

Report Card 2023-24

The Perth Air Quality Management Plan (Perth AQMP) was released in December 2000. It aims to ensure that clean air is achieved and maintained throughout the Perth metropolitan region to 2030 and beyond.

The short-term and long-term actions within the Perth AQMP address a variety of issues through eight key initiatives: land use and transport planning; vehicle emissions management; health effects research and indoor air quality; monitoring and modelling; industrial emissions management; small to medium enterprise emissions management; haze reduction; and smoke management.

Some highlights include:

Active Transport Program



The program informs and encourages the community to make more trips by walking, bike riding and using public transport in place of some car trips. Boosting the use of active transport options can make better use of walk and bike paths and public transport services, contribute to community health and wellbeing, and reduce car use and associated emissions and congestion.

[Safe active streets](#) are specifically treated streets designed with local government authorities where speeds have been reduced to 30 km per hour to create a safer space for people walking, riding or driving.

To encourage active transport when traffic volume and speed can discourage people from walking or riding along suburban streets, the Department of Transport (DoT) has partnered with local governments to trial innovative treatments designed to reduce traffic, and improve safety and connections for travel by bicycle and on foot.

Highlights 2023-24

- Eight safe active street (SAS) projects were delivered in metropolitan Perth providing safe, low traffic routes to encourage active travel on streets in the Cities of Bayswater, Belmont, Melville, Nedlands, Stirling and Vincent, and the Towns of Bassendean and Cambridge.
- Town of Cambridge provided traffic calming treatments along Ruislip, Northwood and Woolwich streets, creating a safer road environment to walk, wheel and ride. The 4.4 km route connects to Floreat Park and West Leederville primary schools, Floreat Park Tennis Club, Rutter Park, Cowden Park and the West Leederville town centre.
- Provided safer routes for people of all ages and abilities to use active transport, treating over 23 km of streets. Treatments varied by project and included traffic calming (e.g. raised plateaus, speed humps, filtered permeability), parking changes (e.g. formalising roadside bays), changes to street width and surface (e.g. brown asphalt to differentiate the street) and landscaping.
- Collected data before and after the SAS treatments to allow evaluation of seven of the projects in Perth, including pneumatic traffic counters, video-based counts and surveys of street users and local residents.
- Overall, the evaluation found that the projects have been effective in reducing the volume and speed of traffic and increasing the level of walking and bike riding. A report on the findings will be prepared.
- Safe active streets are now an active transport infrastructure solution available to local governments to improve connectivity and amenity for residents. To assist further application of SAS, guidance for the design of these treatments, drawing on experience with the pilot projects, will be published.

RAC Air Health Monitor



The recently launched [RAC Air Health Monitor](#) measures particulate matter (PM_{2.5} and PM₁₀) and nitrogen dioxide (NO₂). It is an RAC initiative that:

- collects rich and current information about air quality to support advocacy and community engagement
- includes an interactive model to blend air quality data from sensors with near real-time traffic data from Main Roads Western Australia and motor vehicle emissions modelling from [Copert Australia](#)
- also includes emissions data from the [Department of Climate Change, Energy, the Environment and Water's National Pollutant Inventory \(NPI\) database](#).

Highlights 2023-24

- More than 200 air quality sensors are live across Perth and Peel and the first Black Carbon Modules have been deployed.
- As of June 2024, there have been more than 98,000+ page views and 35,000+ unique users on the website.
- As part of continuous development, the Curtin School of Population Health independently reviewed the RAC Air Quality Index.
- RAC hosted an inaugural Air Health Stakeholder Series event with presentations from Clarity Movement Co. and London's Imperial College.
- The project was awarded the 'Clear Air Achievement Award' by the Clean Air Society of Australia & New Zealand (WA Branch).

RAC Electric Highway®



A first in Australia, the RAC Electric Highway® is an RAC initiative, opened in June 2015. The Highway is a network of 16 publicly accessible electric vehicle charging locations, including fast and ultra-rapid charging stations between Perth and Pemberton and at selected RAC parks and resorts across WA.

Highlights 2023-24

Between July 2023 and June 2024, 40,574 charges occurred on the network – up 121 per cent on the previous year. Just under half were at ultra-rapid chargers, 42.8 per cent at fast chargers and 8.6 per cent at destination chargers.

State Government Electric Vehicle Strategy



The \$21 million [State Electric Vehicle Strategy for Western Australia](#), released in November 2020, provides a pathway for decarbonising road transport, improving air quality and supporting a robust electricity system with increasing levels of renewable energy. The strategy continues to support the transition to lower emission transport to make electric vehicles (EVs) more affordable and easier to charge.

Highlights 2023–24

- The number of EVs on Western Australian roads increased from 11,147 in July 2023 to 22,000 in June 2024. About 7,000 rebates of \$3,500 had been issued to make EVs more affordable by 30 June 2024.
- The first WA EV Network charging sites opened in April 2023 and the network was completed throughout 2023–24. Thirty-five charging locations became operational between Kununurra in the north and Esperance. The remainder of the 98 chargers across the 49 sites are due for completion by late 2024.
- Round two of the \$15 million [Charge Up](#) grant scheme was open from 4 November 2023 to 30 June 2024. This supported local governments, not-for-profits, and small and medium-sized businesses with grants of up to 50 per cent of costs for installing charging infrastructure around WA. This will see the installation of both AC (7 to 22 kW) and faster DC chargers (25 kW to 350 kW) chargers.
- A statewide strategy for future electric road transport charging infrastructure to support the transition to net zero was announced as part of the [Sectoral Emissions Reduction Strategy](#).
- The Department of Water and Environmental Regulation (the department) supported the Australian Electric Vehicle Association's annual EV Expo and conference held in November 2023, which enabled about 10,000 Western Australians to experience an EV firsthand, helping to demystify EV purchase decisions.

Smoky Vehicle Reporting Program



This program is a joint initiative of the department and Department of DoT. It aims to:

- identify vehicles that are at risk of breaching vehicle emission legislation
- engage with vehicle owners to undertake any necessary vehicle maintenance.

The program is a key initiative of the [National Environment Protection \(Diesel Vehicle Emissions\) Measure 2001](#).

Highlights 2023–24

The [Smoky Vehicle Reporting Program 2022–23 Annual report](#) was published. Key findings include:

- 750 vehicles were reported in 2022–23 via the reporting form on the department website. Reports were received from 416 individuals.
- Over half of reported vehicle owners advised having repaired or serviced their vehicles.
- Diesel vehicles continue to be over-represented in reports with nearly nine out of ten vehicles reported to be diesels.

The program was updated with additional options to describe vehicle observations. The improved data will be used to better characterise fleet performance and identify trends for further policy review.

Air Quality Monitoring and Modelling



The objectives of this program are to:

- introduce procedures for the ongoing development of current air quality models and the review of new modelling methods and techniques for application in Perth
- ensure that the existing monitoring network is maintained and improved and to assess trends in air quality
- develop future monitoring programs, based on the exposure to and impact of air toxics and acid gases, and evaluate monitoring options, such as mobile monitoring facilities.

This program, run by the department, aims to ensure that the existing monitoring network is maintained and improved, and continues to assess trends in air quality. This program incorporates the review of Perth ambient air quality monitoring data and the review and improvement of monitoring equipment.

Highlights 2023–24

- Commenced a scientific program with funding from the [State Government's Climate Action Fund](#) to develop high-resolution datasets for Perth to enable assessment of the urban heat island effect. Outcomes will include urban heat island scenarios and analysis tools to support future city planning activities, including assessment of climate change adaptation actions, and assessment of ambient air quality.
- Progressed key stakeholder engagement, supercomputing resource planning, input data identification and environmental monitoring.
- Deployed low-cost air quality monitoring sensors to regional areas in response to findings of the 2020 [Royal Commission into National Natural Disaster Arrangements](#). The network currently includes eight regional towns and cities, with sensors installed at local government facilities. The regional sensor network provides real-time access to smoke levels, enabling communities to better understand their potential exposure and manage their activities to minimise the impacts of smoke.
- Established an air quality monitoring site in Como in January 2023, close to the intersection of Kwinana Freeway and Canning Highway for a 12-month monitoring campaign. The Como site was designed to provide a better understanding of contemporary traffic emissions and local air quality close to a major transport intersection.
- [National Environmental Protection \(Ambient Air Quality\) Measure](#) criteria pollutant data from the station were published hourly on [Air Quality Index](#). A report on the findings of the campaign will be published in the second half of 2024.

About the Air Quality Coordinating Committee

The Air Quality Coordinating Committee comprises representatives from State Government, industry, business, and the community. Its role is to monitor the implementation of the Perth Air Quality Management Plan and review the progress towards achieving its aims.

AQCC members Membership as at 30 June 2024:

State Government

- Belinda Walker – Chair ([Department of Water and Environmental Regulation](#))
- Dr Peter Franklin – proxy ([Department of Health](#))
- Justin McKirdy ([Department of Transport](#))
- Katie MacWilliams ([Department of Biodiversity, Conservation and Attractions](#))
- Jacque Stone ([Department of Planning, Lands and Heritage](#))
- Joscyln Sloan ([Department of Energy, Mines, Industry Regulation and Safety](#))

Community

- Professor Philip Jennings ([Conservation Council of Western Australia](#))
- Dr Sue Graham-Taylor (Pollution Action Network)
- Martin Chape (Community Member)

Business and Industry

- Nick Jones ([WA Local Government Association](#))
- Chris Oughton ([Kwinana Industries Council](#))
- Anne Still ([Royal Automobile Club of WA](#))

The Air Quality Coordinating Committee met once between July 2023 and June 2024.

Contact the Air Quality Coordinating Committee

For more information, please contact:

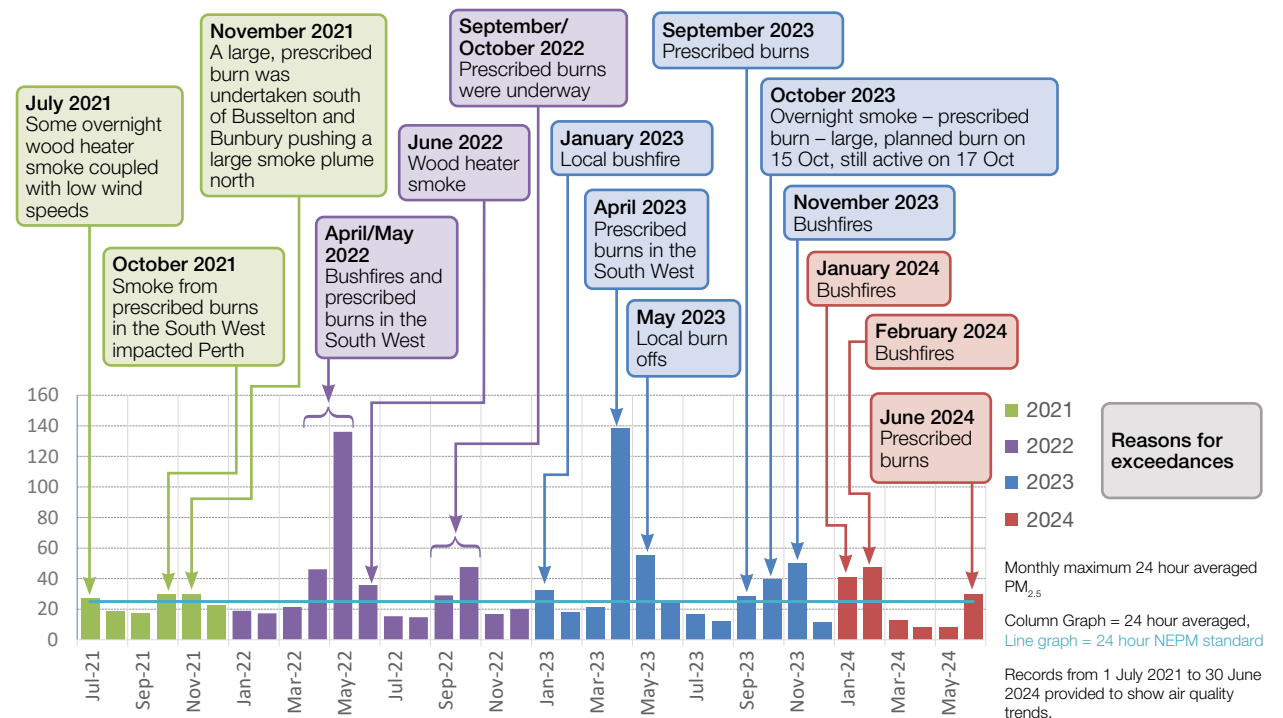
The secretary
Tel: 08 6364 6581
Email: AQCCadmin@dwer.wa.gov.au
or visit [Air Quality Coordinating Committee](#).

Further details on air pollutant trends in Perth can be found in the Department of Water and Environmental Regulation's [WA air monitoring reports](#). An [hourly update of air quality in WA](#) is also available.

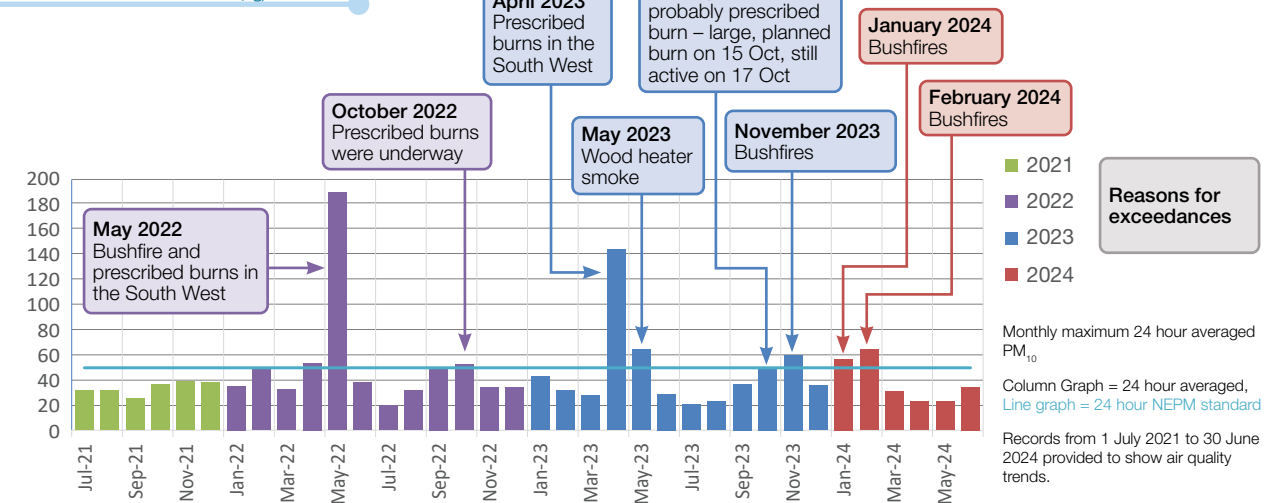
Air pollutant trends 2021-24

The graphs below show the maximum levels for fine particle ($PM_{2.5}$), coarse particles (PM_{10}), ozone and nitrogen dioxide from 1 July 2021 to 30 June 2024, recorded at Perth monitoring stations (Armadale, Caversham, South Lake, Duncraig, Mandurah, Rolling Green, Quinns Rocks, Rockingham, Swanbourne and Wattleup). For comparison, the diameter of a human hair is seven times the diameter of the largest coarse particle (PM_{10}). The high concentrations of particles were primarily due to natural dust and smoke haze. The precursors for ozone (an indicator of photochemical smog) are produced by motor vehicles and industry. Nitrogen dioxide in cities is caused by motor vehicles and contributes to the formation of photochemical smog.

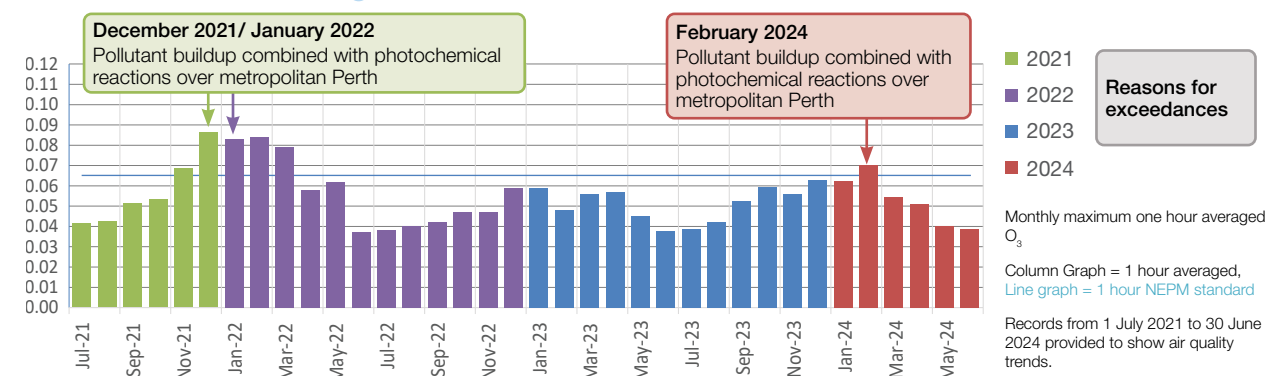
$PM_{2.5}$ Particles $\mu g/m^3$



PM_{10} Particles $\mu g/m^3$



Ozone ppm



Nitrogen dioxide ppm

