
APS 3	14	1	15	9	1	10	0	0	0	0	0	0	1	0	1	**26**
APS 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
APS 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**58**	**27**	**85**	**69**	**13**	**82**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**170**

Australian Public Service Act employees by full-time and part-time status – Current report period (2024–25)

	Ongoing			Non-ongoing			Total
	Full time	Part time	Total	Full time	Part time	Total	
SES 3	0	0	0	0	0	0	**0**
SES 2	6	0	6	0	0	0	**6**
SES 1	18	0	18	1	0	1	**19**
EL 2	297	33	330	4	1	5	**335**
EL 1	561	103	664	30	9	39	**703**
APS 6	358	52	410	20	7	27	**437**
APS 5	130	11	141	12	2	14	**155**
APS 4	82	4	86	4	5	9	**95**
APS 3	47	4	51	17	3	20	**71**
APS 2	0	2	2	0	0	0	**2**
APS 1	0	0	0	0	1	1	**1**
Other	14	0	14	0	0	0	**14**
Total	**1,513**	**209**	**1,722**	**88**	**28**	**116**	**1,838**

Note: Excludes Head of Agency.

Australian Public Service Act employees by full-time and part-time status – Previous report period (2023–24)

	Ongoing			Non-ongoing			Total
	Full time	Part time	Total	Full time	Part time	Total	
SES 3	0	0	0	0	0	0	**0**
SES 2	6	0	6	0	0	0	**6**
SES 1	19	0	19	1	0	1	**20**
EL 2	310	0	310	4	4	8	**318**
EL 1	540	29	569	47	18	65	**634**
APS 6	333	89	422	32	10	42	**464**
APS 5	130	61	191	14	4	18	**209**
APS 4	115	12	127	8	2	10	**137**
APS 3	29	1	30	24	2	26	**56**
APS 2	0	4	4	0	0	0	**4**
APS 1	1	1	2	0	0	0	**2**
Other	31	0	31	0	0	0	**31**
Total	**1,514**	**197**	**1,711**	**130**	**40**	**170**	**1,881**

Australian Public Service Act employment type by location – Current report period (2024–25)

	Ongoing	Non-ongoing	Total
NSW	117	9	**126**
Qld	261	13	**274**
SA	84	3	**87**
Tas	73	12	**85**
Vic	951	51	**1,002**
WA	100	12	**112**
ACT	97	6	**103**
NT	37	2	**39**
External Territories	2	8	**10**
Overseas	0	0	**0**
Total	**1,722**	**116**	**1,838**

Note: Excludes Head of Agency.

Australian Public Service Act employment type by location – Previous report period (2023–24)

	Ongoing	Non-ongoing	Total
NSW	112	13	**125**
Qld	250	17	**267**
SA	83	13	**96**
Tas	75	19	**94**
Vic	962	80	**1,042**
WA	97	9	**106**
ACT	95	11	**106**
NT	35	4	**39**
External Territories	2	4	**6**
Overseas	0	0	**0**
Total	**1,711**	**170**	**1,881**

Australian Public Service Act Indigenous employment – Current report period (2024–25)

	Total
Ongoing	21
Non-ongoing	3
Total	24

Australian Public Service Act Indigenous employment – Previous report period (2023–24)

	Total
Ongoing	21
Non-ongoing	2
Total	23

Financial resource management

Financial performance

The Bureau recorded an operating deficit of $2.1 million which was lower than the approved operating deficit of $15.9 million. The operating deficit was the result of higher than anticipated technology, people and utilities costs, as well as increased security and corporate costs supporting the growing complexity of the Bureau's operations.

The operating deficit was funded from prior year appropriation. The improved outcome to budget was the result of implementing a range of actions during 2024–25 to align the Bureau's costs with available revenue, while ensuring delivery of essential services to the Australian community.

Income

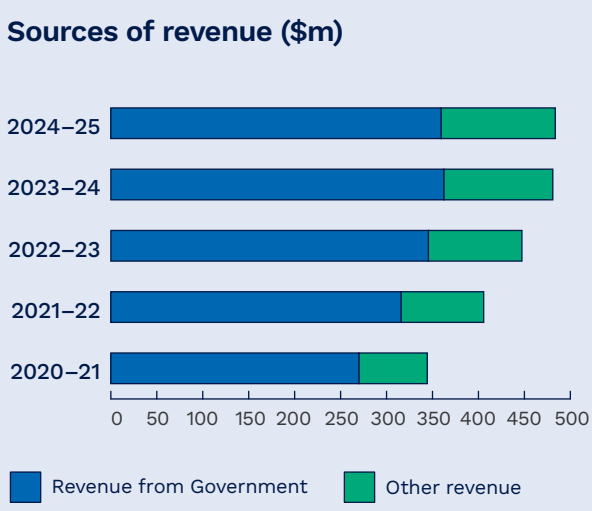
Total income for the Bureau for 2024–25 was $483.7 million compared to $480.9 million in 2023–24.

The income increase was primarily driven by an increase in own-source revenue related to funding provided to the Bureau to support international development activities in partnership with the Department of Foreign Affairs and Trade.

Own-source income contributed

$124.3 million

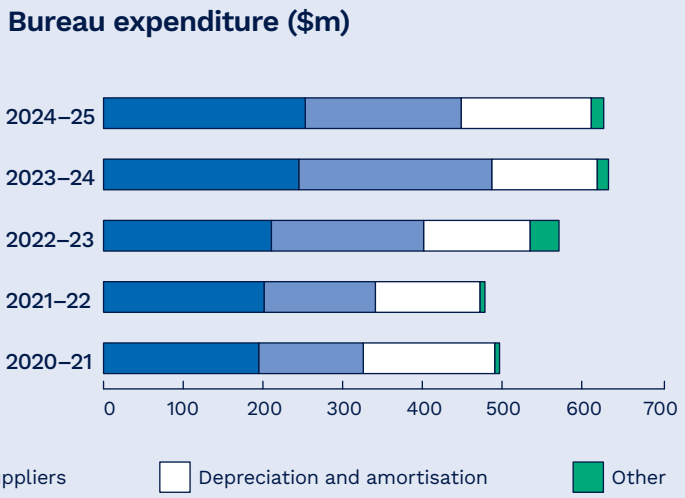
to the Bureau



Expenditure

The Bureau's operating expenditure for 2024–25 was $627.6 million, compared to $633.6 million in 2023–24. This decrease was primarily driven by reductions in supplier and contractor expenditure in addition to non-essential travel.

Expenditure of
$627.6 million
(including depreciation)



Significant non-compliance

In 2024–25 the Bureau did not report any significant issues relating to non-compliance with finance law to the Minister for the Environment and Water under paragraph 19(1)(e) of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act).

Resource Statement Summary – Current report period (2024–25)

	Current available appropriation (a) $'000	Payments made (b) $'000	Balance remaining (a) – (b) $'000
Departmental			
Annual appropriations - ordinary annual services	449,753	368,141	81,612
Prior year appropriations available – ordinary annual services	96,165	96,165	-
Annual appropriations - other services - non-operating	30,794	2,982	27,812
Prior year appropriations available – other services – non-operating	29,971	28,322	1,649
Total departmental annual appropriations (c)	**606,683**	**495,610**	**111,073**
Total departmental special appropriations (d)	**-**	**-**	**-**
Opening balance – special accounts	1,463	1,200	263
Special account receipts	1,803	-	1,803
Total special accounts (e)	**3,266**	**1,200**	**2,066**
less departmental appropriations drawn from annual/special appropriations and credited to special accounts **(f)**	-	-	-
Total departmental resourcing (c+d+e-f)	**609,949**	**496,810**	**113,139**
Administered			
Annual appropriations – ordinary annual services	-	-	-
Prior year appropriations available – ordinary annual services	-	-	-
Annual appropriations – other services – non-operating	-	-	-
Prior year appropriations available – other services – non-operating	-	-	-
Annual appropriations – other services – specific payments to States, ACT, NT and local government	-	-	-
Prior year appropriations available other services - specific payments to States, ACT, NT and local government	-	-	-
Annual appropriations – other services – new administered expenses	-	-	-
Prior year appropriations available - other services - new administered expenses	-	-	-
Total administered annual appropriations (g)	**-**	**-**	**-**
Total administered special appropriations (h)	**-**	**-**	**-**
Opening balance – special accounts	-	-	-
Special account receipts	-	-	-
Total special accounts receipts (i)	**-**	**-**	**-**
less administered appropriations drawn from annual/special appropriations and credited to special accounts **(j)**	-	-	-
less payments to corporate entities from annual/special appropriations **(k)**	-	-	-
Total administered resourcing (g+h+i+j+k)	**-**	**-**	**-**
Total resourcing and payments for the Bureau of Meteorology	**609,949**	**496,810**	**113,139**

Expenses by Outcome – Current report period (2024–25)

Expenses for Outcome 1

Outcome 1: Enabling a safe, prosperous, secure and healthy Australia through the provision of weather, water, climate, ocean and space weather services.	Budget* 2024–25 $'000 (a)	Actual expenses 2024–25 $'000 (b)	Variation 2024–25 $'000 (a) – (b)
Program 1.1: Bureau of Meteorology			
Administered expenses			
Ordinary annual services (Appropriation Act No. 1)	-	-	-
Other services (Appropriation Act Nos. 2, 4 and 6)	-	-	-
s74 External Revenue[1]	-	-	-
Special appropriations	-	-	-
Special accounts	-	-	-
Payments to corporate entities	-	-	-
Expenses not requiring appropriation in the Budget year[2]	-	-	-
Administered total	**-**	**-**	**-**
Departmental expenses			
Departmental appropriation	311,376	339,741	(28,365)
s74 External Revenue[1]	99,295	114,758	(15,463)
Special appropriations	-	-	-
Special accounts	-	1,113	(1,113)
Expenses not requiring appropriation in the Budget year[2]	120,846	171,980	(51,134)
Departmental total	**531,517**	**627,592**	**(96,075)**
Total expenses for Outcome 1	**531,517**	**627,592**	**(96,075)**

	2024–25	2024–25	
Average staffing level (number)	**1,831**	**1,767**	

* Full-year budget, including any subsequent adjustment made to the 2024–25 budget at Additional Estimates.

1. Estimated expenses incurred in relation to receipts retained under section 74 of the PGPA Act.

2. Expenses not requiring appropriation in the Budget year are made up of depreciation expenses, amortisation expenses, make good expenses, audit fees, write down of assets, and foreign exchange losses.

Asset management

The Bureau's asset base comprises observation equipment, software, leasehold improvements, data centre equipment and right-of-use assets associated with accounting standard AASB 16 Leases relating mainly to property leases.

Asset network plans were developed that specify the activities that are intended to be undertaken for a specific network across the lifecycle. The plans detail timescales, costs and responsibilities for delivery.

In addition, a suite of lifecycle delivery plans exists that includes all operational plans including maintenance plans, capital delivery plans and detailed project plans. This is the most practical component of asset management and covers systems engineering, reliability engineering, maintenance delivery, fault and incident response, acquisition, disposal and decommission.

The Bureau's property portfolio is managed through the strategic property management plan to ensure its workplaces and facilities are maintained to a suitable standard.

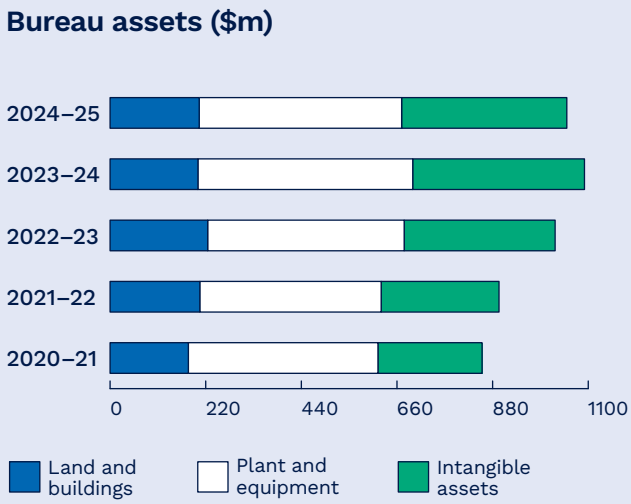
The Bureau uses an asset management system to manage its observing network assets and related IT equipment, including:

- providing reports on asset performance
- scheduling preventive maintenance, inspections and calibrations
- planning, scheduling, assigning and executing work in a safe and efficient manner
- tracking rotables, spare parts and consumables.

More than

$1 billion

in assets were operated and maintained to deliver services to the Australian community



Procurement

Value for money is the core principle underpinning all procurement. The Bureau's Accountable Authority Instructions provide internal control of procurement within the agency, and are aligned with the PGPA Act, the Commonwealth Procurement Rules and broader Australian Government policy. The Bureau is committed to assessing and addressing modern slavery risks and this is reflected in the procurement framework. The Bureau also contributes to the annual Commonwealth Modern Slavery Statement and regularly updates its contractual and tendering templates to include obligations under the *Modern Slavery Act 2018*.

There were no instances of contracts of $100,000 or more (inclusive of GST) entered into 2024–25 that precluded the Auditor-General from accessing the contractor's premises.

For details of standard clauses that provide the Australian National Audit Office (ANAO) with access to contractors' information, refer to: www.finance.gov.au/procurement/clausebank.

There were no contracts in excess of $10,000 (inclusive of GST) that was exempted by the Accountable Authority from being published on AusTender on the basis that they would disclose exempt matters under the *Freedom of Information Act 1982*.

Information on procurements expected to be undertaken in the coming year is in the Bureau's annual procurement plan, available from the AusTender website: www.tenders.gov.au.

Procurement initiatives to support small business and Indigenous-owned businesses

The Bureau supports small business participation in the Commonwealth Government procurement market. Small and Medium Enterprises (SME) and Small Enterprise participation statistics are available on the Department of Finance's website: www.finance.gov.au/government/procurement/statistics-australian-government-procurement-contracts-.

The Bureau's measures to support SMEs include:

- complying with the Commonwealth Procurement Framework
- using standardised contracts for low-risk procurements valued under $200,000
- implementing the Indigenous Procurement Policy, noting that many Indigenous businesses are also SMEs
- using the Australian Industry Participation policies and programs to encourage SME engagement opportunities
- using credit cards for procurements valued below $10,000
- complying with the Government's Supplier Pay On-Time or Pay Interest Policy
- including at least one SME when seeking a quote from the Management Advisory Services Panel or People Panels.

The Bureau recognises the importance of ensuring that small businesses are paid on time. The results of the Survey of Australian Government Payments to Small Business are available on the Treasury's website: www.treasury.gov.au.

The Bureau supports the goals of the Australian Government's Indigenous Procurement Policy and achieved its Indigenous procurement volume target for 2024–25. More information is available on the Department of the Prime Minister and Cabinet's website: www.pmc.gov.au.

Reportable consultancies and non-consultancies

The selection and engagement of consultants was conducted in accordance with the PGPA Act, Commonwealth Procurement Rules and internal policy and procedures. Of the 25 consultancy contracts reported, 6 used a limited tender procurement method and 19 used an open tender procurement method, of which 19 used a panel arrangement.

During 2024–25, 12 new reportable consultancy contracts were entered into involving total actual expenditure of $2,733,158. In addition, 13 ongoing reportable consultancy contracts were active during the period, involving total actual expenditure of $444,546.

The main categories of purpose for which consultants were engaged were management advisory services, audit services and management support services.

Annual reports contain information about actual expenditure on reportable consultancy contracts. Information on the value of reportable consultancy contracts is available on the AusTender website www.tenders.gov.au.

Expenditure on Reportable Consultancy Contracts – Current report period (2024–25)

	Number	Expenditure $'000 (GST inc.)
New contracts entered into during the reporting period	12	$2,733
Ongoing contracts entered into during a previous reporting period	13	$445
Total	**25**	**$3,178**

Organisations receiving a share of Reportable Consultancy Contract Expenditure – Current report period (2024–25)

Name of Organisation	Organisation ABN	Expenditure $'000 (GST inc.)
Scyne Advisory Pty Ltd	ABN: 20 607 773 295	$1,012
Synergy Group Australia Pty Ltd	ABN: 65 119 369 827	$674
Protiviti Pty Ltd	ABN: 27 108 473 909	$484
Deloitte Touche Tohmatsu	ABN: 74 490 121 060	$224
Chartertech Pty Ltd	ABN: 30 617 464 990	$190
Total of largest shares		**$2,584**

During 2024–25, 771 new non-consultancy contracts were entered into involving total actual expenditure of $211,961,538. In addition, 628 ongoing non-consultancy contracts were active during the period, involving total actual expenditure of $62,511,878.

Annual reports contain information about actual expenditure on reportable non-consultancy contracts. Information on the value of reportable non-consultancy contracts is available on the AusTender website: www.tenders.gov.au.

Expenditure on Reportable Non-Consultancy Contracts – Current report period (2024–25)

	Number	Expenditure $'000 (GST inc.)
New contracts entered into during the reporting period	771	$211,962
Ongoing contracts entered into during a previous reporting period	628	$62,512
Total	**1,399**	**$274,474**

Note: This includes operating and equity contracts.

Organisations receiving a share of Reportable Non-Consultancy Contract Expenditure – Current report period (2024–25)

Name of Organisation	Organisation ABN	Expenditure $'000 (GST inc.)
Ventia Property Pty Ltd	ABN: 16 618 028 676	$37,528
CSIRO Accounts Receivable	ABN: 41 687 119 230	$17,850
Leidos	ABN: 79 612 590 155	$13,932
UNISYS Australia Pty Ltd	ABN: 31 105 642 902	$13,677
Hays Specialist Recruitment	ABN: 47 001 407 281	$10,635
Total of largest shares		**$93,622**

Advertising and market research

Under section 311A of the *Commonwealth Electoral Act 1918*, the Bureau is required to disclose payments for advertising and market research.

Advertising and market research over the reporting threshold of $16,900 (GST inclusive) were undertaken to the value of $65,739 and $432,651 respectively, in 2024–25. Details are provided below.

The Bureau did not undertake any polling, direct mail or advertising campaigns during 2024–25.

Organisation	Purpose	Expenditure ($, GST inclusive)
Media advertising organisations		
Universal McCann (ABN: 19 002 966 001)	Recruitment Advertising	$65,739
Market research organisations		
Askable Pty Ltd (ABN: 72 621 754 096)	User testing panel and recruitment	$254,001
Ernst & Young (ABN: 75 288 172 749)	Market research for key performance measures	$111,445
Indigenous Professional Services Pty Ltd (ABN: 32 608 918 252)	First Nations User Needs Assessment	$67,205
Total		**$498,390**

Section 5:

Financial statements

For the period ending
30 June 2025

BUREAU OF METEOROLOGY
for the period ended 30 June 2025

Australian National Audit Office

INDEPENDENT AUDITOR'S REPORT

To the Minister for the Environment and Water

Opinion

In my opinion, the financial statements of the Bureau of Meteorology (the Entity) for the year ended 30 June 2025:

(a) comply with Australian Accounting Standards – Simplified Disclosures and the *Public Governance, Performance and Accountability (Financial Reporting) Rule 2015*; and

(b) present fairly the financial position of the Entity as at 30 June 2025 and its financial performance and cash flows for the year then ended.

The financial statements of the Entity, which I have audited, comprise the following as at 30 June 2025 and for the year then ended:

- Statement by the Accountable Authority and Chief Financial Officer;
- Statement of Comprehensive Income;
- Statement of Financial Position;
- Statement of Changes in Equity;
- Cash Flow Statement; and
- Notes to the financial statements, comprising material accounting policy information and other explanatory information.

Basis for opinion

I conducted my audit in accordance with the Australian National Audit Office Auditing Standards, which incorporate the Australian Auditing Standards. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Entity in accordance with the relevant ethical requirements for financial statement audits conducted by the Auditor-General and their delegates. These include the relevant independence requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) to the extent that they are not in conflict with the *Auditor-General Act 1997*. I have also fulfilled my other responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Accountable Authority's responsibility for the financial statements

As the Accountable Authority of the Entity, the Chief Executive Officer and Director of Meteorology is responsible under the *Public Governance, Performance and Accountability Act 2013* (the Act) for the preparation and fair presentation of annual financial statements that comply with Australian Accounting Standards – Simplified Disclosures and the rules made under the Act. The Chief Executive Officer and Director of Meteorology is also responsible for such internal control as the Chief Executive Officer and Director of Meteorology determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Chief Executive Officer and Director of Meteorology is responsible for assessing the ability of the Entity to continue as a going concern, taking into account whether the Entity's

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operations will cease as a result of an administrative restructure or for any other reason. The Chief Executive Officer and Director of Meteorology is also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless the assessment indicates that it is not appropriate.

Auditor's responsibilities for the audit of the financial statements

My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian National Audit Office Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with the Australian National Audit Office Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Accountable Authority;
- conclude on the appropriateness of the Accountable Authority's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Entity to cease to continue as a going concern; and
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the Accountable Authority regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Australian National Audit Office

Philip Collier

Acting Executive Director

Delegate of the Auditor-General

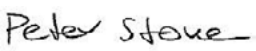
Canberra

10 September 2025

BUREAU OF METEOROLOGY
STATEMENT BY THE ACCOUNTABLE AUTHORITY AND CHIEF FINANCIAL OFFICER

In our opinion, the attached financial statements for the year ended 30 June 2025 comply with subsection 42(2) of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act), and are based on properly maintained financial records as per subsection 41(2) of the PGPA Act.

In our opinion, at the date of this statement, there are reasonable grounds to believe that the Bureau of Meteorology will be able to pay its debts as and when they fall due.



Signed……..

Dr. P. Stone
Acting Chief Executive Officer and
Director of Meteorology

05 September 2025

Signed……..

M. Lyons
Chief Financial Officer

05 September 2025

BUREAU OF METEOROLOGY
Statement of Comprehensive Income
for the period ended 30 June 2025

	Notes	2025 $'000	2024 $'000	Original Budget 2025 $'000
NET COST OF SERVICES				
Expenses				
Employee Benefits	1.1A	**253,101**	244,958	230,023
Suppliers Expenses	1.1B	**195,566**	242,052	156,633
Depreciation and Amortisation	2.2A	**163,167**	132,211	141,694
Finance Costs	1.1C	**4,077**	3,277	656
Write-Down and Impairment of Assets	1.1D	**8,433**	8,161	1
Foreign Exchange Losses		**265**	121	-
Contributions to WMO and IOC[1]		**2,983**	2,836	2,510
Total expenses		**627,592**	633,616	531,517
Own-source income				
Own-source revenue				
Revenue from Contracts with Customers	1.2A	**74,762**	63,660	51,095
Aviation Industry	1.2B	**48,685**	54,347	48,200
Other Revenue	1.2C	**560**	119	-
Total own-source revenue		**124,007**	118,126	99,295
Gains				
Sale of Assets		**-**	93	-
Foreign Exchange Gains		**342**	358	-
Total gains		**342**	451	-
Total own-source income		**124,349**	118,577	99,295
Net (cost of) services		**(503,243)**	(515,039)	(432,222)
Revenue from Government	1.2D	**359,381**	362,286	311,376
Deficit		**(143,862)**	(152,753)	(120,846)
OTHER COMPREHENSIVE INCOME				
Changes in Asset Revaluation Reserve		**-**	-	-
Total comprehensive loss		**(143,862)**	(152,753)	(120,846)

1. Contributions to World Meteorological Organization (WMO) and Inter-Governmental Oceanographic Commission (IOC).

The above statement should be read in conjunction with the accompanying notes.

BUREAU OF METEOROLOGY
Statement of Comprehensive Income
for the period ended 30 June 2025

Budget Variances Commentary

Employee Expenses
The variance relates to additional employee costs associated with reclassification of appropriation funding and the delivery of own source revenue, which was not known or confirmed at the time the original budget was developed.

Supplier Expenses
The variance relates to contractor and IT expenses that were originally budgeted and appropriated as capital and adjusted through the 2024-25 appropriation reclassifications. The variance also reflects additional supplier costs associated with delivery of additional own source revenue.

Depreciation
Higher than budgeted depreciation due to additional movements from asset under construction and depreciation of Right-of-Use Assets, primarily attributable to factors that were not known or confirmed at the time the original budget was developed.

Write-Down and Impairment of Other Assets
Actual expenses reflect the movement in expected credit loss, the Bureau's stocktake and impairment assessments. Budgets are not created for these items due to their uncertainty.

Revenue from Contracts with Customers
Higher revenue from contractual arrangements with business and government entities attributable to factors that were not known or confirmed at the time the original budget was developed.

BUREAU OF METEOROLOGY
Statement of Financial Position
for the period ended 30 June 2025

	Notes	2025 $'000	2024 $'000	Original Budget 2025 $'000
ASSETS				
Financial Assets				
Cash and Cash Equivalents	2.1A	**3,271**	1,959	3,231
Trade and Other Receivables	2.1B	**158,152**	147,208	146,653
Accrued Revenue		**1,113**	6,654	6,690
Total Financial Assets		**162,536**	155,821	156,574
Non-Financial Assets[1]				
Land	2.2A	**14,489**	14,536	15,591
Buildings	2.2A	**190,455**	187,558	208,873
Plant and Equipment	2.2A	**465,752**	494,144	508,753
Computer Software	2.2A	**379,978**	395,055	436,506
Inventories	2.2B	**6,497**	6,767	4,818
Prepayments		**10,322**	11,411	15,643
Total Non-Financial Assets		**1,067,493**	1,109,471	1,190,184
Total Assets		**1,230,029**	1,265,292	1,346,758
LIABILITIES				
Payables				
Suppliers Payable	2.3A	**25,723**	49,496	58,675
Other Payables	2.3B	**51,161**	41,601	24,137
Total Payables		**76,884**	91,097	82,812
Interest Bearing Liabilities				
Leases	2.4A	**133,052**	129,284	150,042
Total Interest Bearing Liabilities		**133,052**	129,284	150,042
Provisions				
Employee Provisions	4.1	**80,509**	74,443	70,516
Provision for Restoration	2.5	**36,385**	35,173	28,312
Total Provisions		**116,894**	109,616	98,828
Total Liabilities		**326,830**	329,997	331,682
Net Assets		**903,199**	935,295	1,015,076
EQUITY				
Contributed Equity		**1,908,184**	1,796,418	1,954,722
Reserves		**383,807**	383,807	383,808
Accumulated Deficit		**(1,388,792)**	(1,244,930)	(1,323,454)
Total Equity		**903,199**	935,295	1,015,076

1. Right-of-use assets are included in the following line items: Land and Buildings.

The above statement should be read in conjunction with the accompanying notes.

BUREAU OF METEOROLOGY
Statement of Financial Position
for the period ended 30 June 2025

Budget Variances Commentary

Trade and Other Receivables
Receivables from goods and services higher than budgeted due to timing of payments from Government customers. Resulting in higher than budgeted debtor balances at year end.

Non-Financial Assets
Higher than budgeted annual depreciation, offset in part by lower than budgeted acquisitions, resulting from Departmental Capital Budget (DCB)/ Equity reclassifications.

Suppliers Payables
Variance reflects timing of payments made for vendors during June which were budgeted to be made in the following financial year.

Other Payables
This variance reflects increases compared to budget of Bureau revenue received in advance (primarily related to higher than budget deferred revenue related to Climate and Ocean Support Program in the Pacific (COSPPac) and Climate services revenue).

Leases
Variance reflects disposals of leases, no additions during the year and adjustments made on review of right of use asset and liabilities which were not reflected in the budget.

Employee Provisions
Variance reflects the impact of slightly higher than budgeted ASL levels and higher than budgeted actual average ASL cost.

Provisions for Restoration
Lower than budgeted make good undertaken on expiring leases and higher than budgeted impact of unwinding of discount /change in discount rate.

BUREAU OF METEOROLOGY
Statement of Changes in Equity
for the period ended 30 June 2025

	2025 $'000	2024 $'000	Original Budget 2025 $'000
CONTRIBUTED EQUITY			
Balance carried forward from previous period	**1,796,418**	1,689,665	1,796,417
Adjusted opening balance	**1,796,418**	1,689,665	1,796,417
Transactions with owners			
Contributions by owners			
Equity injection - Appropriations	**10,794**	10,788	29,593
Departmental capital budget	**100,972**	95,965	128,712
Total transactions with owners	**111,766**	106,753	158,305
Closing balance as at 30 June	**1,908,184**	1,796,418	1,954,722
RETAINED EARNINGS			
Opening balance			
Balance carried forward from previous period	**(1,244,930)**	(1,092,177)	(1,202,608)
Adjusted opening balance	**(1,244,930)**	(1,092,177)	(1,202,608)
Comprehensive income			
Deficit for the period	**(143,862)**	(152,753)	(120,846)
Total comprehensive income	**(143,862)**	(152,753)	(120,846)
Closing balance as at 30 June	**(1,388,792)**	(1,244,930)	(1,323,454)
ASSET REVALUATION RESERVE			
Opening balance			
Balance carried forward from previous period	**383,807**	383,807	383,808
Adjusted opening balance	**383,807**	383,807	383,808
Closing balance as at 30 June	**383,807**	383,807	383,808

BUREAU OF METEOROLOGY
Statement of Changes in Equity
for the period ended 30 June 2025

	2025 $'000	2024 $'000	Original Budget 2025 $'000
TOTAL EQUITY			
Opening balance			
Balance carried forward from previous period	**935,295**	981,295	977,617
Adjustment for errors	**-**	-	-
Adjusted opening balance	**935,295**	981,295	977,617
Comprehensive income			
Deficit for the period	**(143,862)**	(152,753)	(120,846)
Total comprehensive income	**(143,862)**	(152,753)	(120,846)
Equity injection - Appropriations	**10,794**	10,788	29,593
Departmental capital budget	**100,972**	95,965	128,712
Total transactions with owners	**111,766**	106,753	158,305
Closing balance as at 30 June	**903,199**	935,295	1,015,076

The above statement should be read in conjunction with the accompanying notes.

Accounting Policy

Equity Injections
Amounts appropriated which are designated as 'equity injections' for a year (less any formal reductions) and Departmental Capital Budgets (DCBs), are recognised directly in contributed equity in that year.

Other Distributions to Owners
The Financial Reporting Rule requires that distributions to owners be debited to contributed equity unless it is in the nature of a dividend.

BUREAU OF METEOROLOGY
Cash Flow Statement
for the period ended 30 June 2025

	Notes	2025 $'000	2024 $'000	Original Budget 2025 $'000
OPERATING ACTIVITIES				
Cash received				
Appropriations		**522,763**	545,499	406,921
Sales of goods and rendering of services		**113,208**	129,022	99,294
Other		**1,846**	1,725	-
GST received		**26,645**	31,800	-
Total cash received		**664,462**	708,046	506,215
Cash used				
Employees		**(251,669)**	(240,376)	(229,273)
Suppliers		**(215,399)**	(227,168)	(156,633)
Interest payments on lease liabilities		**(2,582)**	(2,339)	(656)
Section 74 receipts transferred to the OPA		**(143,803)**	(172,612)	(99,295)
GST paid		**(25,232)**	(30,243)	(2,510)
Total cash used		**(638,685)**	(672,738)	(488,367)
Net cash from operating activities		**25,777**	35,308	17,848
INVESTING ACTIVITIES				
Cash received				
Proceeds from sales of property, plant and equipment and assets held for sale		**-**	594	1,225
Total cash received		**-**	594	1,225
Cash used				
Purchase of property, plant and equipment and intangibles		**(99,742)**	(224,187)	(162,091)
Total cash used		**(99,742)**	(224,187)	(162,091)
Net cash used by investing activities		**(99,742)**	(223,593)	(160,866)
FINANCING ACTIVITIES				
Cash received				
Departmental capital budget		**85,345**	94,136	-
Contributed equity		**11,304**	113,830	158,305
Total cash received		**96,649**	207,966	158,305
Cash used				
Principal payments of lease liabilities		**(21,372)**	(20,952)	(15,287)
Total cash used		**(21,372)**	(20,952)	(15,287)
Net cash from financing activities		**75,277**	187,014	143,018
Net increase/(decrease) in cash held		**1,312**	(1,271)	-
Cash and equivalents at the beginning of the reporting period		**1,959**	3,230	3,231
Cash and equivalents at the end of the reporting period	2.1A	**3,271**	1,959	3,231

The above statement should be read in conjunction with the accompanying notes.

BUREAU OF METEOROLOGY
Cash Flow Statement
for the period ended 30 June 2025

Budget Variances Commentary

Cashflow

Appropriations

Appropriations drawdown higher than budgeted reflecting the drawdown of the Appropriation reclassifications, and lower than budgeted suppliers at year-end.

Sale of goods

Higher receipts from contractual arrangements with business and government entities attributable to factors that were not known or confirmed at the time the original budget was developed.

GST received and paid

The budget reflects GST as a net figure where the cash flow presents gross GST received and GST paid separately.

Employees

Increase in cash used relates to additional employee costs associated with reclassification of appropriation funding and the delivery of own source revenue, which was not known or confirmed at the time the original budget was developed.

Suppliers

Increase in cash used relates to contractor and IT expenses that were originally budgeted and appropriated as capital and adjusted through the 2024-25 appropriation reclassifications. The variance also reflects additional supplier costs associated with delivery of additional own source revenue.

Section 74 receipts transferred to the Official Public Account (OPA)

Transfers to OPA higher than budget reflecting transfer of additional Government and business activity, primarily attributable to factors that were not known or confirmed at the time the original budget was developed.

Cash used Property Plant and Equipment and received Departmental Capital Budget (DCB) / Equity

Lower drawdown of DCB/ Equity associated with purchase of Property Plant and Equipment, which primarily relates to the appropriation reclassifications between capital and operating attributable to factors that were not confirmed at the time the original budget was developed.

BUREAU OF METEOROLOGY
Notes to the Financial Statements

Overview

Objectives of the Entity
The Bureau of Meteorology (the Bureau) is Australia's national weather, climate and water information agency operating under the authority of the *Meteorology Act 1955* and the *Water Act 2007.*

The Bureau is an Executive Agency under the *Public Service Act 1999*, and a non-corporate Commonwealth entity under the Public Governance, Performance and Accountability (PGPA) Act. The Bureau operates under the Climate Change, Energy, the Environment and Water Portfolio and reports to the Minister for the Environment and Water.

The Bureau provides essential and trusted products and services which contribute to the safety, prosperity and wellbeing of the Australian community, through the provision of weather, water, climate, ocean and space weather services.

The Bureau's work directly informs decisions by governments and the community and supports industry in key sectors such as emergency management, aviation, transport, water management, agriculture and environmental management.

The Basis of Preparation
The financial statements are required by section 42 of the PGPA Act.

The financial statements have been prepared in accordance with:

a) *Public Governance, Performance and Accountability (Financial Reporting) Rule 2015 (FRR)*; and

b) *Australian Accounting Standards and Interpretations* - including simplified disclosures for Tier 2 Entities under AASB 1060 issued by the Australian Accounting Standards Board (AASB) that apply for the reporting period.

The financial statements have been prepared on an accrual basis and in accordance with the historical cost convention, except for certain assets and liabilities at fair value. Except where stated, no allowance is made for the effect of changing prices on the results or the financial position. The financial statements are presented in Australian dollars.

New Accounting Standards
The Bureau has not adopted any new Australian Accounting Standards in the 2025 financial statements.

Taxation
The Bureau is exempt from all forms of taxation except Fringe Benefits Tax (FBT) and the Goods and Services Tax (GST).

Events After the Reporting Period
There has been no subsequent event that had the potential to significantly affect the ongoing structure and financial activities of the Bureau.

Financial Performance

This section analyses the financial performance of the Bureau of Meteorology for the year ended 2025.

1.1 Expenses

	2025 $'000	2024 $'000
1.1A: Employee Benefits		
Wages and salaries	**182,702**	179,152
Superannuation		
Defined contribution plans	**24,729**	24,810
Defined benefit plans	**9,925**	9,549
Leave and other entitlements	**31,789**	28,180
Separation and redundancies	**3,539**	2,808
Other	**417**	459
Total employee benefits	**253,101**	244,958

Accounting Policy

Accounting policies for employee related expenses are contained in the People and Relationships section (Note 4.1).

	2025 $'000	2024 $'000
1.1B: Supplier Expenses		
Goods and services supplied or rendered		
Consultants	**6,042**	7,722
Contractors	**45,982**	54,643
External professional provider services	**29,004**	47,641
Communication and consumables - observing network	**29,164**	38,790
IT Licence and maintenance	**42,090**	53,525
Property operating expenses	**12,911**	9,949
IT services	**1,287**	3,639
Office expenses	**920**	1,144
Comcover insurance	**1,824**	1,363
Travel	**1,706**	3,477
Other	**8,468**	3,337
Total goods and services supplied or rendered	**179,398**	225,230
Goods supplied	**12,031**	12,149
Services rendered	**167,367**	213,081
Total goods and services supplied or rendered	**179,398**	225,230
Other suppliers		
Property other	**14,977**	15,809
Workers compensation expenses	**867**	670
Low value leases	**324**	343
Total other suppliers	**16,168**	16,822
Total suppliers	**195,566**	242,052

The Bureau has low value lease commitments of $323,524 and no short-term lease commitments as at 30 June 2025.

The above lease disclosures should be read in conjunction with the accompanying Notes 1.1C, 2.2A and 2.4A.

Accounting Policy

Short-term Leases and Leases of Low-value Assets

The Bureau has elected not to recognise right-of-use assets and lease liabilities for short-term leases of assets that have a lease term of 12 months or less and leases of low-value assets (less than $10,000). The Bureau recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

	2025 $'000	2024 $'000
1.1C: Finance Costs		
Unwinding of discount	**1,495**	938
Interest on lease liabilities	**2,582**	2,339
Total finance costs	**4,077**	3,277

The above lease disclosures should be read in conjunction with the accompanying Notes 1.1B, 2.2A and 2.4A.

	2025 $'000	2024 $'000
1.1D: Write-Down and Impairment of Assets		
Trade and other receivables	**3,156**	307
Property, plant and equipment[1]	**3,323**	2,073
Intangibles[1]	**651**	3,206
Other	**1,303**	2,575
Total write-down and impairment of assets	**8,433**	8,161

1. Property, Plant and Equipment and Intangible assets includes the following:

- Assets under construction: $3.706m
- Software: $0.010m
- Building: $0.258m

1.2 Own-Source Revenue

	2025 $'000	2024 $'000
1.2A: Revenue from Contracts with Customers		
Sale of goods	**1,558**	1,310
Rendering of services	**73,204**	62,350
Total revenue from sale of goods and services	**74,762**	63,660
Disaggregation of revenue		
Major product / service line:		
Defence weather services	**21,570**	19,320
Consultative services	**34,670**	26,273
Research	**4,838**	4,756
Other revenue	**13,684**	13,311
	74,762	63,660

Accounting Policy

Revenue from the sale of goods is recognised when control has been transferred to the buyer.

A contract is in scope of AASB 15 when it is probable that the Bureau will collect the consideration to which it will be entitled based on the existing relationship with, and knowledge of, the customer's ability and intention to pay the consideration.

Defence weather, consultative and research services - Recognition is contingent on the terms of the individual contract. Due to the nature of the services, revenue is recognised upon delivery of services or performance obligations over time in line with the term of the contract as per AASB 15.

The transaction price is the total amount of consideration to which the entity expects to be entitled in exchange for transferring promised goods or services to a customer. The consideration promised in a contract with a customer may include fixed amounts, variable amounts, or both.

Receivables for goods and services, which have 30 day terms, are recognised at the nominal amounts due less any impairment allowance. Collectability of debts is reviewed at end of the reporting period. Allowances are made when collectability of the debt is no longer probable.

Aviation revenue falls under the scope of AASB 1058. Aviation weather services relate to the provision of meteorological services in support of the Civil Aviation, the costs for which is recovered pursuant to the *Meteorology Act 1955*.

	2025 $'000	2024 $'000
1.2B: Aviation Industry		
Revenue from Aviation	**48,685**	54,347
Total other revenue	**48,685**	54,347

	2025 $'000	2024 $'000
1.2C: Other Revenue		
Resources received free of charge		
Remuneration of auditors	**115**	105
Insurance refunds	**430**	-
Other	**15**	14
Total other revenue	**560**	119

Accounting Policy

Resources Received Free of Charge

Resources received free of charge are recognised as revenue when, and only when, a fair value can be reliably determined and the services would have been purchased if they had not been donated. Use of those resources is recognised as an expense. Resources received free of charge are recorded as either revenue or gains depending on their nature.

	2025 $'000	2024 $'000
1.2D: Revenue from Government		
Appropriations		
Departmental appropriations	**348,781**	362,286
Supplementation		
Supplementation	**10,600**	-
Total revenue from Government	**359,381**	362,286

Accounting Policy

Revenue from Government

Amounts appropriated for departmental appropriations for the year (adjusted for any formal additions and reductions) are recognised as Revenue from Government when the Bureau gains control of the appropriation, except for certain amounts that relate to activities that are reciprocal in nature, in which case revenue is recognised only when it has been earned. Appropriations receivable are recognised at their nominal amounts.

Financial Position

This section analyses the Bureau of Meteorology's assets used to conduct its operations and the operating liabilities incurred as a result. Employee related information is disclosed in the People and Relationships section.

2.1 Financial Assets

	2025 $'000	2024 $'000
2.1A: Cash and Cash Equivalents		
Cash on hand or on deposit	**1,205**	496
Cash in special accounts	**2,066**	1,463
Total cash and cash equivalents	**3,271**	1,959

Accounting policy

Cash is recognised at its nominal amount. Cash and cash equivalents includes:

a) Cash on hand.

b) Cash in special accounts.

	2025 $'000	2024 $'000
2.1B: Trade and Other Receivables		
Goods and services receivables		
Goods and Services	**7,724**	8,903
Contract assets from contracts with customers	**30,276**	9,100
Total goods and services receivables	**38,000**	18,003
Appropriation receivables		
For ordinary annual appropriation	**62,840**	93,019
For capital - capital budget	**18,772**	3,145
For equity injection	**29,461**	29,971
For Government supplementation	**10,600**	-
Total appropriation receivables	**121,673**	126,135
Other receivables		
GST receivable from the Australian Taxation Office	**1,363**	2,775
Other	**317**	359
Total other receivables	**1,680**	3,134
Total trade and other receivables (gross)	**161,353**	147,272
Less expected credit loss allowance	**(3,201)**	(64)
Total trade and other receivables (net)	**158,152**	147,208

Accounting Policy

Financial Assets

Trade receivables and other receivables that are held for the purpose of collecting the contractual cash flows where the cash flows are solely payments of principal and interest, that are not provided at below-market interest rates, are subsequently measured at amortised cost using the effective interest method adjusted for any loss allowance.

Credit terms for goods and services were 30 days (2024: 30 days).

Refer Note 2.3A for information relating to contract liabilities, for contracts with customers.

2.2 Non-Financial Assets

2.2A: Reconciliation of the Opening and Closing Balances of Property, Plant and Equipment and Intangibles

	Land	Buildings	Plant and equipment	Computer software	Other intangibles	Total
	$'000	$'000	$'000	$'000	$'000	$'000
Total as at 1 July 2024						
Gross book value	15,916	280,150	576,282	601,573	-	1,473,921
Accumulated depreciation and amortisation	(1,380)	(92,592)	(82,138)	(206,518)	-	(382,628)
Adjusted total as at 1 July 2024	**14,536**	**187,558**	**494,144**	**395,055**	**-**	**1,091,293**
Additions						
Purchase or Internally developed	-	3,296	36,412	61,674	-	101,382
Depreciation and amortisation	-	(3,589)	(61,934)	(75,905)	-	(141,428)
Depreciation on right-of-use assets	(364)	(21,375)	-	-	-	(21,739)
Remeasurement of right-of-use asset	317	24,823	-	-	-	25,140
Disposals without proceeds	-	(258)	(3,065)	(651)	-	(3,974)
Other movements	-	-	195	(195)	-	-
Total as at 30 June 2025	**14,489**	**190,455**	**465,752**	**379,978**	**-**	**1,050,674**
Total as at 30 June 2025 represented by:						
Gross book value	16,218	280,935	609,822	630,668	-	1,537,643
Accumulated depreciation and amortisation	(1,729)	(90,480)	(144,070)	(250,690)	-	(486,969)
Total as at 30 June 2025	**14,489**	**190,455**	**465,752**	**379,978**	**-**	**1,050,674**
Carrying amount of right-of-use assets	**4,250**	**115,715**	**-**	**-**	**-**	**119,965**

Contractual commitments for the acquisitions of property, plant and equipment and intangible assets

	2025 $'000	2024 $'000
Capital commitments		
Property, plant and equipment		
Within 1 year	**7,383**	9,256
Between 1 to 5 years	**1,066**	59
Computer software		
Within 1 year	**194**	539
Between 1 to 5 years	**-**	3,059
Total capital commitments	**8,643**	12,913

The above commitment amounts are exclusive of Goods and Services Tax (GST).

Accounting Policy

Assets are recorded at cost on acquisition except as stated below. The cost of acquisition includes the fair value of assets transferred in exchange and liabilities undertaken. Non-financial assets are initially measured at their fair value plus transaction costs where appropriate.

Assets acquired at no cost, or for nominal consideration, are initially recognised as assets and income at their fair value at the date of acquisition, unless acquired as a consequence of restructuring of administrative arrangements. In the latter case, assets are initially recognised as contributions by owners at the amounts at which they were recognised in the transferor's accounts immediately prior to the restructuring.

Asset Recognition Threshold

The following thresholds apply for the recognition of purchases of property, plant and equipment in the Statement of Financial Position. The cost of an asset includes an estimate of the cost of dismantling and removing the item and restoring the site on which it is located. This is particularly relevant to Make Good provisions in property leases taken up by the Bureau where there exists an obligation to restore the property to its original condition. These costs are included in the value of the Bureau's leasehold improvements and relevant assets with a corresponding liability recognised as a provision for 'Make Good' (Note 2.5).

Asset Type	Threshold	
	2025	2024
Land	No threshold	No threshold
Buildings	$50,000	$50,000
Plant and equipment	$5,000	$5,000
Computer software	$50,000	$50,000
Other intangibles	$50,000	$50,000

Lease Right-of-Use (ROU) Assets

Lease ROU assets are capitalised at the commencement date of the lease and comprise of the initial lease liability amount, initial direct costs incurred when entering into the lease less any lease incentives received. After the commencement date, ROU assets are measured at cost less any accumulated depreciation and accumulated losses and adjusted for any re-measurement of the lease liability. These assets are accounted for by the Bureau as separate asset classes to corresponding assets owned outright, but included in the same column as where the corresponding underlying assets would be presented if they were owned.

Revaluations

Following initial recognition at cost, land, buildings, property, plant and equipment (excluding ROU assets) are carried at fair value (or an amount not materially different from fair value) less subsequent accumulated depreciation and accumulated impairment losses. Valuations are conducted with sufficient frequency to ensure that the carrying amounts of assets do not differ materially from the assets' fair values as at the reporting date. The regularity of independent valuations depended upon the volatility of movements in market values for the relevant assets.

Revaluation adjustments are made on a class basis. Any revaluation increment is credited to equity under the heading of asset revaluation reserve except to the extent that it reversed a previous revaluation decrement of the same asset class that was previously recognised in the surplus/deficit. Revaluation decrements for a class of assets are recognised directly in the surplus/deficit except to the extent that they reversed a previous revaluation increment for that class.

Any accumulated depreciation as at the revaluation date was eliminated against the gross carrying amount of the asset and the asset restated to the revalued amount.

In 2023 the Bureau engaged the service of ValQuip Consulting Pty Ltd (ValQuip) together with CIVAS (NSW) Pty Ltd (a subsidiary to Colliers) to carry out an independent valuation of certain property, plant, and equipment assets. The valuation for financial reporting was conducted in accordance with AASB 13 Fair Value Measurement.

The following methods were used to estimate Fair Value:

- Market approach - was used to estimate value from an analysis of actual transactions or offerings for economically comparable assets available as of the valuation date. The process was essentially that of comparison and correlation between the subject asset and similar assets that were sold or were offered for sale in the market. The transaction or offering prices of the comparable assets were adjusted for dissimilarities in characteristics including location, age, time of sale, size, and utility, among others. The adjusted prices of the comparable assets provided an indication of value for the subject asset.
- Cost approach - was based on the principle of substitution, which suggested that a prudent buyer will pay no more for an asset than the cost to acquire a substitute asset of equal utility. When the cost to reproduce an asset exceeds the cost to replace it, if measurable, the cost of replacement is normally the appropriate starting point to develop an indication of value using the cost approach. The cost approach was used to determine values in circumstances where it was not possible to determine values using a market approach or an income approach.

Land and buildings were valued using the market and cost approach.

Plant and equipment primarily used the cost approach.

The Bureau has assessed that a revaluation for the 2024–25 financial year will not be undertaken and conducted a materiality assessment of fixed assets instead. This determination aligns with AASB 116 and the Bureau's internal financial asset management procedures, ensuring that reported values remain materially accurate without additional revaluation.

As at 30 June 2025, management has assessed the fair value of assets and any impairments identified were recognised.

Make Good Valuation
The Bureau engaged ValQuip Consulting Pty Ltd (ValQuip) to carry out an independent assessment of Make Good obligation at specific Bureau leasehold locations and provision values as at 30 June 2024 for financial reporting purposes. In 2025, this valuation was updated for discounting to reflect the balances as at 30 June 2025 and management assessed the value of the provision to be materially correct.

The Make Good assessment for financial reporting has been conducted in accordance with AASB 116 Property, Plant and Equipment (PPE), AASB 16 Leases, AASB 13 Fair Value Measurement and AASB 137 Provisions, Contingent Liabilities & Contingent Assets.

Leases taken up by the Bureau, where an obligation exists to restore the property to its original condition, are included in the value of the Bureau's relevant assets and a corresponding liability recognised as a restoration obligation or Make Good provision.

Make Good obligations are measured at the best estimate of the expenditure required to settle the present obligation at the reporting date, including the risks and uncertainties specific to the liabilities.

Depreciation
Depreciable property, plant and equipment assets are written-off to their estimated residual values over their estimated useful lives to the Bureau using, in all cases, the straight-line method of depreciation.

Depreciation rates (useful lives), residual values and methods are reviewed at each reporting date and necessary adjustments are recognised in the current, or current and future reporting periods, as appropriate.

Depreciation rates applying to each class of depreciable asset, excluding ROU assets, are based on the following useful lives:

	2025	2024
Buildings on freehold land	**5 to 52 Years**	5 to 52 Years
Leasehold improvements	**Lease term**	Lease term
Property, plant and equipment	**2 to 50 Years**	2 to 50 Years

The depreciation rates for ROU assets are based on the commencement date to the earlier of either the end of the useful life of the ROU asset or the end of the lease term.

Impairment
All assets, including intangible assets, were assessed for impairment at 30 June 2025. Where indications of impairment exist, the asset's recoverable amount is estimated and an impairment adjustment made if the asset's recoverable amount is less than its carrying amount.

The recoverable amount of an asset is the higher of its fair value less costs of disposal and its value in use. Value in use is the present value of the future cash flows expected to be derived from the asset. Where the future economic benefit of an asset is not primarily dependent on the asset's ability to generate future cash flows and the asset would be replaced if the Bureau were deprived of the asset, its value in use is taken to be its depreciated replacement cost.

Derecognition
An item of property, plant and equipment is derecognised upon disposal or when no further future economic benefits are expected from its use or disposal.

Intangibles
The Bureau's intangibles comprise computer software which is carried at cost less accumulated amortisation and accumulated impairment losses.

Software is amortised on a straight-line basis over its anticipated useful life. The useful lives of the Bureau's software is predominately 3 to 5 years.

	2025 $'000	2024 $'000
2.2B: Inventories		
Inventories held for distribution	**10,995**	9,991
less: provision for obsolescence	**(4,498)**	(3,224)
Total inventories	**6,497**	6,767

During 2025, impairment losses of $1.206m were recognised in profit or loss (2024: $0.388m).

Assessment of the loss of service potential of inventories held for distribution was based on frequency of usage, potential obsolescence and overstocking.

Accounting Policy

Inventories held for distribution are valued at cost, adjusted for any loss of service potential.

The Bureau's inventory holding consists of items utilised in the installation of sites, or the repair/maintenance of its equipment.

Items held for the purposes of major spare parts or as stand-by equipment are classified in the Bureau's accounts and records as property, plant and equipment in accordance with AASB 116.

2.3 Payables

	2025 $'000	2024 $'000
2.3A: Suppliers Payable		
Trade creditors and accruals	**25,723**	49,496
Total suppliers payable	**25,723**	49,496

The payment terms for goods and services were 20 calendar days from the receipt of a correctly rendered invoice (2024: 20 days).

Refer Note 2.1B for information relating to contract assets from contracts with customers.

	2025 $'000	2024 $'000
2.3B: Other Payables		
Wages and salaries	**6,571**	5,972
Superannuation	**1,116**	530
Separation and redundancies	**139**	-
Unearned revenue	**43,335**	35,099
Total other payables	**51,161**	41,601

2.4 Interest Bearing Liabilities

	2025 $'000	2024 $'000
2.4A: Leases		
Lease liabilities		
Land	**4,652**	4,580
Buildings	**128,400**	124,704
Total leases	**133,052**	129,284
Maturity analysis – contractual undiscounted cash flows		
Within 1 year	**26,250**	23,606
Between 1 to 5 years	**67,835**	64,015
More than 5 years	**59,248**	61,263
Total leases	**153,333**	148,884

Total cash outflow for leases for the year ended 30 April 2025 was $18.662m (2024: $23.290m).

Significant lease arrangements:

- Main Data Centre – 15 year lease term expiring 14 April 2039. Contains annual price increases based on CPI rates.
- Backup Data Centre – 6 year lease term, with 3 option periods up to 01 October 2037. Contains annual price increases based on CPI rates.
- 700 Collins Street, Docklands VIC – The lease is under review and expected to be restructured into three components: (a) lease for floors 5–8; (b) deed of surrender for floors 9–11; and (c) lease incentives. As at 30 June 2025, only the lease for floors 5–8 had been executed (May 2025), with the remaining components still under negotiation. The deed of surrender and lease incentives are expected to be material. The financials reflect the original lease for floors 5–11, which remain occupied by The Bureau as at reporting date.

The Bureau in its capacity as lessee does not have any significant leasing arrangements with below market terms.

The above lease disclosures should be read in conjunction with the accompanying notes 1.1B, 1.1C and 2.2A.

Accounting Policy

For all new contracts entered into, the Bureau considers whether the contract is or contains a lease. A lease is defined as 'a contract, or part of a contract, that conveys the right to use an asset (the underlying asset) for a period of time in exchange for consideration'.

Once it has been determined that a contract is, or contains a lease, the lease liability is initially measured at the present value of the remaining lease payments unpaid at the commencement date, discounted using the interest rate implicit in the lease, if that rate is readily determinable, or the department's incremental borrowing rate.

Subsequent to initial measurement, the liability will be reduced for payments made and increased for interest. It is remeasured to reflect any reassessment or modification to the lease. When the lease liability is remeasured, the corresponding adjustment is reflected in the right-of-use asset or profit and loss depending on the nature of the reassessment or modification.

2.5 Provision for Restoration

	2025 $'000	2024 $'000
As at 1 July	**35,173**	28,312
Additional provisions made	**-**	11,483
Amounts used / revaluation	**(282)**	(5,560)
Unwinding of discount or change in discount rate	**1,495**	938
Total as at 30 June	**36,386**	35,173

Accounting Judgements and Estimates

Make Good

A provision for restoration obligation (Make Good) is recognised if, as a result of a past event, the Bureau has a present obligation (legal or constructive) that can be estimated reliably and it is probable that an outflow of economic benefits will be required to settle the obligation. Make Good provisions are measured at the best estimate of the expenditure required to settle the present obligation at reporting date, including the risks and uncertainties specific to the liabilities.

Make Good provisions are discounted to present value when the time value of money is material.

ValQuip undertook an external revaluation of Make Good, provisions for restoration as at 30 June 2024. As there is no material change in the balance during the year the ValQuip valuation was used as a basis for the calculation of the 30 June 2025 provision with the discounting updated to reflect the changes in the bond rate

Refer Note 2.2A.

Funding

This section identifies the Bureau of Meteorology's funding structure.

3.1 Appropriations

3.1A: Annual Appropriations

Annual Appropriations for 2025

	Annual Appropriations	Adjustments to Appropriations[1]	Total Appropriations	Appropriation applied in 2025 (current and prior years)	Variance[2]
	$'000	$'000	$'000	$'000	$'000
Departmental					
Ordinary annual services	361,151	131,433	492,584	(522,054)	(29,470)
Capital budget[3]	128,712	-	128,712	(85,345)	43,367
Other services					
Equity injections	32,294	-	32,294	(11,304)	20,990
Total Departmental	**522,157**	**131,433**	**653,590**	**(618,703)**	**34,887**

1. The adjustments to appropriations includes adjustments to current year annual appropriations including the PGPA Act Section 74 Receipts.
2. The variances disclosed are made up of the movement in cash, appropriation receivable.
3. Departmental and Administered Capital Budgets are appropriated through Appropriation Acts (No.1,3,5). They form part of ordinary annual services and are not separately identified in the Appropriation Acts.

Annual Appropriations for 2024

	Annual Appropriations	Adjustments to Appropriations[1]	Total Appropriations	Appropriation applied in 2024 (current and prior years)	Variance[2]
	$'000	$'000	$'000	$'000	$'000
Departmental					
Ordinary annual services	362,286	172,612	534,898	(546,348)	(11,450)
Capital budget[3]	124,965	-	124,965	(94,136)	30,829
Other services					
Equity injections	25,788	-	25,788	(113,830)	(88,042)
Total Departmental	**513,039**	**172,612**	**685,651**	**(754,314)**	**(68,663)**

1. The adjustment to appropriations includes adjustments to current year annual appropriations including the PGPA Act Section 74 Receipts.
2. The variances disclosed are made up of the movement in cash and appropriation receivable.
3. Departmental and Administered Capital Budgets are appropriated through Appropriation Acts (No.1,3,5). They form part of ordinary annual services and are not separately identified in the Appropriation Acts.

	2025 $'000	2024 $'000
3.1B: Unspent Annual Appropriations ('Recoverable GST exclusive')		
Departmental		
Appropriation Act (No 3) - Operating - 2024-25	**62,840**	
Appropriation Act (No 1) - Operating - 2023-24		48,494
Appropriation Act (No 3) - Operating - 2023-24		15,525
Ordinary Annual Services of the Government - Appropriation Act (No. 5) - Operating		29,000
DCB Appropriation Act (No.1) 2024 -2025	**46,512**	
DCB Appropriation Act (No.1) 2023 -2024	**29,000**	32,145
Appropriation Act (No.2) Equity 2024-2025	**26,611**	
Appropriation Act (No.4) Equity 2024-2025	**2,701**	
Appropriation Act (No.2) Equity 2023-2024	**18,205**	25,788
Supply Act (no 4) Equity 2022-2023	**18,444**	19,183
Cash and cash equivalents	**1,205**	496
Total departmental	**205,519**	170,630

1. An amount of $10.6m has been quarantined under s51 of the PGPA Act which constitutes a loss of control. This amount forms part of the appropriation receivable balance in note 2.1B

3.2 Special Accounts

	Services for Other Entities and Trust Moneys - Bureau of Meteorology Special Account[1]	
	2025 $'000	2024 $'000
Balance brought forward from previous period	**1,463**	1,882
Increases	**1,803**	1,373
Available for payments	**3,266**	3,255
Decreases	**(1,200)**	(1,792)
Total Departmental	**2,066**	1,463
Total balance carried to the next period	**2,066**	1,463
Balance represented by:		
Cash held in the Official Public Account	**2,066**	1,463
Total balance carried to the next period	**2,066**	1,463

1. Appropriation: *Public Governance, Performance and Accountability Act 2013, Section 78.*

Establishing Instrument: *Financial Management and Accountability Determination 2010/02.*

Purpose: To enable the Bureau to hold and expend amounts on behalf of persons or entities other than the Commonwealth.

3.3 Net Cash Appropriation Arrangements

	2025 $'000	2024 $'000
3.3: Net Cash Appropriation Arrangements		
Total comprehensive income/(loss) - as per the Statement of Comprehensive Income	**(143,862)**	(152,753)
Plus: depreciation/amortisation of assets funded through appropriations (departmental capital budget funding and/or equity injections)	**141,428**	108,417
Plus: depreciation right-of-use assets	**21,739**	23,794
Less: lease principal repayments	**(21,372)**	(20,952)
Net Cash Operating Surplus/(Deficit) attributable to the Bureau[1]	**(2,067)**	(41,494)

From 2010-11, the Government introduced net cash appropriation arrangements where revenue appropriations for depreciation/amortisation expenses of non-corporate Commonwealth entities and selected corporate Commonwealth entities were replaced with a separate capital budget provided through equity appropriations. Capital budgets are to be appropriated in the period when cash payment for capital expenditure is required.

The inclusion of depreciation/amortisation expenses related to ROU leased assets and the lease liability principal repayment amount reflects the impact of AASB 16 Leases, which does not directly reflect a change in appropriation arrangements.

People and Relationships

This section describes a range of employment and post employment benefits provided to our people and our relationships with other key people.

4.1 Employee Provisions

	2025 $'000	2024 $'000
4.1: Employee Provisions		
Leave	**80,456**	74,409
FBT payable	**53**	34
Total employee provisions	**80,509**	74,443

Accounting Policy

Liabilities for 'short-term employee benefits' and termination benefits expected within twelve months of the end of reporting period are measured at their nominal amounts.

Other long term employee benefits are measured as net total of the present value of the defined benefit obligation at the end of the reporting period minus the fair value at the end of the reporting period of plan assets (if any) out of which the obligations are to be settled directly.

Leave
The liability for employee benefits includes provision for annual leave and long service leave.

The leave liabilities are calculated on the basis of employees' remuneration at the estimated salary rates that will be applied at the time leave is taken, including the Bureau's employer superannuation contribution rates to the extent that the leave is likely to be taken during service rather than paid out on termination.

The liabilities for annual leave and long service leave have been determined by reference to the work of an actuary as at 30 June 2025. The estimate of the present value of the liability takes into account attrition rates and pay increases through promotion and inflation.

Separation and redundancy
Provision is made for separation and redundancy benefit payments. The Bureau recognises a provision for termination when it has developed a detailed formal plan for the terminations and has informed those employees affected that it will carry out the terminations.

Termination benefits
An employee whose employment is terminated under section 29(3) of the Public Service Act following their agreement to be voluntarily retrenched is entitled to be paid a severance benefit of an amount equal to two weeks' salary for each completed year of continuous service, plus a pro-rata payment for completed months of service since the last completed year of service, subject to any minimum amount the employee is entitled to under the National Employment Standards (NES). Separation payments for the year ended 30 June 2025 were $0.139m (2024: $0.636m).

Superannuation
Staff of the Bureau are members of the Commonwealth Superannuation Scheme (CSS), the Public Sector Superannuation Scheme (PSS), the PSS accumulation plan (PSSap) and other superannuation funds held outside the Australian Government. The CSS and PSS are defined benefit schemes for the Australian Government. The PSSap is a defined contribution scheme.

The liability for defined benefits is recognised in the financial statements of the Australian Government and is settled by the Australian Government in due course. This liability is reported in the Department of Finance's administered schedules and notes.

The Bureau makes employer contributions to the employees' superannuation scheme at rates determined by an actuary to be sufficient to meet the current cost to the Government. The Bureau accounts for the contributions as if they were contributions to defined contribution plans.

The liability for superannuation recognised as at 30 June 2025 represents outstanding contributions.

4.2 Key Management Personnel Remuneration

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Bureau, directly or indirectly, including any director (whether executive or otherwise) of the Bureau. The Bureau has determined the key management personnel to be the Director of Meteorology/Chief Executive Officer and Group Executives. Key management personnel remuneration is reported in the table below:

	2025 $'000	2024 $'000
Short-term employee benefits	**2,841**	2,548
Post-employment benefits	**414**	411
Other long-term employee benefits	**61**	61
Total key management personnel remuneration expenses[1]	**3,316**	3,020

The total number of key management personnel that are included in the above table are 9 individuals (2024: 6 individuals however, 1 for only part year).

1. The above key management personnel remuneration excludes the remuneration and other benefits of the Portfolio Minister. The Portfolio Minister's remuneration and other benefits are set by the Remuneration Tribunal and are not paid by the Bureau.

4.3 Related Party Disclosures

Related party relationships:
The Bureau is an Australian Government controlled entity. Related parties to the Bureau are Key Management Personnel including the Portfolio Minister and Executive, and other Australian Government entities.

Transactions with related parties:
Given the breadth of Government activities, related parties may transact with the government sector in the same capacity as ordinary citizens. Such transactions include the payment or refund of taxes, receipt of a Medicare rebate or higher education loans. These transactions have not been separately disclosed in this note.

Significant transactions with related parties can include:

- the payments of grants or loans
- purchases of goods and services
- asset purchases, sales, transfers or leases
- debts forgiven, and
- guarantees.

Giving consideration to relationships with related entities, and transactions entered into during the reporting period by the Bureau, it has been determined that there are no related party transactions to be separately disclosed.

Managing Uncertainties

This section analyses how the Bureau of Meteorology manages financial risks within its operating environment.

5.1 Contingent Assets and Liabilities

	Claim for damages or costs	
	2025 $'000	2024 $'000
5.1A: Contingent Assets and Liabilities		
Contingent assets		
Balance from previous period	**457**	79
New contingent assets recognised	**374**	480
Assets realised	**(505)**	(102)
Total contingent assets	**326**	457
Contingent liabilities		
Balance from previous period	**(24,258)**	-
New contingent liabilities recognised	**(985)**	(24,258)
Total contingent liabilities	**(25,243)**	(24,258)
Net contingent assets/(liabilities)	**(24,917)**	(23,801)

Quantifiable contingencies

The Bureau has a number of claims with Comcover in respect of motor vehicle damage, radar equipment and property, make good and legal.

Unquantifiable contingencies

The Bureau has no unquantifiable contingencies relating to ongoing legal matters.

Accounting Policy

Contingent liabilities and contingent assets are not recognised in the Statement of Financial Position but are reported in the notes. They may arise from uncertainty as to the existence of a liability or asset or represent an asset or liability in respect of which the amount cannot be reliably measured.

Contingent assets are disclosed when settlement is probable but not virtually certain and contingent liabilities are disclosed when settlement is greater than remote.

5.2 Financial Instruments

	2025 $'000	2024 $'000
5.2A: Categories of Financial Instruments		
Financial assets at amortised cost		
Cash and cash equivalents	**3,271**	1,959
Trade receivables	**34,799**	17,939
Total financial assets at amortised cost	**38,070**	19,898
Total financial assets	**38,070**	19,898
Financial liabilities measured at amortised cost		
Supplier payables	**20,966**	46,390
Total financial liabilities measured at amortised cost	**20,966**	46,390
Total financial liabilities	**20,966**	46,390

Accounting Policy

Financial assets

In accordance with AASB 9 Financial Instruments, the Bureau classifies its financial assets in the following categories:

a) financial assets at fair value through profit or loss

b) financial assets at fair value through other comprehensive income, and

c) financial assets measured at amortised cost.

The classification depends on both the entity's business model for managing the financial assets and contractual cash flow characteristics at the time of initial recognition. Financial assets are recognised when the entity becomes a party to the contract and, as a consequence, has a legal right to receive or a legal obligation to pay cash and derecognised when the contractual rights to the cash flows from the financial asset expire or are transferred upon trade date.

Financial Assets at Amortised Cost

Financial assets included in this category need to meet two criteria:

1. the financial asset is held in order to collect the contractual cash flows, and

2. the cash flows are solely payments of principal and interest (SPPI) on the principal outstanding amount.

Amortised cost is determined using the effective interest method.

Effective Interest Method

Income is recognised on an effective interest rate basis for financial assets that are recognised at amortised cost.

Impairment of Financial Assets

Financial assets are assessed for impairment at the end of each reporting period based on Expected Credit Losses, using the general approach which measures the loss allowance based on an amount equal to lifetime expected credit losses where risk has significantly increased, or an amount equal to 12-month expected credit losses if risk has not increased.

The simplified approach for trade, contract and lease receivables is used. This approach always measures the loss allowance as the amount equal to the lifetime expected credit losses.
A write-off constitutes a derecognition event where the write-off directly reduces the gross carrying amount of the financial asset.

Financial liabilities
Financial liabilities are classified as either financial liabilities 'at fair value through profit or loss' or other financial liabilities. Financial liabilities are recognised and derecognised upon 'trade date'.

Financial Liabilities at Amortised Cost
Financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs. These liabilities are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective interest basis.
Supplier and other payables are recognised at amortised cost. Liabilities are recognised to the extent that the goods or services have been received (and irrespective of having been invoiced).

5.2B: Fair Value Measurements

	Fair value measurements at the end of the reporting period	
	2025 $'000	2024 $'000
Non-financial assets		
Land	**10,239**	10,239
Buildings	**71,337**	75,184
Plant and equipment	**291,867**	267,706
	373,443	353,129

Other Information

6.1 Current/Non-Current Distinction for Assets and Liabilities

	2025 $'000	2024 $'000
6.1A: Current/non-current distinction for assets and liabilities		
Assets expected to be recovered in:		
No more than 12 months		
Cash and cash equivalents	**3,271**	1,959
Trade and other receivables	**158,152**	147,208
Accrued revenue	**1,113**	6,654
Prepayments	**10,322**	11,411
Inventories	**6,497**	6,767
Total no more than 12 months	**179,355**	173,999
More than 12 months		
Land	**14,489**	14,536
Buildings	**190,455**	187,558
Plant and equipment	**465,752**	494,144
Computer software	**379,978**	395,055
Other intangibles	**-**	-
Total more than 12 months	**1,050,674**	1,091,293
Total assets	**1,230,029**	1,265,292
Liabilities expected to be settled in:		
No more than 12 months		
Suppliers	**25,723**	49,496
Other payables	**51,161**	41,601
Leases	**22,206**	23,291
Employee provisions	**24,508**	24,960
Other employee provisions	**53**	34
Provisions for restoration	**8,860**	8,208
Total no more than 12 months	**132,511**	147,590
More than 12 months		
Leases	**110,846**	105,993
Employee provisions	**55,948**	49,449
Provisions for restoration	**27,525**	26,965
Total more than 12 months	**194,319**	182,407
Total liabilities	**326,830**	329,997

Section 6:

Appendices

Appendix A

Glossary

A

AASB	Australian Accounting Standards Board
ACCA	Automation of Capital City Airports
ACCESS	Australian Community Climate and Earth System Simulator
ACCESS-A	a prototype national-scale ACCESS model
ACCESS-AE	a prototype ensemble version of ACCESS-A
ACCESS-C	a city-scale ACCESS model
ACCESS-CE	an ensemble version of ACCESS-C
ACCESS-G	a global-scale ACCESS model
ACCESS-GE	an ensemble version of ACCESS-G
ACCESS-MICAS	the Bureau's modified initial conditions attribution system
ACCESS-S/S2	a seasonal prediction ACCESS model
ACS	Australian Climate Service
ACSVIβ	Australian Climate Social Vulnerability Index

ACT	Australian Capital Territory
ADF	Australian Defence Force
AEST	Australian Eastern Standard Time
AFAC	the National Council for Fire and Emergency Services
AI	Artificial Intelligence
AIFS	an AI-based weather model
AM	Member of the Order of Australia
analysis	the process of creating a snapshot of the current state of the Earth system using the latest available observations and data assimilation techniques
ANAO	Australian National Audit Office
annual exceedance probability	the probability that a given variable (e.g. total rainfall accumulated) will be exceeded in any one year
APS	Australian Parallel Suite
APS	Australian Public Service
APSC	Australian Public Service Commission
ARM	US Department of Energy Atmospheric Radiation Measurement
ARPANSA	Radiation Protection and Nuclear Safety Agency
ARRO	Australian Rain and River Observation
ASL	Average Staffing Level
ASWS	Australian Spaceflight Weather Service
ATWS	Australian Tsunami Warning System
Australis I and II	the Bureau's supercomputer
AWS	automatic weather station

B

BARRA	Bureau of Meteorology Atmospheric high-resolution Regional Reanalysis for Australia
BARPA	Bureau of Meteorology Atmospheric Regional Projections for Australia
Bluelink	an ocean forecasting platform
BMAC	Bureau of Meteorology Audit Committee
BMKG	Badan Meteorologi, Klimatologi dan Geofisika (the Indonesian Meteorological Service)
BOM	Bureau of Meteorology
BOMIdeas	the Bureau's online research community
BSG	Business Solutions Group
Bureau	Bureau of Meteorology

C

°C	degrees Celsius
C3S	Copernicus Climate Change Service
CaMa-Flood	Catchment-based Macro-scale Floodplain model – the continental river routing model used at the Bureau
CATS	Cross-Application Time Sheet system
CEO	Chief Executive Officer
cm	centimetre
CAPE-k	Cloud and Precipitation Experiment at Kennaook
CMSS	Central Message Switching System
CO_2	Carbon Dioxide
CO_2-e	Carbon Dioxide Equivalent
COAST-k	Clean Ocean Air Sampling upwind of Tasmania – Kennaook
CORE	the Bureau's cultural eLearning modules
COSPPac	Climate and Oceans Support Program for the Pacific
CM	contributing measure
CRM	Customer relationship management system
CRPS	Continuous Ranked Probability Score
CSAT	Customer satisfaction score
CSC	Recipient of the Conspicuous Service Cross
CSG	Community Services Group
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CTBT	Comprehensive Nuclear-Test-Ban Treaty

D

data assimilation	the process of combining different sources of information (usually Earth system models and observations) to estimate possible states of a system as it evolves in time
DCB	Departmental Capital Budget
DCCEEW	Department of Climate Change, Energy, Environment and Water
DDG	Data and Digital Group

deterministic (model)	a single model simulation given a set of initial conditions and boundary conditions defined by observations
DevSecOps	Development, Security, and Operations
DRRP	Disaster Risk Reduction Package
DSM	Recipient of the Distinguished Service Medal
DSS	Decision Support Services
DWS	Defence Weather Service

E

EA	Enterprise Agreement
EAP	Employee Assistance Program
EAR	Early Action Rainfall
Earth system modelling	a modelling approach that simulates all relevant aspects of the Earth system, including physical, chemical, and biological processes to better understand and predict changes in the Earth's climate and environment
ECMWF	European Centre for Medium-Range Weather Forecasts
EDC	Eastern Data Centre
EIP	Enterprise Integration Platform
EL	Executive Level
El Niño	the extensive warming of the central and eastern tropical Pacific Ocean which leads to a major shift in weather patterns across the Pacific
ensemble	a set of numerical forecasts for the same period or event used to sample potential forecast outcomes
Enviromon	the Bureau's previous flood warning network data collection system
EW4All	Early Warnings for All initiative

F

FAICD	Fellow of the Australian Institute of Company Directors
FBT	Fringe Benefits Tax
FOI	Freedom of Information
FOI Act	*Freedom of information Act 1982*
forecast skill	the relative accuracy of the forecast over a reference forecast
forecast verification	the process of assessing the quality of a forecast against a corresponding observation of what occurred
FTSE	Fellow of the Australian Academy of Technological Services and Engineering
FWIN	Flood Warning Infrastructure Network Program

G

GFE	Graphical Forecast Editor
GPS	Global Positioning System
GOCF	Gridded Operational Consensus Forecast
GST	Goods and Services Tax
GWL	global warming levels
gustnado	A type of non-supercell thunderstorm that forms in thunderstorm outflows. Some stronger gustnadoes can cause damage to structures and vegetation.

H

Himawari	Japan Meteorological Agency geostationary meteorological satellite
HIP	Hazards Insurance Partnership
HR	human resources
HSF	Hazards Services Forum
HSR	Health and Safety Representative
HyFS	Hydrological Forecasting System

I

ICAO	International Civil Aviation Organisation
ICT	Information and communication technology
IDAHOBIT	International Day Against Homophobia, Biphobia, Interphobia and Transphobia
IEDIβ	Industry of Employment Diversity Index
IGA	Intergovernmental Agreement
IMOS	Integrated Marine Observing System
IMPROVER	Integrated Model post-Processing Verification
IOC	Intergovernmental Oceanographic Commission (of UNESCO)
ISO	International Organization of Standardization
IT	information technology
IUCN	International Union for Conservation of Nature

J

JATWC	Joint Australian Tsunami Warning Centre

JCO	Joint Commercial Operations
JMA	Japan Meteorological Agency
JULES	Joint UK Land Environment Simulator – the land surface model operational at the Bureau
JULES-ES+CaMa-Flood	The coupled Earth System configuration of JULES plus CaMa-Flood

K

KCG	Kennaook / Cape Grim
km	kilometre
km/h	kilometre per hour
KMA	Korea Meteorological Administration
kWh	kilowatt hours

L

La Niña	the extensive cooling of the central and eastern tropical Pacific Ocean which leads to a major shift in weather patterns across the Pacific
LGA	Local Government Area
LGBTQIA+	people who identify as lesbian, gay, bisexual, transgender, queer, intersex, asexual or otherwise sexually or gender diverse
LiDAR	light detection and ranging
LSTM	Long Short-Term Memory
LTIFR	lost time injury frequency rate

M

m	metre
MAERI	Marine Atmospheric Emitted Radiance Interferometer
MDC	Main Data Centre
MET5	Meteorology Five Eyes Community of Practice
Meteorology Act	*Meteorology Act 1955*
microburst	an intense and potentially destructive phenomenon with downward force that can produce localised damaging or destructive wind gusts, particularly with thunderstorms
ML	machine learning – a subset of AI that involves training AI models on large volumes of data to analyse, learn patterns and make predictions without specific human instruction
mm	millimetre
MOMENTUM	a consortium agreement with partners from the United Kingdom, New Zealand, India and Singapore on a next generation modelling systems program

N

NAA	National Archives of Australia
NAIDOC	National Aborigines and Islanders Day Observance Committee
NatCORR	National Centre for Outdoor Risk and Readiness
NCI	National Computational Infrastructure
NEMA	National Emergency Management Agency
NMHS	National Meteorological and Hydrological Service
nowcasting	describing current weather conditions or those within the next 90 minutes
NPR	National Performance Report
NSW	New South Wales
NT	Northern Territory
NWP	numerical weather prediction
NWS	US National Weather Service

O

OAIC	Office of the Australian Information Commissioner
OPA	Official Public Account
OT	observation technology

P

PacWave 24	A Pacific-wide tsunami exercise held in 2024
PAWS	portable automatic weather stations
PBS	Portfolio Budget Statements
PEOPLE	Progressing EW4All Oriented to Partnerships and Local Engagement project
PGPA Act	*Public Governance, Performance and Accountability Act 2013*

PGPA Rule	*Public Governance, Performance and Accountability Rule 2014*
PhD	Doctor of Philosophy
PICs	Pacific Island Countries
post-processing	a range of techniques that can be applied to Earth system models after the initial simulation to improve accuracy
probabilistic forecast	a forecast that specifies the likelihood of occurrence of a specific set of events during a given time frame – ranging from 0.0 (event cannot occur) to 1.0 (event is certain to occur)
Privacy Act	*Privacy Act 1988*
PSM	Public Service Medal
Public Service Act	*Public Service Act 1999*

Q

Qld	Queensland

R

R&D	research and development
RAAF	Royal Australian Air Force
RAP	Reconciliation Action Plan
reanalyses	combines historical observations with numerical weather models to generate a spatially and temporally complete history of the atmosphere
RI	Rainfall Intelligence
ROBUST	a program to transform the security, stability and resilience of the Bureau's information and observing technology
ROU	Right of Use

S

SA	South Australia
SDA	space domain awareness
Sentinel	the Bureau's disaster recovery supercomputer
SES	Senior Executive Service
SES	State Emergency Service
SIMPLER	the Bureau's model data management system
SLS	Service Level Specifications
SOFF	Sustained Observing Finance Facility (of WMO)
SPC	The Pacific Community
SSM	Strategic Success Measure
STEM	Science, Technology, Engineering and Mathematics
STEPS	Short Term Ensemble Prediction System
Strategy	Strategy 2022–2027

T

Tas	Tasmania
TOAST	Tsunami Observation And Simulation Terminal

U

UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
US	United States
UV	ultraviolet

V

VAAC	Volcanic Ash Advisory Centre
Vic	Victoria

W

WA	Western Australia
Water Act	*Water Act 2007*
WHACS	Wave Hindcast for ACS
WHS	work health and safety
WIGOS	WMO Integrated Global Observing System
WMO	World Meteorological Organization

Appendix B

List of requirements

This list of requirements is provided in accordance with the *Public Governance, Performance and Accountability Rule 2014*, section 17AJ: Aids to access.

N/A notes that the requirement was not applicable to the Bureau in 2024–25.

PGPA Rule Reference	Description	Requirement	Part of Report	Page
17AD(g)	Letter of transmittal			
17AI	Letter of transmittal	Mandatory	Letter of transmittal	1
17AD(h)	Aids to access			
17AJ(a)	Table of contents	Mandatory	Contents	3
17AJ(b)	Alphabetical index	Mandatory	Appendices	283
17AJ(c)	Glossary of abbreviations and acronyms	Mandatory	Appendices	271
17AJ(d)	List of requirements	Mandatory	Appendices	276
17AJ(e)	Details of contact officer	Mandatory	Inside back cover (IBC)	IBC
17AJ(f)	Entity's website address	Mandatory	Inside back cover	IBC
17AJ(g)	Electronic address of report	Mandatory	Inside back cover	IBC
17AD(a)	Review by Accountable Authority			
17AD(a)	Review by the Accountable Authority	Mandatory	Review by the CEO and Director of Meteorology	21–29
17AD(b)	Overview of the entity			
17AE(1)(a)(i)	Role and functions	Mandatory	Agency overview	30
17AE(1)(a)(ii)	Organisational structure	Mandatory	Corporate governance	166–167
17AE(1)(a)(iii)	Outcome and program administered	Mandatory	The Bureau at a glance	6
17AE(1)(a)(iv)	Purpose	Mandatory	The Bureau at a glance	5

PGPA Rule Reference	Description	Requirement	Part of Report	Page
17AE(1)(aa)(i)	Name of the Accountable Authority	Mandatory	Corporate governance	160
17AE(1)(aa)(ii)	Position title of the Accountable Authority	Mandatory	Corporate governance	160
17AE(1)(aa)(iii)	Period as the Accountable Authority	Mandatory	Corporate governance	160
17AE(1)(b)	An outline of the structure of the portfolio of the entity	Portfolio Dept. mandatory	N/A	–
17AE(2)	Where the outcomes and programs differ from budget statements	If applicable, Mandatory	N/A	–
17AD(c)	Report on the Performance of the entity			
	Annual Performance Statements			
17AD(c)(i); 16F	Annual performance statement in accordance with the PGPA Act and Rule	Mandatory	Annual Performance Statement	35–71
17AD(c)(ii)	Report on Financial Performance			
17AF(1)(a)	A discussion and analysis of the entity's financial performance	Mandatory	Financial resource Management	225–226
17AF(1)(b)	A table summarising the total resources and total payments of the entity	Mandatory	Financial resource Management	227–228
17AF(2)	Significant changes in the financial results during or after the previous or current reporting period	If applicable, Mandatory	N/A	–
17AD(d)	Management and Accountability			
	Corporate Governance			
17AG(2)(a)	Information on compliance with section 10 (fraud and corruption systems)	Mandatory	Corporate governance	177
17AG(2)(b)(i)	A certification by Accountable Authority that fraud and corruption risk assessments and fraud and corruption control plans have been prepared	Mandatory	Letter of transmittal	1
17AG(2)(b)(ii)	A certification by Accountable Authority that appropriate mechanisms for preventing, detecting incidents of, investigating or otherwise dealing with, and recording or reporting fraud and corruption are in place	Mandatory	Letter of transmittal	1

PGPA Rule Reference	Description	Requirement	Part of Report	Page
17AG(2)(b)(iii)	A certification by Accountable Authority that all reasonable measures have been taken to deal appropriately with fraud and corruption relating to the entity	Mandatory	Letter of transmittal	1
17AG(2)(c)	An outline of structures and processes in place for corporate governance	Mandatory	Corporate governance	160–178
17AG(2)(d) – (e)	A statement of significant issues reported to the Minister under paragraph 19(1)(e) of the Act that relates to non compliance with Finance law and remedial action	If applicable, Mandatory	N/A	–
	Audit Committee			
17AG(2A)(a)	Direct electronic address of the audit committee charter	Mandatory	Corporate governance	169
17AG(2A)(b)	The name of each audit committee member	Mandatory	Corporate governance	169–170
17AG(2A)(c)	The qualifications, knowledge, skills or experience of audit committee members	Mandatory	Corporate governance	169–170
17AG(2A)(d)	Information about the attendance of each member of the audit committee at committee meetings	Mandatory	Corporate governance	169–170
17AG(2A)(e)	The remuneration of each member of the audit committee	Mandatory	Corporate governance	169–170
	External Scrutiny			
17AG(3)	Information on the most significant developments in external scrutiny and the entity's response to the scrutiny	Mandatory	Corporate governance	178
17AG(3)(a)	Information on judicial decisions and decisions of administrative tribunals and by the Australian Information Commissioner that may have a significant effect on the operations of the entity	If applicable, Mandatory	N/A	–
17AG(3)(b)	Information on any reports on operations of the entity by the Auditor General, a Parliamentary Committee, or the Commonwealth Ombudsman	If applicable, Mandatory	Corporate governance	178
17AG(3)(c)	Information on any capability reviews that were released during the period	If applicable, Mandatory	N/A	–

PGPA Rule Reference	Description	Requirement	Part of Report	Page
	Management of Human Resources			
17AG(4)(a)	An assessment of the entity's effectiveness in managing and developing employees to achieve entity objectives	Mandatory	People management	202–205
17AG(4)(aa)	Statistics on the entity's employees on an ongoing and non ongoing basis, including the following: (a) statistics on full time employees (b) statistics on part time employees (c) statistics on gender (d) statistics on staff location	Mandatory	People management	214–224
17AG(4)(b)	Statistics on the entity's APS employees on an ongoing and non ongoing basis; including the following: • statistics on staffing classification level • statistics on full time employees • statistics on part time employees • statistics on gender • statistics on staff location • statistics on employees who identify as Indigenous	Mandatory	People management	214–224
17AG(4)(c)	Information on any enterprise agreements, individual flexibility arrangements, Australian workplace agreements, common law contracts and determinations under subsection 24(1) of the *Public Service Act 1999*	Mandatory	People management	208
17AG(4)(c)(i)	Information on the number of SES and non SES employees covered by agreements etc identified in paragraph 17AG(4)(c)	Mandatory	People management	208
17AG(4)(c)(ii)	The salary ranges available for APS employees by classification level	Mandatory	People management	209
17AG(4)(c)(iii)	A description of non salary benefits provided to employees	Mandatory	People management	209
17AG(4)(d)(i)	Information on the number of employees at each classification level who received performance pay	If applicable, Mandatory	People management	210
17AG(4)(d)(ii)	Information on aggregate amounts of performance pay at each classification level	If applicable, Mandatory	N/A	–

PGPA Rule Reference	Description	Requirement	Part of Report	Page
17AG(4)(d)(iii)	Information on the average amount of performance payment, and range of such payments, at each classification level	If applicable, Mandatory	N/A	–
17AG(4)(d)(iv)	Information on aggregate amount of performance payments	If applicable, Mandatory	N/A	–
	Assets Management			
17AG(5)	An assessment of effectiveness of assets management where asset management is a significant part of the entity's activities	If applicable, mandatory	Financial resource management	229
	Purchasing			
17AG(6)	An assessment of entity performance against the *Commonwealth Procurement Rules*	Mandatory	Financial resource management	230
	Reportable consultancy contracts			
17AG(7)(a)	A summary statement detailing the number of new reportable consultancy contracts entered into during the period; the total actual expenditure on all such contracts; the number of ongoing reportable consultancy contracts that were entered into during a previous reporting period; and the total actual expenditure in the reporting period on those ongoing contracts	Mandatory	Financial resource management	231
17AG(7)(b)	Summary statement regarding the engagement of consultants in the format specified at paragraph 17AG (7)(b) of the PGPA Rule	Mandatory	Financial resource management	231
17AG(7)(c)	A summary of the policies and procedures for selecting and engaging consultants and the main categories of purposes for which consultants were selected and engaged	Mandatory	Financial resource management	231
17AG(7)(d)	Statement regarding actual expenditure on contracts for consultancies in the format specified at paragraph 17AG (7)(d) of the PGPA rule	Mandatory	Financial resource management	231

PGPA Rule Reference	Description	Requirement	Part of Report	Page
	Reportable non-consultancy contracts			
17AG(7A)(a)	A summary statement detailing the number of new reportable non-consultancy contracts entered into during the period; the total actual expenditure on such contracts; the number of ongoing reportable non-consultancy contracts that were entered into during a previous reporting period; and the total actual expenditure in the reporting period on those ongoing contracts	Mandatory	Financial resource management	232
17AG(7A)(b)	Statement regarding actual expenditure on reportable non-consultancy contracts in the format specified at paragraph 17AG (7A)(b) of the PGPA rule	Mandatory	Financial resource management	232
17AD(daa)	Additional information about organisations receiving amounts under reportable consultancy contracts or reportable non-consultancy contracts			
17AGA	Additional information, in accordance with section 17AGA, about organisations receiving amounts under reportable consultancy contracts or reportable non-consultancy contracts	Mandatory	Financial resource management	231–232
	Australian National Audit Office Access Clauses			
17AG(8)	Contracts with a value of more than $100,000 (inclusive of GST) that did not provide the Auditor General with access to the contractor's premises	If applicable, Mandatory	Financial resource management	230
	Exempt contracts			
17AG(9)	Statement regarding contracts or standing offers with a value greater than $10,000 (inclusive of GST) that have been exempted from being published in AusTender because it would disclose exempt matters under the FOI Act	If applicable, Mandatory	Financial resource management	230
	Small business			
17AG(10)(a)	Summary statement detailing procurement initiatives supporting small business using the text specified at paragraph 17AG (10)(a) of the PGPA Rule	Mandatory	Financial resource management	230
17AG(10)(b)	An outline of the ways in which the procurement practices of the entity support small and medium enterprises	Mandatory	Financial resource management	230

PGPA Rule Reference	Description	Requirement	Part of Report	Page
17AG(10)(c)	Summary statement regarding timely payments to small businesses using the text specified at paragraph 17AG (10)(c) of the PGPA Rule	If applicable, Mandatory	Financial resource management	230
	Financial Statements			
17AD(e)	Inclusion of the annual financial statements in accordance with subsection 43(4) of the Act	Mandatory	Financial statements	235–269
	Executive Remuneration			
17AD(da)	Information about executive remuneration in accordance with Subdivision C of Division 3A of Part 2-3 of the Rule	Mandatory	People management	210–213
17AD(f)	Other Mandatory Information			
17AH(1)(a)(i)	Statement in relation to advertising campaigns conducted as specified in the PGPA rule	If applicable, Mandatory	N/A	–
17AH(1)(a)(ii)	If the entity did not conduct advertising campaigns, a statement to that effect	If applicable, Mandatory	Financial resource management	233
17AH(1)(b)	Statement on grants awarded for the reporting period, as specified in the PGPA Rule	If applicable, Mandatory	N/A	–
17AH(1)(c)	Mechanisms of disability reporting	Mandatory	Corporate responsibility	190
17AH(1)(d)	Website reference for the entity's Information Publication Scheme statement pursuant to the FOI Act	Mandatory	Corporate governance	178
17AH(1)(e)	Correction of material errors in previous annual report	If applicable, mandatory	Corporate governance	178
17AH(2)	Information required by other legislation:	Mandatory		
	• *Freedom of Information Act 1982*		Corporate governance	178
	• *Environmental Environment Protection and Biodiversity Conservation Act 1999*		Corporate responsibility	175–177, 195–201
	• *Work Health and Safety Act 2011*		People management	205–208
	• *Commonwealth Electoral Act 1918*		Financial resource management	233

Appendix C

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The Bureau's work supports a wide variety of sectors, enabling a safe, prosperous, secure and healthy Australia

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