New Mexico’s Good Neighbor State Implementation Plan Certification for the 2015 Ozone NAAQS

I: Introduction

A State Implementation Plan (SIP) identifies how the state will attain and maintain the primary and secondary National Ambient Air Quality Standards (NAAQS). The SIP contains regulations, source-specific requirements, non-regulatory items such as plans and inventories, and in some cases additional requirements to satisfy regulations promulgated by the U.S. Environmental Protection Agency (EPA). The initial SIPs for states were approved by EPA on May 31, 1972 (37 FR 10842). A state may revise its SIP with EPA approval, as necessary. The federally enforceable SIP for New Mexico is compiled in 40 CFR Part 52 Subpart GG.

Sections 110(a)(1) and 110(a)(2) of the federal Clean Air Act (CAA) require states to submit an infrastructure SIP to the EPA that provides for the implementation, maintenance and enforcement of new or revised NAAQS, including any new legally enforceable mechanisms that may be necessary. If the existing state regulatory framework and resources are already sufficient without the need for new legally enforceable mechanisms, the state may instead submit an infrastructure SIP "certification."

This SIP certification for New Mexico addresses the requirements of section 110(a)(2)(D)(i)(I) of the federal CAA, demonstrating that New Mexico and Albuquerque - Bernalillo County comply with interstate transport obligations in regard to the revised 8-hour Ozone (O_3) NAAQS promulgated by EPA on October 1, 2015 (80 FR 65291, October 26, 2015). A SIP that addresses the requirements of section 110(a)(2)(D)(i)(I) is also referred to as a “good neighbor” SIP. The New Mexico Environment Department (NMED) and the City of Albuquerque Environmental Health Department (EHD) addressed the other requirements of Sections 110(a)(1) and 110(a)(2), including Section 110(a)(2)(D)(i)(II), in separate submissions to EPA.

The analysis submitted with this good neighbor SIP fulfills New Mexico’s obligation to address interstate transport by demonstrating that New Mexico does not cause or contribute to nonattainment or interfere with maintenance of the 2015 O_3 NAAQS in any other state. These elements, referred to as prong 1 and prong 2 of the good neighbor provisions, respectively, must be evaluated independently when assessing downwind air quality problems (North Carolina v. EPA, 531 F.3d 896, 909-911, 2008).

Because the City of Albuquerque and Bernalillo County are a separate, combined jurisdiction from the rest of New Mexico for air quality regulatory purposes, NMED and EHD are responsible for separate submittals to EPA for the 2015 O_3 NAAQS good neighbor requirements. While these are separate submittals, NMED worked closely with EHD during their development and applied a common analytical framework addressing the entire state.

Legislative authority for New Mexico's air quality program is codified in Chapter 74 (Environmental Improvement) of the New Mexico Statutes Annotated 1978 (NMSA 1978), which gives the State Environmental Improvement Board and NMED the authority to implement the CAA in New Mexico. The authority to implement air quality programs under state statutes is contained in the New Mexico Administrative Code (NMAC), specifically Title 20, Chapter 2 - Air Quality (Statewide). These regulations are part of the approved New Mexico SIP and cited in 40 CFR Part 52.1620(c).

This SIP certification document relies upon EPA memoranda and supporting materials, including photochemical modeling of nationwide O_3 transport. They include EPA memoranda issued on March 27, 2018, August 31, 2018, and October 19, 2018, as well as supplemental information that describes in detail how photochemical modeling accounted for emissions of O_3 precursors, changes in those emissions over time, O_3 formation based on seasonal variability in meteorology, and the presence of existing and future legally enforceable emission control measures. Unless otherwise noted, this documentation is the basis for the analytical framework and data presented below in tables, charts, and discussion of New Mexico's good neighbor obligations under section 110(a)(2)(D)(i)(I) of the CAA.

Implementation of the 2015 O_3 NAAQS

The EPA sets NAAQS to protect public health (primary standards) and the environment (secondary standards) for six principle pollutants, referred to as "criteria" air pollutants, based on scientific evidence of the pollutant's impacts on public health and welfare. The 2015 O_3 NAAQS is based on eight-hour averages of O_3 concentrations with a level of 0.070 parts per million (ppm) or 70 parts per billion (ppb). For clarity and ease of use, all subsequent discussion will use ppb as the unit of measurement for O_3. Based on these averages, air quality agencies calculate an O_3 design value (DV), which is used to determine compliance with the level of the standard. Areas that do not meet the standard may be designated as nonattainment and are required to develop SIPs to improve air quality. The EPA completed area designations for the 2015 O_3 NAAQS on August 3, 2018, through a separate state submittal and regulatory action (83 FR 25776, June 4, 2018). For a complete, detailed explanation of the standard, calculation methods used to determine compliance, and the designation process, see EPA's 2015 O_3 NAAQS website.

II: EPA's Analytical Framework for Ozone Transport

Through previous rulemakings, including the Cross State Air Pollution Rule (CSAPR) for the 1997 O_3 NAAQS and the CSAPR Update for the 2008 O_3 NAAQS, EPA worked with states to develop the following four-step framework to address the requirements of the good neighbor provision for the O_3 NAAQS: 1.) identify potential downwind air quality problems at air quality monitoring sites (EPA refers to sites showing potential problems as "receptors"); 2.) identify upwind states that contribute to potential downwind air quality problems; 3.) identify emissions reductions needed to prevent downwind problems; and 4.) adopt permanent and enforceable emission reductions.

National modeling conducted by EPA may be used to assist states in developing good neighbor SIPs by providing data to address steps 1 and 2 to identify each state's good neighbor obligation. On March 27, 2018 EPA provided such assistance for the 2015 O_3 NAAQS, via modeling data and a guidance memorandum for use in preparing good neighbor SIP submissions. EPA provided further memoranda and supporting data in August and October 2018.

EPA used 2023 as the analytic year for the modeling analyses (using a 2011 base year emissions inventory and meteorology), considering that 2023 aligns with the anticipated attainment year for Moderate O_3 nonattainment areas and allows for timeframes that may be required for implementing further emissions reductions. The EPA modeling analysis identified ambient air quality monitoring sites that are projected to have air quality problems attaining or maintaining the NAAQS in 2023.

The EPA memorandum issued on March 27, 2018 identified nonattainment receptors at those monitoring sites with current measured design values exceeding the NAAQS that also have projected (i.e., in 2023) average design values exceeding the NAAQS. Further, the memo identified maintenance receptors as those monitoring sites with maximum design values exceeding the NAAQS. This included sites with current measured values below the NAAQS with projected average and maximum design values exceeding the NAAQS, and monitoring sites with projected average design values below the NAAQS but with projected maximum design values exceeding the NAAQS.

For consistency, this SIP certification will refer to air quality monitors with potential future O_3 air quality issues as nonattainment and maintenance "receptors."

After identifying nonattainment and maintenance receptors, EPA used the Anthropogenic Precursor Culpability Analysis (APCA) approach to quantify contributions of anthropogenic nitrogen oxides (NO_x) and volatile organic compound (VOC) emissions to O_3 formation in downwind states. In their modeling analysis, EPA identified "links" between upwind state's contributions to downwind receptor sites with future design values greater than or equal to 70 ppb. In past rulemakings (e.g., the CSAPR Update Rule), EPA considered 1% of the NAAQS, or 0.70 ppb in this case, a potentially significant contribution to nonattainment or interference with maintenance.

However, the CSAPR Closeout Final Rule applied to eastern states of the United States, and EPA never developed a parallel rule for specifically analyzing and addressing O_3 transport in the western United States. In the eastern United States, electric generating units are the primary contributors to downwind O_3 air quality problems due to their close geographic proximity to one another. In the western United States, by contrast, long distances separate sources with high mountains and drastic elevation changes, hindering regional concentrations of ozone and its precursors. This widely varying topography does not support a single, all-encompassing approach to ozone transport. Thus, upwind western states contributions' to linked receptors require additional analysis beyond the 1% of the NAAQS threshold to determine the significance of transported pollution in downwind states.

EPA recommends that a case-specific analysis of good neighbor requirements for an upwind western state focus on the factors that contribute to attainment or maintenance issues in a downwind state, specifically, whether the driving factor is emissions from upwind states or from sources within the downwind state itself. EPA applied this approach in approving Arizona's good neighbor SIP for the 2008 O_3 NAAQS (81 FR 15201, March 22, 2016 and 81 FR 31513, May 16, 2016).

In this case, EPA's modeling linked Arizona, using the 1% of the NAAQS threshold to two receptors in California. However, in their approval of the SIP, EPA noted that the attainment issues at the California receptors were not primarily a result of small O_3 contributions from numerous upwind states. The analysis demonstrated that contributions from California sources far outweighed contributions to O_3 concentrations by Arizona, as well as all other upwind states combined. Thus, EPA concluded that Arizona met its good neighbor obligations and its contribution to downwind air quality, although greater than 1% of the NAAQS, was not significant at these receptors. NMED used this approach to demonstrate that New Mexico fulfills its good neighbor obligations under the CAA and does not contribute to nonattainment or interfere with maintenance of the 2015 O_3 NAAQS in another state.

III: EPA Modeling Results: Good Neighbor Requirements for the 2015 Ozone NAAQS

The EPA photochemical modeling described in their March 27, 2018 memorandum estimated New Mexico's contributions to O_3 measurements at every ambient air quality monitor in the 48 contiguous United States. The EPA identified two receptors linked to emissions originating in New Mexico at a contribution threshold of 0.70 ppb or above. These two receptors (Table 1) are within the Denver Metro/North Front Range O_3 nonattainment area (Denver/NFR NAA).

Table 1.Monitored and Projected Design Values of receptors linked to New Mexico emissions in ppb.

Receptor	AQS ID	2015-2017 DV	2023 Avg DV	2023 Max DV	NM Contribution
Weld County Tower	081230009	70	70.2	71.4	0.77
Rocky Flats-N	080590006	77	71.3	73.7	0.70

EPA identified the Rocky Flats-N site as a nonattainment receptor based on 2014-2016 monitoring data that measured above the 2015 O_3 NAAQS and is projected to remain in nonattainment in 2023. The Weld County Tower site is recognized as a maintenance receptor because 2014-2016 monitoring data and the 2023 Projected Average Design Value shows attainment of the 2015 O_3 NAAQS, but the 2023 Projected Maximum Design Value is above the standard. Based on EPA's identification of these receptors and the modeled linkage to New

Mexico emissions, NMED conducted further analysis to determine whether those emissions warrant consideration of new emissions control measures within the state.

The remainder of this SIP certification evaluates the available modeling, monitoring, and emissions data provided through EPA memoranda, technical support documents, the Air Quality System Data Mart, and the National Emissions Inventory (NEI) to determine if New Mexico contributes significantly to nonattainment or interferes with maintenance in the Denver/NFR NAA. NMED concludes that emissions reductions within the state are not necessary to prevent downwind air quality problems, as discussed below.

IV: New Mexico's Modeled Ozone Emissions Contribution at Colorado Receptors, Topography, Monitoring Data, and Emission Trends

To determine if New Mexico emissions contribute significantly to nonattainment or interfere with maintenance at receptors in Colorado, NMED used a weight-of-evidence approach. Adopting EPA's approach in the above-discussed Arizona SIP approval, NMED focused on the magnitude of emissions from within Colorado compared to emissions from upwind states, the complex topography and the unique meteorology that drives O_3 formation in the Denver/NFR NAA. The disparity between Colorado's and linked state's emission contributions highlights the contrast between western and eastern states' O_3 transport challenges. Whereas, nonattainment receptors in eastern states are often linked to numerous upwind states with the home state accounting for a smaller percentage of the contribution, nonattainment receptors in the west are linked to a relatively small number of states (e.g., five) with small contributions compared to the home state. The resulting analysis demonstrates that Colorado emissions, rather than upwind state emissions, were in fact the primary driver of attainment issues at the Denver/NFR NAA.

Upwind State vs. In-state Contributions to Ozone Formation in Colorado

Table 2, below, presents EPA's modeled 2023 O_3 contribution from each upwind state to the two Colorado receptors of concern, including linked upwind states that meet the 1% threshold. For the Weld County Tower site, three states meet this threshold: California, New Mexico, and Texas. For the Rocky Flats-N receptor, five states meet this threshold: California, New Mexico, Texas, Utah, and Wyoming. Note that Colorado's contributions to each receptor (highlighted in red) far exceed the contribution of any other state. For the Weld County Tower and Rocky Flats-N receptors, Colorado's contribution (~25 ppb) is greater than 30 times larger than New Mexico's contribution (<1 ppb).

Table 2. Projected 2023 O3 design values and upwind contributions at two Colorado receptors in ppb

Receptor	2023 Avg DV	2023 Max DV	CO	CA	NM	TX	UT	WY
Weld County Tower	70.2	71.4	**24.44**	**0.95**	**0.77**	**1.05**	0.54	0.58
Rocky Flats-N	71.3	73.7	**25.52**	**1.32**	**0.70**	**1.02**	**0.83**	**0.81**

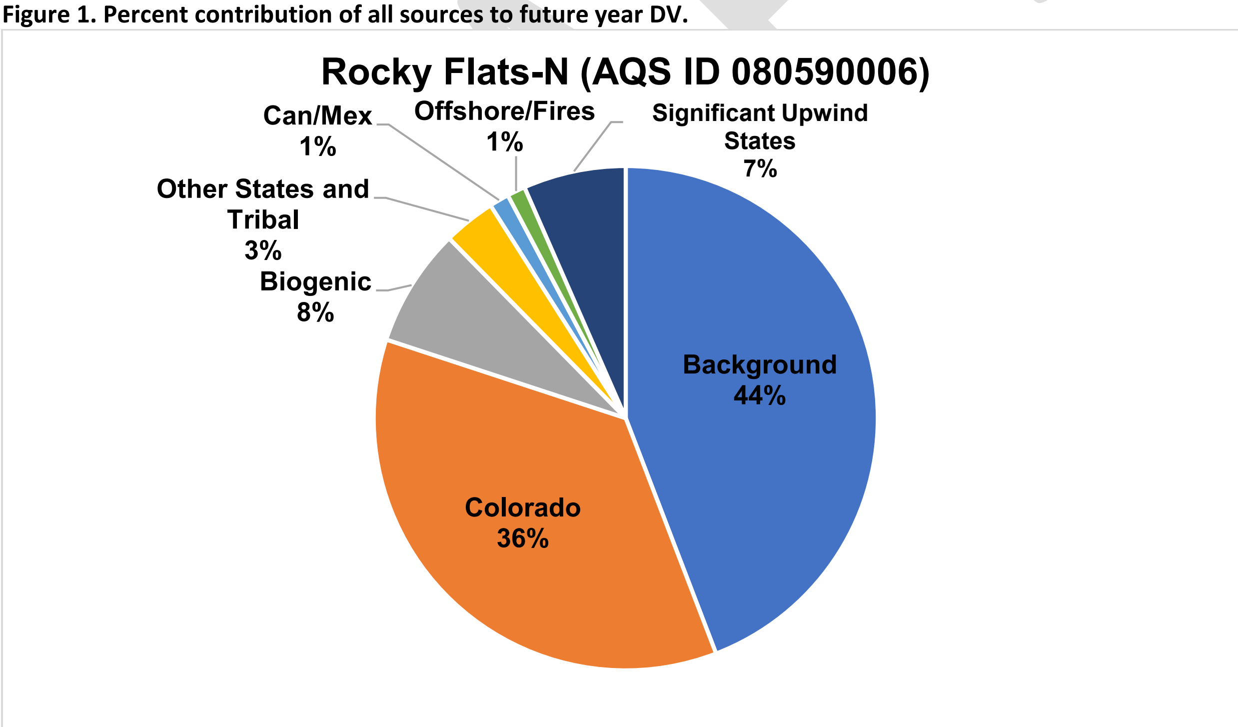
Table 3, below, consolidates the above data into broader categories, showing the collective contribution for modeled year 2023 by upwind states at the two receptors. Contributions from Colorado emissions far outweigh contributions from the 1% states. This information supports the argument that contributions from the upwind 1% states are not expected to become a significant contributor to O_3 attainment issues at the two Colorado receptors.

Table 3. 2023 contributions to projected average DV from Colorado and upwind states in ppb.

Receptor	2023 Ave DV	CO	All Upwind States	Linked Upwind States	NM
Weld County Tower	70.2	24.44	5.63	2.77	0.77
Rocky Flats-N	71.3	25.52	7.06	4.68	0.70

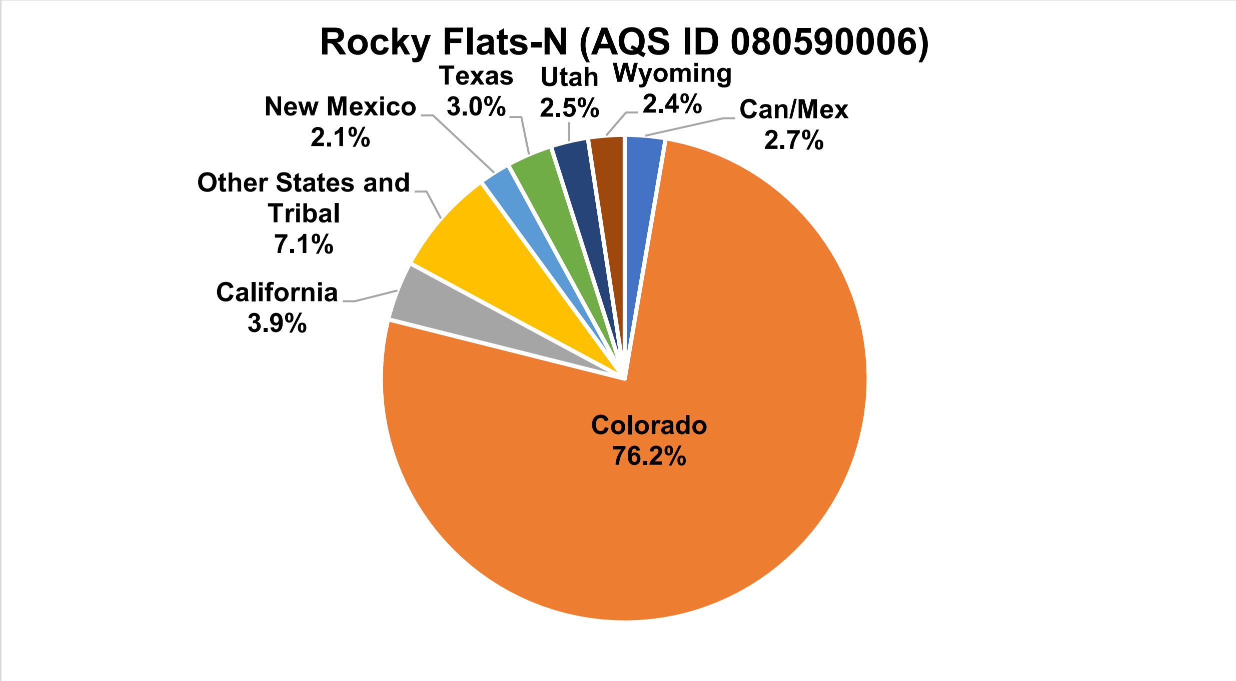
At the Rocky Flats-N receptor, EPA identifies background concentrations (44%) and anthropogenic emissions from Colorado (36%) as contributing to nearly 80% of modeled future year design values, with 7% of contributions attributed to linked upwind states and 3% attributed to the remainder of upwind states and tribes (Figure 1). Colorado's emissions account for approximately three and a half times the contribution to the future year design value as all other states combined and nearly five and a half times as much as linked states.

Figure 1. Percent contribution of all sources to future year DV.



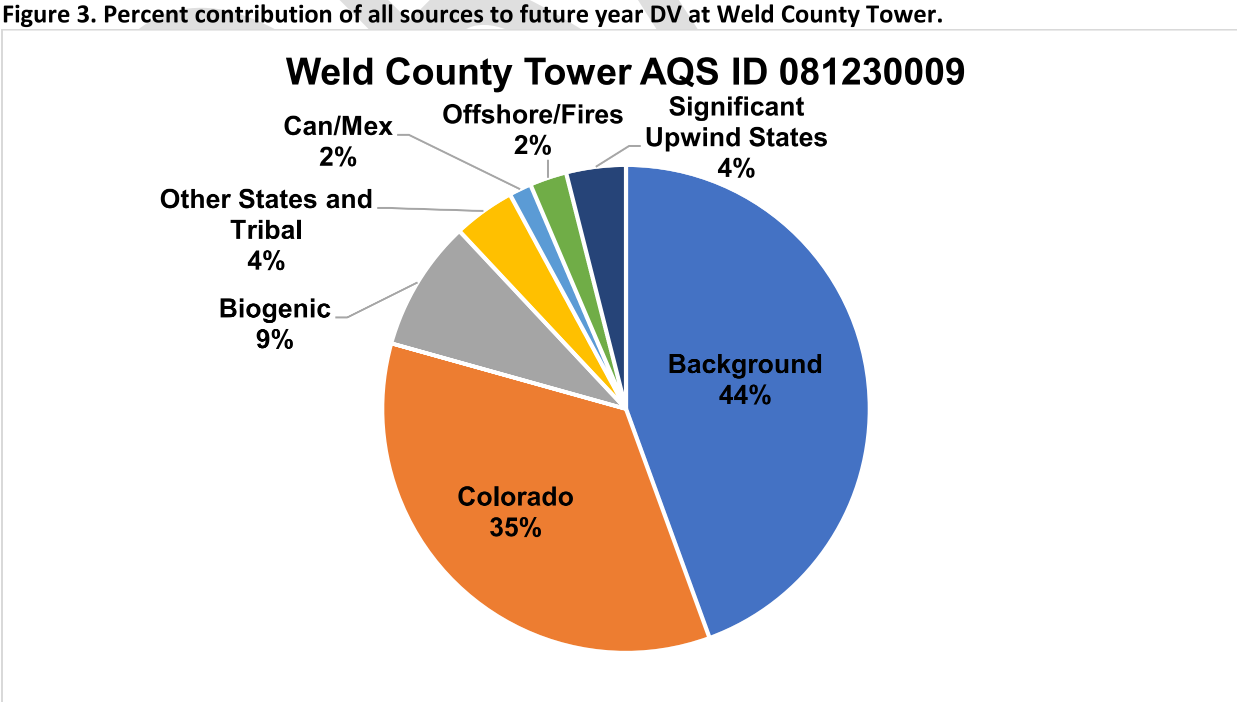
When considering controllable anthropogenic emissions and removing background, offshore, fire and biogenic emissions from consideration (Figure 2), Colorado alone contributes over 75% to the projected DV. The five linked upwind states individually contribute from 2 to 4%, with other states contributing about 7%, and international emissions from Canada and Mexico contributing about 3% to the future year DV.

Figure 2. Percent contribution of controllable anthropogenic sources to future year DV at Rocky Flats-N.



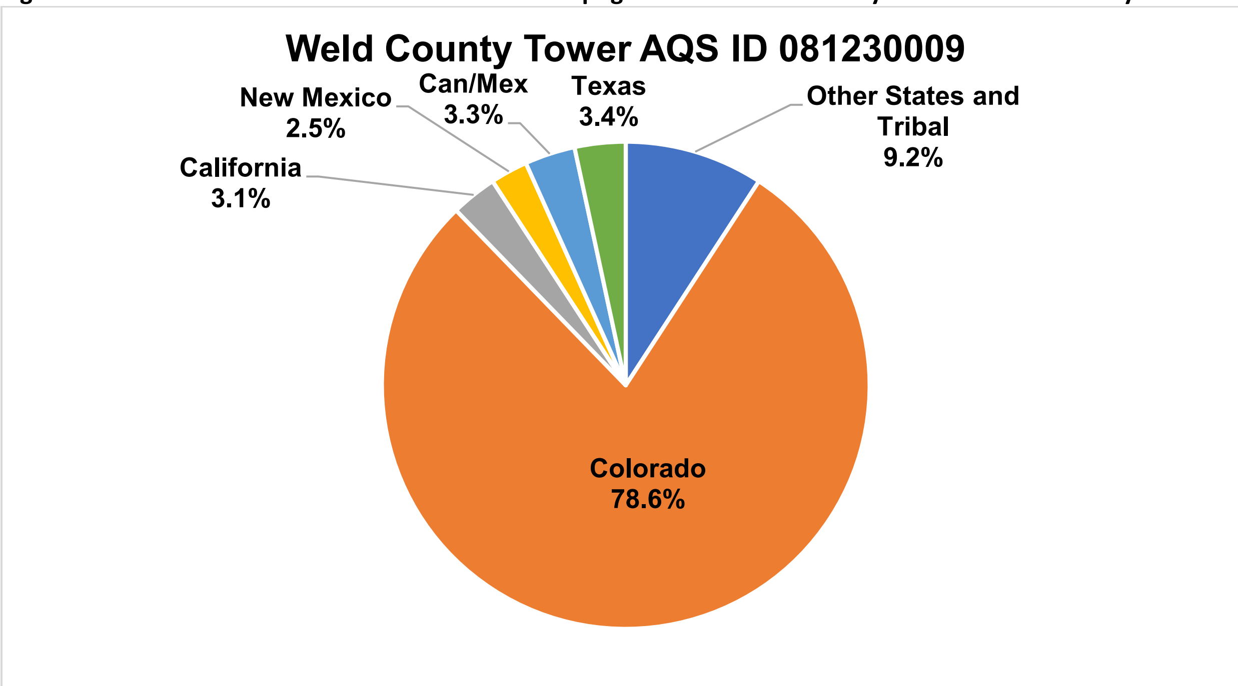
At the Weld County Tower receptor, EPA identifies background concentrations (44%) and anthropogenic emissions from Colorado (35%) contributing to approximately 79% of modeled future year design values, with 8% of contributions attributed to upwind states and tribes (Figure 3). Colorado's emissions account for greater than four times the contribution to the future year design value as all other states combined.

Figure 3. Percent contribution of all sources to future year DV at Weld County Tower.



When background, offshore, fire and biogenic emissions are removed from consideration (Figure 4), Colorado alone contributes approximately 79%, with the linked states of California, Texas and New Mexico individually contributing 3.4%, 3.1%, and 2.5%, respectively. For the remaining anthropogenic emissions from North America, other states contribute 9% and emissions from Canada and Mexico contribute 3.3% to the future year DV. Similar to the Rocky Flats-N receptor, Colorado' emissions far outweigh emissions from any other state.

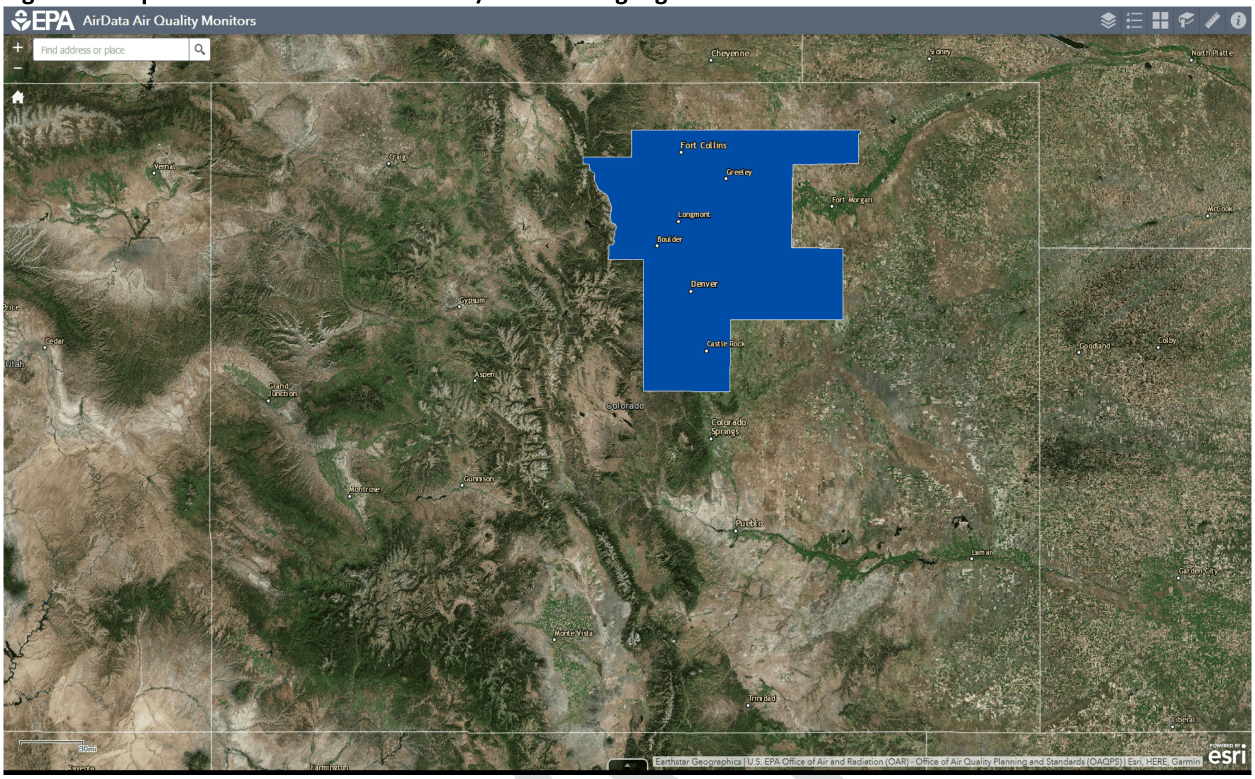
Figure 4. Percent contribution of controllable anthropogenic sources to future year DV at Weld County Tower.



Nonattainment History and Topography of the Denver/North Front Range Area

EPA designated the Denver/NFR area as nonattainment for the 1997 (72 FR 5392, September 21, 2007), 2008 (77 FR 30087, May 21, 2012) and 2015 8-hour O_3 NAAQS (83 FR 25776, June 4, 2018). The Denver/NFR NAA includes seven entire counties and two partial counties surrounding Denver (Figure 5). This area has a history of elevated O_3 levels and was reclassified as "Serious" nonattainment under the 2008 standard (84 FR 41674, Aug. 15, 2019).

Figure 5. Map of Colorado with the Denver/NFR NAA highlighted in blue.



In the process of making the nonattainment designation for the 2015 NAAQS, the State of Colorado provided a five-factor analysis to determine an appropriate boundary for the Denver/NFR recommended nonattainment area. This analysis concluded that unique topography and meteorological conditions in and around Denver, tend to "magnify and constrain the influence of local emissions on air quality" resulting in elevated O_3 levels. Emissions within the air basin tend to recirculate within the area, making them a significant cause of O_3 formation. EPA agreed with Colorado's conclusions in the agency's Technical Support Document for designating the Denver/NFR area nonattainment for the 2015 O_3 NAAQS without expanding the existing boundary (EPA-HQ-OAR-2017-0548-0408, 2017).

Both EPA and Colorado agreed that the topography, comprised of mountains and ridges in the Denver/Front Range region serve as a bowl that traps local NO_X and VOC emissions during the May through September O_3 season. These topographical features include the Rocky Mountains to the west, the Cheyenne Ridge to the north, and the Palmer Divide to the south, walling off the Denver/NFR NAA on three sides. During warm weather months, these three barriers constrain airflow in a way that effectively creates an invisible, fourth wall to the east. These four walls trap local NO_X and VOC emissions during the O_3 season. Because of this topography, emissions from within the Denver/NFR NAA are the primary driver of O_3 formation. EPA and Colorado based this assessment on measurements of prevailing airflow patterns and on modeling of airflow patterns around monitors violating the 2015 O_3 NAAQS.

EPA performed HYSPLIT back trajectory modeling of airflow patterns at four monitoring sites on all days with an exceedance of the O_3 NAAQS. Colorado further focused their modeling on the four highest exceedance days and combined the results of their frequency analysis. The results found fewer than 5 trajectory hours outside of the Denver/NFR NAA boundary during these periods of elevated O_3 levels.

In describing the meteorological effects responsible for this, Colorado and EPA identified four circulation patterns that affect O_3 levels within the Denver/NFR NAA as:

- nighttime and early-morning down-valley drainage flow;
- thermally-driven upslope flow;
- mountain-plains solenoid circulation; and
- the "Denver Cyclone."

These air circulation patterns and the surface topography of the NAA trap emissions and produce O_3 within the air basin. These patterns compound the problem as prior day emissions recirculate to form O_3 that is carried west up the slopes of the Rocky Mountains during the day, returning the polluted air to surface as lofted air recirculates to the east as temperatures subside in the evening and nighttime hours. The "Denver Cyclone" is a separate meteorological phenomena that independently creates a circulation pattern that impacts localized pollution transport due to mesoscale winds (EPA-HQ-OAR-2017-0548-0408, 2017).

Thus, EPA's and Colorado's assessments demonstrate that topography and related wind patterns in the Denver/NFR NAA cause local emissions to build up in the area, resulting in significant locally driven O_3 formation due to physical conditions within the NAA boundaries. Although the Colorado and EPA assessments did not assess interstate transport of O_3 and its precursors, the assessments do provide further evidence of the significance of local conditions in Colorado driving O_3 formation within the NAA.

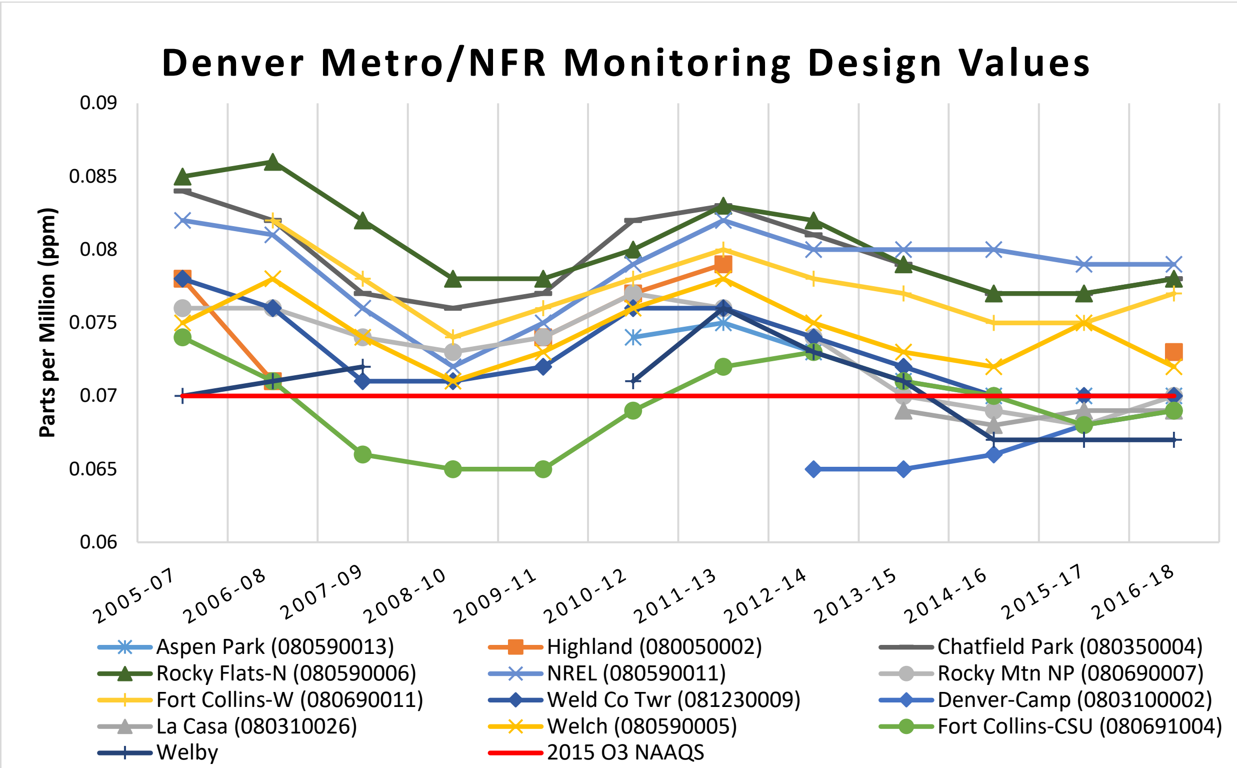
Air Quality Monitoring Data and Design Values

To further understand the significance and potential impact of New Mexico emissions on the two Colorado receptors, this certification examines trends in monitored O_3 concentrations within the Denver/NFR NAA. Doing so provides additional context for assessing the O_3 modeling performed by EPA.

Of the 14 monitoring sites in the Denver/NFR NAA, six recorded O_3 data above the level of the 2015 O_3 NAAQS in 2018. Although EPA designated the area as nonattainment of the 2015 O_3 NAAQS, trends in measured concentrations of O_3 show a decrease in concentration at the two receptors of concern, the Weld County Tower and Rocky Flats-N receptors. In recent years the O_3 design values for these receptors show an overall downward trend in design values since 2013 (Figure 6). The design value at Rocky Flats-N dropped from 86 ppb in 2008 to 78 ppb in

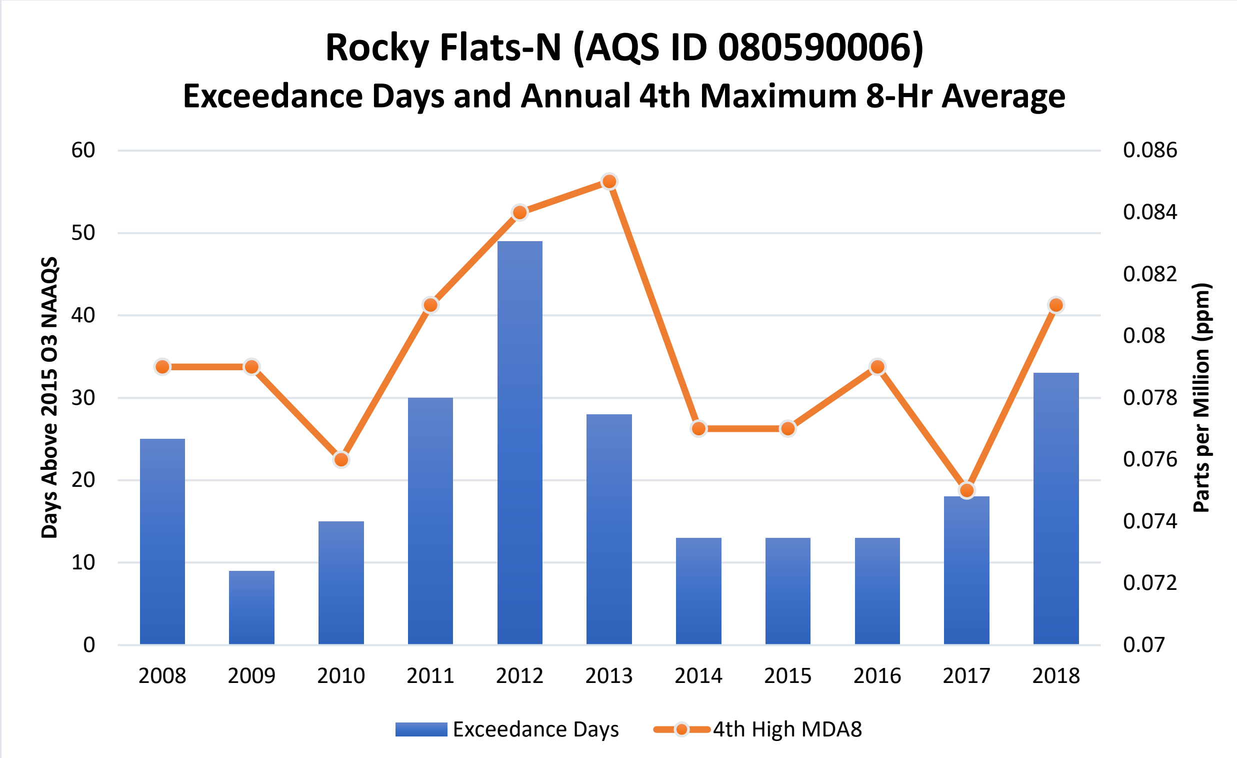
2018. The Weld County Tower design value shows a similar improvement, dropping from 76 ppb in 2013 to 70 ppb in 2016 where it has remained steady through 2018.

Figure 6. Ozone DV trends at Denver Metro/NFR NAA monitoring sites.



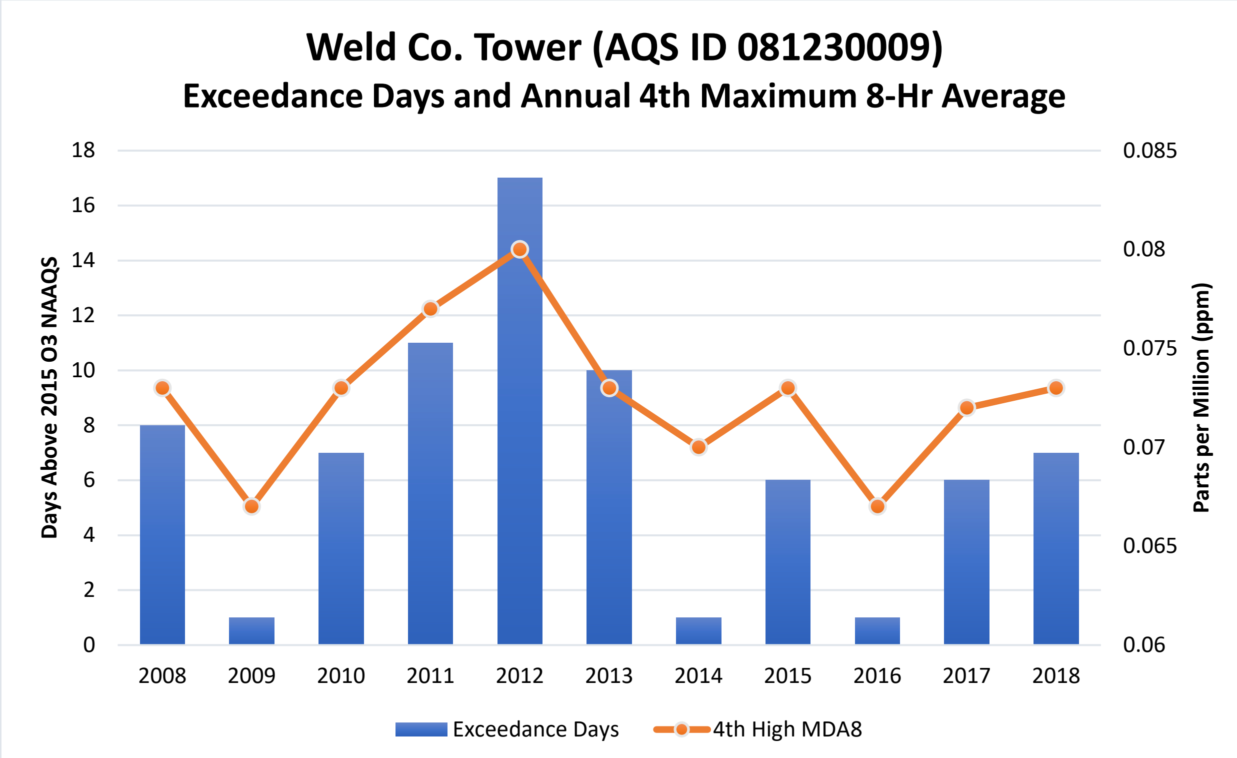
The Rocky Flats-N receptor shows improvement over time not only in overall design values but in frequency of NAAQS exceedances, as illustrated in Figure 7. In 2012, this receptor measured a peak of forty-nine days with a recorded NAAQS exceedance, along with a fourth maximum 8-hour O_3 average of 84 ppb. By 2017, the number of days with an exceedance fell to 18, with a fourth maximum 8-hour O_3 average of 75 ppb. In 2018 the receptor recorded an uptick in concentrations with the number of exceedance days increasing to 33 and the fourth maximum 8-hour O_3 average increasing to 81 ppb. This resulted in the slight increase in the DV at the receptor from 77 ppb in 2017 to 78 ppb in 2018.

Figure 7. Recorded O_3 exceedances and the annual fourth max 8-hour average at the Rocky Flats-N receptor.



The Weld County Tower receptor exhibits a similar O_3 concentration pattern. Its design values show a downward trend over time, with the receptor meeting the O_3 NAAQS since 2016. In addition, this receptor records fewer exceedance days than the Rocky Flats-N receptor (Figure 8). In 2012, the receptor recorded a peak of seventeen exceedance days and an annual fourth maximum 8-hour average of 80 ppb. By 2018 the number of exceedance days dropped to 7 with an annual fourth maximum 8-hour average of 73 ppb. Currently, the Weld County Tower receptor shows attainment of the standard with a design value of 70 ppb using the most recent publicly available data from 2016-2018.

Figure 8. Recorded O_3 exceedances and the annual fourth max 8-hour average at the Weld Co. Tower receptor.



These trends in monitoring data reinforce the assertion that New Mexico's small modeled contribution to O_3 concentrations in the Denver/NFR NAA does not interfere with maintenance or contribute to nonattainment of the 2015 O_3 NAAQS.

Nitrogen Oxides and Volatile Organic Compounds Emissions Trends

To further understand the potential impact of New Mexico emissions on the two receptors, this certification examines trends in O_3 precursor emissions in Colorado and upwind states. Doing so will help provide additional context for assessing the O_3 modeling performed by EPA and the significance of emissions from New Mexico.

O_3 forms in the atmosphere from complex chemical reactions of NOx and VOCs in the presence of sunlight. Since O_3 formation depends on these chemicals, they are collectively referred to as precursor emissions. Control strategies to reduce O_3 pollution generally rely on emission reductions of one or both categories of precursor emissions.

In addition to New Mexico, the states of Utah, Wyoming, California and Texas have been linked to the Weld County or Rocky Flats-N receptors, as discussed above. However, a review of emission trends for those states shows no indication of substantial, consistent increases over time in upwind O_3 precursor emissions within these states. The magnitude of the emissions from California and Texas compared to the other states necessitate separate figures and scales, to distinguish trends easily.

In all of the linked upwind states and Colorado, NOx emissions have declined steadily since 2002, as estimated in the NEI as shown in Figures 9 and 10, below.

Figure 9. Fifteen-year trend of NO_X emissions in New Mexico, Colorado, Utah and Wyoming.

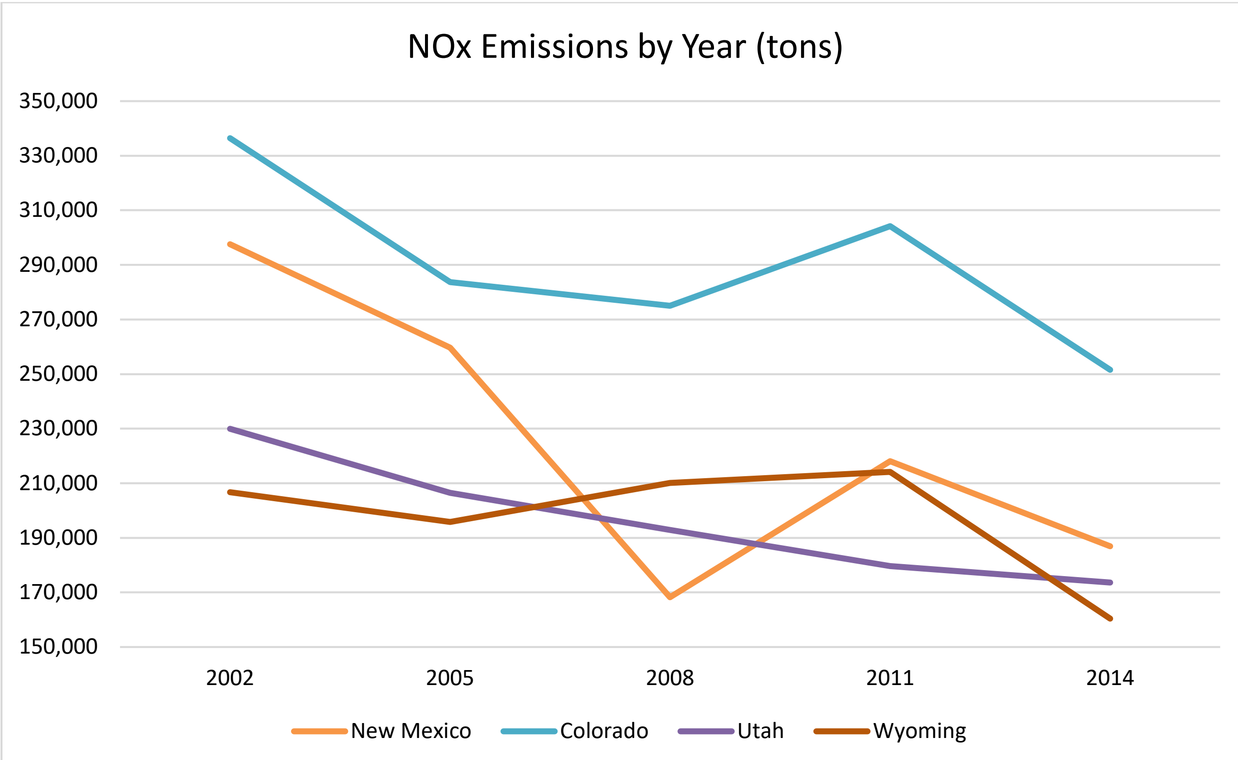
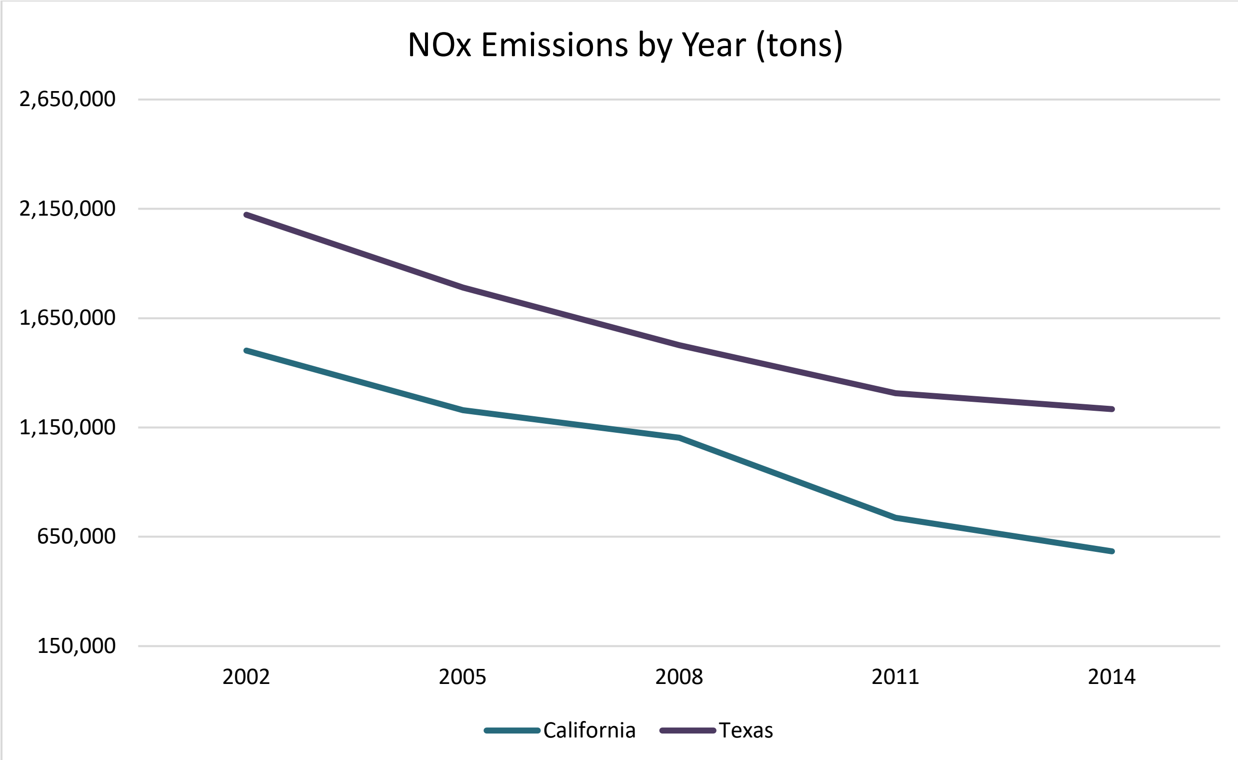


Figure 10. Fifteen-year trend of NOx emissions in California and Texas



VOC emissions in the upwind states and Colorado do not display the same steady downward trend as NOx, but neither do they suggest a dramatic trend upward. VOC emissions from the NEI since 2002 show variability over time in upwind states and Colorado (Figures 11 and 12).

Figure 11. Fifteen-year trend of VOC emissions in New Mexico, Colorado, Utah and Wyoming.

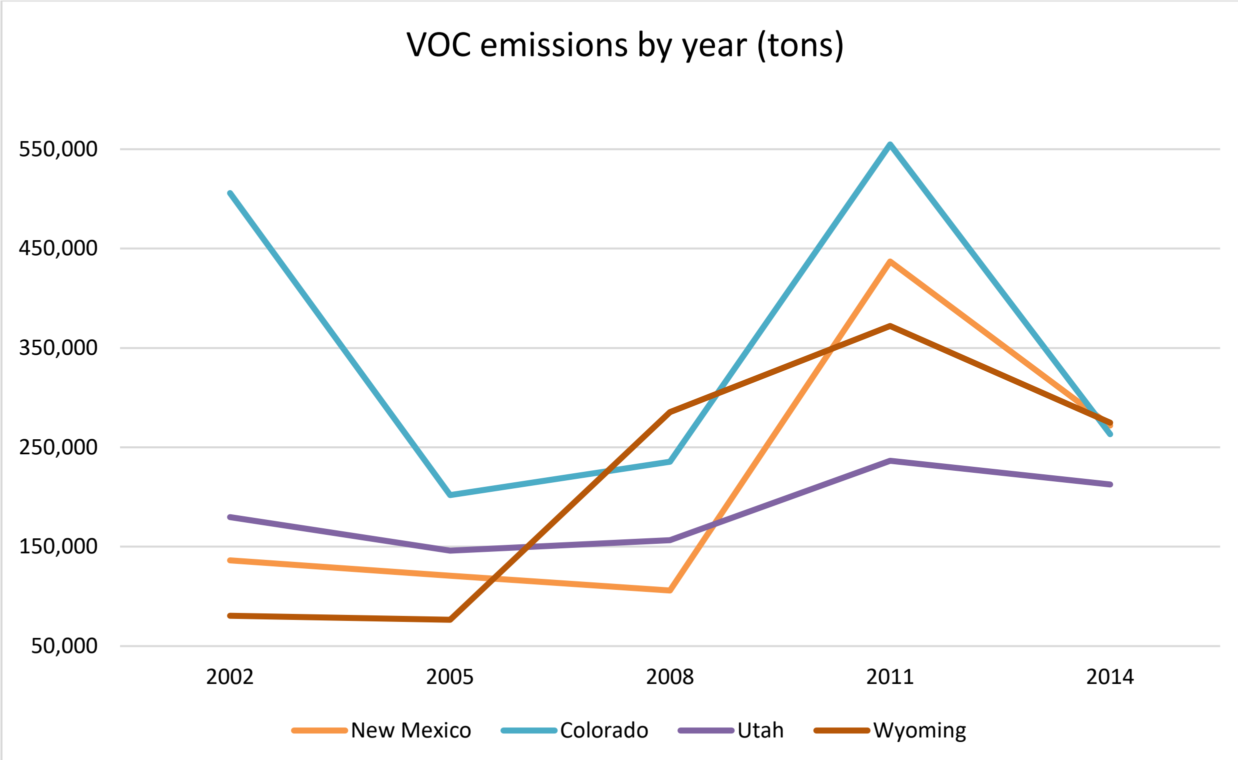
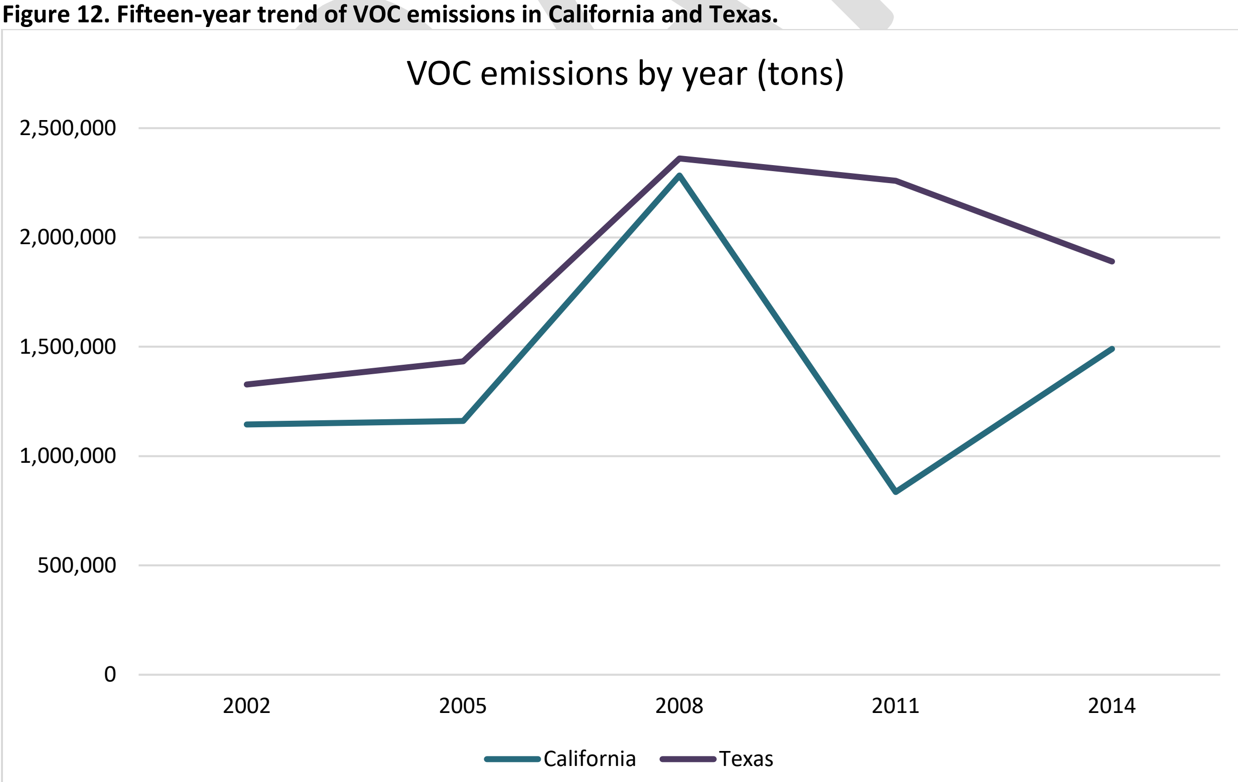


Figure 12. Fifteen-year trend of VOC emissions in California and Texas.



V: Conclusion

This good neighbor SIP demonstrates that New Mexico's emissions do not contribute significantly to nonattainment or interfere with maintenance at the two Colorado receptors examined above. New Mexico's modeled 2023 contribution for these locations is projected to be at or slightly above 1% of the 2015 O_3 NAAQS. However, the contributions of Colorado emissions at these two receptors are projected to substantially outweigh the contributions of all upwind states.

In approving previous good neighbor SIP submissions under the 2008 O_3 NAAQS, EPA found linked upwind states' contributions did not significantly contribute to nonattainment or interfere with maintenance (81 FR 31513, May 19, 2016). In that case, contributions from all upwind states combined were heavily outweighed by emissions contributions from within the receptors' home state.

Emissions in New Mexico are expected to continue to decrease in the future as the state implements federal rules as well as state initiatives to attain and maintain the 2015 O_3 NAAQS within its jurisdiction. In addition, the hypothetical scenario of removing all emissions from New Mexico, would result in an air quality improvement of only 1% at each receptor and within the Denver/NFR NAA as a whole.

Thus, the weight of evidence provided in this submittal demonstrates that emissions from New Mexico do not significantly impact the linked receptors in Colorado and the State meets its good neighbor obligations under the 2015 O_3 NAAQS.