

Technical Support Document for 2008 Ozone NAAQS Designations

California Area Designations for the 2008 Ozone National Ambient Air Quality Standards

Technical Analysis for San Luis Obispo (Eastern San Luis Obispo)

Figure 1 is a map of San Luis Obispo County, CA. The map provides other relevant information including the locations and design values of air quality monitors, county names and boundaries and indicates EPA's partial county nonattainment designation. See Map 14 in Appendix 1 (and inserted under Factor 1, below) for a detailed map of the partial county boundary that EPA is designating nonattainment.

San Luis Obispo (Eastern San Luis Obispo), CA

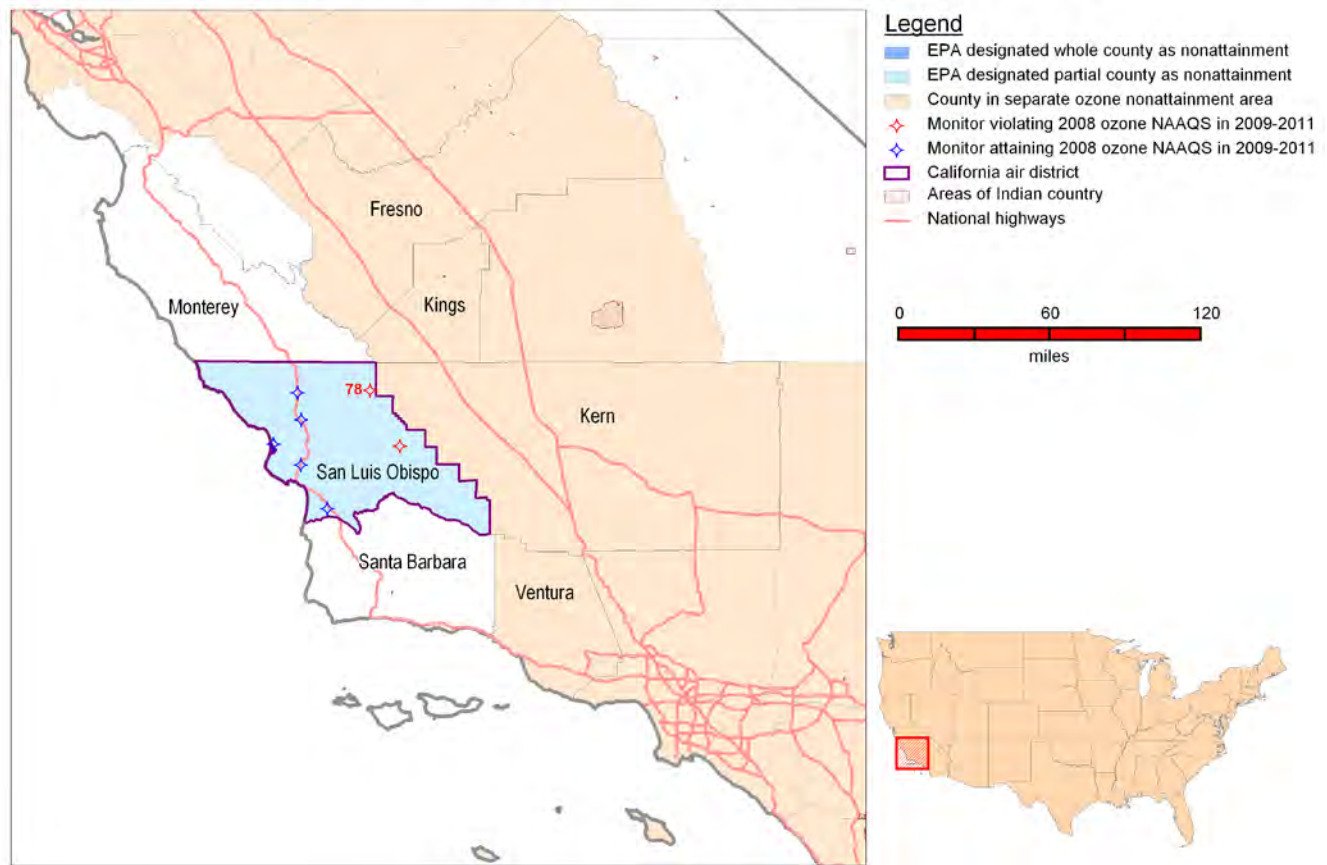


Figure 1

Note: The map shown in Figure 1 provides 8-hour ozone design values in parts per billion (ppb) based on data from the 2009-2011 period (i.e., the 2011 design value, or DV), which are the most recent years with fully-certified air quality data. For each particular area, Factor 1 and Appendix 3 describe the air quality data relevant for our nonattainment decisions.

In March 2009, California recommended that a new partial-county area be designated as “nonattainment” for the 2008 ozone NAAQS based on air quality data from 2006-2008 (letter from James Goldstene, Executive Officer, California Air Resources Board, to Laura Yoshii, Acting Regional Administrator, U.S. EPA Region IX, dated March 11, 2009). California provided an update to the original recommendation in October 2011 based on air quality data from 2008-2010 and preliminary 2009-2011 data and indicating to EPA that it intended to early-certify data for 2011 so that it could be used for the final designations, but did not revise its recommendation for San Luis Obispo County. The 2009 and 2011 recommendations are based on data from Federal Equivalent Method (FEM) monitors sited and operated in accordance with 40 CFR Part 58 (letter from Lynn Terry, Deputy Executive Officer, California Air Resources Board, to Deborah Jordan, Director, U.S. EPA Region IX Air Division, dated October 12, 2011).

After considering these recommendations and based on EPA's technical analysis described below, EPA is designating San Luis Obispo County (partial) in California nonattainment for the 2008 ozone NAAQS, as the San Luis Obispo (Eastern San Luis Obispo) nonattainment area.

Table 1. State’s or Tribe’s Recommended and EPA’s 2008 ozone NAAQS Nonattainment Counties or Areas of Indian country for San Luis Obispo (Eastern San Luis Obispo).

San Luis Obispo (Eastern San Luis Obispo), CA	State or Tribe-Recommended Nonattainment Counties or Areas in Indian country	EPA’s Nonattainment Counties or Areas in Indian Country
San Luis Obispo County	San Luis Obispo County (p)	San Luis Obispo County (p)
No areas of Indian country located within the nonattainment area		

p = partial

Factor Assessment

Factor 1: Air Quality Data

For this factor, we considered 8-hour ozone design values for air quality monitors in San Luis Obispo County, based on data from the most recent three-year period for which we had timely submitted certified air quality data. San Luis Obispo County Air Pollution Control District (APCD) and California Air Resources Board (ARB) submitted certified air quality data for 2011 before February 29, 2012 for this area; thus, for purposes of the final designations, we are considering air quality from the 2009-2011 period (i.e., the 2011 DV) for this area. A monitor’s DV is the metric or statistic that indicates whether that monitor attains a specified air quality standard. The 2008 ozone NAAQS are met at a monitor when the annual fourth-highest daily maximum 8-hour average concentration, averaged over 3 years, is 0.075 parts per million (ppm) (75 parts per billion (ppb)) or less. A DV is only valid if minimum data completeness criteria are met. See 40 CFR part 50 Appendix P. Where several monitors are located in a county (or a designated nonattainment area or maintenance area), the DV for the county or area is determined by the monitor with the highest level.

[Note: Monitors that are eligible for providing design value data generally include State and Local Air Monitoring Stations (SLAMS) that are sited in accordance with 40 CFR Part 58, Appendix D (Section 4.1) and operating with a federal reference method (FRM) or federal equivalent method (FEM) monitor that meets the requirements of 40 CFR part 58, Appendix A. All data from a special purpose monitor (SPM) using an FRM or FEM which has operated for more than 24 months is eligible for comparison to the NAAQS unless the monitoring agency demonstrates that the data came from a particular period

during which the requirements of Appendix A (quality assurance requirements) or Appendix E (probe and monitoring path siting criteria) were not met.]

Certified, quality assured data are available in EPA’s Air Quality System (AQS) for all areas through calendar year 2010. California’s ozone season encompasses the entire year. Preliminary, non-certified data from calendar year 2011 is available in AQS for most areas. States are required to certify and quality assure data by May 1st of the following year. San Luis Obispo County APCD and ARB certified 2011 data by February 29, 2012 for San Luis Obispo County. EPA’s designation for this area is therefore based on 2009-2011 data. As shown in Table 2, air quality data from 2009-2011 data indicate that San Luis Obispo County is violating the 2008 ozone NAAQS. San Luis Obispo County’s 2010 DV was 84 ppb. Ozone monitors relevant for comparison to the NAAQS and information from additional data sources within San Luis Obispo County are shown in Appendix 1, Map 14 (also inserted below).

Table 2. Air Quality Data.

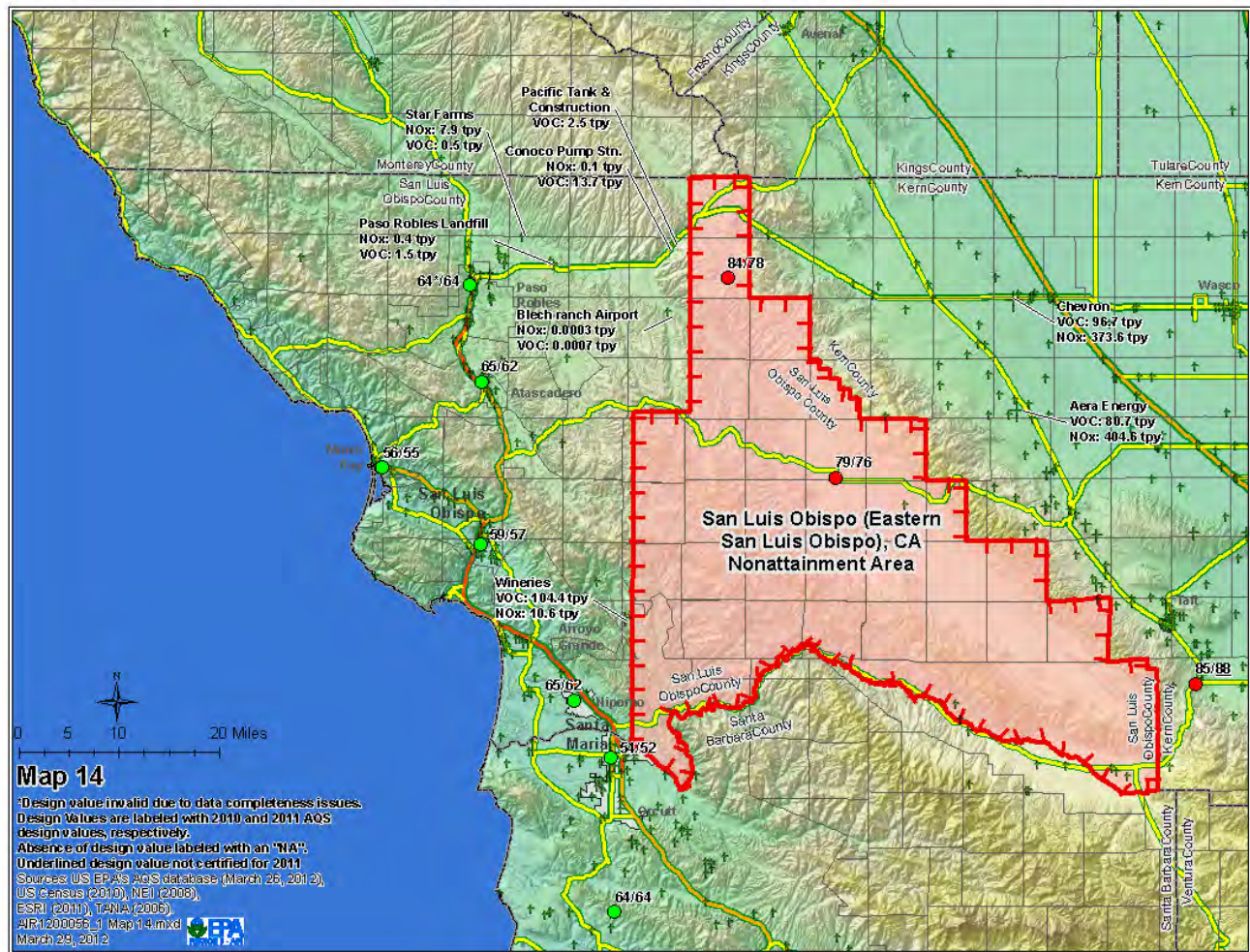
County	State Recommended Nonattainment?	2009-2011 Design Value (ppb)
San Luis Obispo, CA	Yes (partial)	78

Maps contained in Appendix 1 show the geographic distribution of monitors. Map 14 shows monitor locations for San Luis Obispo County. For each monitor, Appendix 1 lists the monitor, the 2008-2010 DV (certified and quality assured in AQS. These were the most recent data available at the time we notified the State of our intended designation) and the 2009-2011 DV (which has been certified and which we are relying on for our final designation decisions for this area). Absence of a DV is symbolized with an “x”.

Appendix 3 lists 2009-2011 DVs for San Luis Obispo County. Monitors shown in bold are the DV monitors (i.e., the monitor with the highest DV) for each individual county. Monitors shown in red font are the DV monitor for the nonattainment area. Values with an asterisk do not meet data completeness, and therefore those DVs are not relevant for comparison to the NAAQS and are solely provided for informational purposes.

The State of California recommended a partial county nonattainment designation for San Luis Obispo County. As shown on Map 14 in Appendix 1, the only violating monitors in San Luis Obispo County are in the eastern portion of the county, based on certified 2009-2011 data. All five monitors in the western portion of the county are attaining the 2008 ozone NAAQS and both monitors in the eastern portion of the county are violating.

A county (or partial county) must also be designated nonattainment if it contributes to a violation in a nearby area. Each county without a violating monitor that is located near a county with a violating monitor has been evaluated based on the weight of evidence of the five factors to determine whether it contributes to the nearby violation.



From Appendix 1, Map 14: For map legend describing monitors, emissions, traffic, population, and boundaries, see Appendix 1.

Factor 2: Emissions and Emissions-Related Data

EPA evaluated emissions of ozone precursors, 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

EPA evaluated county-level emission data for NO_x and VOC derived from the 2008 National Emissions Inventory (NEI), version 1.5. This is the most recently available NEI (see <http://www.epa.gov/ttn/chief/net/2008inventory.html>). Emissions in a nearby area indicate the potential for the area to contribute to observed violations. Table 3 shows emissions of NO_x and VOC (given in tons per year) for San Luis Obispo County.

Table 3. Total 2008 NO_x and VOC Emissions.

County	State Recommended Nonattainment?	NO _x (tpy)	VOC (tpy)
San Luis Obispo, CA	Yes (partial)	7,463	8,460
	Areawide:	7,463	8,460

The eastern part of San Luis Obispo County has very few sources of emissions (see Map 14 of Appendix 1). Almost all stationary sources in the county are found at lower elevations and are located in the western part of the county, close to attaining monitors within the county and a substantial distance away from any violating monitors. In contrast, there are a large number of large stationary sources beyond the county lines to the east, on the other side of the coastal range that divides the coastal portion of San Luis Obispo County from the San Joaquin Valley.

Population density and degree of urbanization

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 ozone-creating emissions from on-road and off-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, which contribute to ozone formation. Rapid population growth or growth in vehicle miles traveled (VMT) (see below) in a county on the urban perimeter signifies increasing integration with the core urban area, and indicates that it may be appropriate to include the area associated with area source and mobile source emissions as part of the nonattainment area. Table 4 shows the population, population density, and population growth information for San Luis Obispo County.

Table 4. Population and Growth.

County	State Recommended Nonattainment?	2010 Population	2010 Population Density (1000 pop/sq mi)	Absolute change in population (2000-2010)	Population % change (2000-2010)
San Luis Obispo, CA	Yes (partial)	269,637	0.08	21,761	+9%
Areawide:		269,637	0.08	21,761	+9%

Sources: U.S. Census Bureau population estimates for 2010 as of August 4, 2011 (http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_PL_GCTPL2.STO5&prodType=table)

Emissions associated with the population centers in San Luis Obispo County are not expected to cause violations at the higher elevation air quality monitors in the eastern part of San Luis Obispo County. There are relatively few population centers in San Luis Obispo County and they occur primarily on the western portion of the county, near the coast as well as along the major roadways (see Map 14a in Appendix 2). The largest population centers of San Luis Obispo, Atascadero, and Paso Robles are still quite small compared to population centers in neighboring Kern County in the San Joaquin Valley nonattainment area (for example, the Bakersfield-Delano Metro Area – see Map 13a in Appendix 2). The population density of the county is slightly lower than Kern County (approximately 1.3 times smaller) and the overall population of San Luis Obispo County is over 3 times smaller than Kern County. Compared to other nonattainment coastal counties like Ventura County or San Diego County, San Luis Obispo County has a very low population density: over 5 times lower than Ventura County and nearly 9 times lower than San Diego County.

Over 2000 - 2010, the population of San Luis Obispo County has grown at a rate of approximately 10%, comparable to Ventura County and San Diego County. The population growth rate of the neighboring Kern County over the same period was 27%. Population growth is associated with even greater growth in traffic and commuting patterns, which are themselves associated with emissions of ozone precursors (see next section).

Traffic (VMT) data

EPA evaluated the commuting patterns of residents in the area, as well as the total VMT for each county. In combination with the population/population density data and the location of main transportation arteries (see above), this information helps identify the probable location of non-point source emissions. A county with high VMT indicates the presence of motor vehicle emissions that may contribute to ozone formation and nonattainment in the area. Rapid population or VMT growth in a county on the urban perimeter signifies increasing integration with the core urban area, and indicates that the associated area source and mobile source emissions may be appropriate to include in the nonattainment area. Table 5 shows total 2008 VMT.

Table 5. Traffic (VMT) data.

County	State Recommended Nonattainment?	2008 VMT* (million miles)
San Luis Obispo, CA	Yes (partial)	3,043
	Areawide:	3,043

*MOBILE model VMTs are those inputs into the NEI version 1.5.

VMT in San Luis Obispo County is roughly 11 times lower than the VMT of San Diego County and 2.6 times lower than the VMT of Ventura County. Similarly, the VMT in San Luis Obispo County is 2.8 times lower than the VMT in Kern County within the adjacent San Joaquin Valley nonattainment area. Major roads are primarily located near the coast and travel between the northern and southern portions of the county (see Map 14 of Appendix 1). There are relatively few roads that link the eastern and western portions of the county, and these roads experience relatively light non-truck traffic. The greatest non-truck traffic occurs on relatively short stretches of roadway, linking San Luis Obispo to Santa Maria along the coastal route to the south, Morro Bay to the northwest, and Atascadero and Paso Robles to the north. These traffic patterns indicate that the western and eastern portions of the county are generally isolated from each other, with most of the traffic flowing generally in a north-south direction.

Factor 3: Meteorology (weather/transport patterns)

EPA evaluated available meteorological data to help determine how meteorological conditions, such as weather, transport patterns and stagnation conditions, would affect the fate and transport of precursor emissions contributing to ozone formation. EPA reviewed information provided by the State, including the State's 2009 recommendation for the ozone area boundaries, and the 2001 "Assessment of the Impacts of Transported Pollutants on Ozone Concentrations in California." In addition, EPA simulated back trajectories for several days when exceedances of the eight hour ozone NAAQS were measured in 2010 in San Luis Obispo County. EPA also reviewed the wind frequency distribution of wind direction data based on an average of 30 years of National Weather Service information for the months of June, July, and August.

The state argues that in the absence of transport from outside the County, it is likely that exceedances would not occur at the monitoring sites in the eastern portion of San Luis Obispo County. The State recommends that, given that ozone exceedances are limited to the eastern portion of the County, and all other sites in the county meet the standard, that only the eastern portion of San Luis Obispo County should be designated as nonattainment. The State has presented the following information for the eastern

portion of San Luis Obispo County as a basis for the March 2009 recommendation for the area's boundaries:¹

“San Luis Obispo County is located in California’s south central coast region and encompasses coastal, as well as inland areas. The design value² for the County is 0.084 ppm, measured at the Carrizo Plains School-9640 Carrizo site in the eastern part of the County. This site is located in a populated area and was originally sited to provide information on transport impacts from the San Joaquin Valley. The design value for a second inland, eastern County site, Red Hills, is also above the standard at a level of 0.088 ppm, but only two years of data are available. In contrast to Carrizo Plains, the Red Hills site is located in an unpopulated area. Design values for all other sites in San Luis Obispo County are below the level of the standard, as are design values for sites in counties located both to the north and to the south of San Luis Obispo County. Previous studies have shown that ozone and ozone precursor emissions from the San Joaquin Valley are transported west, impacting sites in eastern San Luis Obispo County, including Carrizo Plains and Red Hills. Ozone concentrations can also be impacted by transport south from the San Francisco Bay Area. In the absence of transport, it is likely that exceedances would not occur at these sites. Therefore, reducing the transport impact will be critical to attaining the federal standard. Given that exceedances are limited to the eastern portion of the County, and all other sites meet the standard, ARB recommends that only the eastern portion of San Luis Obispo County be designated as nonattainment.”

The “Assessment of the Impacts of Transported Pollutants on Ozone Concentrations in California”³ (California Environmental Protection Agency, Air Resources Board, March 2001), includes a detailed analysis of the transport of ozone from the San Francisco Bay Area and the San Joaquin Valley to San Luis Obispo County. Although the analysis addresses the transport on days with exceedances of the state 1-hour ozone standard in 1998, the discussion of the transport mechanisms provided in the analysis is also applicable to the 2008 8-hour ozone NAAQS.

“All 1996 through 1998 ozone exceedance days were first screened to determine which were violations of the State Ambient Air Quality Standard using the criteria for extreme concentrations. All the violation days were examined with the focus on analyzing examples of “overwhelming”, “significant”, and “inconsequential” ozone transport...”

...The major findings supporting the [ARB] staff’s conclusion that the northern County was impacted by significant emissions from the SFBAAB [San Francisco Bay Area Air Basin] are listed below:

- high ozone concentrations in the southern SFBAAB;
- low ozone concentrations at the surface in the NCCAB [North Central Coast Air Basin];

¹ Recommended Area Designations for the 2008 Federal 8-Hour Ozone Standard Staff Report State of California Air Resources Board, Revised: March 3, 2009.

² This information is based on the design value for 2006-2008. The current design values are discussed in Factor 1, above.

³ <http://www.arb.ca.gov/regact/trans01/isor.pdf>

- high ozone concentrations in the elevated portions of NCCAB at Pinnacles;
- surface and aloft northwest to north winds within the first few thousand feet;
- mid-afternoon SFBAAB emissions impact on Pinnacles;
- the progression of the time of the southern SFBAAB to the northern County peak ozone concentration;
- the Paso Robles early evening (1900 PST) ozone concentration peak occurring with increasing northerly winds; and
- light surface northerly winds at Atascadero.

In addition, the following findings suggest that the northern County was impacted by significant emissions from the SJVAB [San Joaquin Valley Air Basin]:

- high ozone concentrations in the SJVAB;
- offshore flow aloft throughout central California;
- State 1-hour ozone exceedances at Black Mountain; and
- deep vertical mixing over the County and southern NCCAB.”⁴

The conclusion of ARB’s staff was that northern San Luis Obispo County was impacted by emissions from the San Francisco Bay Area Air Basin and the San Joaquin Valley Air Basin. EPA is designating both the San Francisco Bay Area and San Joaquin Valley as their own nonattainment areas.

In addition to reviewing the State’s documentation of transport of ozone to San Luis Obispo County, provided above, EPA simulated back trajectories for several days when exceedances of the 8-hour ozone NAAQS were measured in 2010 in San Luis Obispo County. The 8-hour ozone NAAQS was exceeded in San Luis Obispo County on 17 days in 2010. There were several exceedances measured at the Red Hills monitoring site (AQS number 06-079-8005) on July 30, August 24-25, September 1-4 and 24-28, and October 12-15, 2010. There was one exceedance measured at the Carrizo monitoring site (AQS number 06-079-8006) on July 24, 2010. HYSPLIT⁵ back trajectories are presented below for the Red Hills monitoring site (AQS number 06-079-8005) for one day of each episode, specifically August 24, 2010, September 2, 2010, and October 13, 2010. HYSPLIT back trajectories are presented below for the Carrizo monitoring site (AQS number 06-079-8006) on July 24, 2010. Each set of back trajectories is consistent with the state’s characterization of transport of ozone and ozone precursors from the San Joaquin Valley to San Luis Obispo County (see Figures 2 - 5, below).

AQS Number	Site Address	Latitude (N)	Longitude (W)
06-079-8005	3601 Gillis Canyon Road, San Luis Obispo CA	35.64366	-120.23134
06-079-8006	9640 Carrizo Highway, CA	35.35472	-120.04000

⁴p. F-15. California Environmental Protection Agency, Air Resources Board. “Assessment of the Impacts of Transported Pollutants on Ozone Concentrations in California”, and p. F-21. “Technical Support for Assessments”<http://www.arb.ca.gov/aqd/transport/assessments/assessments.htm>

⁵ Hybrid Single-Particle Lagrangian Integrated Trajectory model, National Oceanic and Atmospheric Administration, <http://ready.arl.noaa.gov/HYSPLIT.php>

Site: Red Hills AQS 06-079-8005
Date: August 24, 2010

NOAA HYSPLIT MODEL Backward trajectories ending at 0300 UTC 24 Aug 10 EDAS Meteorological Data

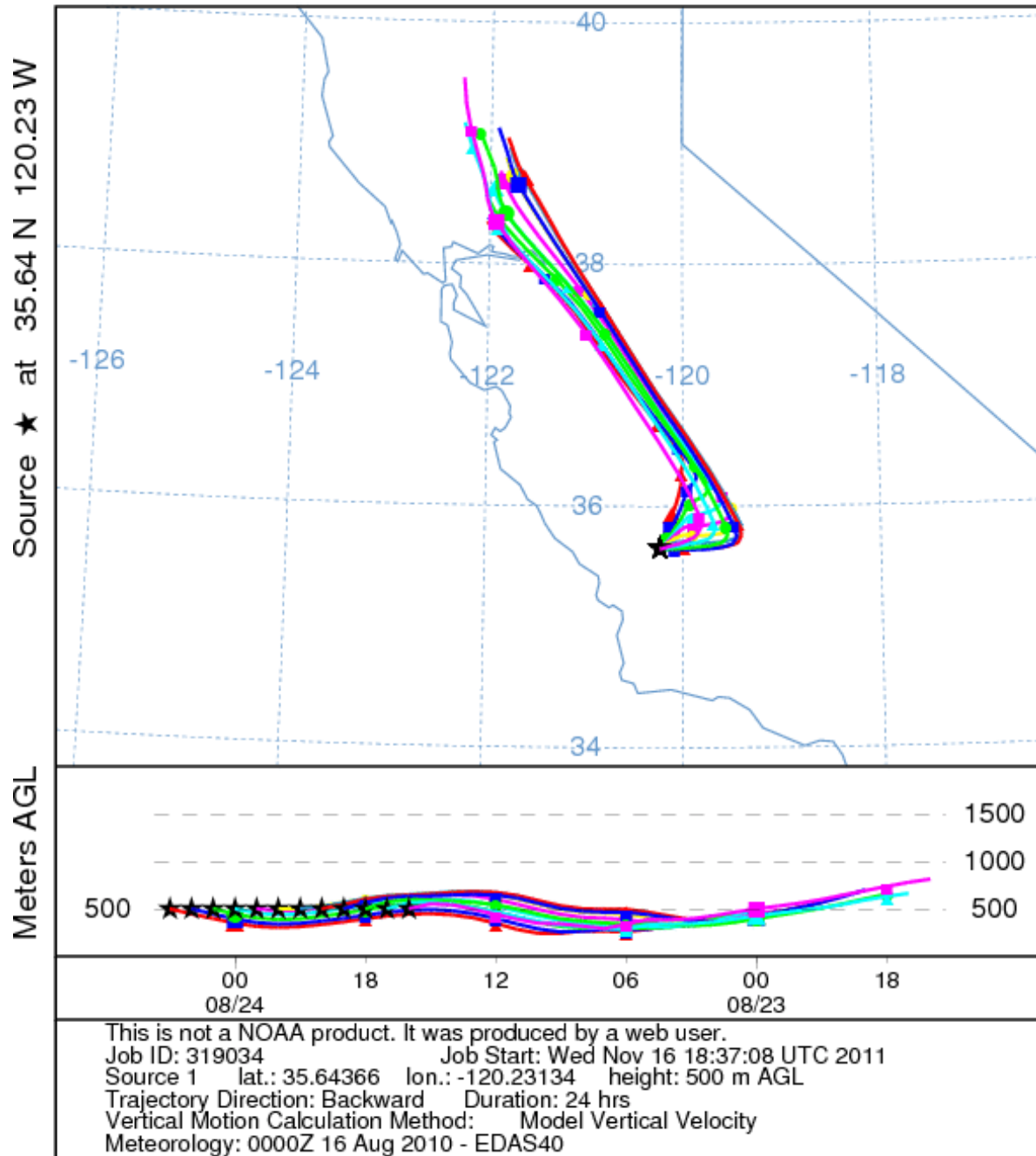


Figure 2

Site: Red Hills AQSS 06-079-8005
Date: September 2, 2010

NOAA HYSPLIT MODEL Backward trajectories ending at 0300 UTC 02 Sep 10 EDAS Meteorological Data

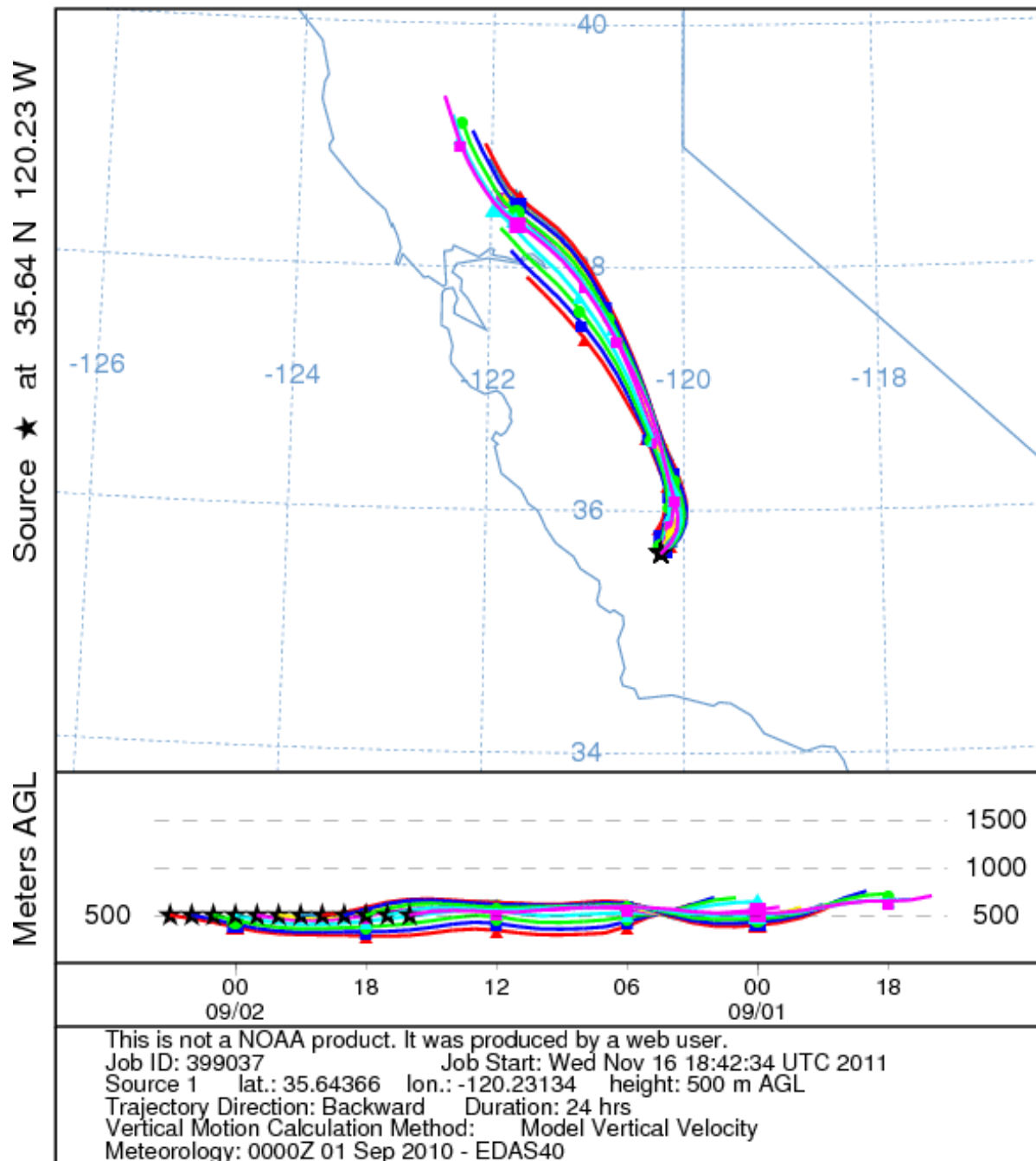


Figure 3

Site: Red Hills AQS 06-079-8005
Date: October 10, 2010

NOAA HYSPLIT MODEL Backward trajectories ending at 0300 UTC 13 Oct 10 EDAS Meteorological Data

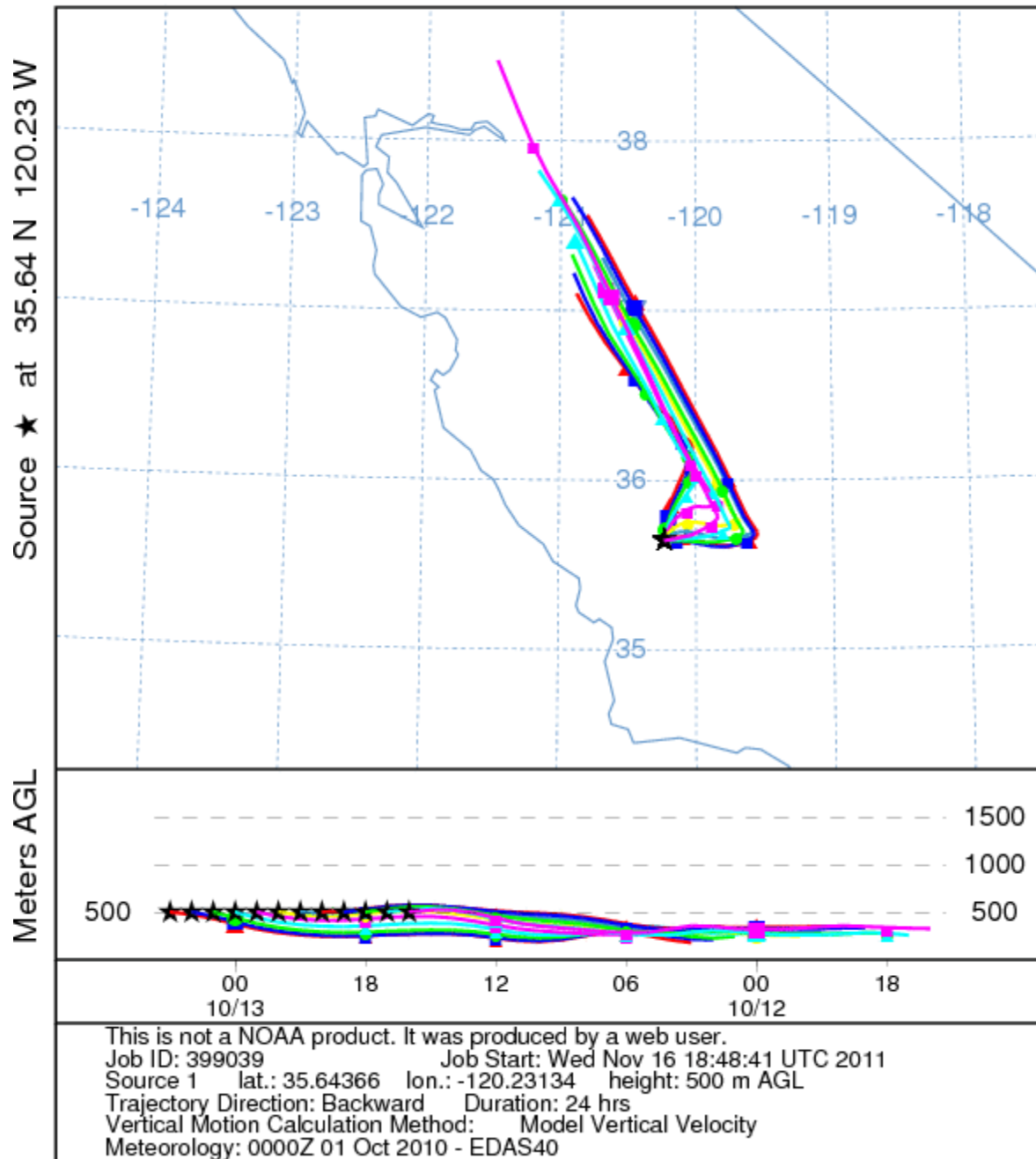


Figure 4

NOAA HYSPLIT MODEL Backward trajectories ending at 0300 UTC 24 Jul 10 EDAS Meteorological Data

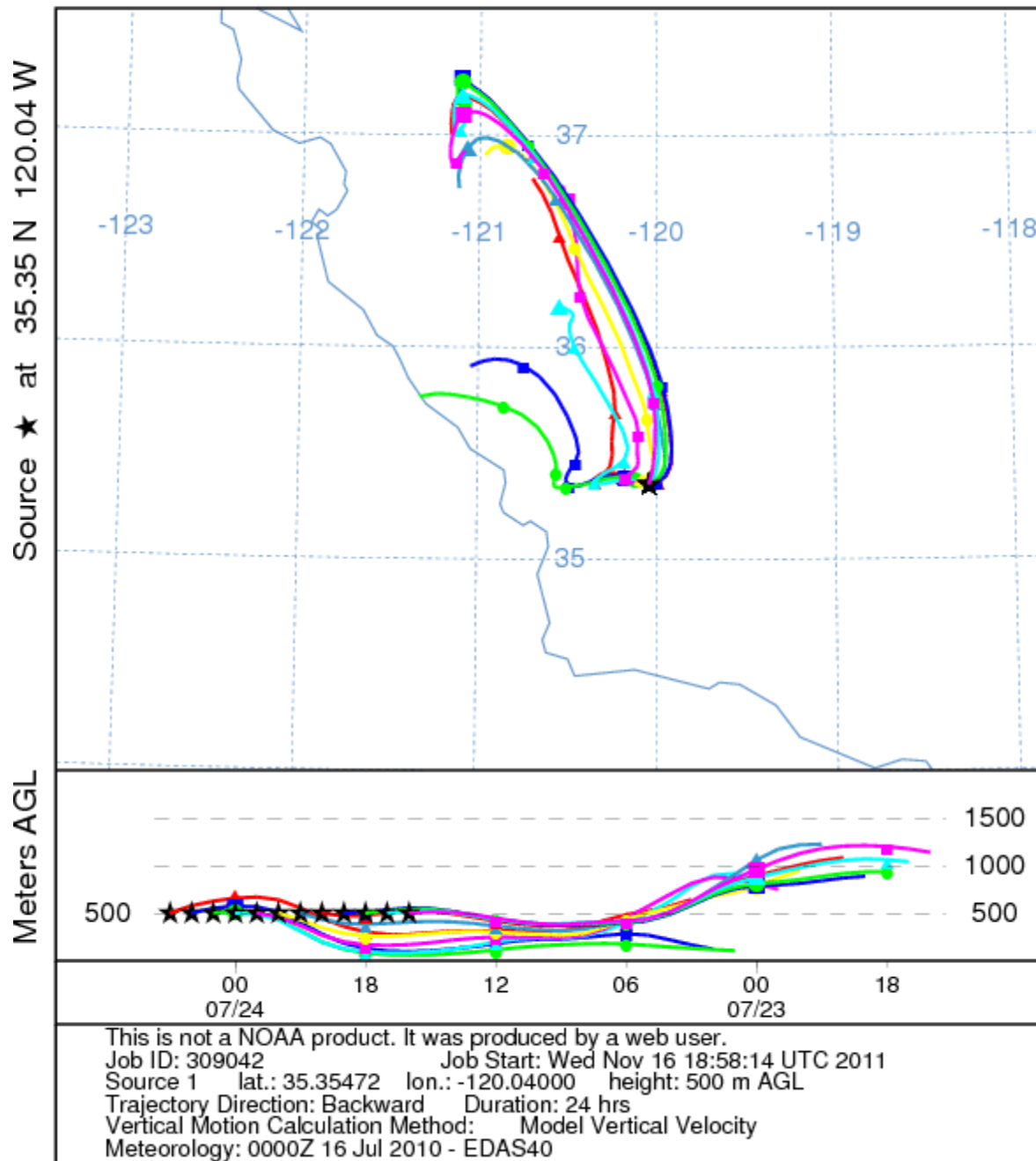


Figure 5

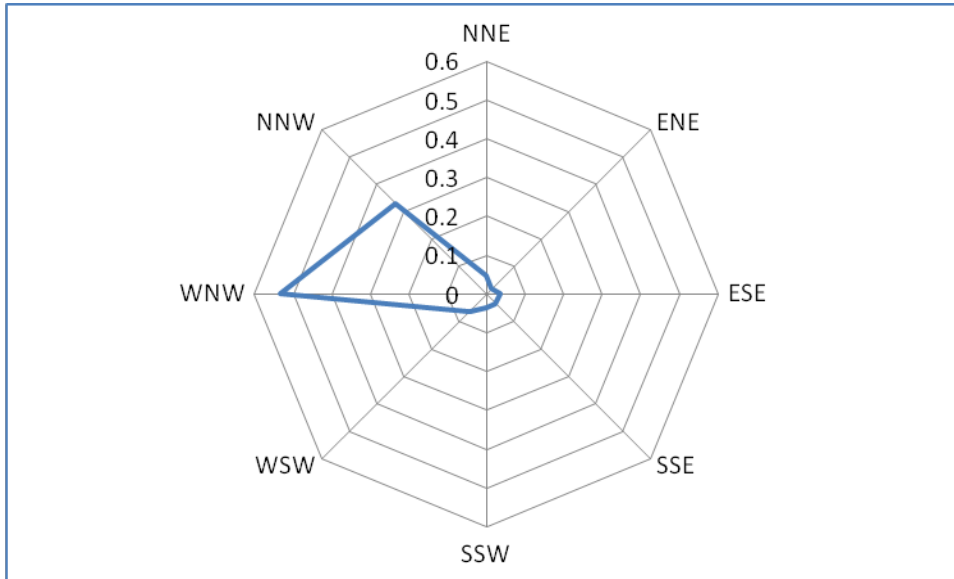


Figure 6: San Luis Obispo County Summer Wind Frequency Distribution

The wind frequency distribution of wind direction data in Figure 6, above, is based on an average of 30 years of National Weather Service information for the months of June, July, and August. The prevailing winds during the ozone season have a strong northwesterly component. This differs from the distribution of wind direction for days when the measured ozone levels are elevated, when, as discussed above, there appears to be transport of ozone and ozone precursors from the San Joaquin Valley.

The analysis of ozone transport to San Luis Obispo County provided by the State, and EPA's back trajectory analysis of current exceedances of the 8-hour ozone NAAQS, indicate transport of ozone and ozone precursors to San Luis Obispo County from the San Joaquin Valley Air Basin. EPA is designating San Joaquin Valley as its own nonattainment area.

Factor 4: Geography/topography (mountain ranges or other air basin boundaries)

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

San Luis Obispo County area is shown in Appendix 2, Map 14a. The County consists of three geographic regions:

- 1) The coastal plateau along the Pacific Ocean;
- 2) The upper Salinas River Valley in the northern section of the county; and
- 3) The east county plain which consists mostly of the Carrizo Plain, a large drainage basin. The Carrizo Plain borders the Temblor Mountain range to the east, which lies in a northwest-southeast direction along the western side of the San Joaquin Valley Air Basin. The only major break in the range occurs at the Cholame Pass (elevation 1,155 feet) in the northern end of the mountain range.

The San Luis Obispo nonattainment area represents only the eastern portion of San Luis Obispo County.

Factor 5: Jurisdictional boundaries

For each potential nonattainment area, we considered existing jurisdictional boundaries to provide a clearly defined legal boundary and to help identify the areas appropriate for carrying out the air quality planning and enforcement functions for nonattainment areas. Examples of jurisdictional boundaries include existing/prior nonattainment area boundaries for ozone or other urban-scale pollutants, county lines, air district boundaries, township boundaries, areas covered by a metropolitan planning organization, state lines, areas of Indian country, and urban growth boundary. Where existing jurisdictional boundaries were not adequate or appropriate to describe the nonattainment area, other clearly defined and permanent landmarks or geographic coordinates were considered.

The state's recommended boundary is defined by the county line on the north, east, and south. The north and east county boundary also forms the California air basin boundary between the South Central Coast Air Basin and the San Joaquin Valley Air Basin⁶. The county line also follows the same boundary for the transportation planning agency, the San Luis Obispo Council of Governments (SLOCOG). SLOCOG has jurisdiction for transportation planning within the entire county. The local air planning agency, the San Luis Obispo County APCD, also uses the county line to define the boundary of its jurisdiction.

To the west, the state recommends drawing a line using specific latitudes and longitudes in a generally north and south orientation through the middle of the county (see Map 14 in Appendix 1). This line does not appear to be based on jurisdictional considerations. However, the boundary for the recommended nonattainment area to the north, south and east is based upon recognized jurisdictions and EPA is using those boundaries for designating the east San Luis Obispo County nonattainment area for the 2008 ozone NAAQS.

Conclusion

Based on the assessment of factors described above, EPA is designating the eastern part of San Luis Obispo County nonattainment, as the San Luis Obispo (Eastern San Luis Obispo), CA nonattainment area, because the area violates the 2008 ozone NAAQS.

The Clean Air Act requires EPA to designate any area as nonattainment if it violates a NAAQS or if it contributes to a violation in a nearby area. Air quality data (Factor 1) show that monitors in the eastern part of San Luis Obispo County violate the 2008 8-hour ozone standard based on 2009-2011 data. Therefore, Factor 1 supports designating San Luis Obispo County (Eastern San Luis Obispo) as nonattainment.

Emissions and emission-related data (Factor 2) support the state's recommended boundary, encompassing only the mountainous eastern portion of San Luis Obispo County, because this area is likely affected by emissions from sources located in San Joaquin Valley, not in the county itself. EPA is designating San Joaquin Valley as a separate nonattainment area (see the technical analysis for San Joaquin Valley).

Under Factor 3 (meteorology and weather or transport patterns), which may be influenced by geography and topography (Factor 4), the analysis of ozone transport to San Luis Obispo County provided by the

⁶ <http://www.arb.ca.gov/ei/maps/statemap/abmap.htm>

state, and EPA's back trajectory analysis of current exceedances of the 8-hour ozone NAAQS, indicate transport of ozone and ozone precursors to San Luis Obispo County from the San Joaquin Valley Air Basin. EPA concurs with the state that, in the absence of this transport from outside the county, it is likely that exceedances would not occur at the monitoring sites in the eastern portion of San Luis Obispo County. Factors 3 and 4 support the state's recommendation that the eastern portion of San Luis Obispo County be designated nonattainment. As previously noted, EPA is designating San Joaquin Valley as a separate nonattainment area (see the technical analysis for San Joaquin Valley).

In considering jurisdictional boundaries (Factor 5), it is not clear why the state has chosen to draw the specific north-south line it is using as a western boundary to the nonattainment area. This line runs according to specific latitudes and longitudes provided by the state, but the state has not explained how it derived the coordinates for drawing the line. However, the roughly triangular area recommended by the state is fairly large in size, about half of the county. It also generally includes the higher elevation portions of the county, consistent with the observed ozone NAAQS violations at monitors in the more mountainous part of the county. For an area receiving transport from San Joaquin Valley, it is appropriate to make a partial county nonattainment designation for San Luis Obispo County, and EPA concludes that the western boundary proposed by the state is acceptable.

EPA's review of air quality data (Factor 1), emissions and emission related data (Factor 2), as well as meteorology and weather or transport patterns (Factor 3), geography and topography (Factor 4), and jurisdictional boundaries (Factor 5), supports the nonattainment boundaries recommended by the state. EPA concurs with the state's boundary recommendation and is designating San Luis Obispo (Eastern San Luis Obispo), CA nonattainment for the 2008 ozone NAAQS.