

2024 Truckee Meadows Annual Report
Northern Nevada Public Health - Air Quality Management Division
(Reporting Period: January - December 2024)

The Clean Air Act mandates the U.S. Environmental Protection Agency (EPA) to establish and periodically review the health-based National Ambient Air Quality Standards (NAAQS) for six criteria pollutants (ozone (O₃), particulate matter (PM_{2.5} and PM₁₀), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb)). The goal of the Northern Nevada Public Health, Air Quality Management Division (AQMD) is to develop and implement effective programs to meet these NAAQS.

All geographic areas of Washoe County currently attain all NAAQS. Preliminary data for 2024 indicate that the southern part of Washoe County is likely to violate the 24-hour PM₁₀ NAAQS. Both 24-hour and annual PM_{2.5}, as well as ozone are nearing the NAAQS violation thresholds.

Wildfire smoke in 2022 and 2024 has contributed to this violation and elevated pollutant concentrations, although AQMD continues to implement programs like Ozone Advance to mitigate air quality issues. The Ozone Advance program is a collaborative effort aimed at voluntary measures to improve air quality with five key goals:

1. Reducing ozone precursor emissions from on-road motor vehicles.
2. Reducing emissions from non-road vehicles and equipment.
3. Mitigating urban heat island (UHI) effects that contribute to ozone formation.
4. Increasing efficiency of buildings.
5. Educating and empowering local jurisdictions to make long-term decisions that improve air quality.

A successful Ozone Advance program requires a multifaceted approach involving all partners to meet federal air quality standards.

Population Growth (PG) Policies

PG 3 - Use of the Consensus Forecast for Planning: The Clean Air Act requires that the AQMD and Metropolitan Plan Organization (MPO) use consistent planning assumptions such as population, employment, travel demand, and vehicle miles traveled (VMT) when developing State Implementation Plans. These assumptions are also used to develop the Motor Vehicle Emissions Budget (MVEB) and transportation conformity analyses in long and short-range transportation plans.

Regional Form (RF) Policies

RF 2 - Priority Hierarchy for Development in the Region: Through agency comment letters, participation on workgroups and committees, and presentations to workgroups and committees, the AQMD encouraged strategies to:

1. Reduce the motor vehicle impacts to air quality impacts, especially related to projects in Tier 2 and 3 Lands where transportation choices are limited to motor vehicles.
2. Reduce Urban Heat Island (UHI) impacts which directly and indirectly affect ozone formation.

Public Facilities and Services (PF) Policies

PF 10 - Regional Transportation Plan (RTP) Requirements: The RTP, the Regional Transportation Improvement Plan, and any substantive amendment must conform to air quality State Implementation Plans (SIPs) to ensure attainment of federal air quality standards. Transportation conformity analyses are conducted for criteria pollutants and areas that are currently or had previously been designated by EPA as nonattainment for any NAAQS. For Washoe County, transportation conformity is required in Hydrographic Area 87 (HA87) for CO and PM₁₀. These analyses were conducted through regularly scheduled inter-agency consultation meetings that included the AQMD, Regional Transportation Commission (RTC), Truckee Meadows Regional Planning Agency, Nevada Department of Transportation, Nevada Division of Environmental Protection, Federal Highway Administration, and EPA.

The Second 10-Year Maintenance Plan for the Truckee Meadows 24-Hour PM₁₀ Attainment Area was adopted by the District Board of Health on June 27, 2024. The plan demonstrates that emissions from all local sources within HA87 will not cause air pollution to violate the 24-hour PM₁₀ NAAQS through 2036 and beyond. The plan also revises the MVEB used by the RTC of Washoe County, lists potential contingency measures, and revises the Washoe County portion of the PM₁₀ SIP.

Natural Resources (NR) Policies

Through agency comment letters, participation on workgroups and committees, and presentations to workgroups and committees, the AQMD encouraged voluntary implementation of the following Regional Plan Natural Resources policies. These policies are strongly connected to the Ozone Advance program.

NR 1 - Natural Resources Planning: AQMD's Ozone Advance program encourages educating and empowering partners, such as TMRPA, to make good long-term decisions to protect air resources. The Regional Planning Governing Board adopted Resolution No. 16-05 (RPGB) in 2016 supporting Ozone Advance. Similar resolutions of support were also adopted by Northern Nevada Public Health, Board of County Commissioners, City of Reno, City of Sparks, and Regional Transportation Commission.

NR 2 - Resilient Region: AQMD was an active partner with the Nevada Climate Initiative and State Climate Strategy. Implementing strategies in the Ozone Advance program will be needed to meet the Initiative's goal of net-zero greenhouse gas emissions (GHG) by 2050.

NR 10 - Parks and Open Space Connectivity: AQMD's Ozone Advance program encourages connected parks and open spaces to serve as a backbone to an active transportation network. This

policy is critical in Tier 2 and 3 Lands where transportation choices are limited to motor vehicles. Strategically planted trees can create cool islands and corridors [also directly supports NR 12].

NR 12 - Urban Heat Island: Higher temperatures increase ozone formation and increase energy use for comfort cooling of buildings and cars. In August 2024, the AQMD participated in a heat mapping campaign to map the warmest parts of Reno, Sparks, and adjacent portions of Washoe County. In January 2024, the AQMD submitted a letter of support to the Nevada Division of Forestry for an urban tree planting subgrant.

NR 13 - Air Quality: Every land use decision can positively or negatively impact air quality levels. The AQMD has encouraged local jurisdictions to incorporate voluntary Ozone Advance strategies in these land use decisions.

NR 17 - Sustainable Development: AQMD's Ozone Advance program supports and encourages incentives for sustainable development.

Regional Coordination (RC) Policies

Air quality is a regional issue. The AQMD encouraged solutions that should be implemented across the local jurisdictions. This was done through agency review and comment on development proposals, presentations to boards and commissions, and preparation of annual reports. While the bottom line for Ozone Advance is to meet the federal air quality standard, solutions also have co-benefits for the environment, public health, and the economy.

Implementing the Regional Plan in 2025

Implementing the AQMD's Ozone Advance program has strong and direct connections to NR 12 (Urban Heat Island) and NR 13 (Air Quality) of the Regional Plan. The AQMD will continue to encourage land use decisions that:

1. Reduce VMT.
2. Reduce per mile motor vehicle tailpipe emissions.
3. Reduce the impacts of UHI.

CHALLENGES

The following are challenges that must be acknowledged and discussed in future growth decisions.

1. More people, especially in the automobile-dependent Tier 2 Lands means VMT will grow at a faster rate than population. Transportation is the largest sector of ozone precursor emissions. Higher density housing in outlying areas and its impact on VMT is a major concern for AQMD.
2. On February 7, 2024, EPA strengthened the primary (health-based) annual PM_{2.5} NAAQS from 12.0 ug/m³ to 9.0 ug/m³ to provide increased public health protection, consistent with the available health science. This can pose challenges like higher regulatory costs, stricter pollution controls, and economic impacts on industries.

3. EPA intends to complete the latest review of its ozone NAAQS in 2030. The next five years will be critical to ensure future development is better than “business as usual”. Violating the current or future ozone NAAQS will have negative impacts on public health and economic development.

OPPORTUNITIES

Below are opportunities available in 2025 that support Regional Plan Policies NR 12 and 13.

1. Smart Trips programs can reduce transportation sector emissions by reducing trips and VMT. RTC has developed a model program that can be tailored to businesses of any type or size. A Smart Trips program will be most effective if implemented through a business license program as recommended by the Reno Planning Commission in November 2020.
2. Existing plans are in place that support NR 12 and 13. The transportation sector and urban tree canopy are common themes in these plans (i.e., Ozone Advance (2016), Reno’s Urban Forestry Management Plan (2016), City of Reno Master Plan (2017), Reno’s Sustainability & Climate Action Plan (2019), the Nevada Climate Initiative (2020), and Envision Washoe 2040 (2024)). Implementing strategies supporting NR 12 and 13 will support these existing plans.
3. Installation of EV charging-ready infrastructure during construction costs considerably less than as a stand-alone building retrofit. Planning for charging stations during the design phase also allows for easy future expansion, saving time and money when more chargers are needed. EV-ready building codes can help encourage EV adoption and reduce tailpipe emissions which have direct air quality benefits.
4. Developing an HOV Master Plan can encourage carpooling which reduces VMT, congestion, and emissions. This plan can also enhance transit efficiency while improving road safety, cutting commuter costs, and supporting economic growth and sustainable urban development.
5. A Commuter Rail Feasibility Study for a route between Sparks and Tahoe-Reno Industrial Center could significantly reduce VMT and emissions, ease I-80 congestion, and promote sustainable growth by shifting commuters to cleaner transit.