

22.0 Technical Analysis for the Morongo Band of Mission Indians, CA

This technical analysis identifies the area with a monitor that violates the 2015 ozone NAAQS. It also provides the EPA's evaluation of this area and nearby areas to determine whether those nearby areas have emissions sources that potentially contribute to ambient ozone concentrations at the violating monitor in the area.

The Morongo Band of Mission Indians (Morongo Band) is a federally recognized tribe whose Indian country is located in the western part of Riverside County, CA. In addition, the Morongo Band has recently acquired and put into trust land (hereafter referred to as the "August 17, 2016 trust lands") contiguous to the boundary of the Morongo Reservation and is in the final stages of completing a land transfer authorized under section 3607 of the Water Infrastructure Improvements for the Nation Act, signed into law by the President on December 16, 2016 ("December 16, 2016 land transfer") that will transfer certain lands into trust and transfer certain lands out of trust.

On September 20, 2016, the Morongo Band recommended to the EPA that the Indian country of the Morongo Band of Mission Indians be designated as a separate nonattainment area from the surrounding state area for the 2015 ozone NAAQS. Please see September 20, 2016 letter from Robert Martin, Chairman, Morongo Band of Mission Indians to Deborah Jordan, Director, Air Division, EPA Region IX. On August 29, 2017, the Morongo Band supplemented its recommendation with a description of the land transfer referred to above as the December 16, 2016 land transfer and a revised boundary map reflecting the land transfer. Please see email from Dana Morey, Environmental Department Manager, Morongo Band of Mission Indians, to Alexis Strauss, Acting Regional Administrator, EPA Region IX.

In 2004, the EPA established the Los Angeles-South Coast Air Basin nonattainment boundaries for the 1997 ozone NAAQS consistent with those established for the 1-hour ozone NAAQS. The Los Angeles-South Coast Air Basin nonattainment area included the entirety of Orange County, the southwestern portion of Los Angeles County, the southwest portion of San Bernardino County, and the western portion of Riverside County. In 2004, the Morongo Band's Indian country was included as part of the Los Angeles-South Coast Air Basin nonattainment area for the 1997 ozone NAAQS.

In designating areas of the United States for the 2008 ozone NAAQS, the EPA designated the Morongo Band's reservation lands as a separate nonattainment area consistent with the Morongo Band's recommendation (see letters from Robert Martin, Chairman, Morongo Band of Mission Indians, to Deborah Jordan, Director, U.S. EPA Region IX Air Division, dated June 18, 2009, and from Jeff R. Keohane, Forman & Associates, on behalf of the Morongo Band of Mission Indians, to Jared Blumenfeld, Regional Administrator, U.S. EPA Region IX, dated February 27, 2012).

At the request of the Tribe, on September 23, 2013, the EPA revised the boundaries of the Morongo Band's area for the 1-hour and 1997 8-hour ozone NAAQS consistent with the boundaries identified for the Morongo Band's area under the 2008 ozone NAAQS (see 78 FR 58189, dated September 23, 2013). The EPA's analysis for the 2008 ozone NAAQS designations process and the analysis for our action dated September 23, 2013, regarding the 1997 ozone NAAQS, were each predicated on the geographic extent of Morongo Band Indian country at the time and did not consider lands placed in trust since then.

For the EPA's 2015 ozone NAAQS, the area of analysis for the intended nonattainment boundary for the Morongo Band includes all of the Morongo Band's Indian country in the Banning Pass area in

Riverside County that is either reservation lands or lands placed in trust for the Tribe (including those accepted into trust as of August 17, 2016) and those anticipated to be accepted into trust upon the completion of the December 16, 2016 land transfer. The EPA intends to designate surrounding state lands as part of the separate Los Angeles-South Coast Air Basin, CA and Riverside County (Coachella Valley), CA nonattainment areas. More information on this is contained in the associated Technical Analysis section for the Los Angeles-South Coast Air Basin and Riverside County (Coachella Valley) intended nonattainment areas.

Unless otherwise specified, in the following sections of this TSD, “the Morongo Band’s jurisdictional area” refers to all of the Morongo Band’s Indian country in the Banning Pass area that is either reservation lands or lands placed in trust for the tribe (including those accepted into trust as of August 17, 2016) and those anticipated to be accepted into trust upon the completion of the December 16, 2016 land transfer.

This analysis was based on the weight-of-evidence of the five factors recommended in the EPA’s ozone designations guidance and other relevant information. In developing this technical analysis, the EPA used the latest data and information available to the EPA (and to the states and tribes through the Ozone Designations Mapping Tool and the EPA Ozone Designations Guidance and Data web page).¹ In addition, the EPA considered all additional data or information provided to the EPA by states or tribes. The EPA’s assessment of the Tribe’s separate nonattainment area recommendation and other information was performed in accordance with the EPA’s December 20, 2011 “Policy for Establishing Separate Air Quality Designations for Areas of Indian Country” (Tribal Policy)².

Table 22.1 identifies the area of analysis for the Morongo intended nonattainment area. The area of analysis includes all lands under the Morongo Band’s tribal jurisdiction, which consists of lands in Riverside County. Nontribal lands in this county are analyzed in other sections of this document. The area of analysis comprises portions of the Riverside-San Bernardino-Ontario CBSA and Los Angeles-Long Beach CSA. The intended nonattainment area differs from the existing 1997 and 2008 Morongo nonattainment areas (see above trust lands and designations discussion).

Table 22.1 Area of Analysis.

| Intended Nonattainment Area | Area of Analysis | Associated CBSA | Associated CSA |
|------------------------------------|--|--|---------------------------------------|
| Morongo Band of Mission Indians | All lands under Morongo Band’s tribal jurisdiction in Riverside County | Riverside-San Bernardino-Ontario CBSA (partial)* | Los Angeles-Long Beach CSA (partial)* |

*The remainder of the CBSA/CSA was analyzed in the context of an adjacent nonattainment area.

The five factors recommended in the EPA’s guidance are:

1. Air Quality Data (including the design value calculated for each Federal Reference Method (FRM) or Federal Equivalent Method (FEM) monitor);

¹ The EPA’s Ozone Designations Guidance and Data web page can be found at <https://www.epa.gov/ozone-designations/ozone-designations-guidance-and-data>.

² <https://www.epa.gov/sites/production/files/2016-02/documents/indian-country-separate-area.pdf>

2. Emissions and Emissions-Related Data (including locations of sources, population, amount of emissions, and urban growth patterns);
3. Meteorology (weather/transport patterns);
4. Geography/Topography (including mountain ranges or other physical features that may influence the fate and transport of emissions and ozone concentrations); and
5. Jurisdictional Boundaries (e.g., counties, air districts, existing nonattainment areas, areas of Indian country, Metropolitan Planning Organizations (MPOs)).

Figure 22.1a is a map of the EPA's intended nonattainment boundary for the Morongo Band. The map shows the location of the ambient air quality monitor, county boundaries, tribal boundaries, and existing 1997 and 2008 ozone NAAQS nonattainment boundaries. The EPA does not intend to modify the 2015 ozone NAAQS designation recommendation that we received from the Morongo Band.

Figure 22.1b shows the intended nonattainment area in greater detail.

Figure 22.1a The EPA's Intended Nonattainment Boundaries for the Morongo Band of Mission Indians, CA.

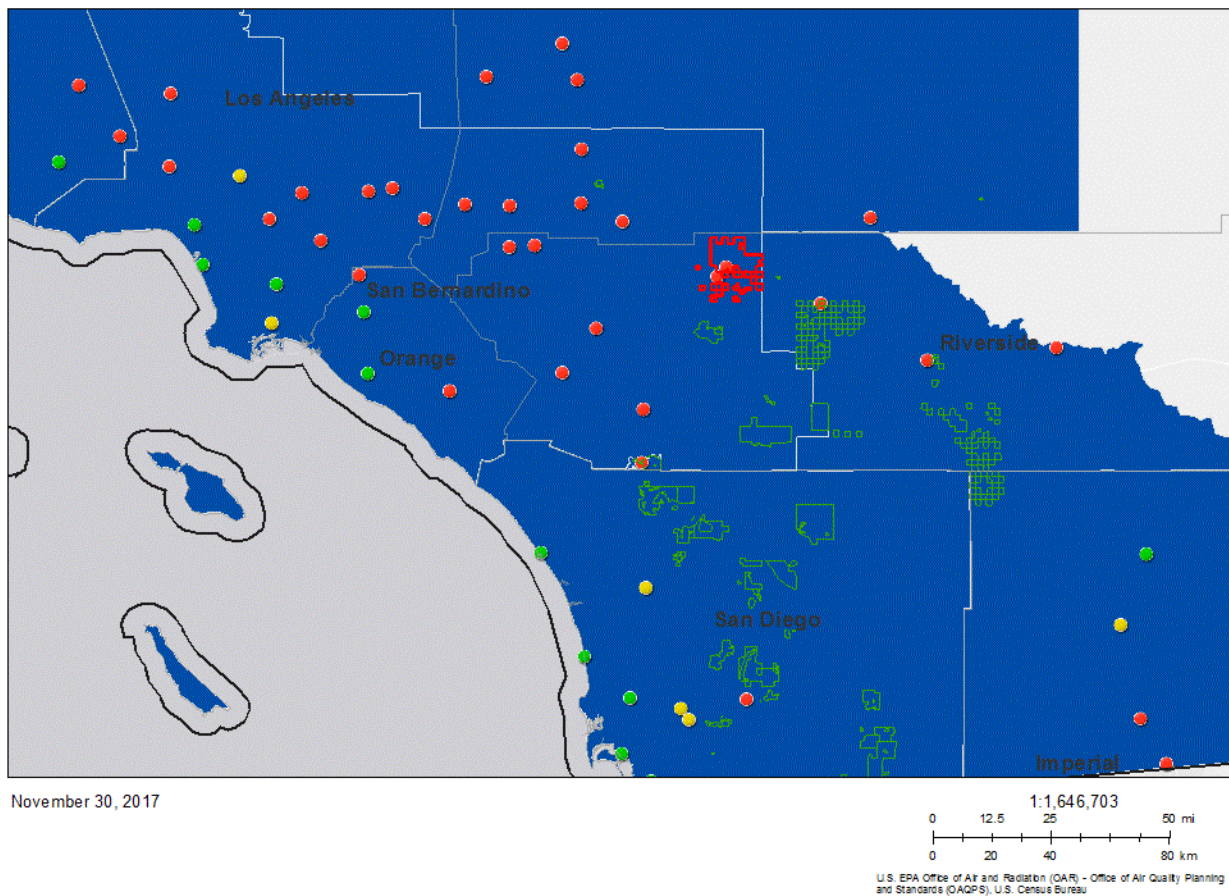


Figure 22.1a shows the EPA's intended nonattainment boundary for Morongo Band as a red line. Nonattainment areas for the 1997 and 2008 ozone NAAQS are shown in dark blue areas. Monitors are shown as red (violating), green (attaining), or yellow (invalid) dots based on 2014-2016 design values. Tribal land boundaries are outlined in green. Please refer to the master legend near the beginning of this document.

Figure 22.1b The EPA’s Intended Nonattainment Boundaries for the Morongo Band of Mission Indians, CA (zoomed in).

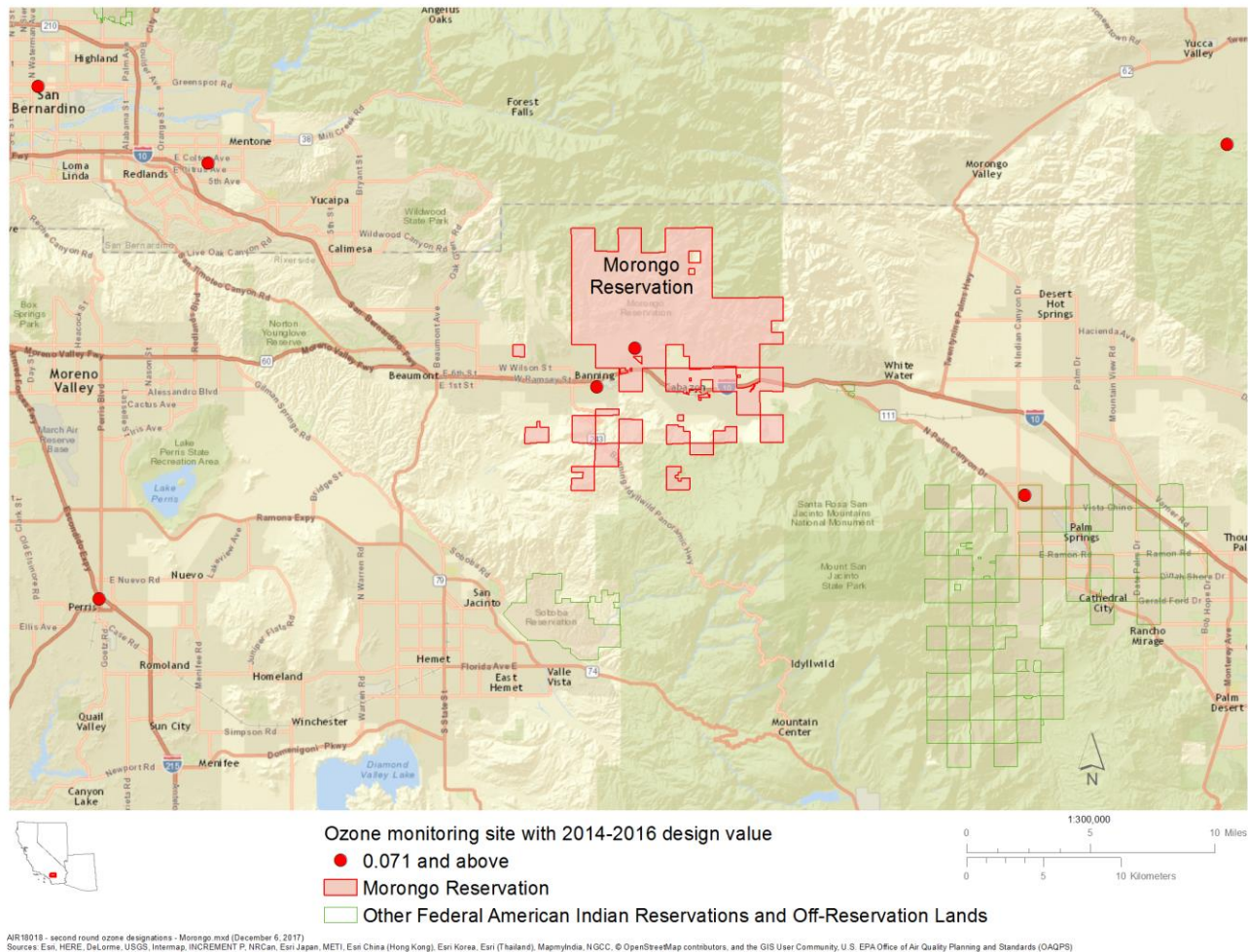


Figure 22.1b shows the EPA’s intended nonattainment boundary for Morongo Band in greater detail, denoted with red outline and pink fill.

The EPA must designate as nonattainment any area that violates the NAAQS and any nearby areas that contribute to the violation in the violating area. The Morongo Band has a monitor in violation of the 2015 ozone NAAQS, therefore the Morongo Band's lands are included in the intended Morongo nonattainment area.

The following sections describe the five factor analysis. While the factors are presented individually, they are not independent. The five factor analysis process carefully considers the interconnections among the different factors and the dependence of each factor on one or more of the others, such as the interaction between emissions and meteorology for the area being evaluated.

Factor Assessment

Factor 1: Air Quality Data

The EPA considered 8-hour ozone design values in ppm for air quality monitors in the Morongo Band area of analysis based on data for the 2014-2016 period (i.e., the 2016 design value, or DV). This is the

most recent three-year period with fully-certified air quality data.³ The design value is the 3-year average of the annual 4th highest daily maximum 8-hour average ozone concentration.⁴ The 2015 NAAQS are met when the design value is 0.070 ppm or less. Only ozone measurement data collected in accordance with the quality assurance (QA) requirements using approved (FRM/FEM) monitors are used for NAAQS compliance determinations.⁵ The EPA uses FRM/FEM measurement data residing in the EPA’s Air Quality System (AQS) database to calculate the ozone design values. Individual exceedances or violations of the 2015 ozone NAAQS that the EPA determines have been caused by an exceptional event that meets the administrative and technical criteria in the Exceptional Events Rule⁶ are not included in these calculations. Whenever several monitors are located in a county (or designated nonattainment area), the design value for the county or area is determined by the monitor with the highest valid design value. The presence of one or more violating monitors (i.e. monitors with design values greater than 0.070 ppm) in a county or other geographic area forms the basis for designating that county or area as nonattainment. The remaining four factors are then used as the technical basis for determining the spatial extent of the designated nonattainment area surrounding the violating monitor(s) based on a consideration of what nearby areas are contributing to a violation of the NAAQS.

The EPA identified monitors where the most recent design values violate the NAAQS, and examined historical ozone air quality measurement data (including previous design values) to understand the nature of the ozone ambient air quality problem in the area. Eligible monitors for providing design value data generally include State and Local Air Monitoring Stations (SLAMS) that are operated in accordance with 40 CFR part 58 Appendices A, C, D, and E and operating with an FRM or FEM monitor. These requirements must be met in order to be acceptable for comparison to the 2015 ozone NAAQS for designation purposes. All data from Special Purpose Monitors (SPMs) using an FRM or FEM are eligible for comparison to the NAAQS, subject to the requirements given in the March 28, 2016 Revision to Ambient Monitoring Quality Assurance and Other Requirements Rule (81 FR 17248).

The 2014-2016 design values for monitors in the area of analysis are shown in Table 22.2.

Table 22.2 Air Quality Data (all values in ppm).

| Tribal Area, State | Tribe Recommended Nonattainment? | AQS Site ID | 2014-2016 DV | 2014 4 th highest daily max value | 2015 4 th highest daily max value | 2016 4 th highest daily max value |
|--------------------|----------------------------------|-------------|--------------|--|--|--|
| Morongo Band, CA | Yes | 06-065-1016 | 0.097 | 0.098 | 0.097 | 0.097 |

The Morongo Band’s jurisdictional area shows a violation of the 2015 ozone NAAQS, therefore the Morongo Band’s jurisdictional area is included in the intended nonattainment area. A county (or partial county) must also be designated nonattainment if it contributes to a violation in a nearby area.

³ Air quality data used in these TSDs were pulled from the EPA’s Air Quality System on October 2, 2017 and are available at: https://www.epa.gov/sites/production/files/2017-10/ozone_designvalues_20142016_final_10_02_17_0.xlsx

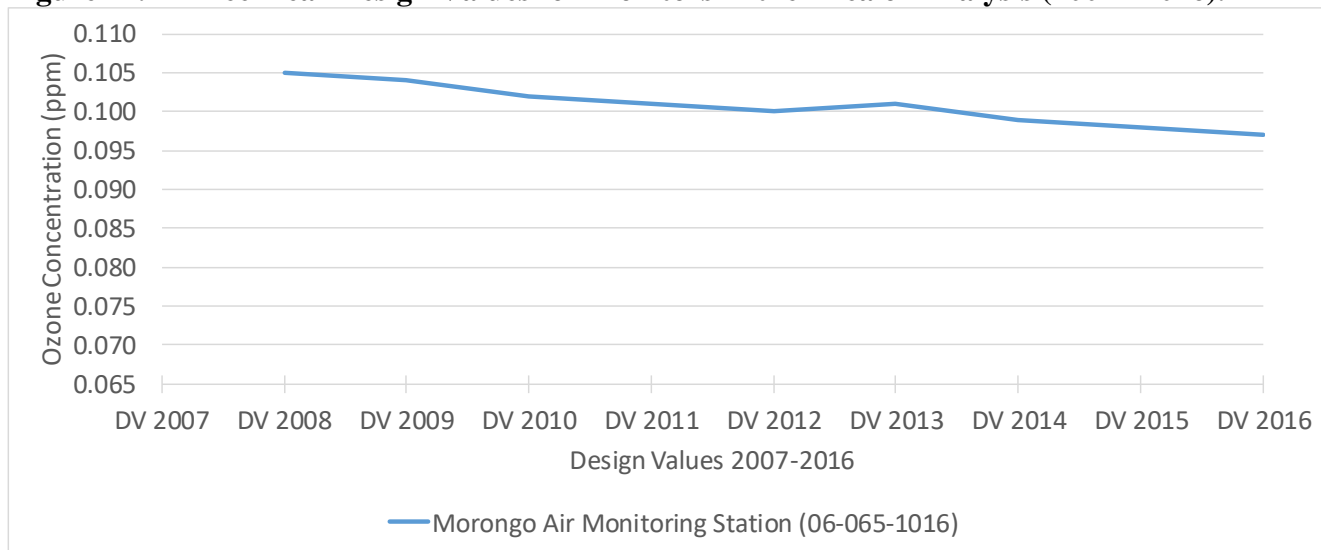
⁴ The specific methodology for calculating the ozone design values, including computational formulas and data completeness requirements, is described in 40 CFR part 50 Appendix U.

⁵ The QA requirements for ozone monitoring data are specified in 40 CFR part 58 Appendix A. The performance test requirements for candidate FEMs are provided in 40 CFR part 53 Subpart B.

⁶ The EPA finalized the rule on the Treatment of Data Influenced by Exceptional Events (81 FR 68513) and the guidance on the Preparation of Exceptional Events Demonstrations for Wildfire Events in September of 2016. For more information, see <https://www.epa.gov/air-quality-analysis/exceptional-events-rule-and-guidance>.

Figure 22.1a, shown previously, identifies the Morongo Band intended nonattainment area and the violating monitor. Table 22.2 identifies the design values for all monitors in the area of analysis. Figure 22.2 shows the historical trend of design values for the single monitor that is located in the Morongo Band’s jurisdictional area. As shown in Figure 22.2, this monitor continues to violate the 2015 ozone NAAQS, but generally shows a gradual downward trend.

Figure 22.2 Three-Year Design Values for Monitors in the Area of Analysis (2007 - 2016).



The Morongo Band’s jurisdictional area has one monitoring site showing a violation of the 2015 ozone NAAQS based on 2014-2016 data. This violating monitor is located within the Morongo Band’s designated nonattainment area for the 1997 and 2008 ozone NAAQS. Therefore, Factor 1 supports including the location of the violating monitor in the Morongo Band’s jurisdictional area within the EPA’s intended nonattainment boundary for the Morongo Band nonattainment area.

Factor 2: Emissions and Emissions-Related Data

The EPA evaluated ozone precursor emissions of nitrogen oxides (NO_x) and volatile organic compounds (VOC) and other emissions-related data that provide information on areas contributing to violating monitors.

Emissions Data

The EPA reviewed data from the 2014 National Emissions Inventory (NEI). For the Morongo Band area of analysis, the EPA examined the magnitude of large sources (NO_x or VOC emissions greater than 100 tons per year) and small point sources for the Morongo Band’s jurisdictional area emissions as reported in the NEI. These emissions represent the sum of emissions from the following general source categories: point sources, non-point (i.e., area) sources, non-road mobile, on-road mobile, and fires. Emissions levels from sources in a nearby area indicate the potential for the area to contribute to monitored violations.

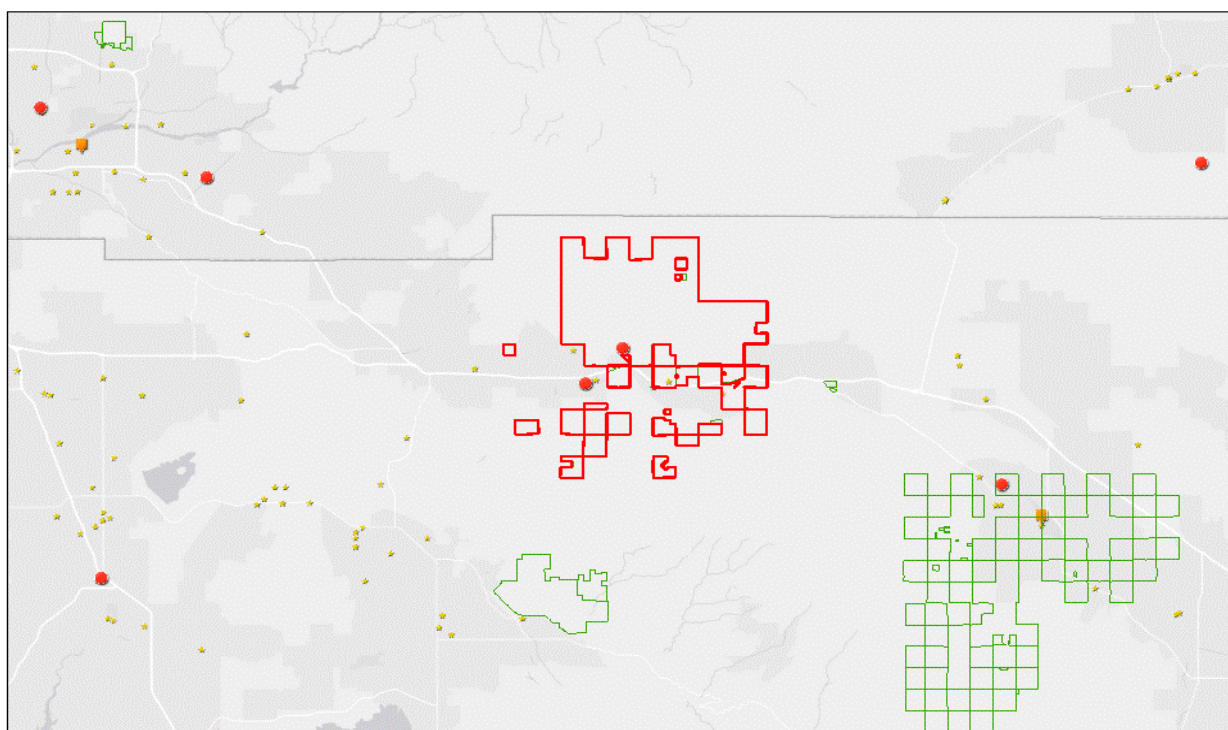
Table 22.3 provides an emissions summary of NO_x and VOC (given in tons per year (tpy)) emissions⁷ for the area of analysis considered for inclusion in the intended Morongo Band nonattainment area.

Table 22.3. Total Morongo Band NO_x and VOC Emissions.

| Tribal Area, State | Tribe Recommended Nonattainment? | Total NO _x (tpy) | Total VOC (tpy) |
|--------------------|----------------------------------|-----------------------------|-----------------|
| Morongo Band, CA | Yes | 143 | 24 |
| | Area wide: | 143 | 24 |

In addition to reviewing emissions of NO_x and VOC in the area of analysis using data from the 2014 NEI (not including biogenics), the EPA also reviewed emissions from large and small point sources within the area of analysis. There are no large point sources within the reservation boundary and one small point source. The location of this source, together with the other factors, can help inform nonattainment boundaries. The locations of the small point source are shown in Figure 22.3 below as a yellow square and is next to the monitor. The intended nonattainment boundary is also shown.

Figure 22.3 Large and Small Point Sources in the Area of Analysis.



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1:411,676
 0 3.5 7 14 mi
 0 5 10 20 km
 U.S. EPA Office of Air and Radiation (OAR) - Office of Air Quality Planning and Standards (OAQPS), U.S. Census Bureau | Map Service: USEPA Office of Environmental Information (OEI), U.S. Census Bureau | Source: U.S. Census Bureau |

Web AppBuilder for ArcGIS

Figure 22.3 shows large point sources in the area of analysis for Morongo Band as orange squares (none appear within the intended nonattainment area). Small point sources are shown as yellow stars. The EPA’s intended nonattainment boundary for Morongo Band is shown as a red line. Monitors are shown as red (violating), green (attaining), or yellow (invalid) dots

⁷ NO_x and VOC data used in this TSD were pulled from the EPA’s 2014 NEI (2014TR582) not including biogenics. Emissions operating type: shutdown, routine, startup, and upset. Pollutants: NO_x and VOC.

based on 2014-2016 design values. Tribal land boundaries are outlined in green. Please refer to the master legend near the beginning of this document.

In summary, the EPA’s analysis of relevant emissions and the geographic locations of the relevant emissions shows that the NO_x and VOC emissions are less than 150 tpy each and there are no large point sources and few small point sources of ozone precursor emissions within the area of analysis.

Population density and degree of urbanization

In this part of the factor analysis, the EPA evaluated the population and vehicle use characteristics and trends of the area as indicators of the probable location and magnitude of non-point source emissions. These include emissions of NO_x and VOC from on-road and non-road vehicles and engines, consumer products, residential fuel combustion, and consumer services. Areas of dense population or commercial development are an indicator of area source and mobile source NO_x and VOC emissions that may contribute to violations of the NAAQS. Table 22.4 shows the population and population density for the Morongo Band area of analysis. The data used in Table 22.4 is the same as that used as the basis for the area designation for the 2008 ozone standard, but the population has remained essentially unchanged since then.

Table 22.4. Population and Growth.

| Tribal Area, State | Tribe Recommended Nonattainment? | 2012 Population | 2012 Population Density (per sq. mi.) |
|--------------------|----------------------------------|-----------------|---------------------------------------|
| Morongo Band, CA | Yes | 1,500 | 27 |
| Area wide: | | 1,500 | 27 |

Figure 22.4 shows that the census tract covering the Morongo Band’s monitor and nearby Morongo jurisdictional lands has a relatively low population as compared to state land census tracts further west and east. We note that Table 22.4 reflects population data for the tribe only, while the census tracts shown in Figure 22.4 reflect population from both state and tribal lands. Based on Table 22.4, there are, on average, approximately 27 tribal members residing per square mile within the Morongo Band’s jurisdictional area.

Figure 22.4 Census Tract-Level Population.

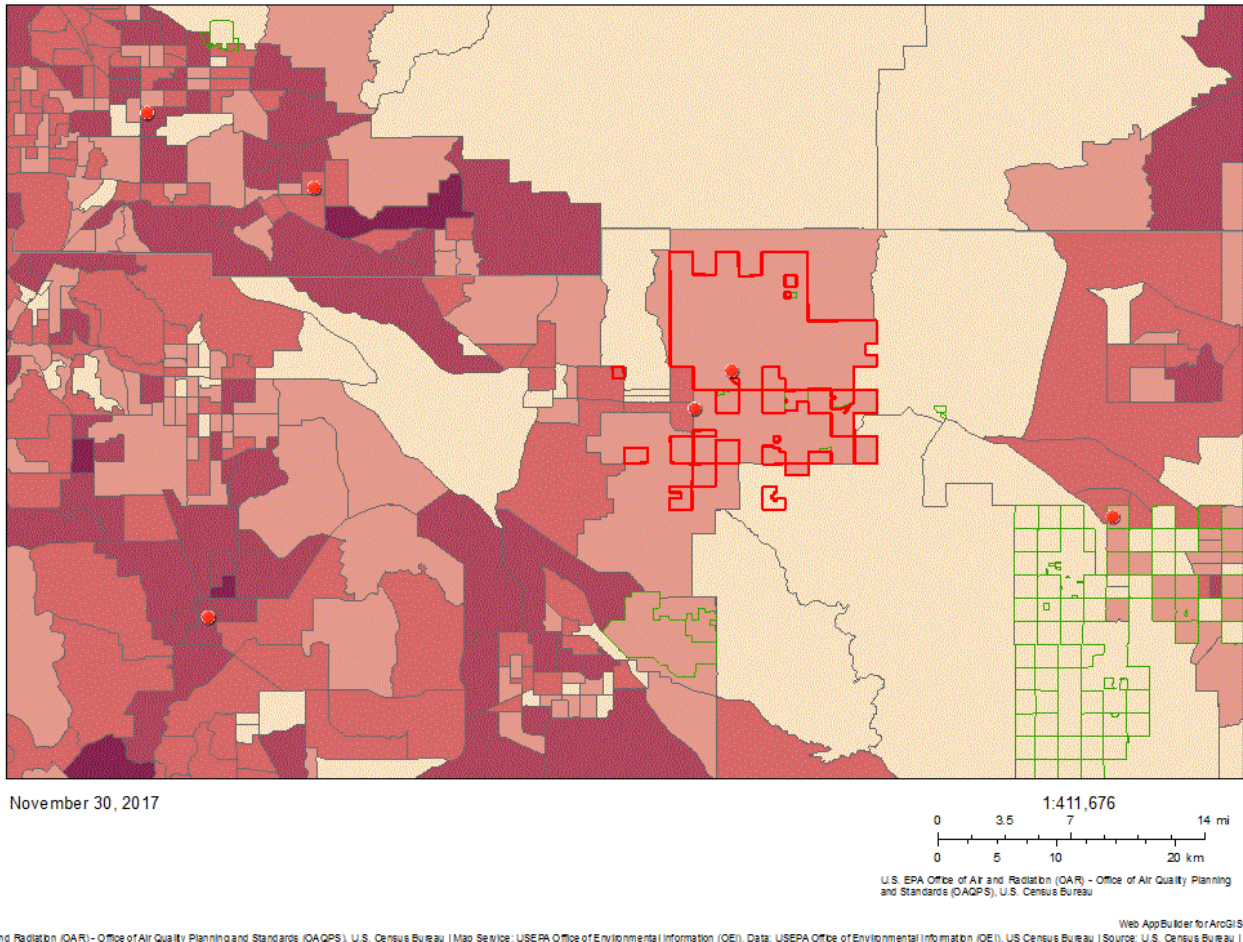


Figure 22.4 shows census tract population in the area of analysis for Morongo Band. Lighter shades of red indicate areas with smaller populations; darker shades of red indicate areas with larger populations. The EPA’s intended nonattainment boundary for Morongo Band is shown as a red line. Monitors are shown as red (violating), green (attaining), or yellow (invalid) dots based on 2014-2016 design values. Tribal land boundaries are outlined in green. Please refer to the master legend near the beginning of this document.

Traffic and Vehicle Miles Travelled (VMT)

The EPA evaluated the commuting patterns of residents, as well as the total vehicle miles traveled (VMT) for each county in the area of analysis. In combination with the population/population density data and the location of main transportation arteries, this information helps identify the probable location of non-point source emissions. A county with high VMT and/or a high number of commuters is generally an integral part of an urban area and high VMT and/or high number of commuters indicates the presence of motor vehicle emissions that may contribute to violations of the NAAQS. Rapid population or VMT growth in a county on the urban perimeter may signify increasing integration with the core urban area, and thus could indicate that the associated area source and mobile source emissions may be appropriate to include in the nonattainment area. In addition to VMT, the EPA evaluated worker data collected by the U.S. Census Bureau for the area of analysis. The data in Table 22.5 are 2014 data.

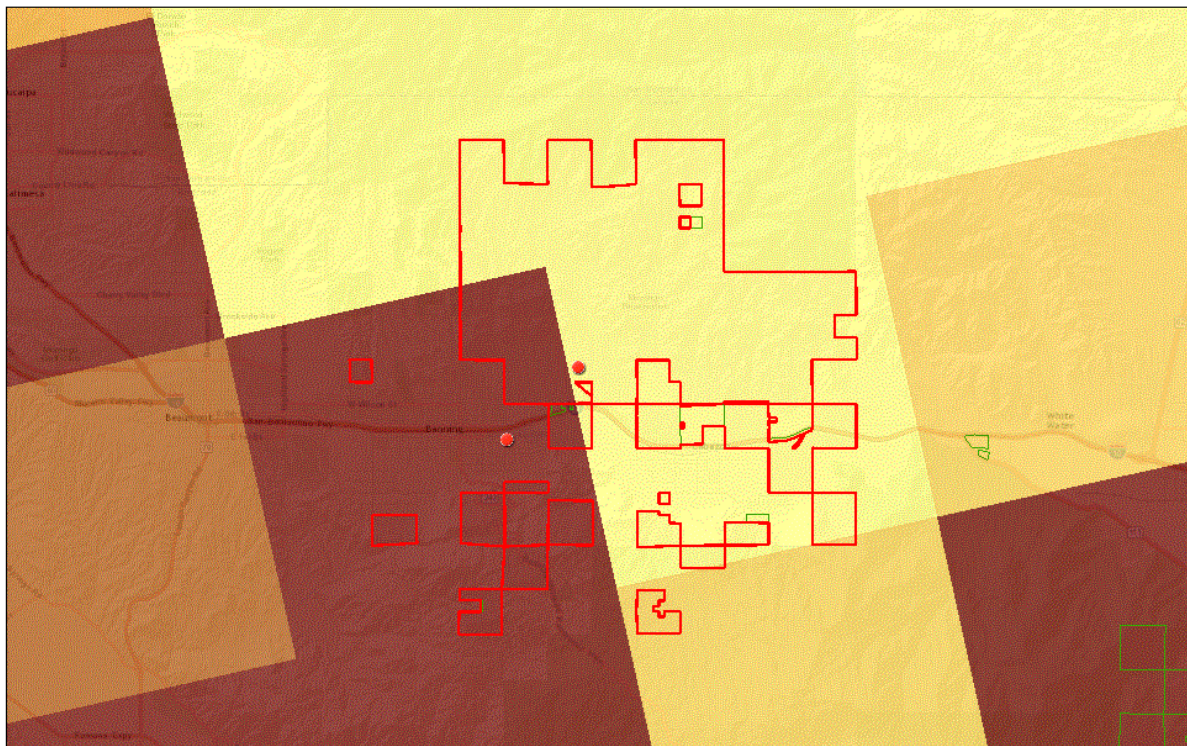
Table 22.5. Traffic and Commuting Patterns.

| Tribal Area, State | Tribe Recommended Nonattainment? | 2014 Total VMT (Million Miles) | Number of Tribal Residents Who Work | Number Commuting To or Within Tribal Area with Violating Monitor(s) Within Area of Analysis | Percentage Commuting To or Within Tribal or County Area with Violating Monitor(s) Within Area of Analysis |
|--------------------|----------------------------------|--------------------------------|-------------------------------------|---|---|
| Morongo Band, CA | Yes | N/A | 179 | 174 | 97.2% |
| Total: | | N/A | 179 | 174 | 97.2% |

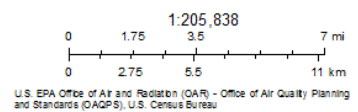
Areas with a monitor(s) violating the NAAQS are indicated in bold.

To show traffic and commuting patterns, Figure 22.5 overlays twelve-kilometer gridded VMT from the 2014 NEI with a map of the transportation arteries.

Figure 22.5 Twelve Kilometer Gridded VMT (Miles) Overlaid with Transportation Arteries.



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Map Service: USEPA Office of Environmental Information (OEI); Data: USEPA Office of Environmental Information (OEI), US Census Bureau | Source: U.S. Census Bureau | City of Riverside, County of Riverside, Bureau of Land Management, Esri, HERE, Garmin, NGA, USGS, NPS | Web App Builder for ArcGIS

Figure 22.5 shows gridded VMT in the area of analysis for Morongo Band. Lighter shades of yellow indicate areas with lower VMT; darker shades of brown indicate areas with higher VMT. The EPA’s intended nonattainment boundary for Morongo Band, CA is shown as a red line. Monitors are shown as red (violating), green (attaining), or yellow (invalid) dots based on 2014-2016 design values. Tribal land boundaries are outlined in green. Please refer to the master legend near the beginning of this document.

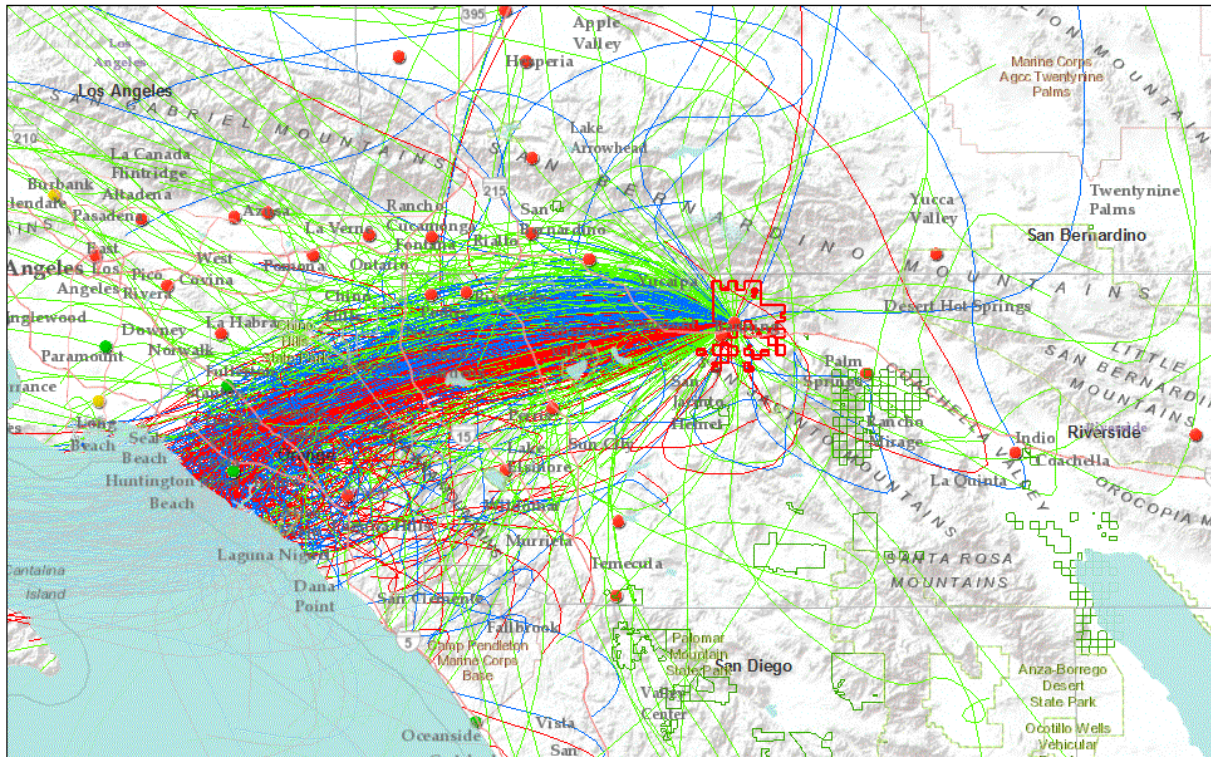
The EPA's analysis of traffic and commuting patterns is based on data from the VMT spreadsheet on the Ozone Designations webpage (see footnote 1) and On the Map data from the Census Bureau,⁸ and shows that VMT is low within the area of analysis, as compared to the surrounding areas to the west, south, and east. Interstate Highway I-10 runs just south of the main body of the Morongo Band's jurisdictional area. Consistent with the EPA's prior designations of the Morongo Band's nonattainment area, emissions from I-10 are included in the technical analysis discussion associated with the intended Los Angeles-South Coast Air Basin nonattainment area.

Factor 3: Meteorology

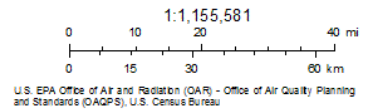
Evaluation of meteorological data helps to assess the fate and transport of emissions contributing to ozone concentrations and to identify areas potentially contributing to the monitored violations. Results of meteorological data analysis may inform the determination of nonattainment area boundaries. In order to determine how meteorological conditions, including, but not limited to, weather, transport patterns, and stagnation conditions, could affect the fate and transport of ozone and precursor emissions from sources in the area, the EPA evaluated 2014-2016 HYbrid Single-Particle Lagrangian Integrated Trajectory (HYSPLIT) trajectories at 100, 500, and 1000 meters above ground level that illustrate the three-dimensional paths traveled by air parcels to a violating monitor. Figure 22.6 shows the 24-hour HYSPLIT back trajectories for each exceedance day (i.e., daily maximum 8-hour values that exceed the 2015 ozone NAAQS) for the violating monitor.

⁸ The Census Bureau's On The Map web page can be found at <https://onthemap.ces.census.gov/>.

Figure 6. HYSPLIT Back Trajectories for Morongo Monitor (AQS ID 06-065-1016).



December 1, 2017



Web AppBuilder for ArcGIS | OAQPS, U.S. Census Bureau | Map Service: USEPA Office of Environmental Information (OEI), Data: USEPA Office of Environmental Information (OEI), US Census Bureau | Source: U.S. Census Bureau | Sources: Esri, USGS, NOAA | Sources: Esri, DeLorme, USGS, NPS |

Figure 22.6 shows HYSPLIT back-trajectories starting at 100 (red lines), 500 (green lines), and 1000 (blue lines) meters above ground level, respectively. Trajectories extend back in time 24 hours from 6 p.m. on the day of the exceedance. The EPA's intended nonattainment boundary for Morongo Band is shown as a red line. Monitors are shown as red (violating), green (attaining), or yellow (invalid) dots based on 2014-2016 design values. Tribal land boundaries are outlined in green. Please refer to the master legend near the beginning of this document.

The EPA's HYSPLIT analysis shows back trajectories for days exceeding the 2015 ozone NAAQS in 2014-2016. The HYSPLIT results show that the winds during exceedance days are predominately from the west.

Factor 4: Geography/topography

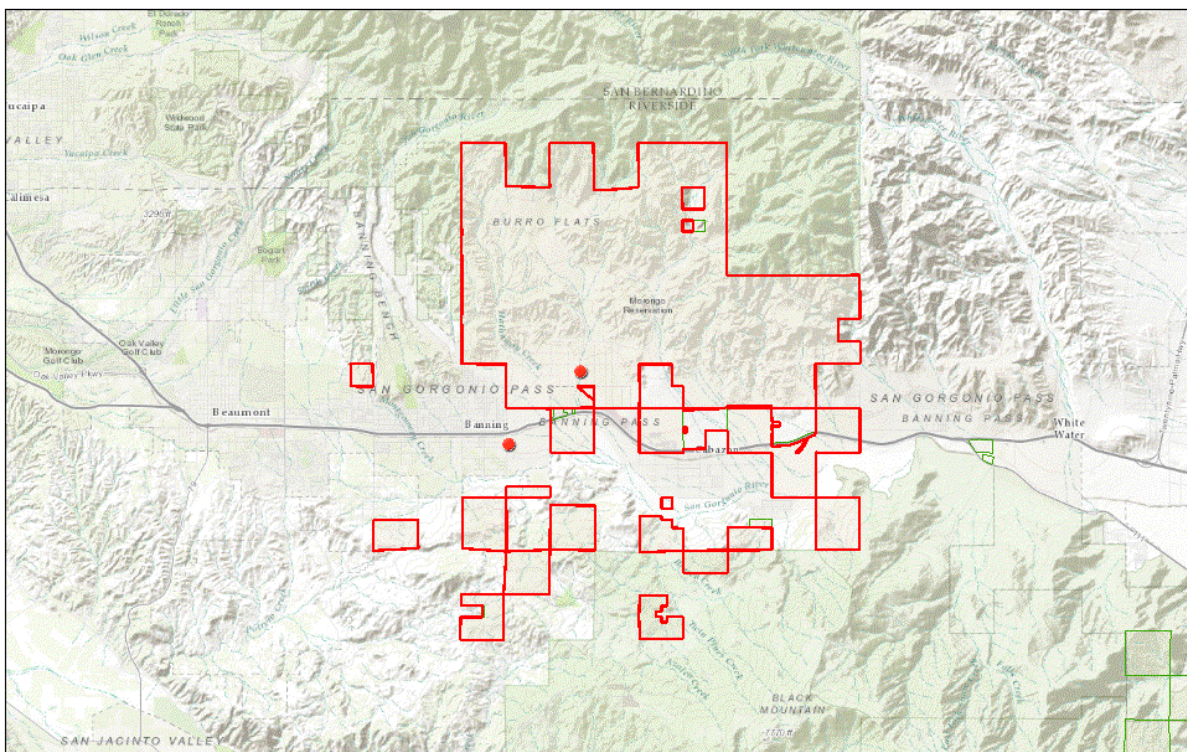
Consideration of geography or topography can provide additional information relevant to defining nonattainment area boundaries. Analyses should examine the physical features of the land that might define the airshed. Mountains or other physical features may influence the fate and transport of emissions as well as the formation and distribution of ozone concentrations. The absence of any such geographic or topographic features may also be a relevant consideration in selecting boundaries for a given area.

The EPA used geography/topography analysis to evaluate the physical features of the land that might affect the airshed and, therefore, the distribution of ozone over the area.

In the western U.S., topography impacts pollutant formation and transport, and thus plays an important role in assessing what areas are contributing to monitored violations of the NAAQS.

The Morongo Band's jurisdictional area is located in an area known as Banning Pass, which is an elevated mountain pass connecting the South Coast Air Basin to the Coachella Valley portion of the Salton Sea Air Basin. The Banning Pass (also known as the San Gorgonio Pass) is one of the three major routes by which air pollutants are transported out of the Los Angeles metropolitan area (which lies within the South Coast Air Basin). Banning Pass runs in an east-west direction for about 15 miles and is about 5 miles wide. The pass starts west of Beaumont at an elevation of about 2,200 feet and reaches a maximum elevation of around 2,600 feet in the city of Beaumont, then drops to an elevation of near 1,400 feet between Cabazon and White Water. The San Bernardino Mountains are on the north side of the pass and the San Jacinto Mountains are on the south side. The San Bernardino Mountains reach a maximum elevation of approximately 11,500 feet at the top of San Gorgonio Mountain and the San Jacinto Mountains reach a maximum elevation of approximately 10,800 feet at Mt. San Jacinto.

Figure 22.7 Topographic Illustration of the Physical Features



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1:205,838
0 1.75 3.5 7 mi
0 2.75 5.5 11 km

Sources: Esri, HERE, DeLorme, Intermap, InCREMENT P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

Map Service: USEPA Office of Environmental Information (OEI). Data: USEPA Office of Environmental Information (OEI), US Census Bureau | Source: U.S. Census Bureau | County of Riverside, Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS | Web AppBuilder for ArcGIS

Figure 22.7 shows the topography in the area of analysis for Morongo Band. The EPA's intended nonattainment boundary for Morongo Band, CA is shown as a red line. Monitors are shown as red (violating), green (attaining), or yellow (invalid) dots based on 2014-2016 design values. Tribal land boundaries are outlined in green. Please refer to the master legend near the beginning of this document.

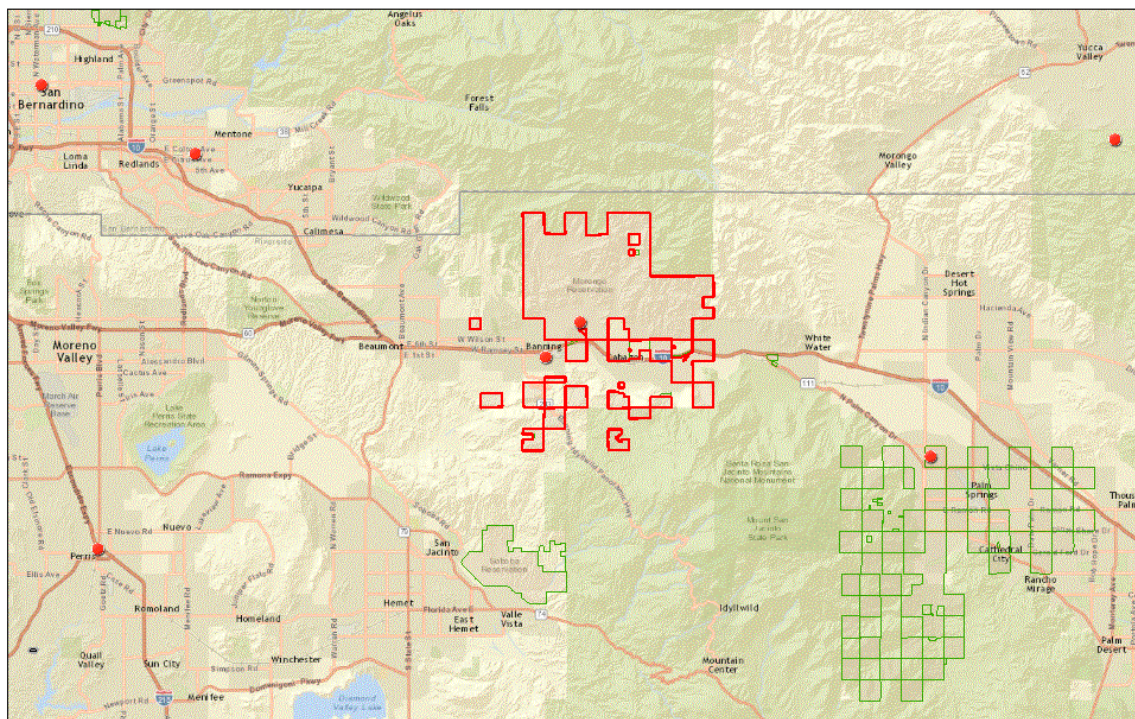
Factor 5: Jurisdictional boundaries

Once the geographic extent of the violating area and the nearby area contributing to violations was determined, the EPA considered existing jurisdictional boundaries for the purposes of providing a clearly defined legal boundary to carry out the air quality planning and enforcement functions for nonattainment areas. In defining the boundaries of the intended Morongo Band nonattainment area, the EPA considered existing jurisdictional boundaries, which can provide easily identifiable and recognized boundaries for purposes of implementing the NAAQS. Examples of jurisdictional boundaries include, but are not limited to: counties, air districts, areas of Indian country, metropolitan planning organizations (MPOs), and existing nonattainment areas. If an existing jurisdictional boundary is used to help define the nonattainment area, it must encompass all of the area that has been identified as meeting the nonattainment definition. Where existing jurisdictional boundaries are not adequate or appropriate to describe the nonattainment area, the EPA considered other clearly defined and permanent landmarks or geographic coordinates for purposes of identifying the boundaries of the intended designated areas.

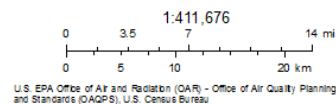
Figure 22.8 shows the relevant jurisdictional boundaries for the Morongo Band. The Morongo Band has previously established nonattainment boundaries associated with the 1997 and 2008 ozone NAAQS. The Morongo Band's lands are located in the western portion of the Riverside-San Bernardino-Ontario MSA.

The Morongo Band's jurisdictional area for the 2015 ozone designations process includes all of the Morongo Band's Indian country in the Banning Pass area that is either reservation lands or lands placed in trust for the tribe (including those accepted into trust as of August 17, 2016) and that anticipates the completion of the December 16, 2016 land transfer. As noted above, the August 17, 2016 trust lands are contiguous to the boundary of the main body of the Morongo Reservation. The same is true for the land to be placed in trust upon completion of the December 16, 2016 land transfer. The main body of the Morongo Reservation and the August 17, 2016 trust lands are under the Morongo Band's jurisdiction, and the same is true for the land to be placed in trust upon completion of the December 16, 2016 land transfer.

Figure 22.8 Jurisdictional Boundaries



November 30, 2017



Map Service: USEPA Office of Environmental Information (OEI). Data: USEPA Office of Environmental Information (OEI), US Census Bureau | Source: U.S. Census Bureau | City of Riverside, County of Riverside, Bureau of Land Management, Esri, HERE, Garmin, NGA, USGS, NPS | Web AppBuilder for ArcGIS

Figure 22.8 shows jurisdictional boundaries in the area of analysis for Morongo Band. The EPA’s intended nonattainment boundary for Morongo Band, CA is shown as a red line. Monitors are shown as red (violating), green (attaining), or yellow (invalid) dots based on 2014-2016 design values. Tribal land boundaries are outlined in green. Please refer to the master legend near the beginning of this document.

The Morongo Band has previously established nonattainment boundaries associated with the 1997 and 2008 ozone NAAQS. The Morongo Band has recommended a different boundary for the 2015 ozone NAAQS due to additional lands being placed in trust since those designations were established. For the 2015 ozone NAAQS, the Morongo Band’s recommended nonattainment area includes all of the Morongo Band’s Indian country in the Banning Pass area that is either reservation lands or lands placed in trust for the tribe (including those accepted into trust as of August 17, 2016) over which the Morongo Band has jurisdiction and those lands soon to be placed in trust upon completion of the December 16, 2016 land transfer.

As defined at 18 U.S.C. 1151, “Indian country” refers to: “(a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation, (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.” The EPA recognizes the sovereignty of tribal governments, and has attempted to take the input of the tribes into account in establishing appropriate nonattainment area boundaries.

The EPA’s assessment of the jurisdictional factor was performed in accordance with the Tribal Designations Policy. The policy stresses the importance of recognizing tribal sovereignty and the

jurisdictional status of Indian country in the decision-making process. It also articulates circumstances under which the jurisdictional boundaries factor could bear the most weight when evaluating a tribe's multi-factor analysis.

The policy states that it may be appropriate to apply the most weight to the jurisdiction factor in a situation where a Tribe recommends being designated as a separate nonattainment area from an adjacent nonattainment area when an analysis of the factors indicates that there are no sources in Indian country contributing to nonattainment in the adjacent area. As with prior designations analyses, taking into account the relative amount of emissions associated with activities within the Morongo Band jurisdictional area and corresponding minimal contribution to regional ozone violations, we believe that under the circumstances present here, it would be appropriate to assign particular weight to the jurisdictional boundaries factor, consistent with the principles for designations of Indian country set forth in the Tribal Designation Policy and the Tribe's recommendation. This approach is consistent with our prior designations that resulted in the EPA designating the Morongo Reservation as a separate ozone nonattainment area for the 1-hour ozone, 1997 8-hour ozone, and 2008 8-hour ozone standards. Therefore, consistent with the prior designations of the Morongo Reservation for the earlier ozone standards, we propose to apply the most weight to the jurisdiction factor in our designations analysis for the 2015 8-hour ozone standard.

Conclusion for the Morongo Band of Mission Indians, CA

Based on the assessment of the five factors described above (especially the three factors of air quality data, meteorology, and topography) and assigning particular weight to the jurisdiction factor, the EPA does not intend to modify the Morongo Band's recommendation to establish a separate nonattainment area for the Morongo Band's jurisdictional area for the 2015 ozone standard

We intend to designate as nonattainment all of the Morongo Band's Indian country in the Banning Pass area in Riverside County that is either reservation lands or lands placed in trust for the tribe (including those accepted into trust as of August 17, 2016) and those anticipated to be accepted into trust upon the completion of the December 16, 2016 land transfer. The air quality monitor in the Morongo Band's jurisdictional area indicates a violation of the 2015 ozone NAAQS based on the 2016 design values. NO_x and VOC emissions are less than 150 tpy each and there are no large point sources and few small point sources of ozone precursor emissions within the area of analysis. There are, on average, approximately 27 tribal members residing per square mile within the Morongo Band's jurisdictional area. Interstate Highway I-10 runs just south of the main body of the Morongo Band's jurisdictional area. HYSPLIT results show that the winds during exceedance days are predominately from the west. The Morongo Band is located in the Banning Pass, which is one of the three major routes by which air pollutants are transported out of the Los Angeles metropolitan area. The Morongo Band jurisdictional area is designated as a separate nonattainment area for the 1-hour ozone, 1997 8-hour ozone, and 2008 8-hour ozone standards.⁹ The EPA's Tribal Designations Policy further supports designating this area separately from adjacent non-tribal lands.

The EPA therefore intends to designate the lands within the Morongo Band's jurisdiction as "nonattainment" separate from the adjacent Los Angeles South Coast Air Basin and Riverside County (Coachella Valley) intended nonattainment areas.

⁹ See 78 FR 58189, dated September 23, 2013 and 77 FR 30088, dated May 21, 2012.